PARADIGM EHR

PARADIGM EHR 14

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Part 1

Release Notes (What's New)

1 Release Notes (What's New)

PARADIGM EHR 14.1.2 Patch 2

- Changed the "Reviewed With Patient" button in the Medication list to set the orange "Reviewed" indicator on for all current medications for the patient.
- Replaced missing Order Entry items.
- Fixed issue with CCDAs from some hospitals not opening in the Inbox.
- Fixed font sizing on signed off notes.
- Moved Topaz SigPlus signature image export from Java to ActiveX.
- No longer using Java Applet.
- Fixed issue with audit records not showing up in the audit report.
- Fixed issue with exporting PDF files to the outbox removing the file under the tab when the "Exclude Cover Page in Outbox" option enabled.

PARADIGM EHR 14.1.2 Patch 1

- Fixed issue with scanning into Pending area of chart causing two worklist items and sending the user to an error page.
- eScript-only clients: Fixed issues loading the Toolbar.

PARADIGM EHR 14.1.2

New Features / Changes

- Updated the logo image.
- The Toolbar has a new style.
- All Standard Icons have been replaced with new style. Please note that form icons are still the same.
- Added the Patient Glance in the Patient Reports.
  Added corresponding Patient Glance System Configuration option. Please see Profile Configurations under the Patient Glance section in the Patient Reports.
- The Super Bill program has been modified to help users in the transition from ICD9 to ICD10 codes.

These changes include:
- When dynamically generating the fee slip ICD information it will look at the Date of Service. If it is before 10/1/2015 it will use ICD-9 codes. If on or after it will use ICD-10 codes.
- The button for the "Diagnosis Selector" has been added to the top of the Diagnosis section. This button allows access to the full ICD-9, ICD-10, Internal List, Patient History, Patient Problem and Top ICD-9 List.
- When you hover over an ICD code and click it will open the GEM (General Equivalency Mapping) program. If the code is an ICD-9 it will be the ICD-9 to ICD-10 map. If the code is an ICD-10 it will be the ICD-10 to ICD-9 map.

- Updated the Standard CC/HPI form to update the appointment reason if selected on the form.
- Updated the Send Secure CCDA report to have a QuickList for the Send to direct email field.
- Added the product name and logo to the top of the Automated Measure Calculation report.
- Fixed issue with Copy from Another Visit not copying to patient specific from an existing visit.
- Added PTools3 with an auto-installer/updater when you log into the EHR.
- Changed printing to use PTools3 instead of Java.
- Stopped the auto-loading of Java from the Toolbar.
- This updated includes all update released for the EHR under version 14.A.1

1.1 14.1.2 Patch 2

PARADIGM EHR 14.1.2 Patch 2

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1.2 14.1.2 Patch 1

PARADIGM EHR 14.1.2 Patch 1

- Fixed issue with scanning into Pending area of chart causing two worklist items and sending you to an error page.

- Fixed eScript only client's having issues loading the Toolbar.

1.3 14.1.2

PARADIGM EHR 14.1.2

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PARADIGM EHR 14.A.1

Requirements

Some new features in the PARADIGM EHR now require Java 1.7 or above to be installed on all PCs that need to use EHR. Please ensure that your PC has Java installed and up to date by visiting http://www.java.com/en/download/installed.jsp.

New Features / Changes

- Printing:
  - Added formatting to documents printing from EHR or exporting to the Outbox in the EHR.
  - Added configuration for file header, cover page, signatures, stickynotes, and footer options.

- Standard History Forms: (Family History, Medical History, and Social History)
  - Style changed to Standard EHR Design.
  - Standard History Forms now save to a database for reporting purposes.
  - Removed field requirements on Social History. (Note: Race, Ethnicity, and Language are still needed to qualify for meaningful use.)
  - Family History is now split into relative information and their illnesses.

- User Defaults:
  - Added "Order Assign" field to default the assign to on orders worklist items.
  - Added "Favorite Users" field to select favorite users that show up in the Select User widget.

- Worklist Edit:
  - Updated style to Standard EHR Design.
  - Changed process of assigning and removing users to utilize a Select User widget.
  - Moved Send Order to a checkbox.
  - Added checkbox for Print Order.

- Alerts:
  - Added option to have pop-ups for Patient Alerts.
  - Added Reference Material to Patient Alerts.

- Automated Measure Calculation Report:
  - Updated to account for 2014 Edition EHR Certification requirements.
  - Updated style to Standard EHR Design.

- Clinical Quality Measures Report:
  - Updated to account for 2014 Edition EHR Certification requirements.
  - Updated style to Standard EHR Design.

- PER:
  - Added Lab Orders, Lab Results, and Medication searching on the National Library of Medicine.
  - Combined PER and PER-NLM into a single form.

- Overall style:
  - Changed base color to a lighter grey.
  - Changed font to Calibri.

- Orders:
  - Added Expand / Collapse to the Header section of the Standard Order Form.
  - Added Print button to Standard Order Form.

- File Linking:
  - Added ability to link files within a patient's chart.
  - Added Chart Amendment form with Accept / Denied Amendment file linking.

- Audit:
  - Moved audit records to SQL database with secure hashing for tamper detection.
  - Added link in audit report to see data affected.

- Added Direct Messaging capabilities.

- Problem List:
  - Changed style to Standard EHR Design.
  - Added SnomedCT database integration.

- Patient Header:
  - Removed Procedures button. (Moved to Reports)
  - Changed style of Crucial Note area.
  - Added Sentence Builder button for Crucial Note.

- Added SnomedCT and LOINC Database Quicklist buttons to Trackable Data Entry.

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PARADIGM EHR 2.1.3

New Features

- Adding Standard Orders Module to EHR
  - Updated Orders Module
    Added "Create New Order" button for the Standard Order Form.
    Moved Custom Order Forms to a drop down list.
    Added Grid Control to display all orders within the orders module instead of in the file list of the Chart.
  - Added Order Form
    The Medical Order Form is a generic order form that can be configured within Administration and is compliant with HL7 Lab Orders Interfaces.
  - Integrated Plan
    Order items from the Medical Order Form integrate into the Standard Plan Form.
  - Added Admin Configuration
    Add, remove, or update Order Types, Order Items, or Ask at Order Entry Questions within the Administration section of the EHR.

- Updated CDC Notifiable Diseases database

- Added option to send Notes to the User Outbox

- Added Grid Control to History

- Added Grid Control to Patient Search

- Added Grid Control to Message List in Patient Chart

- Added Grid Control to Users List (Administration)

- Updated Inbox to display without a header in the Control Panel

- Allow user to select refresh rate for all Control Panel windows

- Added Temperature color alert indicator for Low
  - Low: 95F / 35C   - Yellow
  - High: 100F / 37.8C - Red

- Added Pulse color alert indicator for Low and High values
  - Low: Yellow; High: Red
  - Newborn (0-3 months) Low: 100 High: 150
  - Infants (3-6 months) Low: 90 High: 120
  - Infants (6-12 months) Low: 80 High: 120
  - Children (1-10 years) Low: 70 High: 130
  - Adults (Over 10 years) Low: 60 High: 100

- Added bp_2, bp_3, pulse_2, pulse_3, and weight change fields on the Vitals form to the Vitals History

- Added 'Immunization Due List' System Report

- Added Remove Button to Button Configuration page

- Added logic to the S_SOCHIST to accommodate changes in PLUS that allow race, ethnicity, and language to be entered as patient demographics.

Bug Fixes

- Fixed pdd files exported to outbox showing hidden fields
- Allow user to remove allergies with multiple spaces
- Corrected misspellings in system reports
- Corrected AMC_CPOE report
- Corrected AMC_PATTO report
- Corrected Charge Slip showing UNDEFINED ICD CODE if using Symptoms list in CCHPI Form
- Fixed issues sending some file types to an archive from the outbox
- Fixed Clinical Quality Measures not looking at internal ICD codes for the data set

These bug fixes from patches to 212 are also wrapped up in this update.

E-Prescribe
Combining the NewCrop updates through NEWCROP21 into this update.
NEWCROP21

- Fixed bug with some medications not staying in discontinued in NewCrop.
- Fixed bug with percent signs in the medication name causing the medications to stop syncing.
- Changed the Current Medication List in EHR to look at the Rx-History for each medication to pull the issue date, dispense number, and refill count based on the history of the medication.
- Fixed bug in Current Medication List in EHR when dealing with double quotes in the medication name.
- Changed the worklist user from NewCrop to GROUP-Admin to prevent the Reply To button in the message causing the script to be on an invalid worklist.
- NOTE: This update will assign any worklist items that are currently assigned to NewCrop to GROUP-Admin

NEWCROP20

- Updated xml that we send to NewCrop so that they do not update the sig or pharmacist message based on what we send.

NEWCROP19

- Updated the syncing process to sync medications up until 1/1/2020 instead of 1/1/2012

12/28/11 PARADIGM EHR 212 Patch 3
- Removed debugging alert from e-prescribe syncing process.

12/27/11 PARADIGM EHR 212 Patch 2
- Added Merge Medications section to the Rx Module in the EHR.

pdd_header.js
- Fixed printing in IE9 showing up behind the browser window.

MedRenewalList.htm
- Hiding the "Mapped in NewCrop" entries in the Rx History.

emr.cgi
- Fixed bug with signature valication.
- Fixed bug with opending files from the form=system and a bgm being passed in.

lab_import
- Improved patient matching.
- Added ability to place lab results that are not normal to a different worlist priority from normal results.
- Defaulted priority to Important instead of Urgent.

LabConf.pddf
Added worklist priority fields.

Growth Charts
- Added growth charts to this update because they seem to be missing from the previous update.

E-Prescribe
Combining the NewCrop updates through NEWCROP18 into this update.
NEWCROP18
- Fixed bug with meds being put in discontinued if they were ever in discontinued in NewCrop.
- Fixed bug with time for the Rx History entry being 12 hour instead of 24.
- Fixed bug on setup form when a user is selected for a mid-level prescriber.
- Improved speed during syncing meds when closing out of NewCrop.

NEWCROP17
- Added ability to change the practice name per provider.
- Fixed issue with Discontinued Meds being moved to Current when syncing upon entering the Medication List in the EHR.
- Including cacert.pem for systems that are missing it.
- Changed syncing to verify that there were current meds in NewCrop prior to discontinuing meds in the EHR. This should help issues where the internet is dropped prior to syncing current meds.

11/01/11 PARADIGM EHR 212 Patch 1

emr.cgi
- Changed note.c to add patient name and code in document title.

- Added complete Version and build to VERSION string.
- Will not display "Sign note" button if user does not have E-signature, but will display other applicable buttons. It used to display long message and no other buttons.

Trackable Data Graph.htm
- Improved performance.
- Fix formatted with of select boxes to 250px
- Changed print and outbox buttons to icons

Growth Charts (170.302.f.3).htm
- Added WHO growth charts
- Added Down Syndrome charts
- Added Outbox Button

HTMLViewer.htm
- Put patient name and code in document title.

S_MEDHIST.js
- Changed font size to 9pt for Immunization list when exported. This will allow for printing of with .5 inch margins.

Note.htm
Fixed Smoking Status, was getting undefined.

profile.htm
- Review Note Field added.

ProblemList.htm
- Was not adding problems to Trackable data for special problems for Public Health Information.

TDOList_report.htm
- Fixed bug with displaying fields with an "&" followed by a single character.
- Fixed bug with passing objects with an "&" to TDOEdit.htm

TDOEdit.htm
- Fixed bug with passing objects with an "&" in the data.
- Fixed bug with type of null not being set as "General".

WorklistEdit.htm
- Fixed bug with Sent By field to take into account old and new modified format to get user name. Old format was MM/DD/CCYY HH:MM XM USER new format adds seconds MM/DD/CCYY HH:MM:SS XM USER.

WorklistReport.htm
- Added new reView type. Used for review of note by billing agent.
- Fixed Modified field to display old time format with 00 as seconds.

ToolBar.htm
- Fixed problem with Inbox.

ControlPanel.htm
- Fixed problem with Inbox.

Reports.htm
- Fixed HTML error.

MedEdit.htm
- Displayed First Data Bank Field and added yellow if not set.

Medprint.htm
- Added DOB: and Gender: to printout under patient name and address.

notes_print_signoff.js
- Added reView option.

environment.js
- Update version to 21201
- Added AC_revw variable for Review option on worklist

MedList.htm
- Added passing of previous return values to the load_list function.

MedList_report.htm
- Updated to sync meds with NewCrop when loading the med list.
- Updated list to display med in yellow if there is no First Data Bank code.
- Improved management of checkboxes so that when the screen refreshes you do not lose your checked items.

LabConf.pddf
- Fixed bug that you could not save the lab header field.
- Added support to configure importance of the worklist itmes created based on abnormal flags in the HL7.

ChartCheckIn.htm
- Fixed bug that was uploading checkin file to the wrong URL.
- Disabled load button after first click.

escript.htm
- Added audit logging with failures and successes.
- Improved syncing of meds.
- Meds discontinued in NewCrop now discontinue in Paradigm.
- Displays syncing meds message when closing NewCrop.
- Now pulling Pending meds back from NewCrop.
- Improved Inbox support for renewals that could not match a patient.

LabImport.htm
- Fixed LabCorp interfaces sending different values in the MSH-3 field.
- Fixed bug where values displayed in red.

NestPOD.htm
- This file is for the POD_EXAM form to work with Dragon Naturally Speaking.

wait.htm
- Fixed bug with double prompting to download.

escript.sh
- Fixed time to include the seconds for the worklist items.

lab_import
- Fixed time to include the seconds for the worklist items.

- Fixed issue with LabCorp files not having the requesting phy in all of the OBR segments.
- Added support for worklist items to be counted as Urgent or Important based on configuration.

DRUG_FDB
- This file is used by the rxNorm.cgi program but was not included in the EHR update.

AMC*
- Bug fixes in multi-page reports for AMC_CSUMM.
- Updated smoking status to look at trackable data.
- Measures now look at detail level for from and to dates instead of inv_date.
- Limited to a specific list of cpt and pos codes to define "seen by provider".

recall2.htm
- Added ability to pass in all of the field values when calling for the form as field=value e.g. fsl_numb=6&fsl_time=Months
- Added option ret_detail that will return all fields as a query string when set to yes.

QuickList.htm
SentenceBuilder.htm
- Auto-expands to the width of the widest QuickList item or 50 pixels smaller
- than the width of the screen (whichever is smaller).

S_PLAN.js
- Added support for Discontinued medications.
- Fixed Bug with Evaluation and Managment.

Notes.pddf
- Fixed bug with percent signs in the note causing random issues.

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PARADIGM EHR 2.1.2

New Features

Global
- Interactive HTML Documents (IHD) - New library for creating HTML documents that are interactive.
- Evaluation and Management Coding
- System and Symptom Management
- System and Findings Management
- New Crop E-scribe

The Toolbar
- User button
  - Moved Administration to Other Menu
  - Moved System Reports to Other Menu
  - Moved Window Applications to Other Menu
  - Moved Lock Manager to Other Menu
  - User Defaults / Profile
    - Added Control Panel as option under Default Mode.
- Appointment Schedule
  - Cleaned up appointment schedule layout similar to PM system. The books now have a simple white background and clean border.

  - Sizing of ALL resources is now based on "em" units instead of "px" units. This means that the fields displayed are more constant, "Time, Patient, Room".
    - ALL - Resources Across: Removed sliders and expansion buttons for each schedule. Only one expansion button for width that toggles from wide to narrow. All schedules scroll within the master frame. Previously each book was called in a frame, now each is in a division as part of one html page. This eliminates multiple server request and improves performance by over 20%.
    - ALL - Resources Tile: removed all expansion buttons, only sliders for each schedule. Previously each book was called in an frame, now each is in a division as part of one html page. This eliminates multiple server request and improves performance by over 20%.
- Control Panel Button
  - The control panel allows a user to select up to 6 separate control areas and display them in frames. Each can be configured to automatically refresh.
- Other Menu
  - New drop down menu replaces multiple buttons
- Urgent Message
  - New Alert Feature.

The Chart

- Cover Page
  - Added Crucial Notes section with quick list. This allows for note to display on patient header as long as the patient is displayed.
  - Added Quick List button for patient note.
- Patient Header
  - Removed Alert bar. This was redundant of alert button. Alert button now displays number of outstanding alerts.
  - Added Crucial note area. This will display the crucial note defined on the patient cover page.
  - Moved patient check-in notification from top of file list to area under chart buttons. It will display not only patients checked in but also patients in care.
- Rx (med)
  - Checkbox for current medications to select for plan and IHD.
  - Removed Relay Health E-scribe link.
  - Added NewCrop E-scribe Link
- Problem
  - Added Date recorded
  - Added Priority
  - Added Treating Provider
- PER (Patient Education Resource)
  - Moved buttons to top. Helps when the user has a lot of PER files.
  - New option to get Documents from National Library of Medicine (NLM)
- Checked In / In Care notifier
  - Patient Header now has option to show patients checked in or in care.

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File List

  - Moved Patient check-in notification up to Patient Header area. This presented a display problem when the users tried to hide the file list.
  - Scanning - Changed prompt check box to be Source. Added on screen comment after to read "Check here to be prompted which scanner to use"
  - Create New Document button now uses File selector to pick the file. This allows templates to be stored in subdirectories to allow grouping.

- Encounter Buttons

  - Because of the new method of using IHD to create notes, it is not necessary to sign off on an encounter before saving a note. Signing off on a note will prompt to sign off on the Encounter data.
  - Encounter unique buttons do not need to be put in the button list when using IHD. When the encounter is signed a button will be created based on the template name.
  - Encounter sign off has had the "sign and create note" option removed. It is no longer necessary to sign of on an encounter to create a note.

Standard Note Generation

- All standard notes will hide the file list if the display area is not wide enough. Ie on a 1024 pixel wide screen the file list will hide, but on a 1366 pixel wide display (wide screen) it will not.
- All Standard Note forms have been modified to improve performance by putting the HTML and javascript into separate files. This improves performance because the PDD parser does not have to deal with the javascript which is the largest part of these forms.
- CCHPI
  - Utilizes new integrated symptom list program. This allows for sorting and selecting of symptoms. Lists are now customized by provider, allowing them to select the systems they want to use, as well as the symptoms and how they are are worded.
  - Symptom / Problem and Dx button.
- ROS (review of systems)
  - Utilizes new integrated symptom list program. This allows for sorting and selecting of symptoms. Lists are now customized by provider, allowing them to select the systems they want to use, as well as the symptoms and how they are are worded.
  - Customized Validation to direct user what needs to be fixed.
- Medical History
  - Will return to previous button after save. Ie if you save while on the Surgery button, that is the area that will display when you enter the form.
  - General button was created for common data. This data used to display above the buttons. This makes more room.
  - Illness Injury Hosp Button
    - Added Grid Control
    - Send report to outbox
    - Revised Illness List
  - Surgery
    - Added Grid Control
    - Send report to outbox
    - Revised Surgery List
  - Immunizations
    - Added Grid Control
    - Ability to add immunization plan. These will be put into Alerts.
    - Ability to add immunizations from plan to list.
    - Send plan list to outbox
    - Send immunization list to outbox.
    - Immunizations Quick list uses standard list and combines with users custom list
    - Manufacturer uses Quick list users standard list and combines with users custom list.
    - Immunization and Manufacturers Quick List are used to lookup information for trackable data when immunizations are added.
    - VIS field will pull up PER. Selecting a properly formatted VIS file (and sending to outbox) will populate the VIS date field.
  - Blood Trans
    - Added Grid Control
    - Send report to outbox
  - Chest Xray

    - Added Grid Control
    - Send report to outbox
  - TB Test
    - Added Grid Control
    - Send report to outbox
- Family History
  - Added Date of Onset field.
  - Supports both list view and grid view modes.
  - Output report into outbox.
- Vitals
  - Added calculator button for all numeric entry fields.
  - Added show history to Head Circumference
  - Added show history to Pulse.
- Exam
  - Utilizes new integrated findings list program. This allows for sorting and selecting of findings. Lists are now customized by provider, allowing them to select the systems they want to use, as well as the findings and how they are are worded.
  - Customized Validation to direct user what needs to be fixed.
- PLAN
  - E/M Button - The Evaluation and Management button will activate the E/M coding dialog. This form will evaluate the data collected on the current encounter and recommend the proper E/M service level.
  - Hide on note checkbox.
- Notes
  - Interactive HTML Documents. In the past the notes where all contained in on file "Notes.pddf". This file was customized to try to fit the needs of all notes that needed to be generated. But notes could only be generated from data collected and signed off on. By using Interactive HTML Documents (IHD), each note file can be separate, allowing for a library of different types of notes that the user can select from when they are ready to create a note. The note links to data collected in the system but is all held open until the note is signed off. If a Notes.pddf file does not exist in the buttons area the program will default to using the interactive HTML Document Editor. The IHD editor will first look for a custom Notes folder for the the resource. If a custom folder is not found it will default to a folder named "Notes". After determining where to get the note files it will look for a default Note file for the provider. If not found it will default to Notes.htm. The user may then click on the file name within the IHD editor to use the file selector to pick another note template if desired. A standard IHD note is provided with the this release. If you would like your notes customized to be an Interactive HTML Documents, please contact your salesperson.
  - Multiple Notes per Encounter without having to duplicate the encounter. (Duplicate button has been removed)
  - Dictation is stored for each note, used to be stored only for the encounter. (Dictation button on encounter has been removed)
  - Notes work list item is not removed, but archived. It now keeps a history of all activity with the note. This allows a note to be sent back to the provider if reviewed. The provider can retract the signature, make changes, and re-sign.
  - Note Link features - Allows a signed note to be linked to a Tab. Note will still display in Notes Tab as well as the Encounter.

Bug Fixes

These bug fixes from patches to 211 are also wrapped up in this update.
06/24/11 PARADIGM EHR 2.1.1 (PROGRESSION) PATCH 5
* Fixed bug with Problem List and special characters
* Changed out box logging to log when file is printed, or archived from outbox instead of being placed

into it. This works directly with PER and showing when a file was given.
  * emr.cgi. 2.1.1c 06/10/2011
    - chart.c removed adding of EOBL file
  * outbox.js
    - added adding of EOBL record to file.
    - deleted remving EOBL record when file is removed.
05/25/11 PARADIGM EHR 2.1.1 (PROGRESSION) PATCH 4
* emr.cgi. 2.1.1b 05/23/2011
  - charge_slip.c looks at inv_date = fsl_date .. used to look at inv_date = cur_date when posting charges.
* AMC_1_DASH - Automated Measure Calculations Dashboard.
  - Fixed problem with not showing: Smoking, Timely Access, Vitals.
  - Added ability to click on area to show report.
* outbox_archive
  - Copies style sheet for xml documents.

05/18/11 PARADIGM EHR 2.1.1 (PROGRESSION) PATCH 3
* environment.js. Library Version was not set to 211

05/17/11 PARADIGM EHR 2.1.1 (PROGRESSION) PATCH 2
* Fixed bug with PDD forms in Administration / Buttons / Templates not displaying.
* Files left out of EHR_211 update that should have been included.

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PARADIGM EHR 2.1.1

New Features

The Toolbar

- User button - New look. opens most items in frame next to menu.
  - System Reports
  - Administration
    - Audit Form. Fixed Spelling Error
    - User list now shows role of user in the selected data set.
    - Buttons - Title on configurations showed "photo in tab" now reads "Button list"
    - RBAC
      - Added Co-pay
- Work List
  - Messages - Added ability to print messages.
  - Note / Dictation worklist. If a Dictation worklist item exit it will remove that item and create a Notes worklist item and assigned to the user who created the dictation worklist item. If Dictation does not exist it will assign the note worklist to the user who saved the note. This should improve flow when dictation is used.
- Appointment Schedule
  - Check-in
    - Record co-pay
    - Time column will display check-in, in care, fee slip sent, ad check out times on hover.
    - The Room # field will display the check-in time when checked in. If the user clicks on that it will turn white and blank out to let the user enter the room number.
    - If patient is in care, clicking on the time field will allow you to check patient out. If a charge slip has been sent it will check the patient out and take them to the Encounter screen if they have PLUS permissions.

- Retired resources will not display in the resource list of the appointment schedule.
- Retired locations will not display on appointment schedule.
- The patient's check-in status will not change until after the user has exited the the PARADIGM PAT form. Before it would check them in before the PAT form was completed.

The Chart

- Cover Page
  - Verbiage changes for Medications, Allergies, Problems when none exist.
- Patient Header
  - Shows patient flow status by changing the color of the encounter area to the flow color.
  - Chart now gives ability to check a patient in.
  - Chart now gives ability to put a patient "In-Care".
  - When hovering over Encounter Area it will show Flow times: check-in, in-care, check-out.
  - Next Appt: button under patients name. If next appt exist it will place a button showing next appt. If user has PLUS access it will pull up the apt in scheduling in plus.   In Recall added ability to click on appointment in list to pull up in PLUS SCHD form if user as RBAC access
- Outbox
  - Logs all exports in audit log if they are printed, emailed, portal, or archive.
  - Created Email interface front end. CXI/EMAIL/outbox area for the interface to get data. The CXI EMAIL interface is optional and requires that the client have their own email exchange server.
- Recall
  - In Recall added ability to click on appointment in list to pull up in PLUS SCHD form if user as RBAC access
- Rx (med)
  - Will display button bar when patient hasno recorded medications.

    Patient has no recorded medications. Click Here to report "No medications are known for the patient".
  - Clicking the button will report "No medications are known for the patient"
- Problem
  - Displays button bar that patient has no recorded problems.
  - Clicking button will report "No problems are known for patient"
  - Change spacing in "Problem History" dialog box and add title with description to fields; ICD codes were not visible in their entirety.
- Allergy
  - Displays button bar that patient has no recorded allergies.
  - Clicking button will report "No known allergies"
- Trackable Data
  - Hardcode 'COMMPREF'data value USPS as a Trackable Object default; The TDO would be created when a chart is first displayed.
  - Smoking Status coded from Social History
  - Graphing of trackable data.
- PER (Patient Education Resource)
  - Changed search algorithm to allow for multiword phrases. Ie. "chest pain". ONLY words in the index setup under administration will now be searched. (before it would also search the file name). Words or phrases must be separated in the index via commas. Each word or phrase will be search for in the problem list, drug list, and allergy list.
  - It will now show all matches and where they are to aid decision making.
  - A new column will show an information icon if the PER has been given to a patient more than one time. Clicking on this icon will display the history.

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File List

- New Indicator/Notification on screen that a patient has checked in. Added table at top of file list that shows Patients that have checked in. If a provider is established in the user profile it will show only for that provider, otherwise it will show for all providers. Added option on user profile to turn feature on or off.

File Display Area

- Document Header
    - Added lock button on document header next to help button. Pops up Deny List for file. Allows you to deny access to a specific file.
    - Sign Off
        - Retract a Signature. New feature allows a signature to be retracted.
- Encounter Buttons
    - Standard Buttons
        - Encounter Sign Off
            - Retract an Encounter Signature . This will allow an encounter signature to be retracted.
        - Notes
            - Retract a Note Signature This will allow a note signature to be retracted.

Standard Note Generation

- Vitals
    - Add Blood Pressure color alert indicator for Prehypertension and Hypertension (Stage 1 & Stage 2); Normal = white; Prehypertension = yellow; Hypertension Stage 1 = orange; Hypertension Stage 2 = red.
    - Vitals is now treated as a special form that allows entry of data historically (patient button) or for an encounter. When pulled up as part of an encounter it will work as before, but when pulled up without an encounter it will store the data as history for that date.
    - You may now select and edit previous historical Vitals data via the "Vitals History" button. or date field.
    - Added English / Metric Radio buttons to control input to appropriate fields.
- Medical History
    - Ability to add item (History) to patient Problem List
    - Illness Injury Hospitalization - add DX button to allow user to add item (Description and Onset) to Problem List
    - Surgery - add DX button to allow user to add item (Description and Onset) to Problem List
    - Chest X-ray - Add Comment field
    - Chest X-ray - add DX button to allow user to add item (Description and Onset and Comment) to Problem list
    - TB Test - Add Comment field
    - TB Test - add DX button to allow user to add item (Description and Onset and Comment) to Problem list
    - Immunizations - add checkbox to indicate Counseling was provided at the time of the administration
- Social History
    - Remove 'required' status on Occupation field in Social History; Doesn't apply to Pediatrics, other practices have requested it's removal.
    - Change 'Preferred Language' field to required.
    - Change 'Race' field to required
    - Change 'Ethnicity' field to required
    - Created Smoking Status Field that ties to Patient SMK field in PARADIGM. If Smoking Status is not defined it will pull from PARADIGM-PAT-SMK field. Once it is set here it will feed back to that field.
    - Added Smoking Status Queried check box. When checked it will add the Smoking status to the TRACK data so it may reported on. (CQM)
- Family History
    - Added checkbox to check in cases where the Family History is Unknown or Unavailable (i.e. adoption) with a note/comment area to note why.
- Dictation

    - Worklist item is not created unless the saved dictation file is changed from the one that is checked out.
- Charge Slip
    - Ability to add diagnosis to patient Problem List
- Images Button
    - Created Images form to add to buttons. This allows the user to select from a library of images to edit, instead of having a sperate button for each image.

Bug Fixes

- Rx - Fixed spelling error of E-Prescribe
- Diag Select
    - Reduced font size when "No Diagnosis History found" was presented.
    - When selecting from the patient problem list it validates that it is an actual ICD code and not free form entry.
- Calendar widget did not display entire month when month spanned 6 weeks.
- Sentence Builder - Special characters did not move back and forth from the field.
- Logoff message still read "Thank you for using Progression" was changed to "PARADIGM EHR"
- Modeless Dialog boxes, as presented by the Message, Recall, Rx (med), Problem, Allergy, Alert, Track, Orders, Reports, Procedures, and PER buttons did not pass back mouse or cursor activity and would not reset the login timeout on the control panel. If a user spent to much time in one of these areas, even though they where doing something they could get logged out.

1.8 2.1.0

PARADIGM EHR 2.1.0

PARADIGM EHR 2.1 (formerly PROGRESSION) is the first release of the software that meets ONC certification. Many changes have been added to meet certification but every attempt has been maintain the current look and feel of the PARADIGM EHR product. Below is a list of some of the noticeable changes.

New Features

The Toolbar

- User button - New look. opens most items in frame next to menu.
    - System Reports
    - Administration
        - RBAC - Added Reports, System Rpt, Account, and Amount
        - System Reports Button - Place to store system reports.
        - Track Button
            - Enter New Trackable Configuration - Type and Description fields have been added
              *** THESE WILL NEED TO BE MANUALLY MODIFIED ***
              *** VITALS - BMI, HEIGHT, WEIGHT, & B.P. are tracked automatically with SNOMED codes ***
        - Lab Button - Configuration form for Lab interfaces
- Work List - Utilize GRID control instead of table sort. This allows for much larger amounts of data to be viewed efficiently.
- New Outbox button, used for user outbox.
- Moved Patient Search closer to center to accommodate larger / bolder font.

The Chart

- Cover Page

- Added ETHNICITY, RACE and LANGUAGE fields
- Added required Smoker validation entries.
- Added Inactive section to Problem List
- Improved performance

- Patient Header
  - Account Information - New RBAC feature to enable access to the account button.
  - Reports Button - New RBAC feature to enable access to button.
  - Rx (med)
    - List shows medication in Yellow if no RxNorm code.
    - Enter New Rx / Medication
      - New Field for RxNorm value (Certification)
      - New Drug list with RxNorm codes.
  - Problem
    - New combined List / Form
    - History for problem column in List
    - Google Search column in List
    - New Inactive List
  - Allergy
    - New combined List / Form
    - Google Search column in List
  - Alert Entry Form
    - Added "PER" button
  - Trackable Data
    - New Grid Control of data
    - New fields for Description and Type
    - Expanded Value Field.
  - Reports - Split Standard and Custom Reports
    - Standard Reports
  - Procedure - New Grid Control of data
  - PER - Implementation of Given Date field

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Notes

- Added "Sticky Note" feature to the Note through the whole cycle

  **** Warning **** previous sticky notes will not display that where attached to notes in previous release.
  Old versions would name file based on header such as Note_Full Note.SNF. This created a problem because all notes could be named that. Thus the Sticky note was not unique to the note.

Quicklist

- When you add a new item it will now add the item, and return it to the form and close Quicklist. Previously you had to select the item from the quick list after you added it.

Sentence Builder

- When you add a new item it will now add the item to the list as well as the sentence you are building. Previously you would have to select the item from the list after you added it.

DiagSelect

- Added Suggest to search field.
- Now uses QRS ICD database. Improves performance.

Vitals

- BMI, Height, Weight, and B.P. are all recorded in Track able data using SNOMED codes.

Plan
- Added Sentence builder option to Plan Type as an option.
- Integrated PER into PLAN. Can be set up as a plan type.

Medical History
- Added Units and Amount to Immunization
- Changed Immunization list to CDC - CVX code list.

Bug Fixes

Growth Chart
- Fixed sorting bug of data causing line to not progress in time.
- Centered plotting points.

General
- Note, Rx and Message tab will turn green if data exists in database.
- Fixed bug with Virtual Field rph_spec
- Signature checking now returns GOOD, BAD, or NO signature.
- Fixed issue with corrupt signatures or modified Notes. It now presents the modified file or corrupt signature message on notes so it may easily be remedied.
- Fixed bug with suggest_ret for DATATAB format. Last field would not output correct. Caused problem on SuperBill.
- Added logging to Database functions
- Added Audit to Database (DB) functions.
- Fixed bug with StickyNote Save ability. Should have been able to handle up to 64Kbytes of data but was crashing after 16Kbytes.

Allergy Problem List/Report
- Fixed bug with special characters

1.9 2.0.1

PARADIGM EHR 2.0.1

PARADIGM EHR 2.0 is an entirely new version of the PARADIGM EHR system with many changes and enhancements. Every attempt has been made to keep the overall concepts of the original PARADIGM EHR. Because of the number of changes to the system they will not be documented here. It is recommended that you review the documentation for any unfamiliar buttons that have been added.

Some of the Major Enhancements that have been made are:

New Chart look. Much cleaner, presents more information.
Better integration with PARADIGM PLUS
New chart buttons for Allergy, Alerts, Track, Orders, Reports

File list is cleaner.

Chart display area provides toolbar with all available actions to perform on a file.

Electronic Signatures on any file.

Integration of RX, Problems, Allergies into reportable database file.

Alerts
Order Entry
Reports
Trackable Data
Outbox

Customizable chart cover page.

Based on current understanding this version should meet or exceed ARRA certification requirements. As the final rules are published we will make needed changes to receive certification.

08/10/10 PARADIGM EHR 5

emr.cgi
* Signatures with amendments that had multiple lines would not validate. and the file would think it was not signed off.
* Added Amendment Button to note even if a counter signature is required. This allows NP/PA to create amendment after signoff but before provider signoff.

MedEdit.htm MedList_report.htm Cover.htm
* Added Remove feature to MedEdit to allow user to remove medication from list. Modified report and cover to ignore medications with REMOVED status.

MedEdit.htm AllergyEdit.htm ProblemEdit.htm TDOEdit.htm
* Added confirmation to remove button.

08/06/10 PARADIGM EHR 4
emr.cgi
* Counter Signature button was displaying on notes that had been signed off because the messages was in the archive. Should only display when the messages is in the current messages.

08/05/10 PARADIGM EHR 3

Reports - Growth Chart
* Fixed Sorting of data so line does not zigzag.

S_CCHPI.pddf - Chief Complaint / History Present Illness
* Comment HPI would save more than one line, but did not display anything but the first line when redisplayed.

Cover.htm - Patient Cover Page
* Added Inactive area to problem list
* Improved performance
* Added Hover Help to REFFERING, PCP, and FACILITY areas to show address info.
* When Exporting Cover to Outbox. It used to call the file Cover_{DATETIME} now it just calls it Cover. So only one copy can exist in the outbox at

a time. This is preperation for the outbox log file to come later.

PER - Patient Educations Resources
* Not complete does not currently do logging. This will be added
  in a future update. The logging is used to show if you have already
  given a file to a patient.

WorklistEdit.htm - Message form
* Added ALT-S support for Save button
* Does not add history on initial Save.
* Fixed Sorting of Names in Assigned to field.

MedEdit.htm - Medication Rx Entry
* Added ALT-S support for Save button

recall2.htm - Recall / Followup / Work In Entry
* Added ALT-S support for Save button

AlertEdit.htm - Alert Entry Form
* Added ALT-S support for Save button

TDOEdit.htm - Trackable Data Entry Form
* Added ALT-S support for Save button

ProblemEdit.htm - Problem Data Entry Form
* Changed Add / Update Buttons to Save button
* Added ALT-S support for Save button

AllergyEdit.htm - Problem Data Entry Form
* Changed Add / Update Buttons to Save button
* Added ALT-S support for Save button

ProblemList_report.htm - Problem List
* Will do Google Search search if click on item
* Added "Inactive" Area. You must add "Inactive" to list

MedList_report.htm - Medication List
* Will do rxlist Search search if click on item

AllergyList_report.htm - Allergy List
* Will do Google Search search on allergy if click on item

Library Updated

emr.cgi
* Put in PER admin Tab
* Fixed note Tab to only display notes in root and not subdirs. Also fixed
  count on root folder.

07/29/10 PARADIGM EHR 2
emr.cgi
* Fixed bug in suggest2 that caused program crash on some systems.

07/28/10 PARADIGM EHR 1

emr.cgi
* Autologin ability has been added back for setting up shortcuts.
* Templates for calling PARADIGM reports from PARADIGM EHR. These programs

would give a javascript error on some systems. Have been reworked to call the report in an iframe instead of a modal dialog box.

rhpi (Relay Health to PARADIGM interface) Date fix.

Part 2

Getting Started

2 Getting Started

PARADIGM EHR

PARADIGM EHR is sophisticated, Electronic Medical Record system, designed for ease and speed of use. These help files should aid you in making the most of your PARADIGM EHR system. If for some reason you can't find your answers here you may always call support at QRS, Inc. 1-800-251-3188 or email them at ehrteam@qrshs.com

2.1 Audience

The PARADIGM EHR system is designed to accommodate a wide range of medical practice clinical needs including patient flow, work flow, charting, encounter data collection, note generation, and tracking medications as well as other clinical data. PARADIGM EHR, as well as your operating system, calls for proper usage in order to gain the benefits offered by a state of the art EMR system. This guide explains how to, when to, and why to use PARADIGM EHR in order to optimize your practice clinical needs, and minimize problems that may arise.

This guide is written for PARADIGM EHR users. These are the day to day users of PARADIGM EHR who perform such tasks as patient check in, scanning, data collection, and note generation. Each of these tasks as well as others are described within these pages. We have tried to lay the manual out in a logical order for users who are new to the PARADIGM EHR system.

2.2 How to Use This Manual

The User's Guide is divided into the following chapters:

- Getting Started
- The Toolbar
- Appointments
- Worklist
- The Chart
- Standard Note Generation
- Administration
- Programming
- Release Notes

Each chapter of this document is specific to a set of tasks that a typical user may perform. We feel that it is important for all users to have a global understanding of all user tasks at some level and therefore we recommend that each area be studied. However if your task is specific, such as scanning, pay particular attention to that area. If in doubt about a particular procedure, you should be able to reference this document. If for some reason this document does not cover your issue, please contact the QRS Software Support Team.

2.3 Documentation Conventions

⚠ = **Warnings**

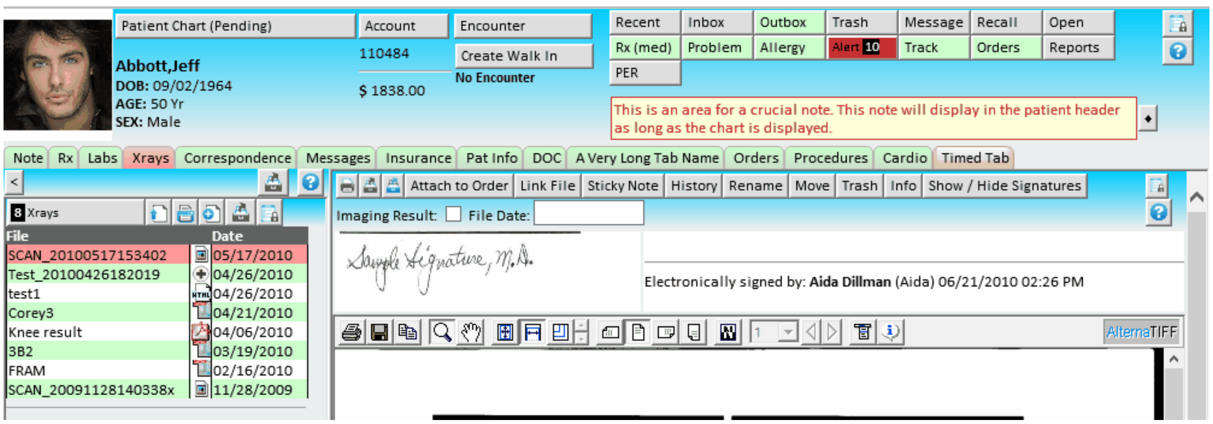
💡 = **Ideas / Examples**

2.4 Software Conventions

Efforts have been made to provide visual cues and standard features that gives the PARADIGM EHR application a consistent look and feel to the user. Understanding these software conventions will aid in getting the most out of your PARADIGM EHR system.

2.4.1 Current Path (In the Pink)

When looking at the form you may notice certain items highlighted in a Salmon or Pink color. This shows the path of what is in the File display area. In the following example we are looking at the Knee Result file in the Xrays Tab.



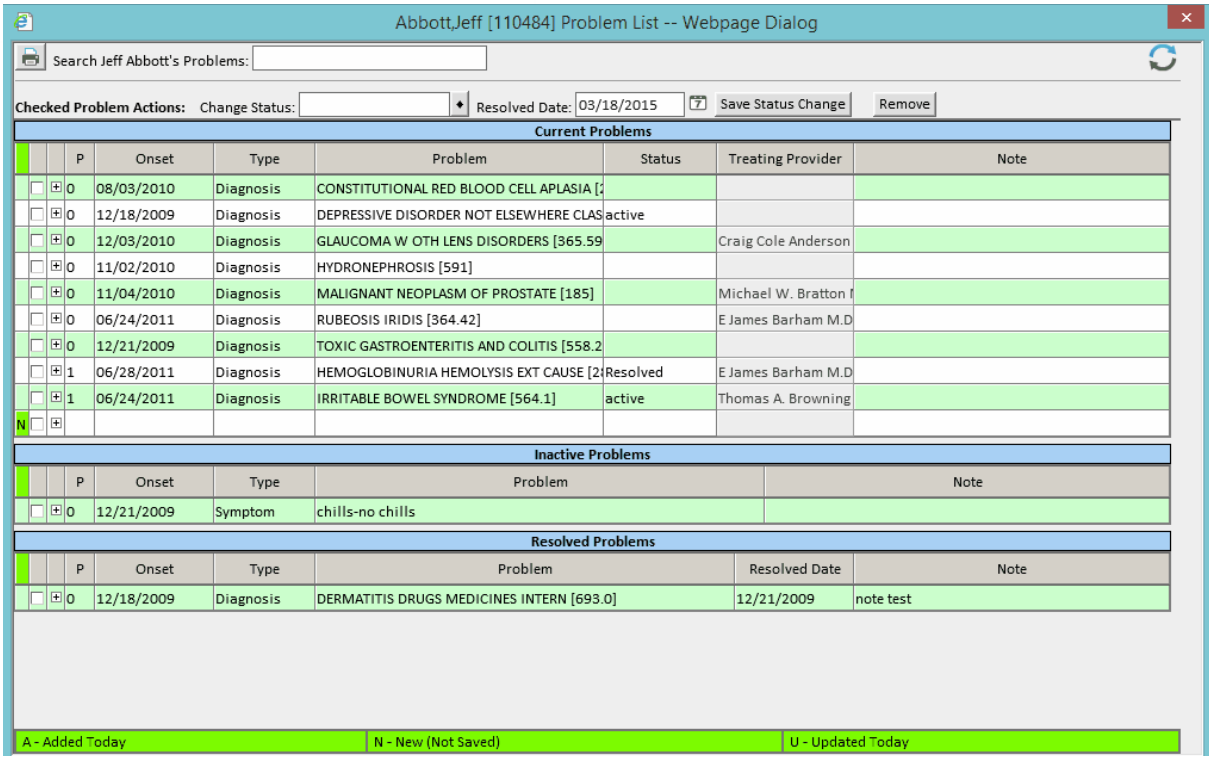
2.4.2 Buttons and Colors

Buttons activate functions and features within the software. Buttons may be text based or have icons. When you hover over buttons they will change color to white to queue you that you are on the button. The following is a list of colors and their meanings.

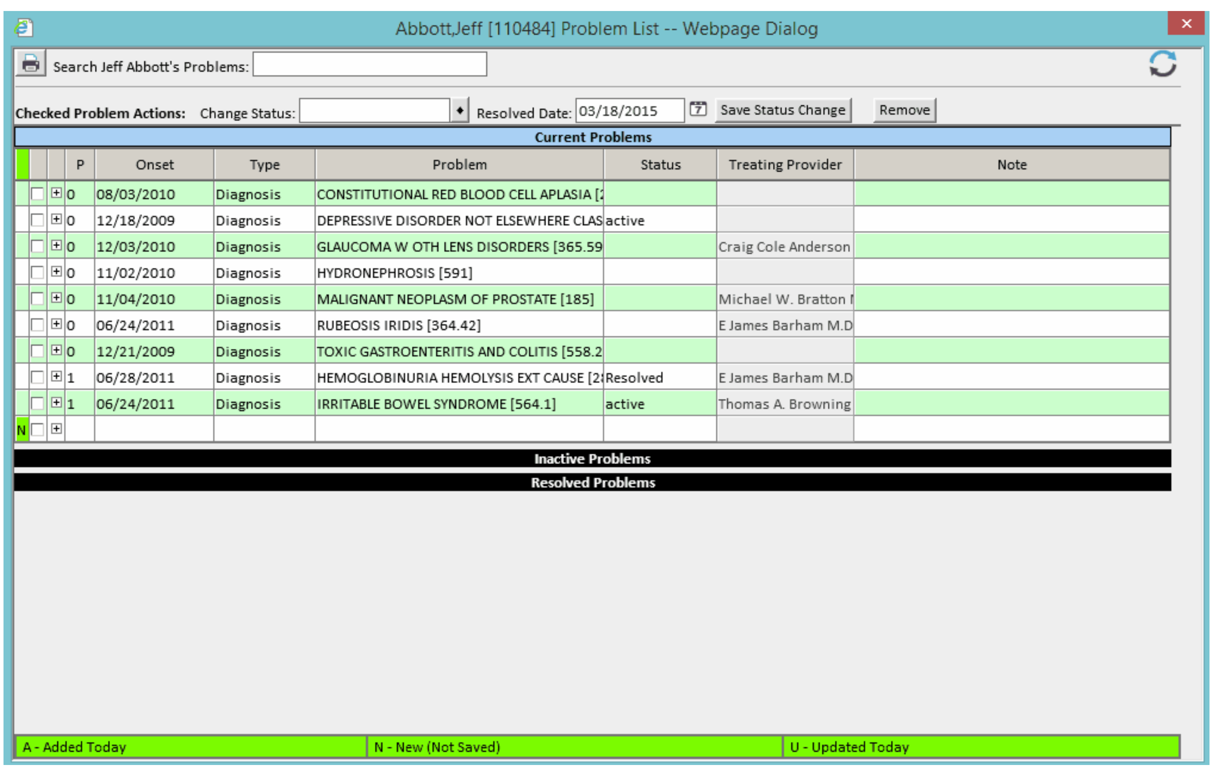
Red	Needs Attentions
Yellow	No Data exist
Green	Data Exists for this button
Blue	Data has been locked for this button

2.4.3 Show / Hide Bars

Show / Hide Bars are used in reports and list to allow you to show or hide sections of th data. This is useful when you want to print this information out. The following is an example of the problem list.



The light blue bars above each area allow you to show or hide that area. By clicking on the bar it will hide the area and change the color of the bar to Black.



To redisplay the area click on the Black Bar. It will turn blue and the area will once again display.

This is useful when used in conjunction with the "Print icon". Areas that are hidden will not print.

2.4.4 Hover Color

When moving the cursor around the screen you may notice items turn white or light green when you hover over them. By clicking on these items you will select that data for display. You will notice this in the Patient Header, File List and even in the Display area of the chart. Also in scheduling.

2.4.5 Print Icon

Many items with in PARADIGM EHR can be printed. Clicking on the Print Icon will activate the printer dialog. These print request will be logged as well.

2.4.6 Outbox Icon

There are two outbox icons. The Black icon will send the document to the patients outbox. The Blue icon will send the document to the user's outbox.

2.4.7 Sortable Tables

Most all tables of data displayed in the PARADIGM EHR system may be quickly sorted by clicking on the column header.

	Type	Date	Data
	Clinical	11/09/2010	test
	Clinical	08/25/2010	Weight
	Clinical	04/04/2011	Weight
	Clinical	08/25/2010	Temperature
	Clinical	04/04/2011	Temperature
	Clinical	10/21/2010	Smoking Status
	Clinical	04/13/2011	Smoking Status
	Clinical	04/27/2011	Smoking Status
	Clinical	10/04/2011	Smoking Status
	Clinical	08/25/2010	Pulse
	Clinical	08/25/2010	Pulse
	Clinical	04/04/2011	Pulse
	Clinical	11/17/2010	EPS

File	Date
SCAN_20091128140338x	11/28/2009
FRAM	02/16/2010
3B2	03/19/2010
Knee result	04/06/2010
Corey3	04/21/2010
Test_20100426182019	04/26/2010
test1	04/26/2010
SCAN_20100517153402	05/17/2010

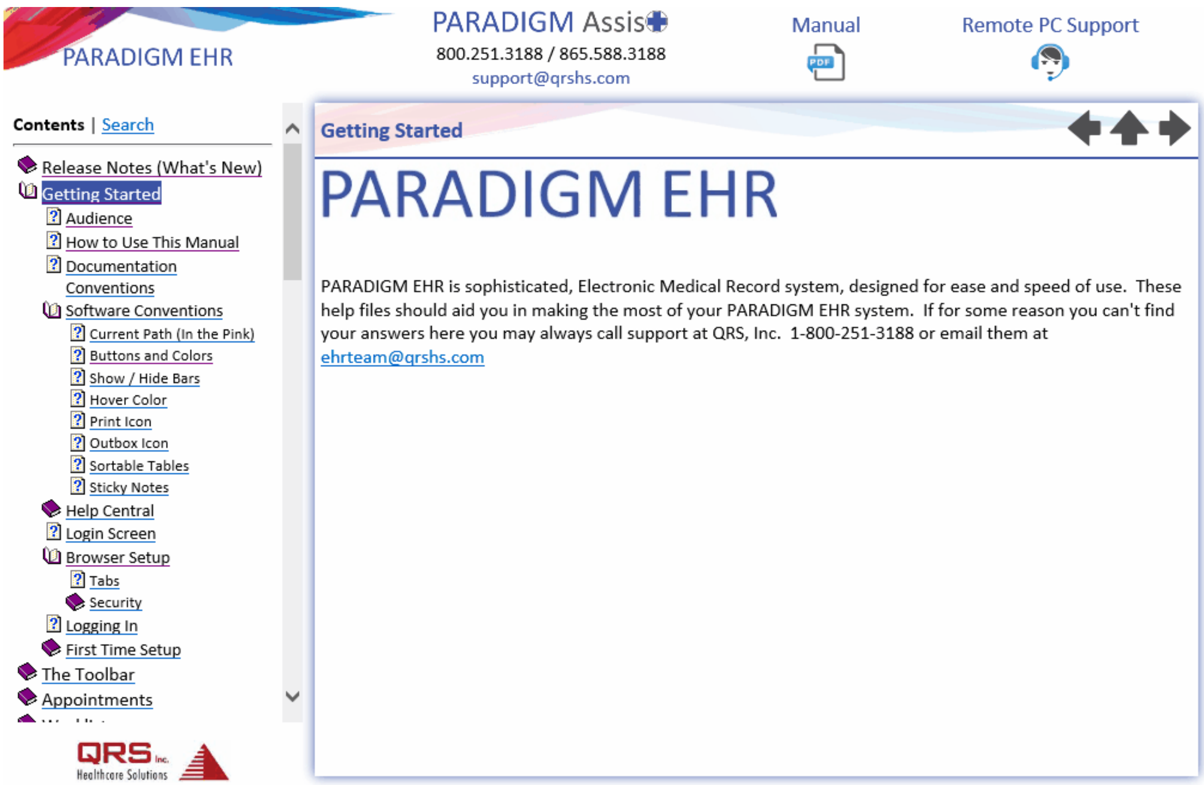
You may notice a triangle displaying either ascending or descending order. On some tables the header will change color when sorted.

2.4.8 Sticky Notes

Sticky Note or Internal notes are displayed in Yellow. These notes will only print if your export options are set to print the Sticky Note. You will find them on the patient cover page and attached to documents in the chart as a sticky note.

2.5 Help Central

The PARADIGM EHR plus system includes a comprehensive context sensitive help system known as "Help Central". "Help Central" not only provides you with searchable documentation for the version of PARADIGM EHR you are using but also links to our web side, our support phone numbers and email starter, a printable manual in PDF format, and a link to our support web site were our representatives can take control of your computer to help you with your needs.



2.5.1 Using Table of Contents

The Table of contents on the left side of the screen allows you to review the documentation by section. Clicking on the closed book icon in front of a section will open that section and display help topics, or other books within that section.

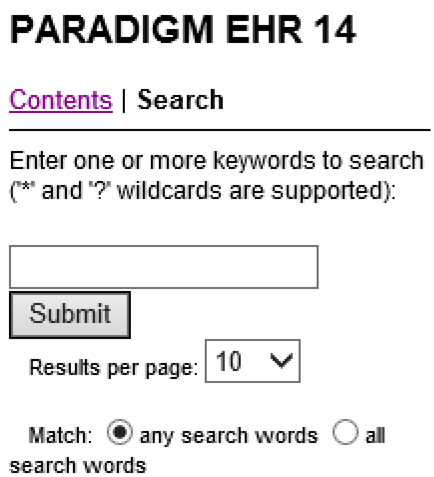
You may click on any section to display that topic in the content panel of the screen.

Next and Previous Arrows

In the upper right hand corner of the content window you will see Arrow buttons that allow you to select the next or previous topic from the topic currently displayed. The Up arrow icon will close all topics and put you at the Getting Started section.

2.5.2 Using Search

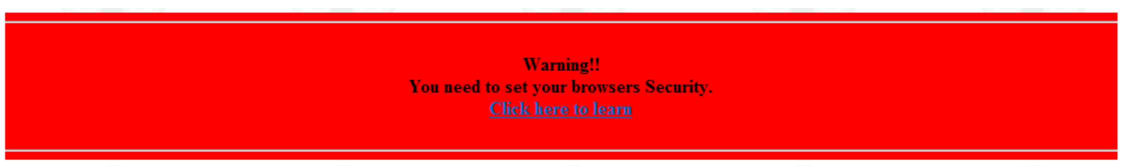
Clicking on "Search" in the navigation pane of "Help Central" will allow you to search all of the help files for whatever keywords you enter.



2.6 Login Screen

The first step of using PARADIGM EHR is to log into the application. To do this you must first point your Windows Internet Explorer web browser to the correct server. Your system administrator will either give you the address or create a shortcut or favorite for you. Once you have the correct address in IE you will see the following screen.

If you do not see a name and password area but instead see the following:



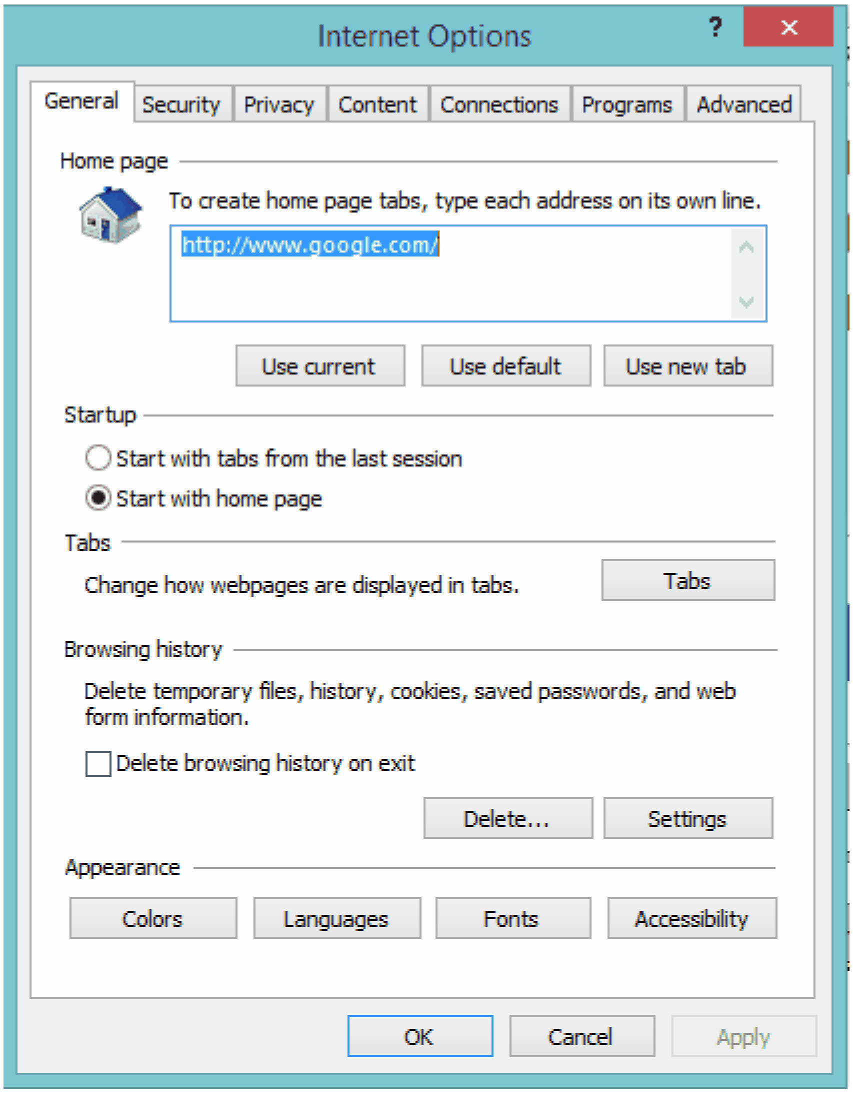
You will need to set up your browser. This process will ensure that you get the most out of the PARADIGM EHR application.

2.7 Browser Setup

PARADIGM EHR is a web application and takes advantage of your PC. In order to do this you must use MicroSoft Internet Explorer (MSIE) as your browser to access PARADIGM EHR. PARADIGM EHR allows you to use other browser such as FireFox or Safari but at this time these browser have not been fully tested. It is known that these browsers will not support many of the features that PARADIGM EHR has because they do not support ActiveX. But they will for the most part allow access into the system for viewing information. Use other browsers at your own risk.

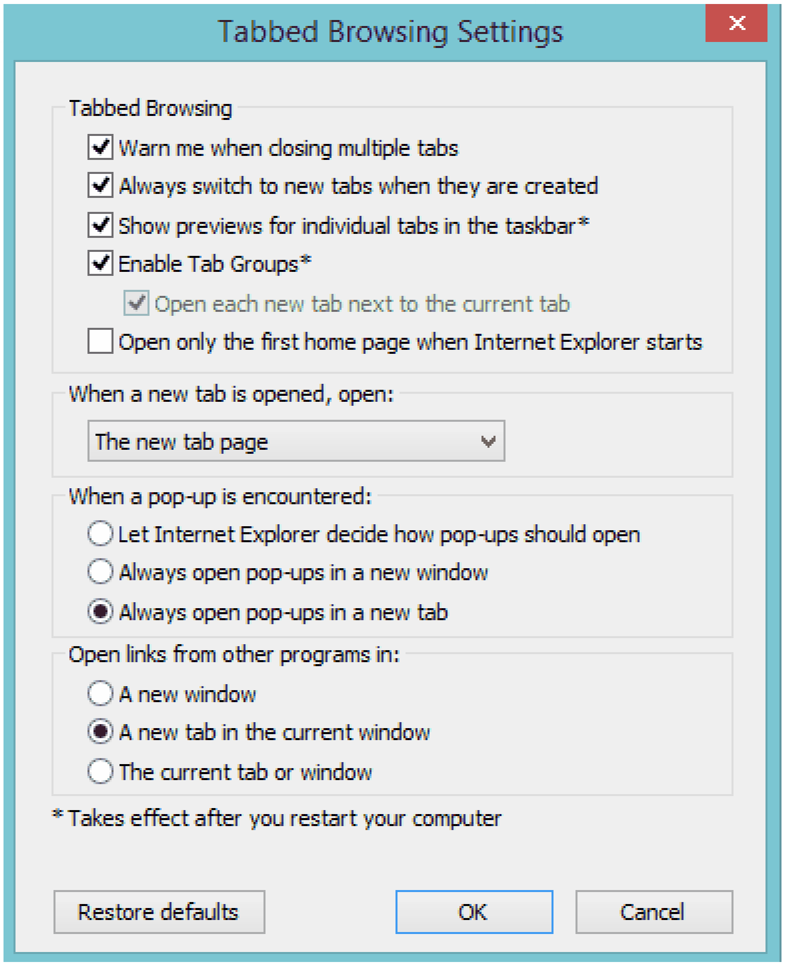
PARADIGM EHR is a WEB 2.0 application that takes advantage of many of the features of the modern MSIE (10 or greater) web browser. However many of these features in MSIE are disabled by default.

To get the full functionality of PARADIGM EHR you need to make the following changes to your MSIE web browser. First you will need to access your Internet Options within MSIE. This can be found under the Tools Menu.



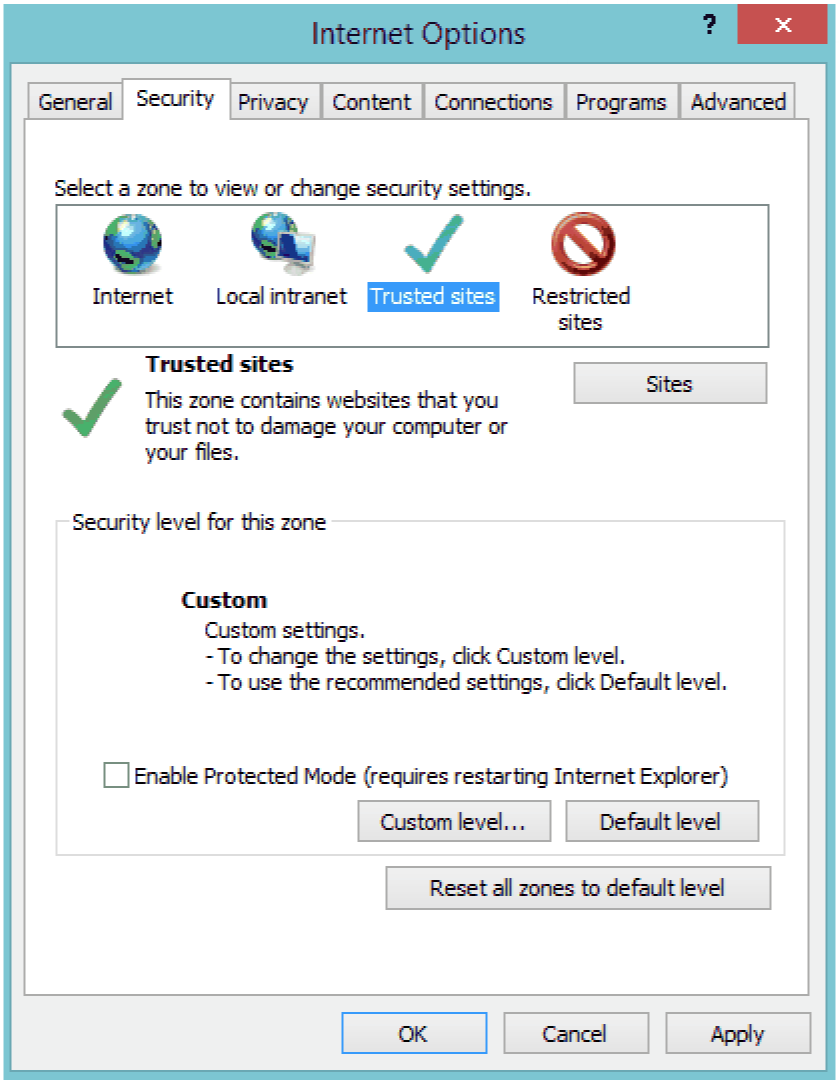
2.7.1 Tabs

PARADIGM EHR takes advantage of Tab Browsing. Tabbed browsing is a feature recently implemented in Web browsers to effectively contain multiple pages or documents in a single window. Each item occupies the browser's entire viewing area when displayed. Tabs facilitate navigation among the items. The term "tab" arises from the visual similarity to the physical tabs on folders used to store and organize hard copy. The entries displayed are the recommend tab settings for PARADIGM EHR.



2.7.2 Security

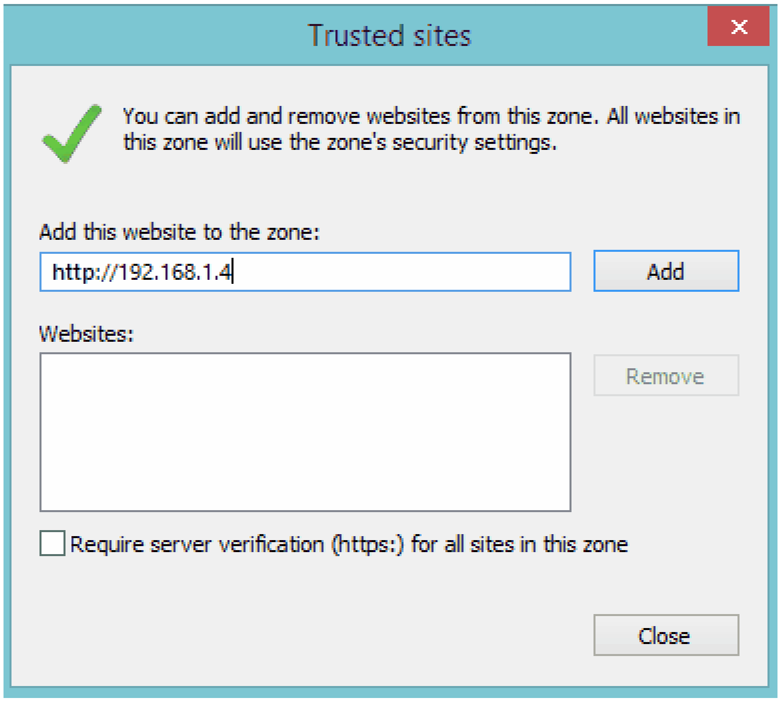
Because PARADIGM EHR is an application, it takes advantage of many features of the MSIE web browser. Normally when surfing the internet you would not want these options turned on because of the security risk that they can present. However since PARADIGM EHR is a trusted application you will need to turn on these features to take full advantage of what PARADIGM EHR has to offer.



2.7.2.1 Secure Server Setup

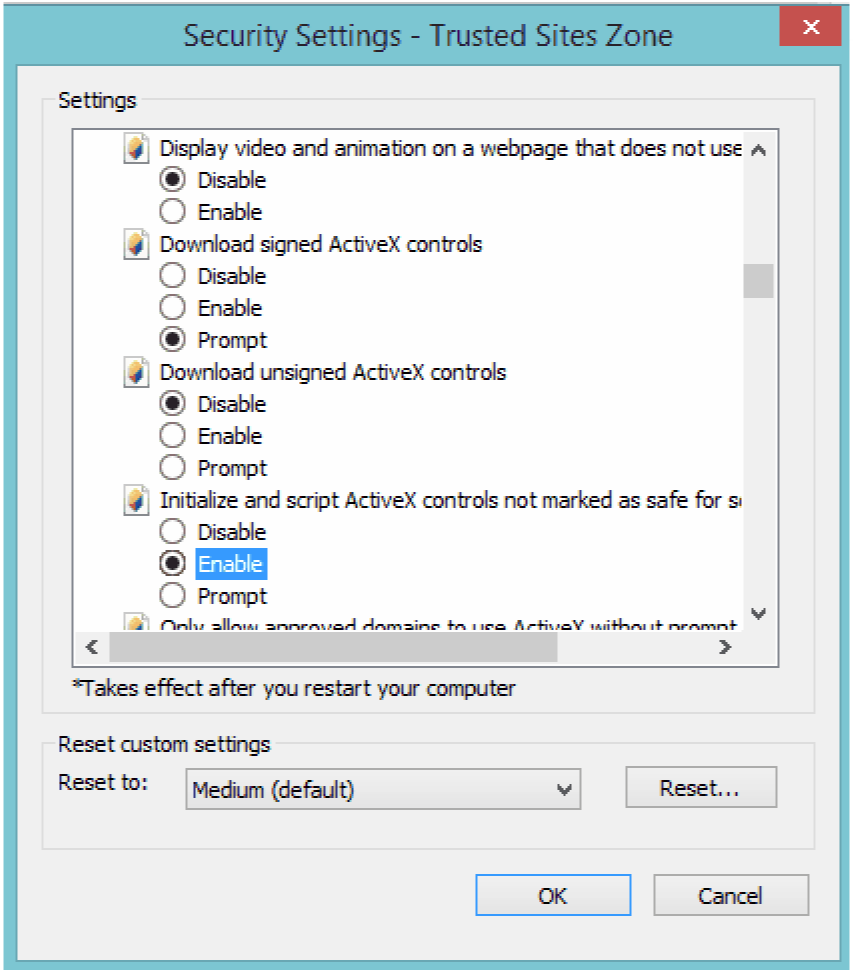
Select the Security Tab on the Internet Options window. Make sure that the “Trusted sites” is selected for the security zone.

- Click the Sites button.
- Uncheck “Require server verification (https: for all sites in this zone)”
- Click the Add button to add the site to the zone.
- Close Trusted sites window.

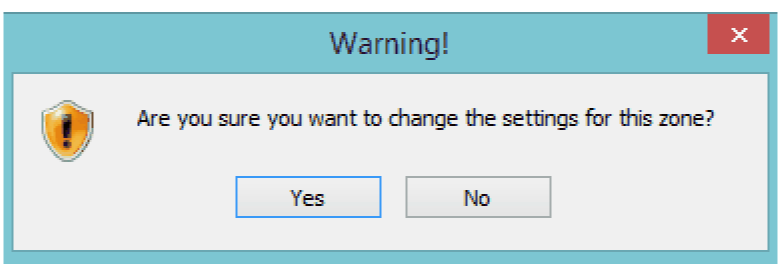


2.7.2.2 Settings

Click the “Custom Level” button on the Security tab of the Internet Options for the security zone you selected above. Set the ActiveX control as follows:



- Click OK.
- Click YES when prompted



- Click Apply on Internet Options
- Click OK on Internet Options.

If for some reason you have security issues while using PARADIGM EHR, you should repeat this procedure, but first the Trusted Sites Security Zone to the Default level.

2.8 Logging In

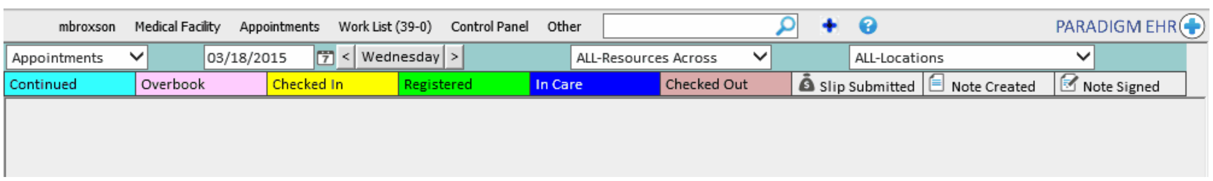
Now that you have set up your browser Enter your Name and Password assigned to you by your system administrator and click the button. If your name and Password are correct you will then precede either to the select data set screen or directly to the PARADIGM EHR control panel unless the system administrator has set your password to expire. If that is the case you will go directly to the password screen. If either your Name or Password is incorrect you will be denied access.

If you are on a PARADIGM EHR system that has multiple data sets, and you are allowed to have access to them, you will first see the Data Set Selection Menu.

Select Data Set	
001	QRS Medical Clinic

If do not select a data set within 60 seconds, you will be automatically logged out.

Select the data set to proceed to the ToolBar.



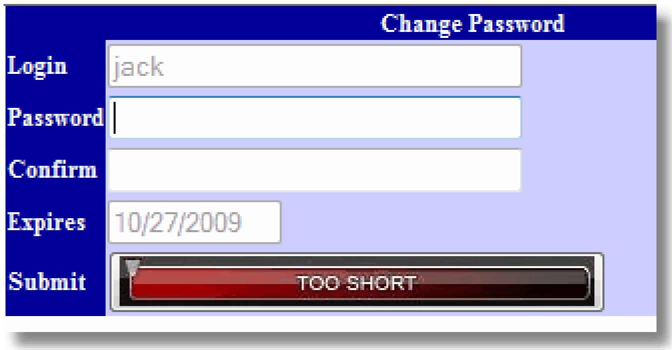
2.9 First Time Setup

If this is the first time that you have logged in you should take care of setting up your password, user defaults and installing and PC or Window applications. The system will attempt to guide you through most of this.

2.9.1 Password

The security administrator has most likely set you up an account with a password set to expire the first time you log into PARADIGM EHR. So before being allowed into the control panel you will be forced to change your password. The following dialog will will appear, prompting you to enter a new password. You must then enter the same password again and press the submit button.

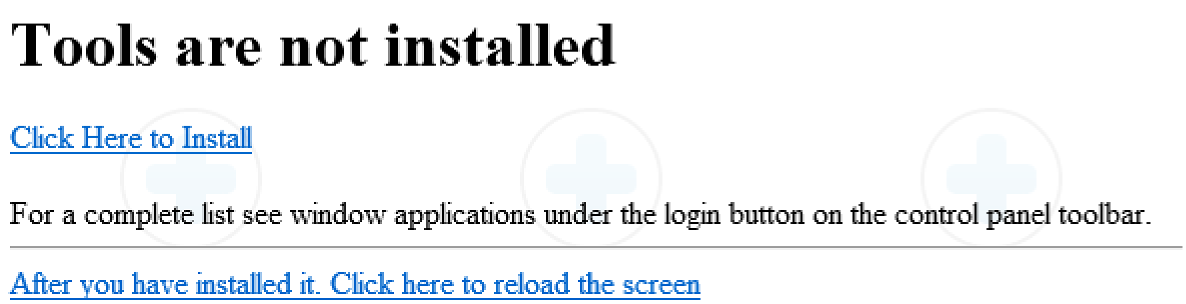
Based on security guidelines established by the security administrator you may be forced to enter a password that meets requirements for length and complexity.



2.9.2 PARADIGM Tools

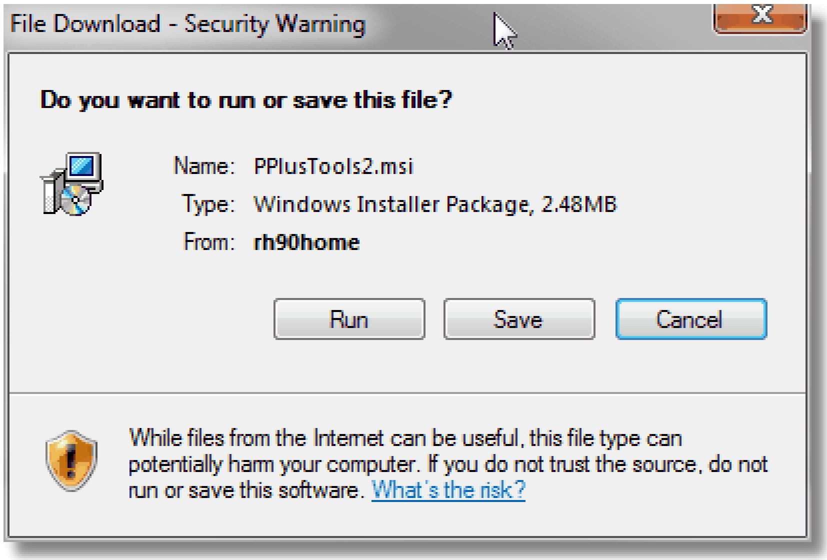
PARADIGM EHR Tools are a set of programs that are loaded onto your PC to allow your PC to communicate with the PARADIGM EHR application. These tools include a secure transfer program used to exchange data between the PARADIGM EHR server and your PC. This allows you to use your familiar PC applications to edit and manipulate data when needed.

Once you enter PARADIGM EHR the following screen will display if PARADIGM EHR Tools are not installed:

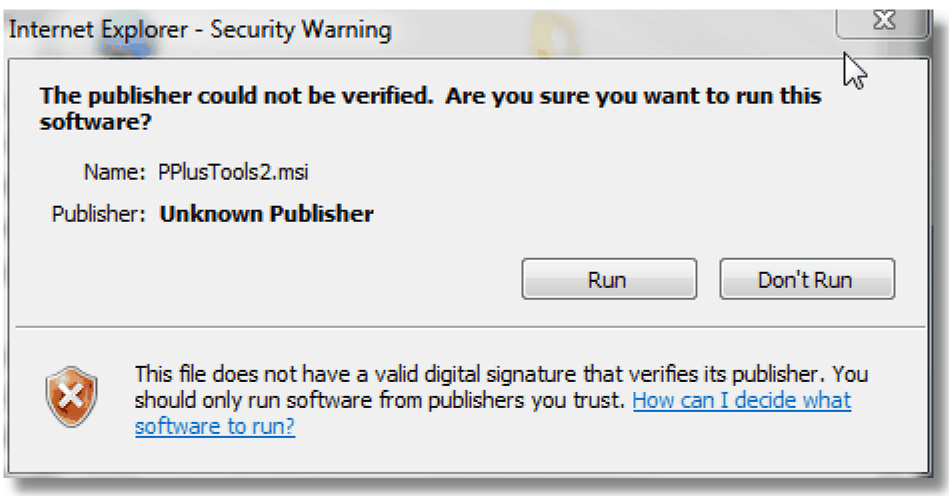


Click on option to install the PARADIGM EHR Tools.

Click on Run

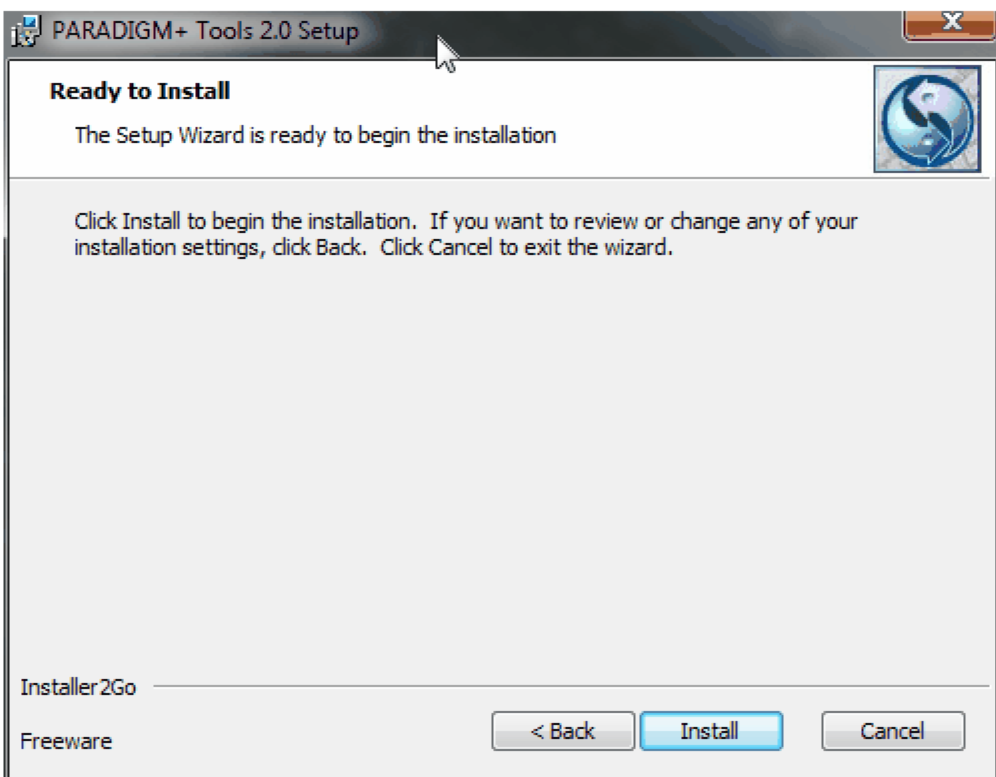


Click on Run again.



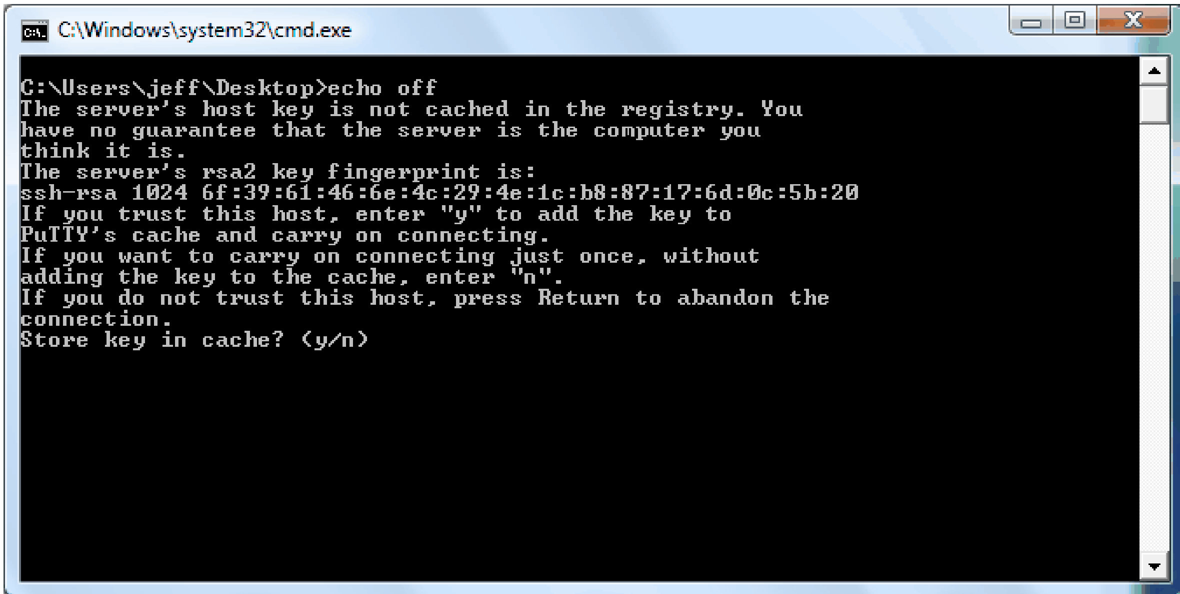
Click on Next

Click on Next



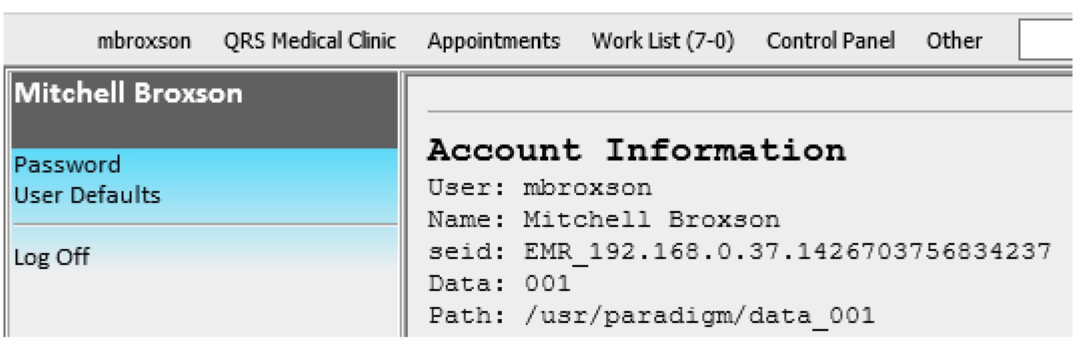
Click on Install,
Then Click Next and FINISH

Then Click on the option to reload the screen. A dialog box will display prompting you to store an RSA key. This Key will identify the server from this point forward. Enter 'y'.



2.9.3 User Button

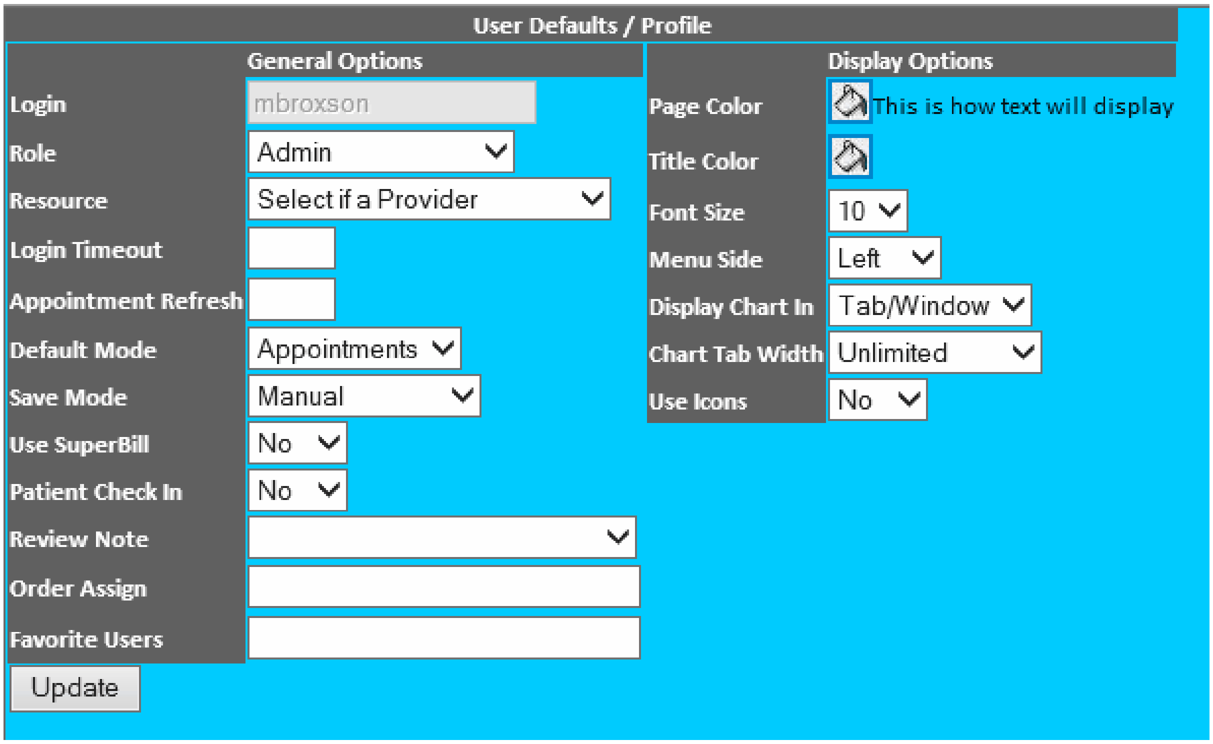
Clicking on the user button of the toolbar will display the following menu:



These functions will help you complete your setup.

2.9.4 User Defaults

User defaults will allow you to customize how your screen displays. You may pick your background color as well as a background image, a color for titles, and a font size. The size of your font is related to the resolution of your screen. The higher the resolution the larger the font size should be.
Enter your preferences and click the Update button to save them.



2.9.4.1 Profile Information

The User Defaults / Profile form contains the following fields.

General Options

Login
This is the User login name. This will be established by the security administrator.

Role
This defines the users role as defined in the Role Based Access Control (RBAC). It determines what features and functions the user has access to.

Resource
If the user is a service provider, select from the resources for the user. The resource will determine what resource code, and associated physician code will be used when a provider enters charges on the Charge Slip form. If the user is not a service provider leave this field empty.

Login Timeout
Enter the number of minutes that a user may go without activity before they will automatically be logged out. Leave blank for indefinite.   If the security profile has an Inactivity timeout established, the control panel will use the lesser of the two values.

Appointment Refresh

Enter the number of seconds to elapses before the Schedule or Work list will automatically refresh. Leave blank for indefinite.

Default Mode
Enter the user's default work mode. This defines what work mode the user is put in after they log in and select a data set.   This can be either "Appointments" or "WorkList"

Save Mode
This option will determine the save mode for PARADIGM EHR Data Documents. The available selections are:

- Manual - In this mode you must manually save each form before selecting another object or the data will be lost.
- Ask to save - In this mode, if you change data on a form and then select another object without first saving you will be prompted to save the data. If you select "OK" the data will be saved and the new object will be displayed. If you select "Cancel" the data will not be saved.
- Automatic save -In this mode, if you change data on a form and select another object without first saving, the software will automatically save the form and then display the new object.

⚠ Administration Mode will always be manual save.

⚠ The Note on an Encounter will always be manual save.

User SuperBill
If the user has access to enter charges using the Charge Slip, this will determine if the Super Bill will automatically display. Some users may prefer not to use the super bill but just use the standard diagnosis and charge entry.

Patient Check In
Display patient check-in information while in a patient's chart.

Review Note
Assign user to review the Note before archiving the worklist item.

Order Assign
Default user(s) that will be assigned to orders as they are created.

Favorite Users
Favorite users list to show up in left column of user selection page.

Display Options

Page Color
This field allows you to select the background color for the major part of the screen

for the user. You may use the Color Selector to select the color code.   The color selected here should be a light color because any text displayed where this color is used will be show as black.

Title Color
This field allows you to select the background color for any title areas to display on the page for the user. You may use the Color Selector to select the color code. The color selected here should be a dark color because any text displayed in titles will show as be white.

Font Size
Here you may select the font size the user wants to use. Font sizes range from 6 to 16 points. The smaller the font the more information you will be able to display on the screen without having to scroll the page content.

Menu Side
This defines what side of the screen the file list menu will display when PARADIGM EHR displays a patient's chart. This can be especially helpful when using tablet PC's to avoid having to reach over to select a file.

Display Chart In
There are two options here:
1. Frame - Display in the Frame under the toolbar. With this method you will only be able to work with one chart at a time.
2. Tab / Window - This method will open another tab or window (depends on browser configuration) and display the chart. With this method you may have multiple charts open at the same time.

⚠ When in Inbox Mode the display will revert to Frame Mode.

Chart Tab Width
This option will allow you to set the maximum width of tab names in characters. If you have a lot of tabs with long names, using this feature may provide you with a cleaner display.

Use Icons
This tells the software to use icons defined in the button setup for Encounter buttons instead of just the defined text. It is also used by some forms such as Review of Systems and Exam. These forms will display either Icons or Text Headings based on this preference.

Patient Check In
This will show if patients check in as part of the patient header.

2.9.4.1.1 Color Selector

The color select appears as a paint bucket icon on the Color and Title Color fields. It will display a grid of colors from you to choose from. Hover over the color you want and click and the color will be loaded into the corresponding field.

Part 3

The Toolbar

3 The Toolbar

Once you have logged into PARADIGM EHR you will be presented with the toolbar. (This is your main window) From here you have access to

The tool bar will appear similar to the following:

You may access both the User Button and Practice Button from the toolbar.

The Toolbar controls the mode used to locate patient charts. You may find charts by Appointments, Work Lists, Control Panel, Patient Search, or Other views.

Other Views include:
Administration
Audit Report
Chart Check-In
Chart Check-Out
History
Inbox
Lock Manager
News
Outbox
System Configurations
System Reports
Windows Applications

Some Other Views are enabled or disabled through RBAC and may not be in your Other menu.

The Icon will connect you to PARADIGM+ and automatically log you in if you have an account in PARADIGM+.
And Last you may always access this help document from the toolbar.

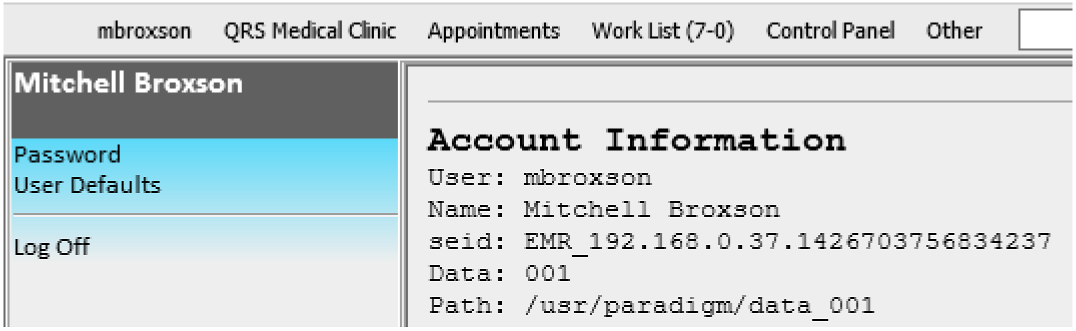
The secadmin user will not have all options displayed.

3.1 Login Timeout

The Login Timeout will appear just before the User Button if you have set a timeout value in the user setup.

3.2 User Button

Clicking on the User button will display the following menu:



- Log Off
- Password
- User Defaults

User based options can be found in First Time Setup.

3.2.1 Log Off

This option will log you out of PARADIGM EHR and close all of you PARADIGM EHR windows. You may also log off by exiting the Control Panel window.

3.3 Practice Button

The Practice Button will contain the name of the data base that you are currently working in. If you have multiple databases on and privileges to access other data bases this button will allow you to select a new database by displaying the Select Data Set menu similar to the following.

Select Data Set	
001	QRS Medical Clinic

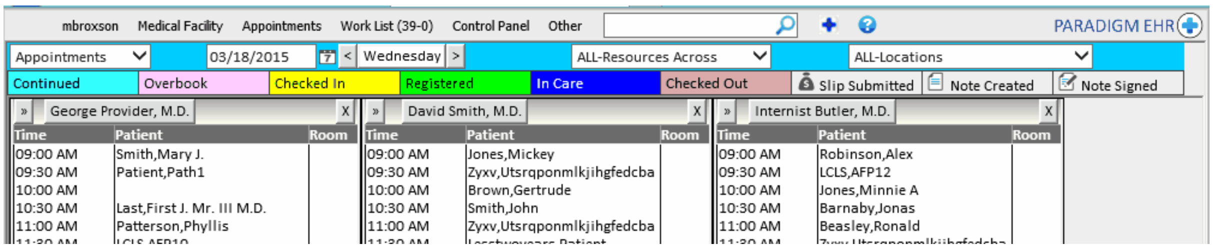
Click on the data set you want.

⚠ If do not select a data set within 60 seconds, you will be automatically logged out.

⚠ If you are viewing charts in separate tabs (windows), changing the data set will close all open tabs (windows) displaying charts.

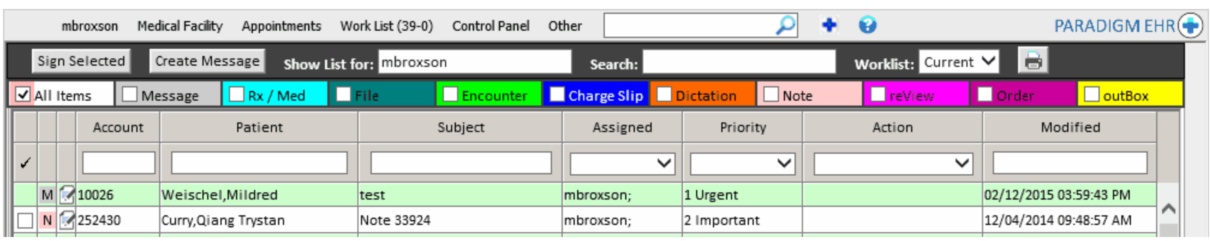
3.4 Appointments Button

The Appointments Button will display the appointment book below the Toolbar. This mode will allow you to access a patients chart via appointments entered in the PARADIGM Practice Management System. See [Appointments] for a full description of all options available under appointments.



3.5 Work List Button

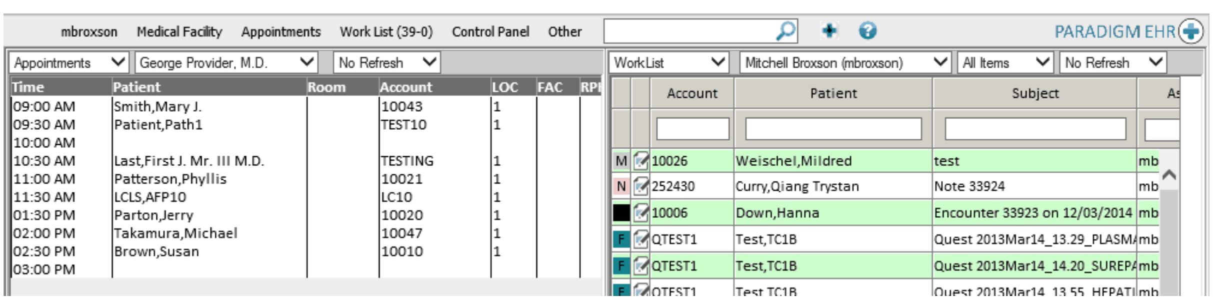
The Work List Button will allow you to access a patients chart via a work list item. Work List Items are things that are marked to be followed up on for a patient. These include: Messages, Rx, Encounters, Charge Slips, Dictation, and Notes. For a full description of all Work List options see [Worklist].



The Work List button will display the number of work list items for the user, as well as the number of new items since the last time the work list was viewed.

3.6 Control Panel

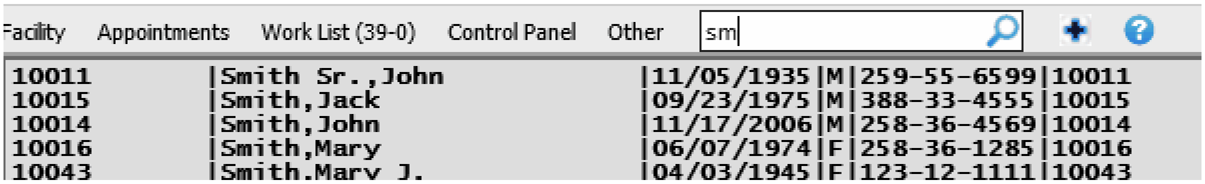
The control allows you to define up to six (6) areas for displaying information, three on each side. These areas can contain appointments, worklist, inbox, outbox, histories, reports, etc... Each item based on its type can be customized and even set to automatically refresh.



Your configuration is automatically saved when you make changes.

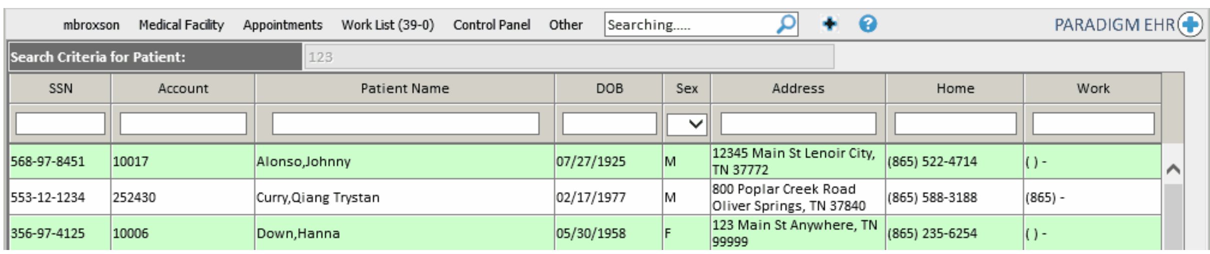
3.7 Patient Search Button

Patient Search works in two ways. The first is, as you start typing it will suggest patients as you type. This is based on the patients last name.



If the patient you are searching for appears in the list you may either click on the patient to display the patients chart.

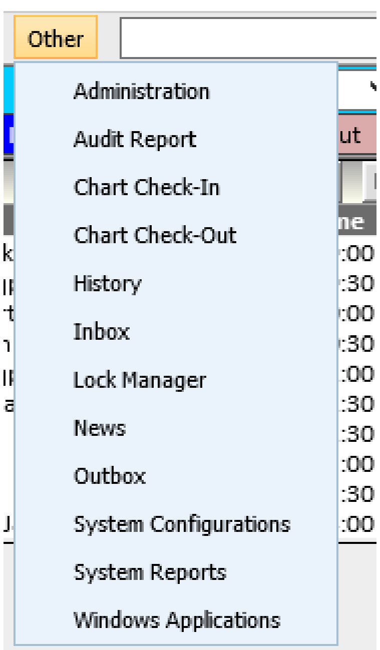
The Patient Search also search the patient database for other information, such as: SSN, address, phone, DOB or account number.
Just enter what you are looking for in the search field and then click the Patient button.



You may then click on the patient you want to display the patients chart.

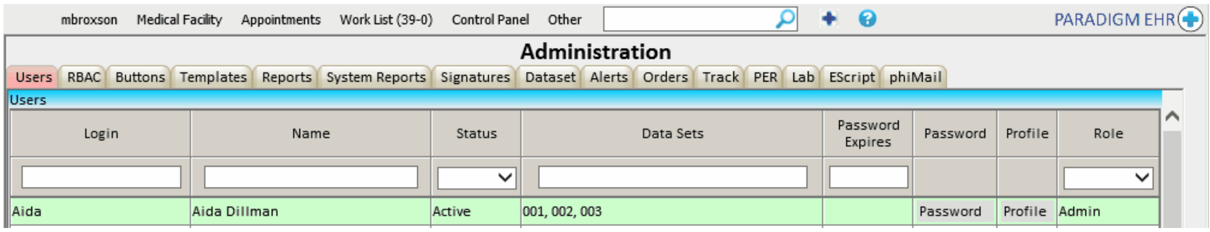
3.8 Other Options

The other options is the drop down select option on the toolbar.



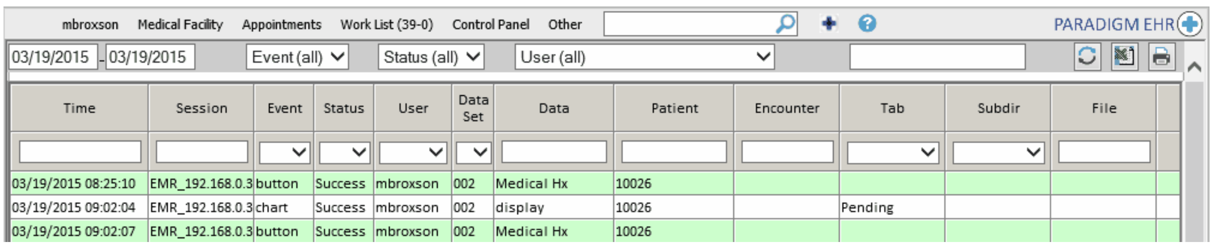
3.8.1 Administration

Administration is only accessible by users with Admin RBAC access. This takes you into the data set administration area.



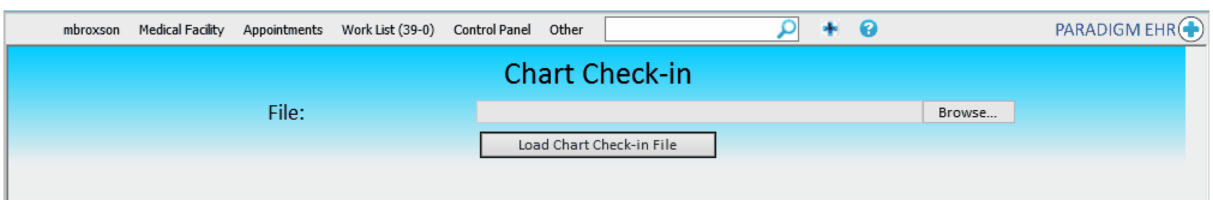
3.8.2 Audit Report

Audit Report is only accessible by users with Admin RBAC access. This report allows you to see the audit reporting tool for the data set that you are in. To see audit reports for other data sets you must log in as secadmin or change to the data set you are wanting to view the audit report for.



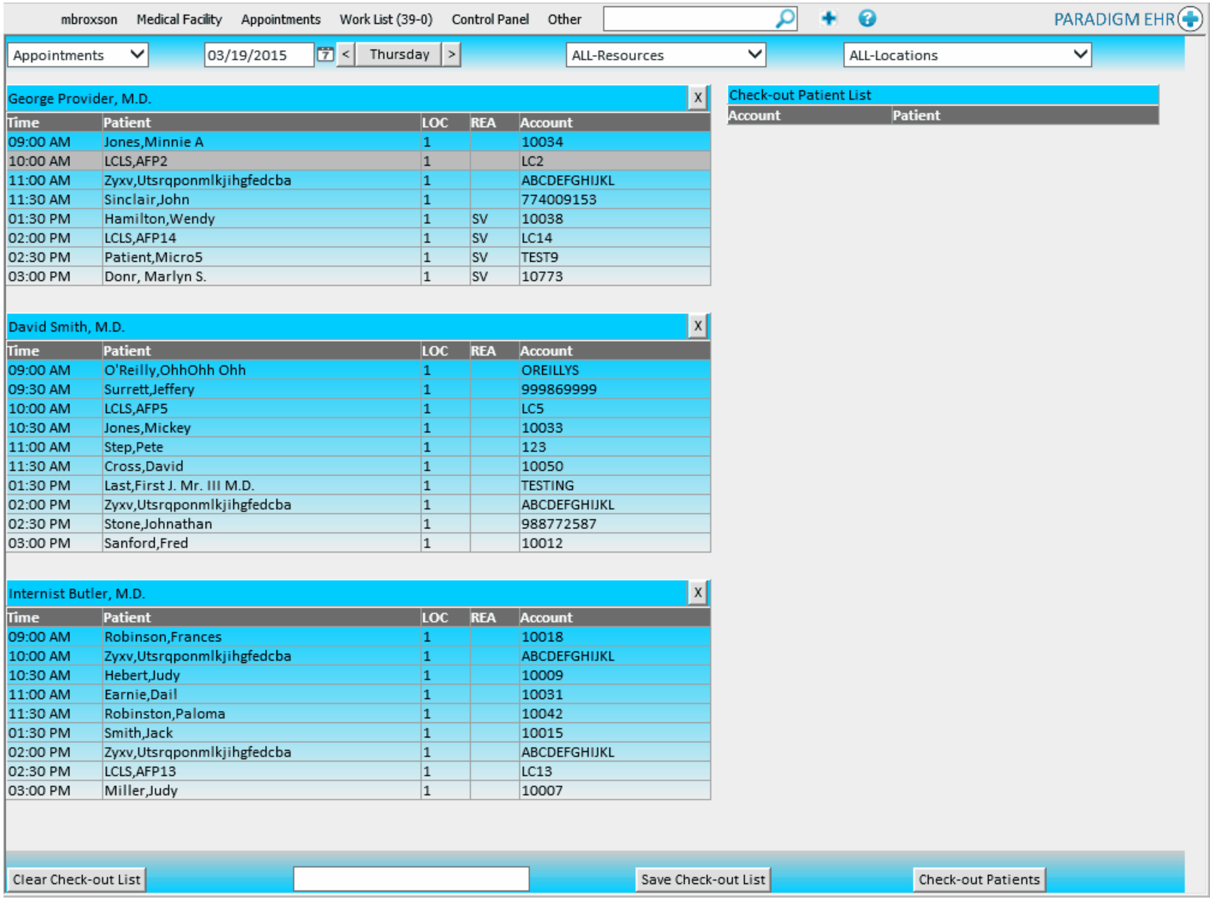
3.8.3 Chart Check-In

Chart Check-In works in conjunction with Portable PARADIGM. This is where the .checkin file will be loaded back into the server to check in all changes you have made to patient records while on the Portable PARADIGM system.



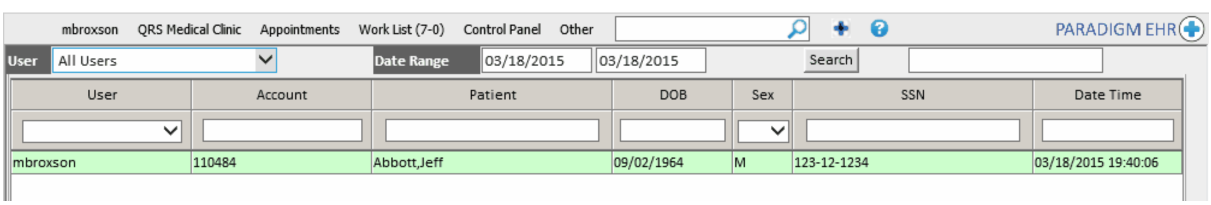
3.8.4 Chart Check-Out

Chart Check-Out works in conjunction with Portable PARADIGM. This is where you select the patients that you would like to check out for this session.



3.8.5 History

The History button allows you to find a patients chart based on a history of charts that you have worked with. It gets this data from the log that is kept of all activity. Clicking the History button you will see something similar to the following:



By default it will display a history for your user for the current day. You may change the selection criteria to display another user or all users. You may also select a date range by clicking in the date fields to set a start and end date. After changing the dates click the Search button. You may also enter in search text in the Search field to display only matching records.

3.8.6 Inbox

Inbox is a special mode that allows you to quickly file documents into patients charts that are placed into the inbox folder. The inbox folder is a common shared folder for a data set that can be accessed externally to allow other applications (such as faxing programs, or interfaces) to have a common place to place documents that can not be automatically filed electronically.

These are documents that will require human intervention to be filed in the proper patient chart.

Clicking on the Inbox option will display all files stored in the inbox and put the program in the inbox mode.

While in the inbox without a patient chart you will have the Transfer, and Scan buttons available.

3.8.6.1 Moving a File to a chart

While in the inbox mode, any patient chart selected using the Patient Search mechanism will be displayed with the inbox and file selected.

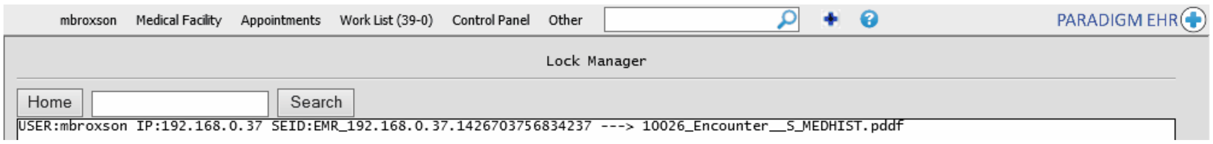
You may then click the Move button to move the file to correct tab within the patients chart.

The Transfer and Scan buttons are not available when in a patients chart and the inbox.

If your profile default is to have charts open an separate tab / window the inbox will automatically refresh when you return focus to the tab or window with the toolbar.

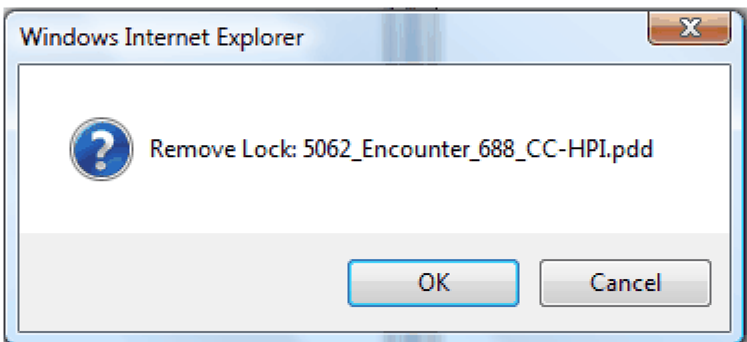
3.8.7 Lock Manager

This is an administrative tool that allows an administrator to remove stale lock files. A stale lock file may be produced if a computer is shut down while a file is locked, or the web browser crashes for some other reason.



You may search for a lock by user, SEID, Patient Code, Tab, Encounter Number, or Form name.

Click on a lock and you will be prompted.



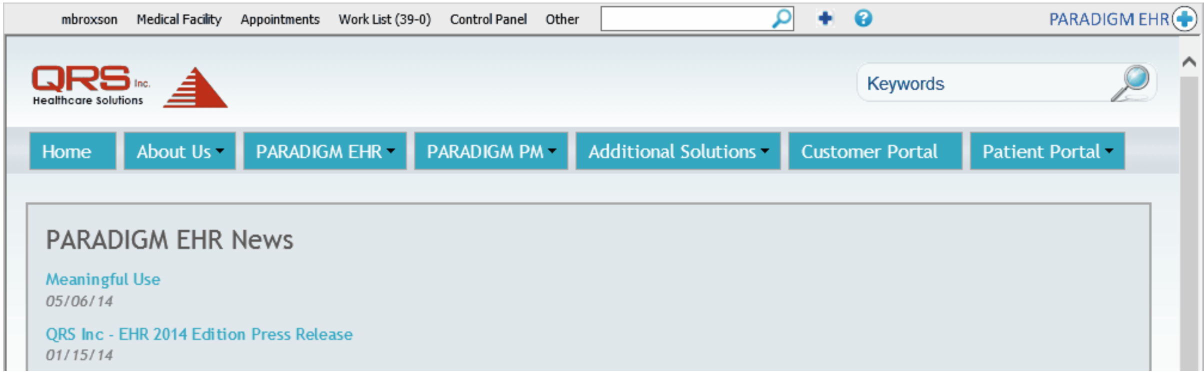
If you click OK the lock file will be removed.

You may also access the lock manger by clicking on a lock notification of a file.

If you are not an administrator, you will first be prompted for a password.

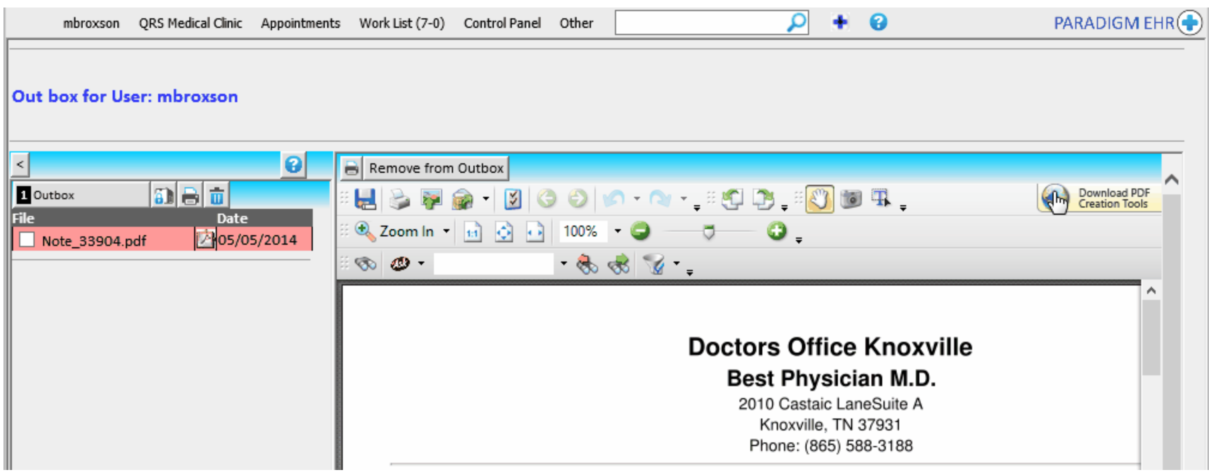
3.8.8 News

This area connects to QRS's website to view EHR and other QRS related news.



3.8.9 Outbox

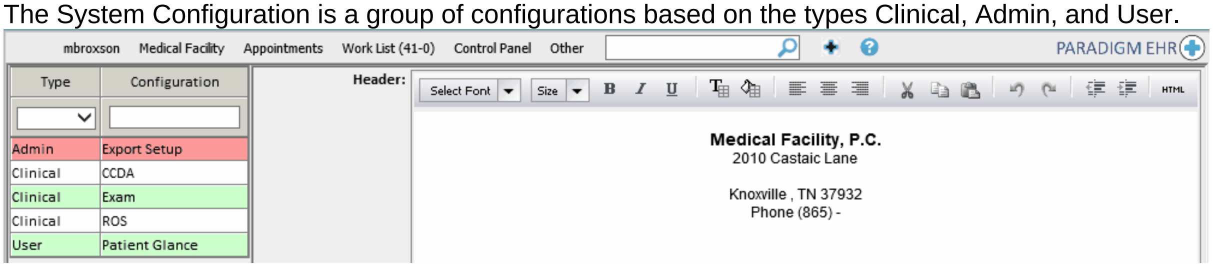
The user out box provides a place for you to send documents to send to a third party. This is useful for things such as school or work excuses that you want to securely email.



Individual files may be sent to the user outbox by clicking the red outbox button on the document header.

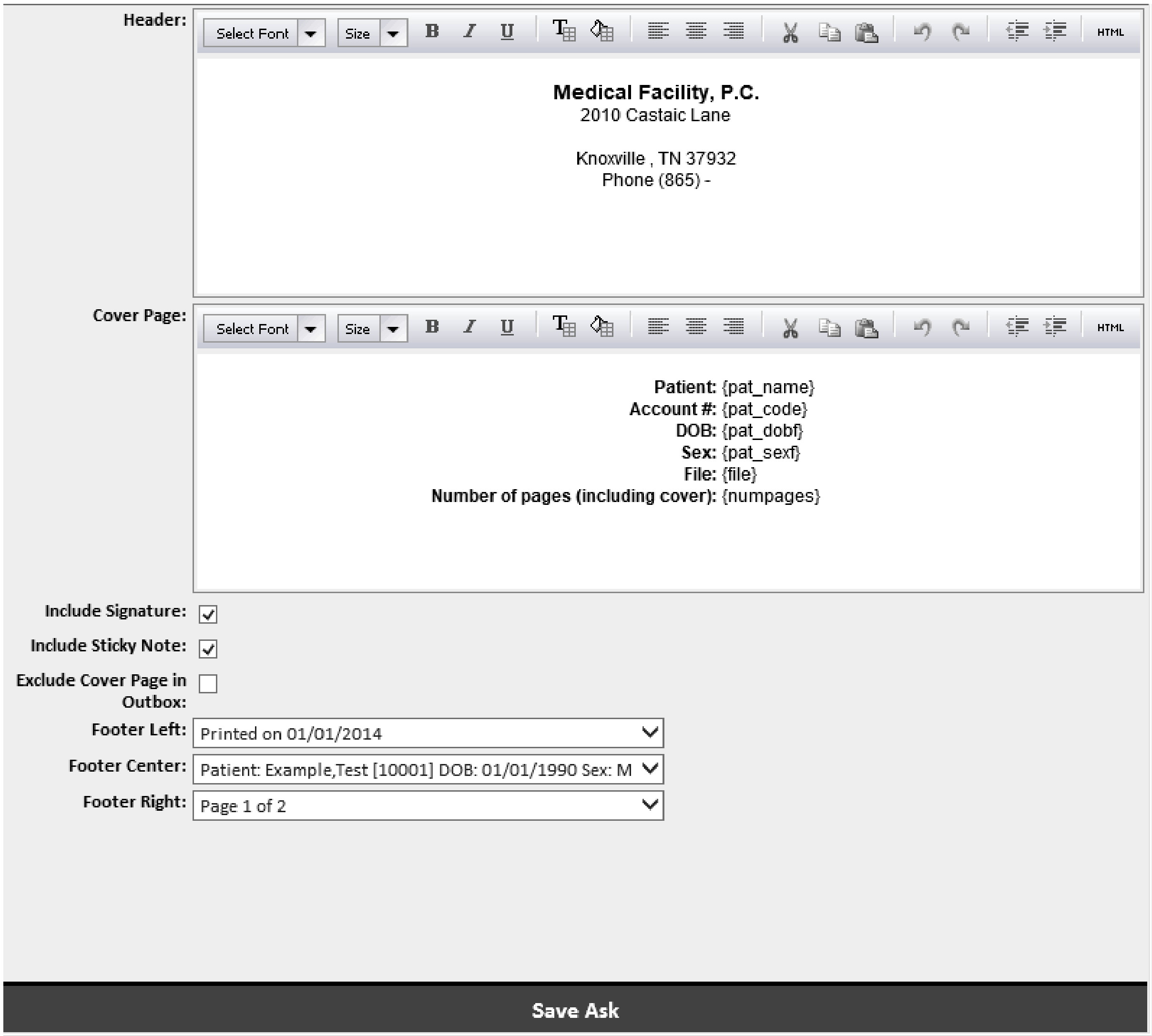
3.8.10 System Configuration

The System Configuration is a group of configurations based on the types Clinical, Admin, and User.



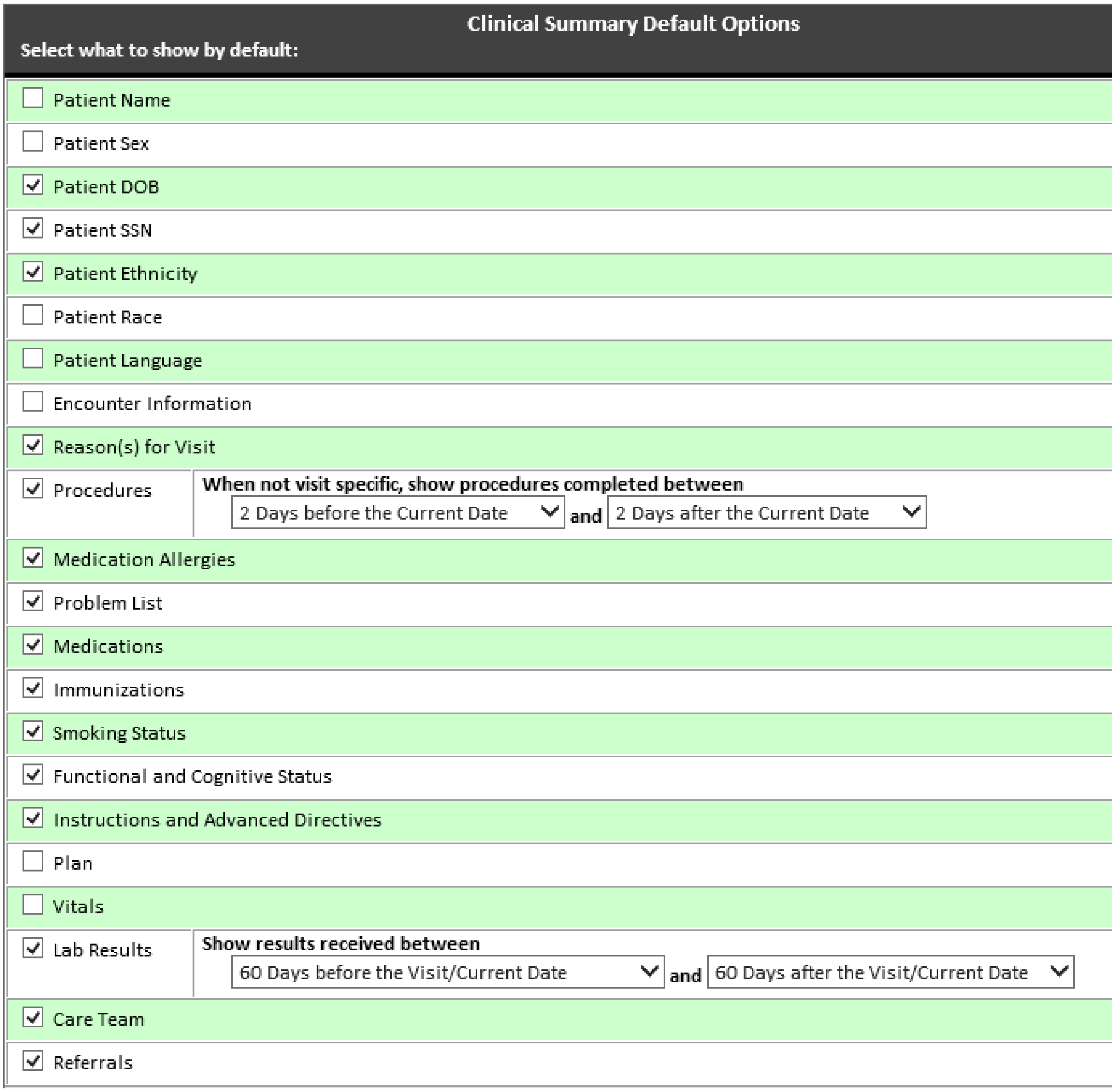
3.8.10.1 Export Setup

Export Setup allows for configuration of the way that files print / export from the EHR.



3.8.10.2 CCDA

CCDA Options allow you to configure how your CCDA documents (Clinical Summaries, Transitions of Care, etc.) will export. These settings can always be overwritten on a per-file basis when generating the CCDA file for a patient.



Clinical Summary Default Options Select what to show by default:	
☐ Patient Name	
☐ Patient Sex	
☑ Patient DOB	
☑ Patient SSN	
☑ Patient Ethnicity	
☐ Patient Race	
☐ Patient Language	
☐ Encounter Information	
☑ Reason(s) for Visit	
☑ Procedures	When not visit specific, show procedures completed between 2 Days before the Current Date and 2 Days after the Current Date
☑ Medication Allergies	
☑ Problem List	
☑ Medications	
☑ Immunizations	
☑ Smoking Status	
☑ Functional and Cognitive Status	
☑ Instructions and Advanced Directives	
☐ Plan	
☐ Vitals	
☑ Lab Results	Show results received between 60 Days before the Visit/Current Date and 60 Days after the Visit/Current Date
☑ Care Team	
☑ Referrals	

3.8.10.3 Review of Systems / Exam

Review of Systems / Exam Configuration

The Review of Systems and Exam forms look at a configuration under System Configuration. The form configurations allow you to setup the systems and symptoms/findings for the form. The hierarchy that the forms look at is: 1st the appointment Resource and Reason, 2nd just the Resource, 3rd just the Reason, 4th the Practice Configuration, and lastly the QRS Standard Configuration.

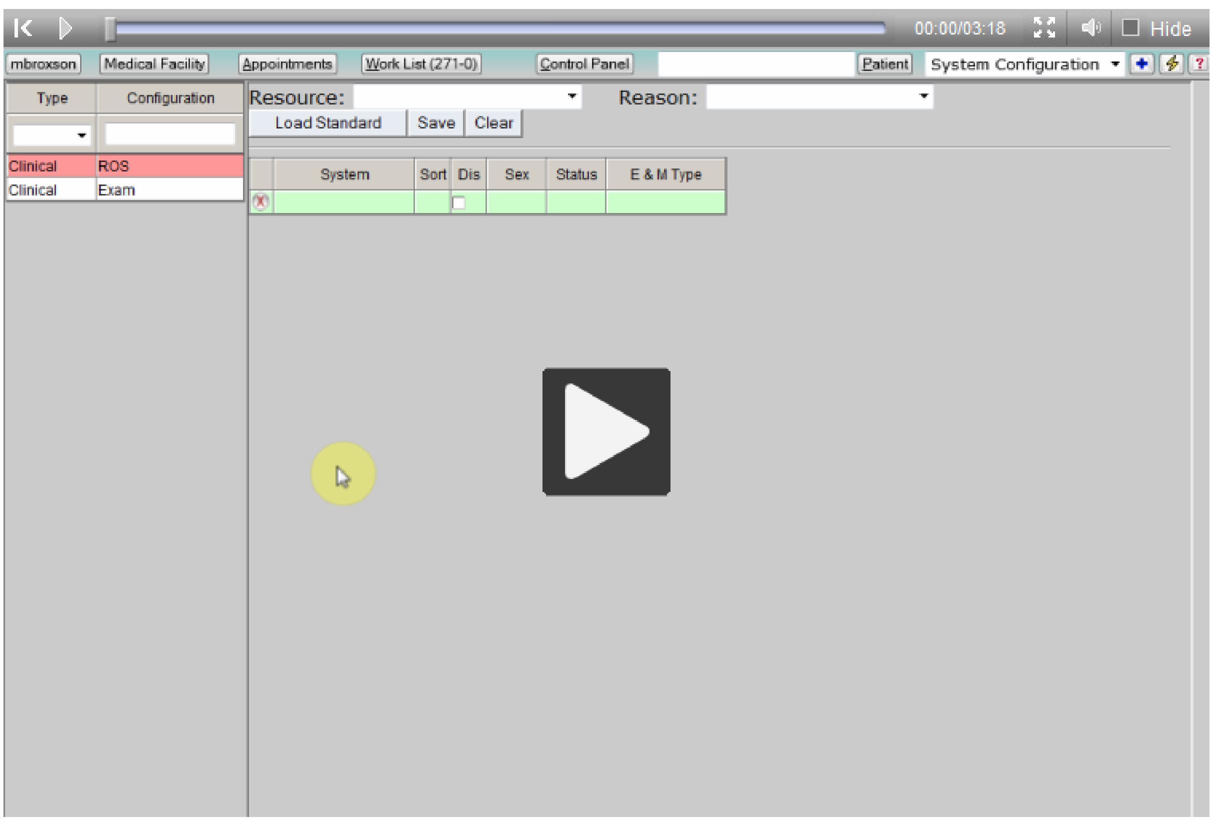
At the top of the configuration page you will see a selection for the Resource and Reason along with 3 – 5 buttons. The buttons are: Load Standard, which copies the QRS Standard Configuration into your current Resource/Reason selection. Save, which saves your current Resource/Reason selection. Clear, which clears the systems and Symptoms/Findings for your current Resource/Reason selection. Load, which loads the saved configuration for your current Resource/Reason selection. And Remove, which removes the saved configuration for your current Resource/Reason selection. The Load and Remove buttons only appear if there is a configuration saved for your current Resource/Reason selection.

Under the Systems section of the configuration, you can add and remove Systems. Set the numeric sort order for the systems. Temporary disable a system. Define a sex for the system if it is only applicable to Males or Females. Set the default status of a system. And set the Evaluation and Management system type.

Under the Symptoms/Findings section, you can add and remove items. Set the numeric sort of the items. Set the item label. Define a sex for the item if it is only applicable to Males or Females. Set the default status of an item. And set the default description of the item.

Please note that both numeric sort sections do not have to be in consecutive order. For example, you can set the sort in increments of 10 to allow for adding additional systems or items at a later time.

To copy one configuration to another, you would first load the configuration that you would like to copy. Then select the configuration that you would like to copy it to. Make any changes that you would like. Then press the save button.

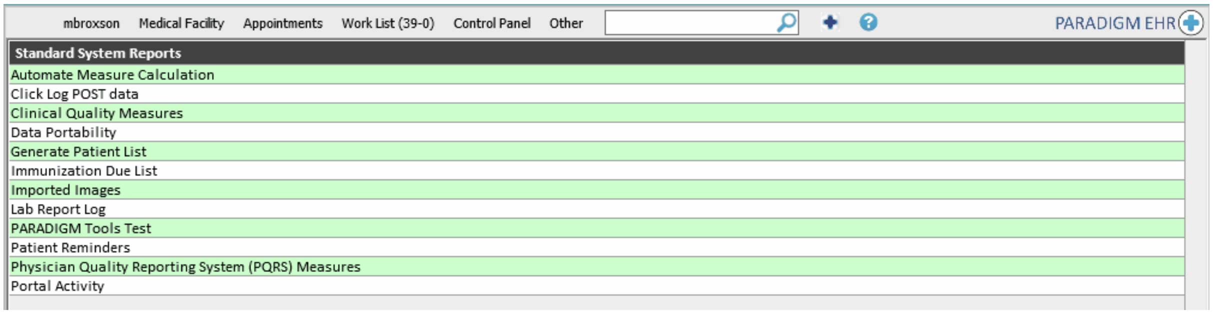


3.8.10.4 Patient Glance

Please see the configuration section under the Patient Glance topic in Patient Reports.

3.8.11 System Reports

Here you may access both standard and custom reports that are system based.

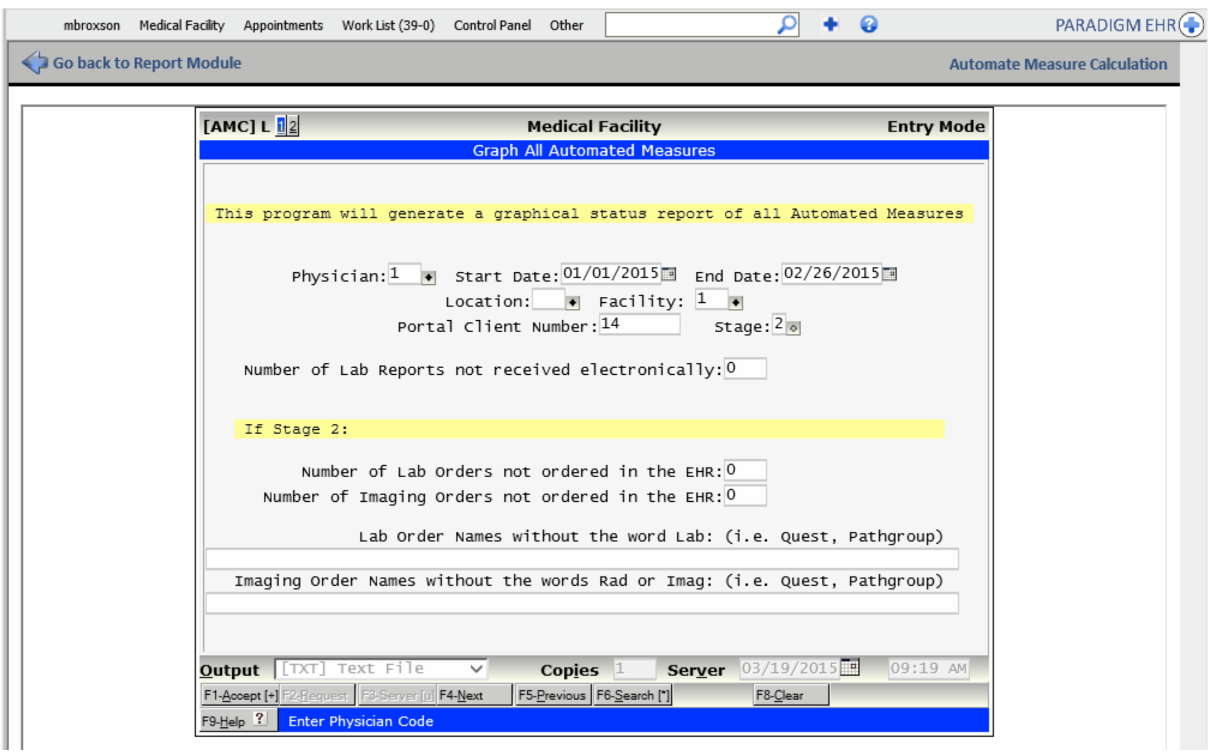


3.8.11.1 Standard Reports

Standard EHR Reports

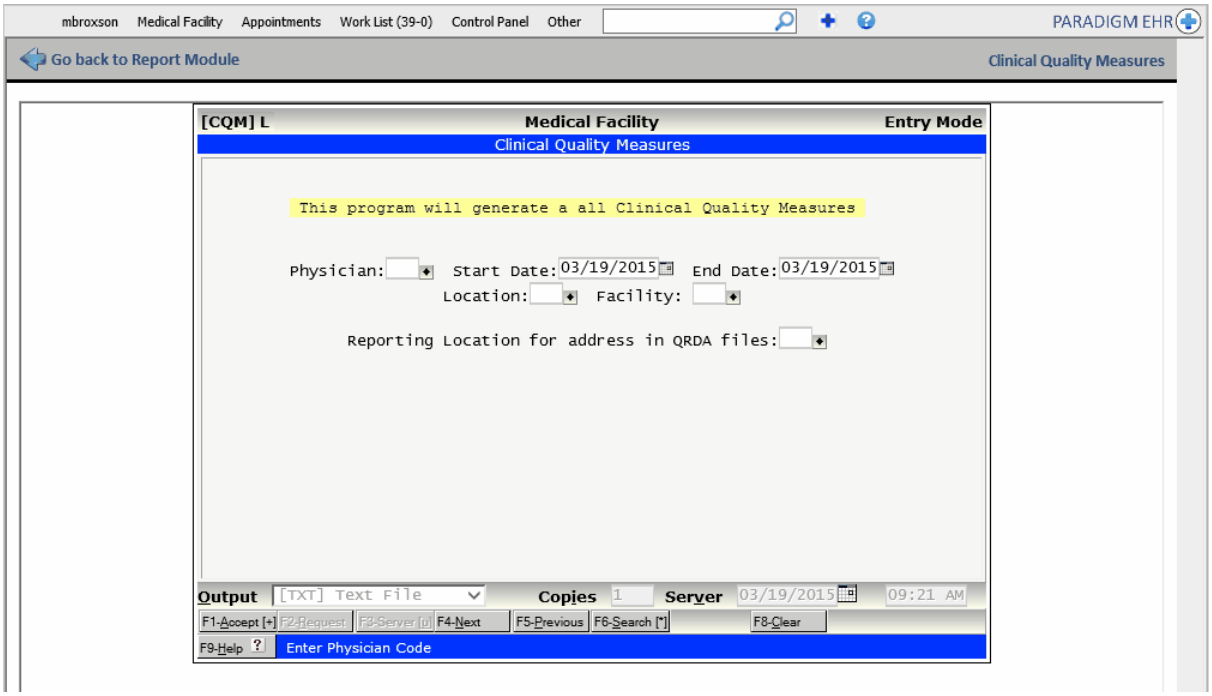
3.8.11.1.1 Automated Measure Calculations

This option allows you to run a graph report for all Automate Measure Calculations for Meaningful Use.



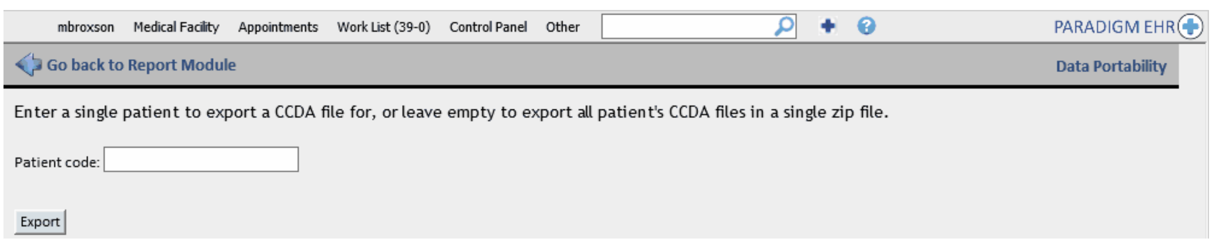
3.8.11.1.2 Clinical Quality Measures

This option will allow you to generate your Clinical Quality Measures for Meaningful Use.



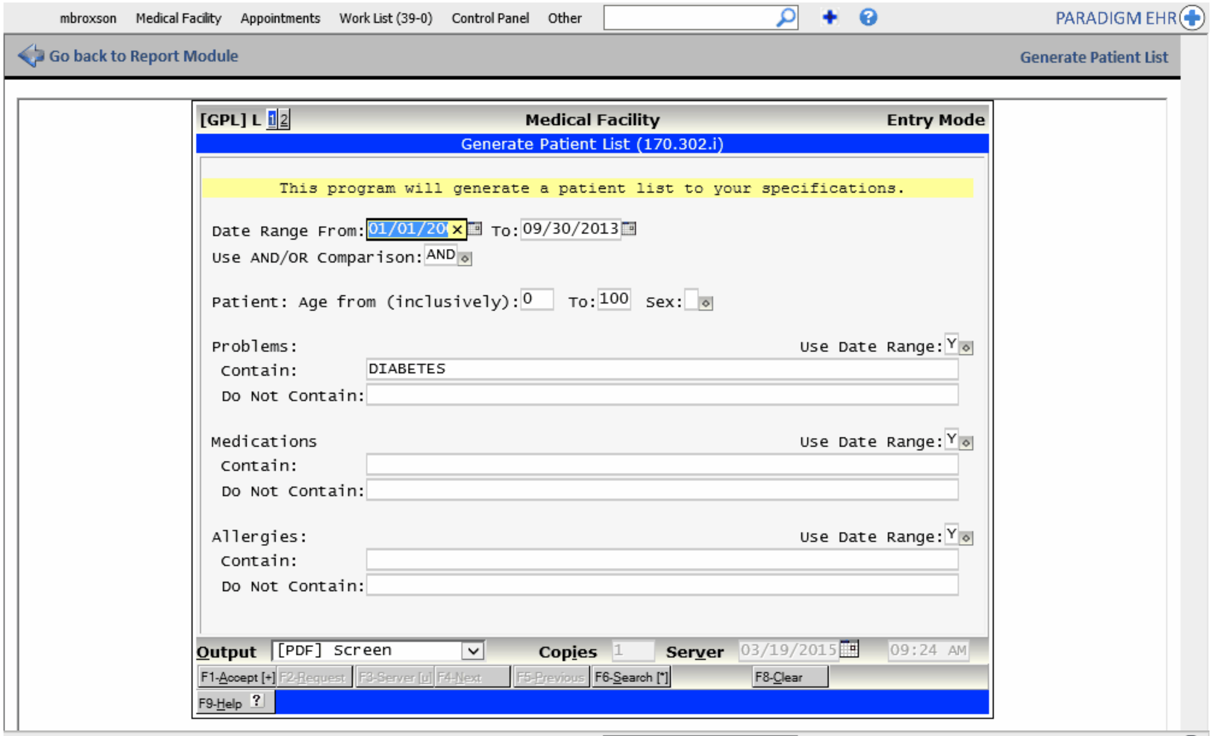
3.8.11.1.3 Data Portability

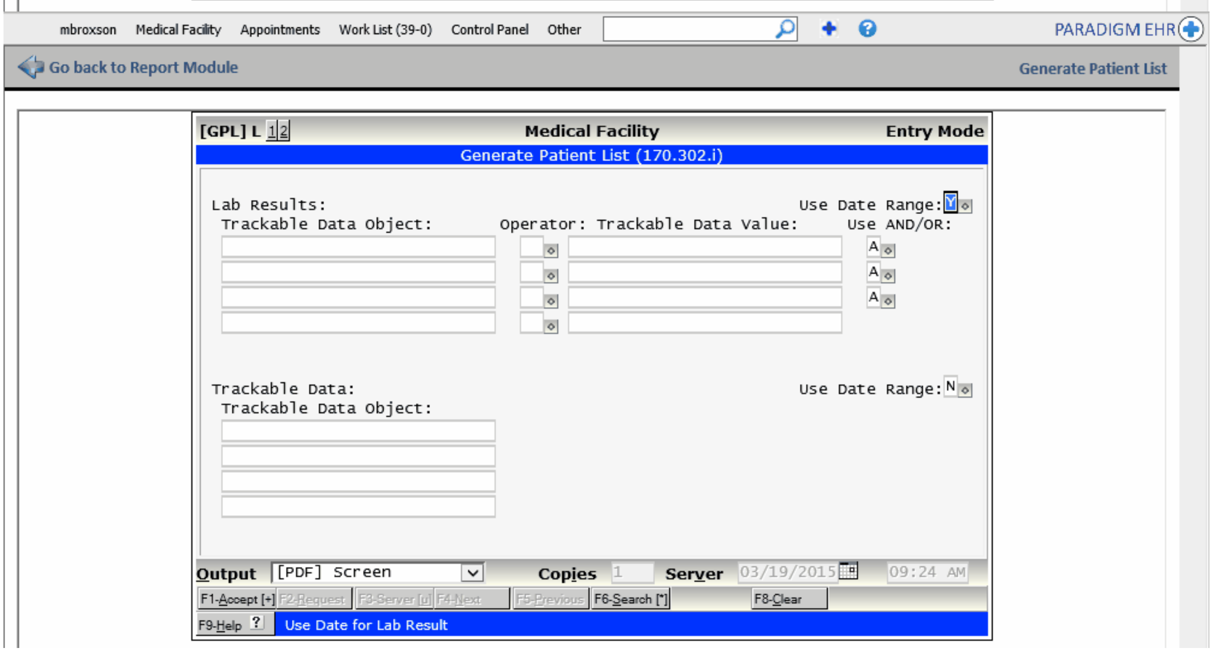
The Data Portability report allows you to export one or all of your patients to a CCDA file. You will be presented with a download option that will be a zip file with all patient's CCDA files within it.



3.8.11.1.4 Generate Patient List

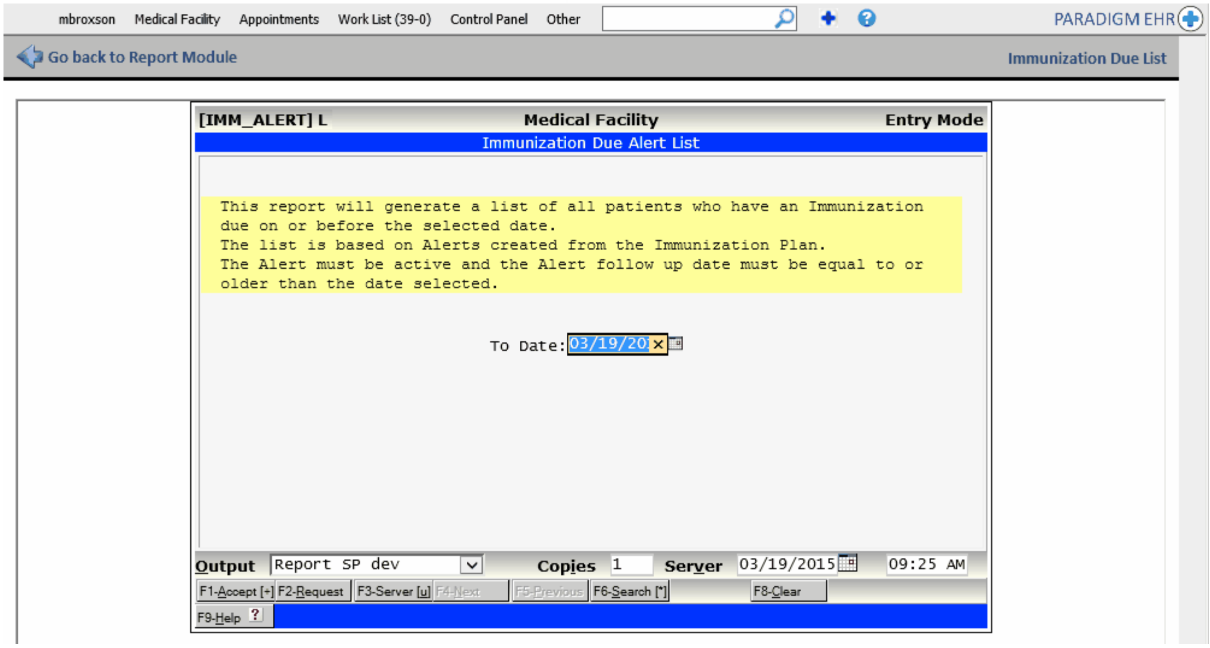
This program will let you generate a patient list based on patient demographics, problems, medications, allergies, and track able data.





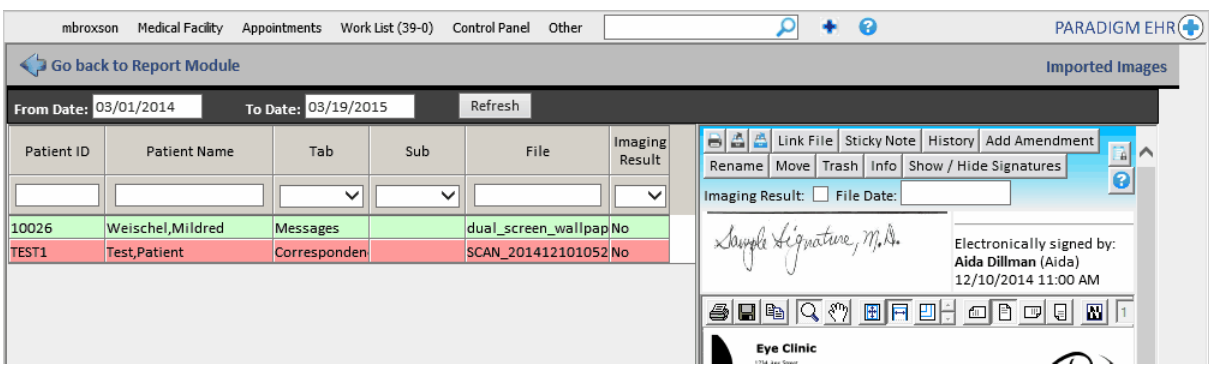
3.8.11.1.5 Immunization Due List

The Immunization Due List looks for all Immunization Due alerts for patients in order for you to schedule appointments with those patients.



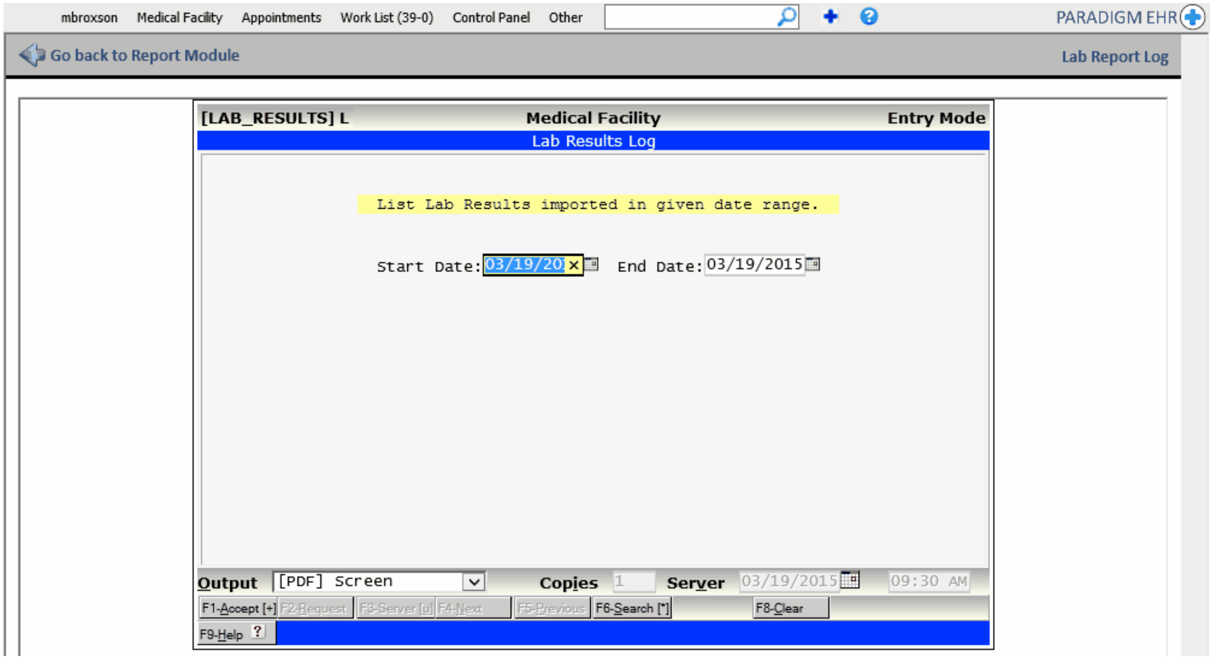
3.8.11.1.6 Imported Images

The Imported Images report is an interactive report that allows you to view all of the images that you imported within a given date range. This can be useful to validate and correct the Imaging Results Automated Measure Calculation Report. By clicking on the image in the list on the left, the system pulls up the image on the right and allows you to check the Imaging Results checkbox and/or set the Image File Date.



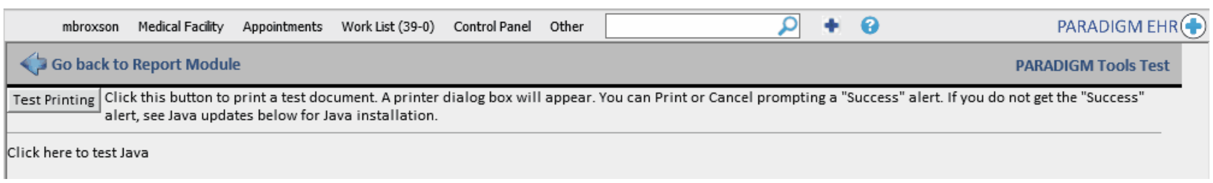
3.8.11.1.7 Lab Report Log

The Lab Report Log allows you to view a list of all labs imported through a Lab Results HL7 Interface within a specified date range.



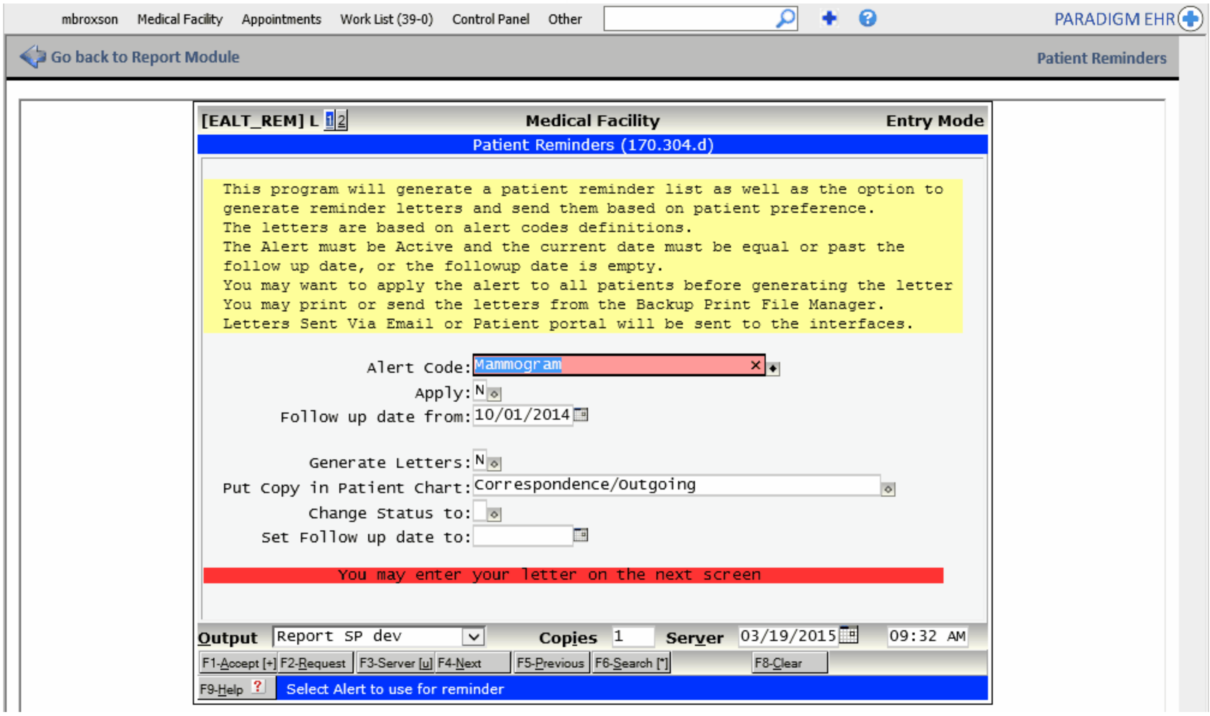
3.8.11.1.8 PARADIGM Tools Test

The PARADIGM Tools Test is a test page for the PARADIGM Tools Java Applet.

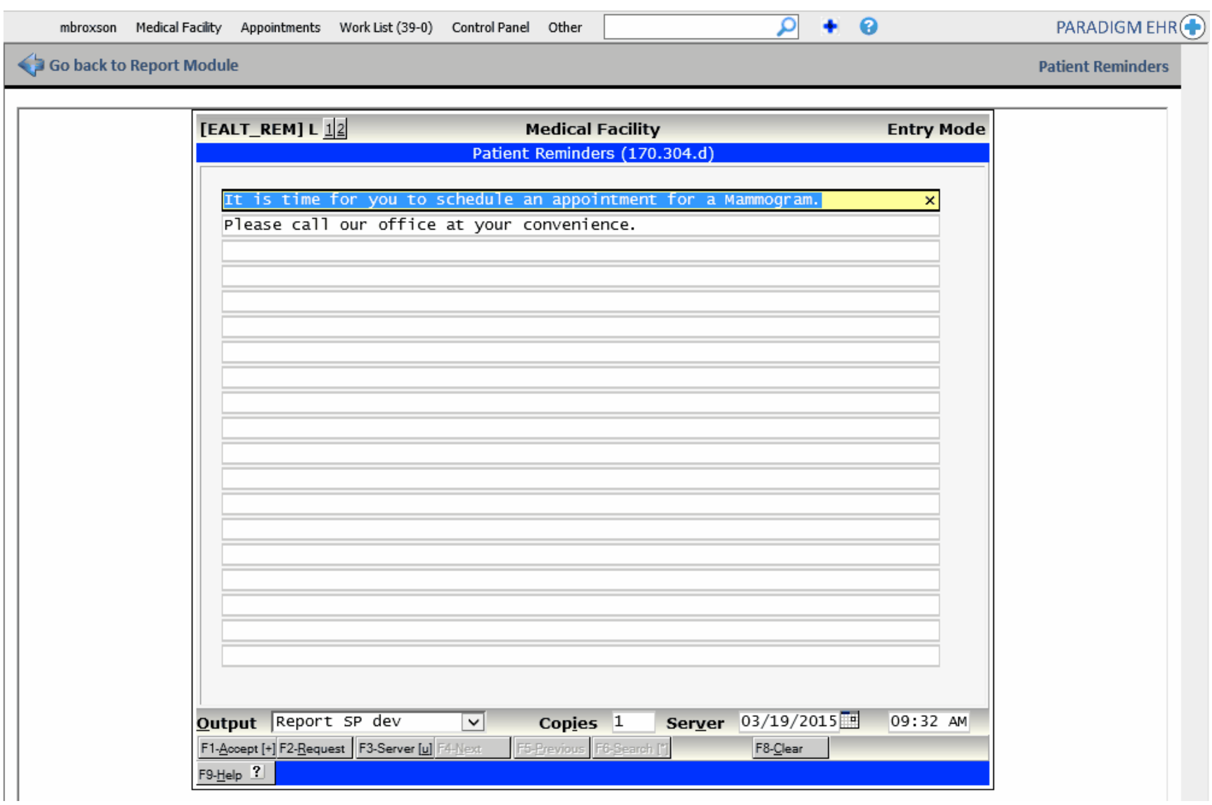


3.8.11.1.9 Patient Reminders

Here you may generate reminder letters for patients based on patient demographics, problems, allergies, medications and track able data. This is done by using the alert code definitions.

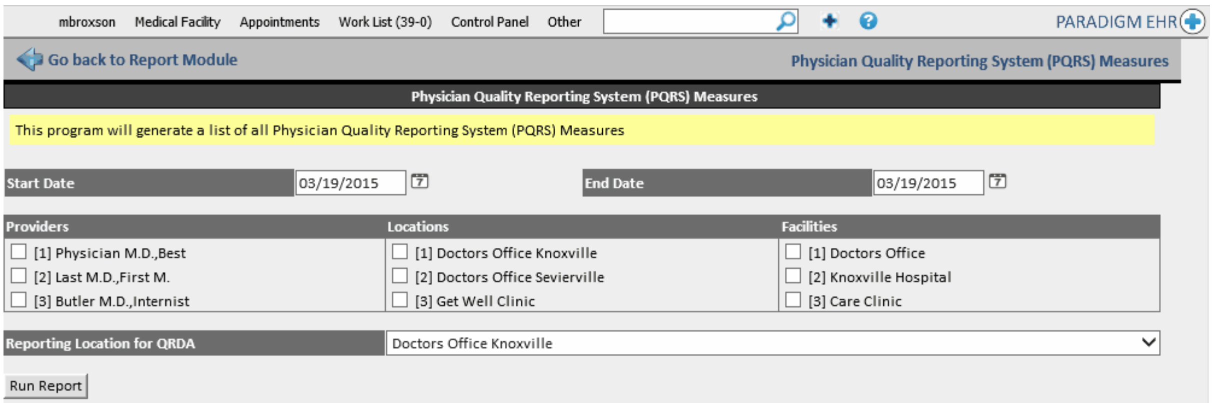


The second page allows you to enter the letter you want to send. This letter will be stored with the alert code for future use.



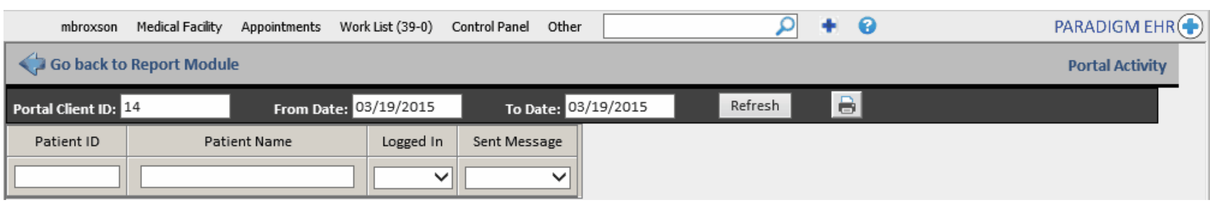
3.8.11.1.10 Physician Quality Reporting System (PQRS) Measures

The Physician Quality Reporting System (PQRS) Measures Report allows you to generate your PQRS reporting files. This report allows you to select the date range, applicable providers, applicable locations, applicable facilities, and the reporting location for the PQRS files. If the Providers, Locations, or Facilities checkboxes are all left blank, all of the Providers, Locations, or Facilities will be reported for.



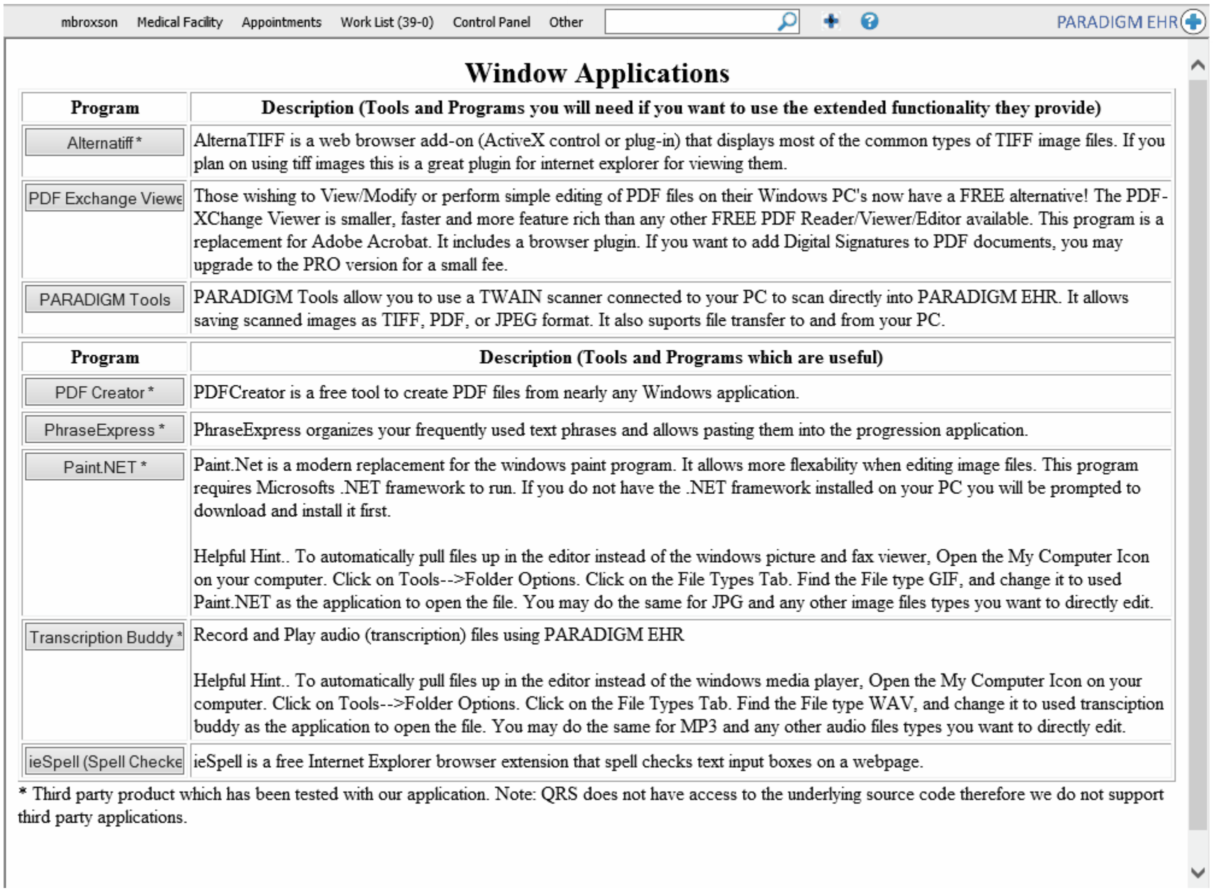
3.8.11.1.11 Portal Activity

The Portal Activity report allows you to view which patients have logged into the Patient Portal and which ones have sent a message within the date range selected.



3.8.12   Window Applications

Window applications are programs that you need or may be helpful when using PARADIGM EHR.



mbroxson Medical Facility Appointments Work List (39-0) Control Panel Other PARADIGM EHR

Window Applications

Program	Description (Tools and Programs you will need if you want to use the extended functionality they provide)
Alternatiff *	AlternaTIFF is a web browser add-on (ActiveX control or plug-in) that displays most of the common types of TIFF image files. If you plan on using tiff images this is a great plugin for internet explorer for viewing them.
PDF Exchange Viewe	Those wishing to View/Modify or perform simple editing of PDF files on their Windows PC's now have a FREE alternative! The PDF-XChange Viewer is smaller, faster and more feature rich than any other FREE PDF Reader/Viewer/Editor available. This program is a replacement for Adobe Acrobat. It includes a browser plugin. If you want to add Digital Signatures to PDF documents, you may upgrade to the PRO version for a small fee.
PARADIGM Tools	PARADIGM Tools allow you to use a TWAIN scanner connected to your PC to scan directly into PARADIGM EHR. It allows saving scanned images as TIFF, PDF, or JPEG format. It also suports file transfer to and from your PC.
Program	**Description (Tools and Programs which are useful)**
PDF Creator *	PDFCreator is a free tool to create PDF files from nearly any Windows application.
PhraseExpress *	PhraseExpress organizes your frequently used text phrases and allows pasting them into the progression application.
Paint.NET *	Paint.Net is a modern replacement for the windows paint program. It allows more flexability when editing image files. This program requires Microsofts .NET framework to run. If you do not have the .NET framework installed on your PC you will be prompted to download and install it first. Helpful Hint.. To automatically pull files up in the editor instead of the windows picture and fax viewer, Open the My Computer Icon on your computer. Click on Tools-->Folder Options. Click on the File Types Tab. Find the File type GIF, and change it to used Paint.NET as the application to open the file. You may do the same for JPG and any other image files types you want to directly edit.
Transcription Buddy *	Record and Play audio (transcription) files using PARADIGM EHR Helpful Hint.. To automatically pull files up in the editor instead of the windows media player, Open the My Computer Icon on your computer. Click on Tools-->Folder Options. Click on the File Types Tab. Find the File type WAV, and change it to used transciption buddy as the application to open the file. You may do the same for MP3 and any other audio files types you want to directly edit.
ieSpell (Spell Checke	ieSpell is a free Internet Explorer browser extension that spell checks text input boxes on a webpage.

* Third party product which has been tested with our application. Note: QRS does not have access to the underlying source code therefore we do not support third party applications.

The two tools that you may need are Alternatiff and PDF Exchange Viewer. Scanned documents are usually in either TIFF (alternatiff) or PDF format.

PDF Exchange viewer is used in place of Adobe Acrobat, because it allows you to not only view PDF files with a browser plugin, but also edit them to add annotations, signatures, and sticky notes.

3.9 PARADIGM+ Access

This button allows into the PARADIGM+ control panel. You must have a concurrent account in PARADIGM+ along with access established for your role in the RBAC file by the system administrator.

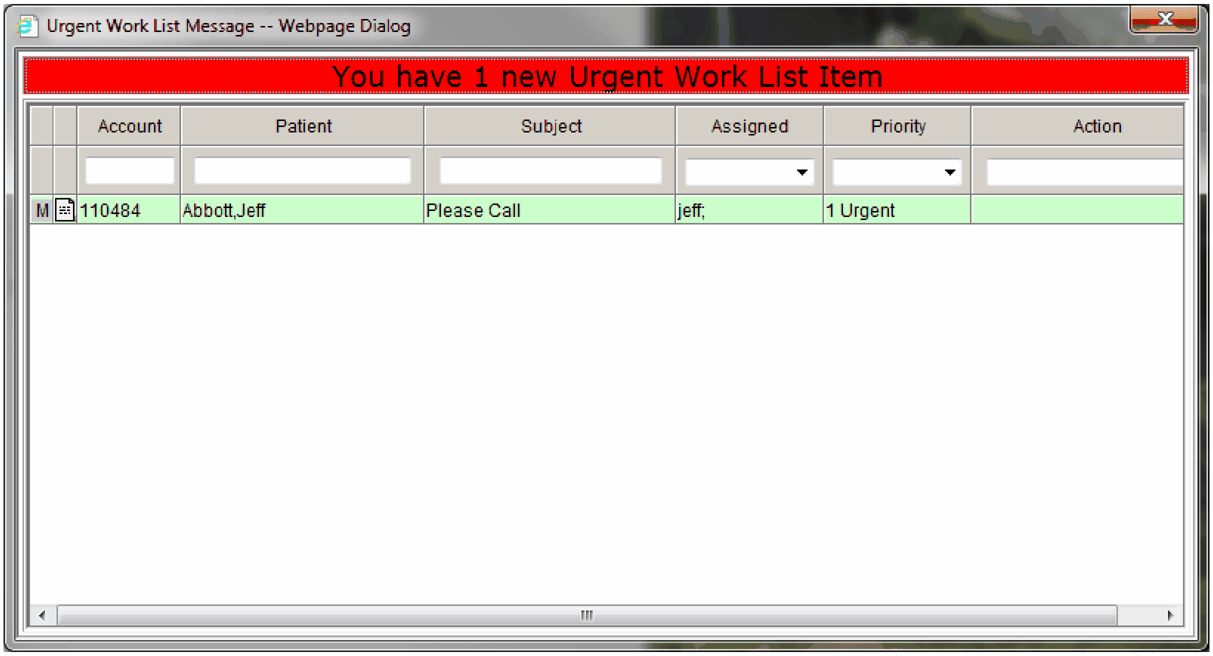
When pressed it will open PARADIGM+ in a new window and automatically log you in.

3.10 Help Button

The Help button will open up this help document in a separate window. See Help Central.

3.11 Urgent Messages

The Urgent Messages feature of the toolbar will monitor work list items looking for new messages in your worklist that have a priority of "Urgent". If a new messages is found it will automatically display the "Urgent Work List Message" Dialog box in the browser tab or window that has the Toolbar program running. If you are on another tab you may notice the tab flashing for a moment on the browser tab list.



From the dialog box you may hover and click on the message item to pull up the information in another window. (NOTE: If you close the dialog window, any windows opened under it will also close).   Or you may click on the message at the top of the form to open and display the work list items from the toolbar. From there the items will open under the control of the toolbar.

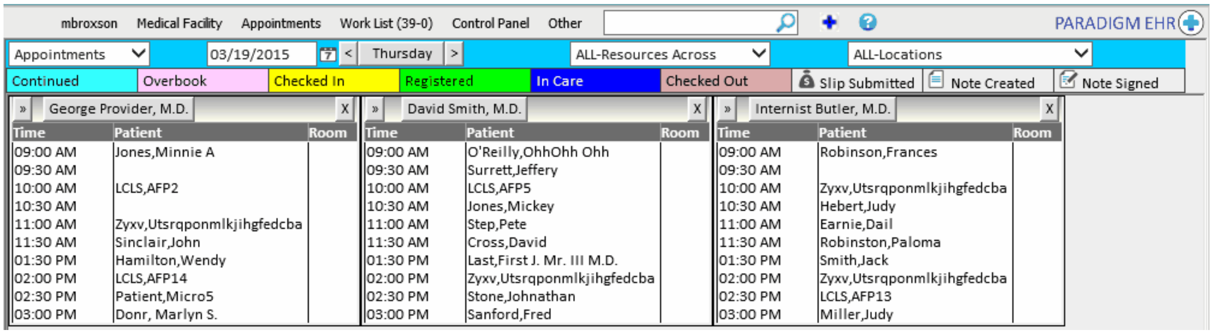
The Urgent Message Dialog window will also monitor new messages as they come in.

Part 4

Appointments

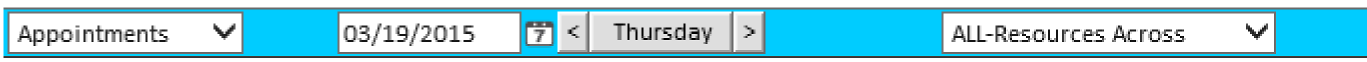
4 Appointments

The Appointments Button will display the appointment book below the Toolbar. This mode will allow you to access a patients chart via appointments entered in the PARADIGM Practice Management System.



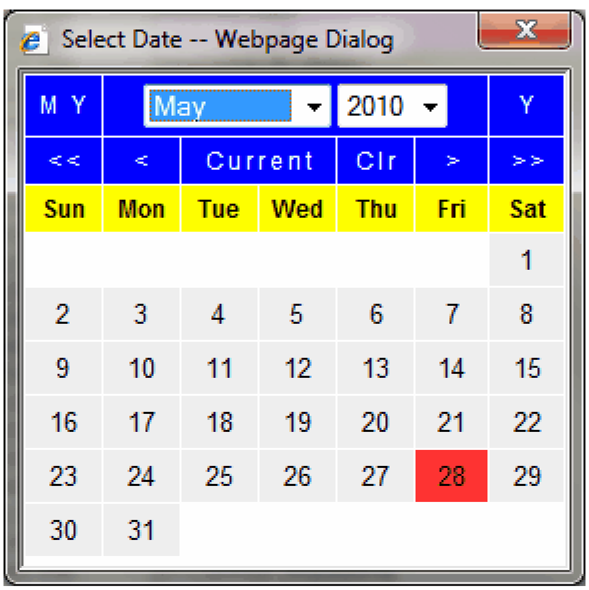
4.1 Selection Toolbar

The Selection toolbar on the Appointment schedule allows you to select the appointment information you want to display.



It is divided into four parts.

<u>**Date**</u>
This controls the date that will be displayed. You may select the date by dropping down the month or day, or entering the year. You may also click on the calendar icon next to the date to open a popup calendar and select a date using this feature.



The Day of week Button will change the date to the current day if clicked. It will be displayed in red if

the current day is not shown.
The > button will add 1 day to the current day
The < button will subtract 1 day from the current day.

Type
This determines if you are looking at appointments or hospital rounds.

Resource

This is a drop down list that will allow you to select either a specific resource or all resources for the given day. When viewing all resources for a day you each book will have controls to allow you to adjust the display.

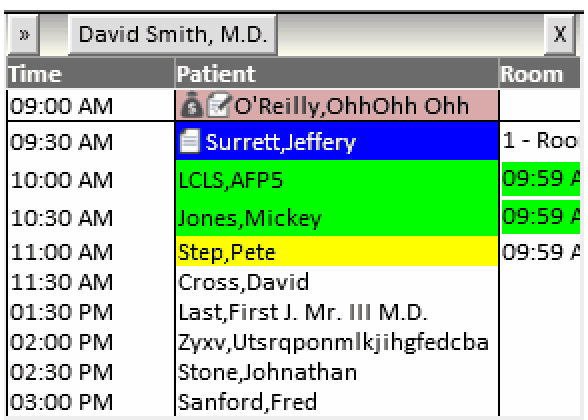
Location

This is a drop down list to allow you to select a specific location or all locations on your book display.

4.2 Appointment Legend

The appointment legend is used to identify at what point a patient is in the patient flow for their appointment.

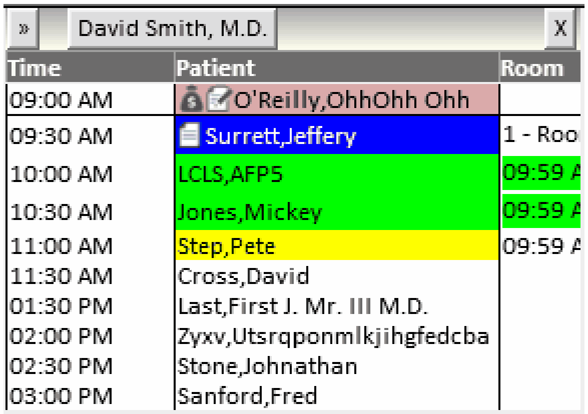
You can see if the appointment is a continuation (long) appointment. If the patient is an overbook. You may also easily identify patients that have been checked in, are in care, have had a charge slip submitted or checked out.



Time	Patient	Room
09:00 AM	O'Reilly,OhhOhh Ohh	
09:30 AM	Surrett,Jeffery	1 - Roo
10:00 AM	LCLS,AFP5	09:59 A
10:30 AM	Jones,Mickey	09:59 A
11:00 AM	Step,Pete	09:59 A
11:30 AM	Cross,David	
01:30 PM	Last,First J. Mr. III M.D.	
02:00 PM	Zyxv,Utsrqponmlkjihgfedcba	
02:30 PM	Stone,Johnathan	
03:00 PM	Sanford,Fred	

4.3 Appointment Books

The Appointment Book will display all appointments for a resource and location for a given date that are in the PARADIGM appointment schedule file.



The appointment schedule will display the time, patient name, account number, location, facility, room number, reason and any notes for the appointment. You may select a patient and display the patients chart by hovering over the patient name and clicking. The PARADIGM EHR appointment schedule will also allow you to check a patient in or put a patient in care.

When viewing more than one resource at a time each book will display in it's own container. You may use the Book Controls to adjust each book.

4.3.1 Checking a Patient In

Checking a Patient in is the easily accomplished by clicking on the time in front of the patients name on the appointment book. You may only check a patient in if the the appointment book displayed is the current date. When a patient is check in the appointment book will redisplay.

This will add a time stamp to the appointment schedule file.

Because checking a patient in is usually done at the front desk by administrative personnel, you may also use PARADIGM to check a patient in.

Clinical people in the back office can see who has been check in and are ready to be brought to the back for patient care.

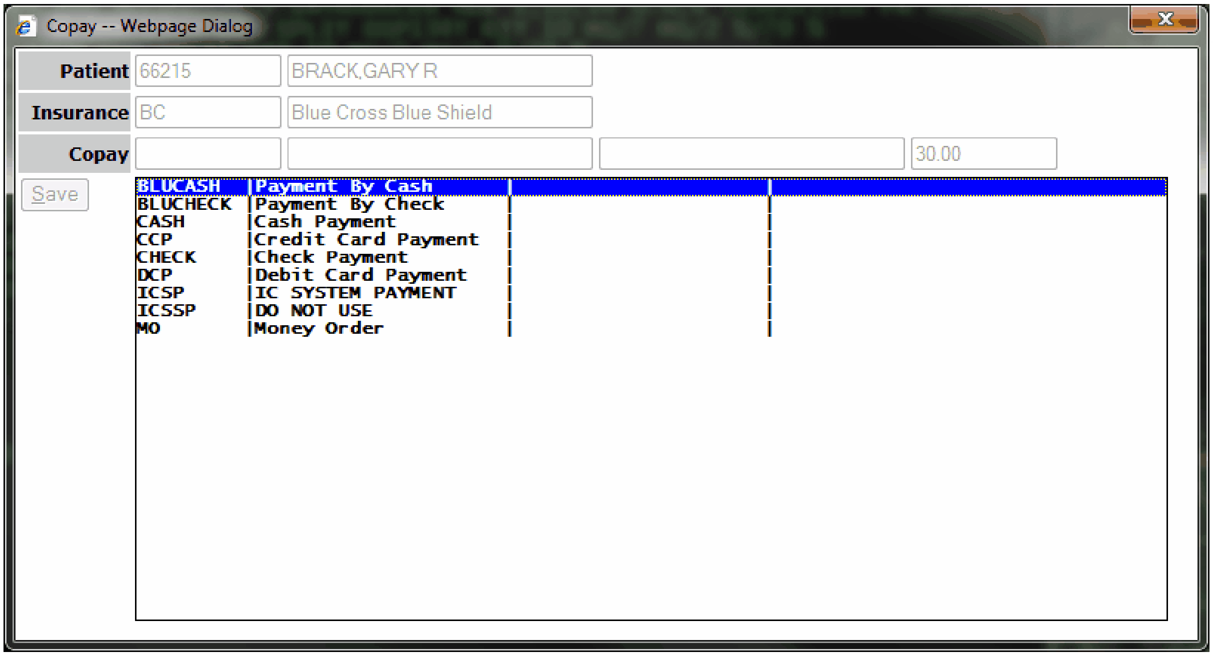
If you have access to PARADIGM The PAT form in PARADIGM will display for you to review the patient information.

Unchecking in a patient

If you accidentally check in a patient and want to uncheck the patient, simply double-click on the time field again.

4.3.1.1 Record co-pay

If the patients primary insurance has a copay amount defined the program will automatically take you to the Copay form if you have access. This form allows you to collect the copay for the patient.



Select the method of payment, enter a comment if needed and Save. You will then be prompted to print a Receipt of the payment.

The system will create the core Encounter in PARADIGM showing the copayment. subsequent charges from the charge slip will be sent to that same visit.

4.3.2 Putting a Patient In Care

After a patient has been checked in and registered, the room # column will display the time the patient was checked in. By clicking on that time an input field will display in the room number column. To put a patient in care simply enter a value in the room number field for the patient and press enter. The schedule will automatically update the status of the schedule and redisplay it. You may enter any value you like in the room number, but it's intended purpose it to identify where the patient is in your medical practice. Therefore each time a patient is in care and moves you may change the room number to reflect that.

For example: The patient is checked in. The nurse gets the patient and takes them to the nurses station to get vitals, history etc.
At that point the nurse could put NS for the room. After the nurse has finished and placed the patient in an exam room, the nurse could put the exam room number. This lets the provider know the patient is in a room and ready to be seen. If the provider gives orders for lab or x-ray the room could be update as well.

Once the patient is returned to an exam room, it may be updated again.

The patient will remain "in-care" until either a charge slip is submitted, or the patient is checked out.

4.3.3 Viewing a Patients Chart

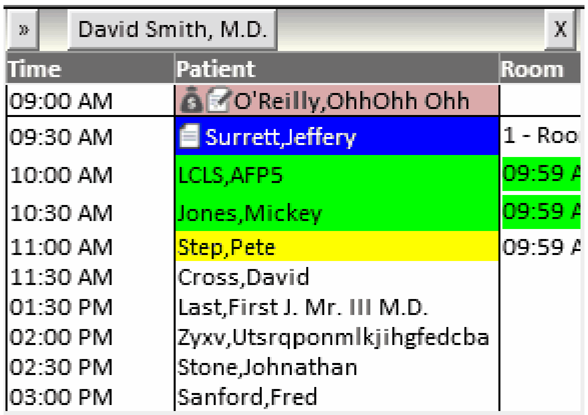
To display a patient's chart from the appointment book, simply click on the patients name. The chart will then display in either the frame where the appointment book displayed, or in a separate tab or window depending on your personal preferences.

4.3.4 Check a patient out

When a patient is in care, clicking on the time field will allow you to check a patient out. If you have access to PARADIGM it will take you to the Encounter form, otherwise it will just check them out.

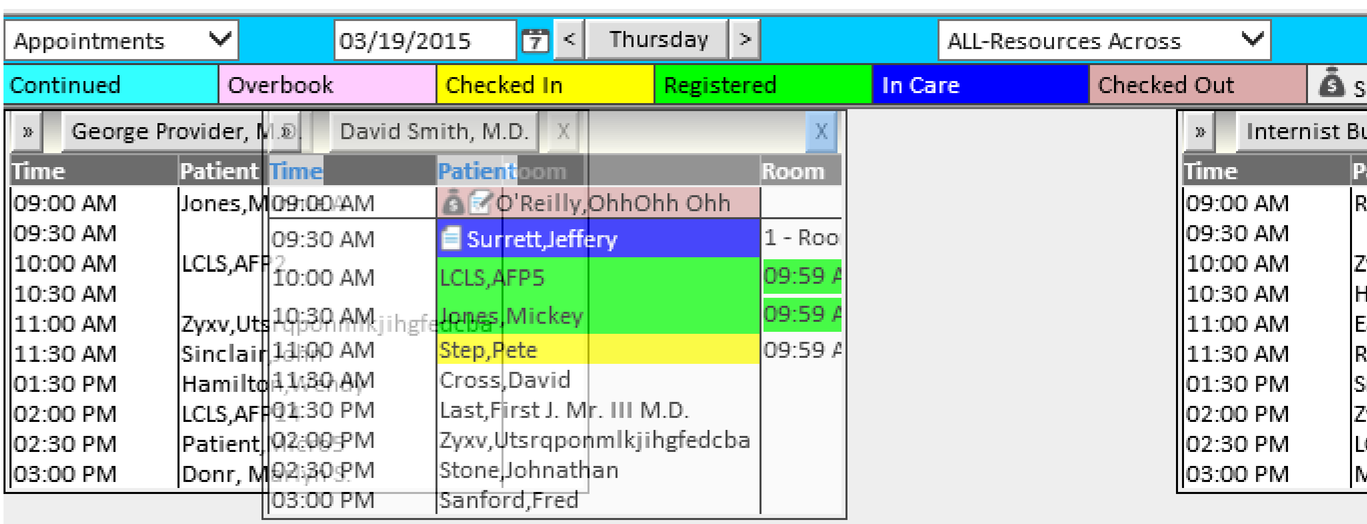
4.3.5 Book Controls

When displaying multiple schedule at the same time, each book will display in its own container that has controls that allow you to manipulate your view of that schedule.



4.3.5.1 Grab Bar

The Grab Bar, located top center of the schedule container, allows you to move the schedule in the appointment book. There may be times you want to see one resource directly next to another, but there is a third that is between the two. By clicking and holding the button down while the cursor is over the grab bar you may move the schedule to either the left or right. Let go of the button to drop the schedule in its new place.



4.3.5.2 Resource Button

The Resource Button in the upper left corner displays the schedule container. Clicking on this will change the schedule to display only that resource. This is the same as selecting that resource on the selection toolbar.

4.3.5.3 Expand Width Button

 The Expand Width Button will expand the width of the container to display all columns defined for the schedule.

4.3.5.4 Contract Width Button

The Contract Width Button will contract the width of the container to only show the time, patient and room number in the schedule.

4.3.5.5 Close Schedule Button

The Close Schedule Button in the, is the"X" button in the upper right hand corner of the scheduling container. Clicking this button will close the scheduling container. You must re-query the schedule to have the book display again.

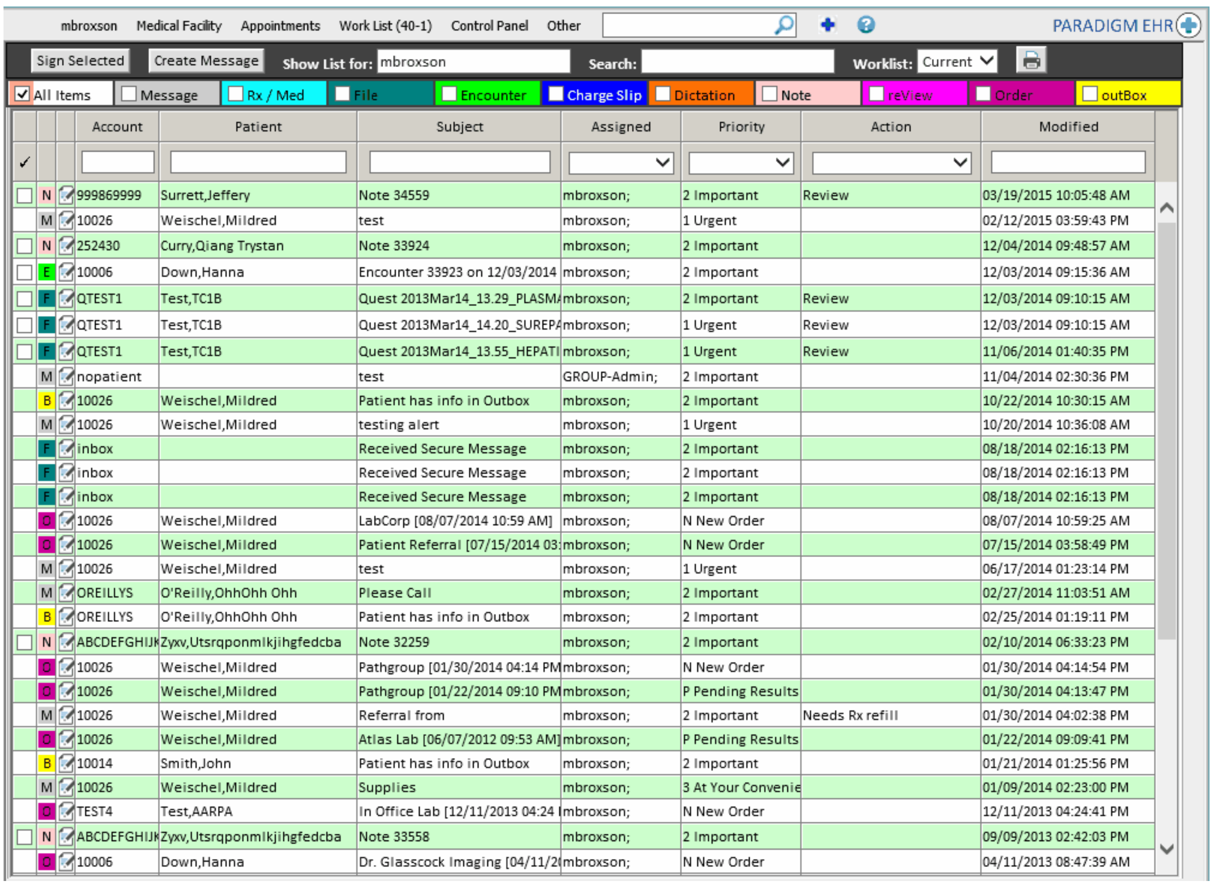
Part 5

Worklist

5 Worklist

The Work list is used to communicate about items that need to be addressed on a patients chart. These include but are not limited to:

- Messages, phone and otherwise
- Rx and medications refills
- Files, documents that need review
- Completion of Encounters
- Completion of Charge Slips
- Dictation
- Completion of Encounter Notes
- Review of Encounter Notes
- Orders
- Outbox Items



	Account	Patient	Subject	Assigned	Priority	Action	Modified
N	999869999	Surrett,Jeffery	Note 34559	mbroxson;	2 Important	Review	03/19/2015 10:05:48 AM
M	10026	Weischel,Mildred	test	mbroxson;	1 Urgent		02/12/2015 03:59:43 PM
N	252430	Curry,Qiang Trystan	Note 33924	mbroxson;	2 Important		12/04/2014 09:48:57 AM
E	10006	Down,Hanna	Encounter 33923 on 12/03/2014	mbroxson;	2 Important		12/03/2014 09:15:36 AM
F	QTEST1	Test,TC1B	Quest 2013Mar14_13.29_PLASM/	mbroxson;	2 Important	Review	12/03/2014 09:10:15 AM
F	QTEST1	Test,TC1B	Quest 2013Mar14_14.20_SUREP/	mbroxson;	1 Urgent	Review	12/03/2014 09:10:15 AM
F	QTEST1	Test,TC1B	Quest 2013Mar14_13.55_HEPATI	mbroxson;	1 Urgent	Review	11/06/2014 01:40:35 PM
M	nopatient		test	GROUP-Admin;	2 Important		11/04/2014 02:30:36 PM
B	10026	Weischel,Mildred	Patient has info in Outbox	mbroxson;	2 Important		10/22/2014 10:30:15 AM
M	10026	Weischel,Mildred	testing alert	mbroxson;	1 Urgent		10/20/2014 10:36:08 AM
F	inbox		Received Secure Message	mbroxson;	2 Important		08/18/2014 02:16:13 PM
F	inbox		Received Secure Message	mbroxson;	2 Important		08/18/2014 02:16:13 PM
F	inbox		Received Secure Message	mbroxson;	2 Important		08/18/2014 02:16:13 PM
O	10026	Weischel,Mildred	LabCorp [08/07/2014 10:59 AM]	mbroxson;	N New Order		08/07/2014 10:59:25 AM
O	10026	Weischel,Mildred	Patient Referral [07/15/2014 03:	mbroxson;	N New Order		07/15/2014 03:58:49 PM
M	10026	Weischel,Mildred	test	mbroxson;	1 Urgent		06/17/2014 01:23:14 PM
M	OREILLYS	O'Reilly,OhhOhh Ohh	Please Call	mbroxson;	2 Important		02/27/2014 11:03:51 AM
B	OREILLYS	O'Reilly,OhhOhh Ohh	Patient has info in Outbox	mbroxson;	2 Important		02/25/2014 01:19:11 PM
N	ABCDEFGHIJK	Zyxv,Utsrqponmlkjihgfedcba	Note 32259	mbroxson;	2 Important		02/10/2014 06:33:23 PM
O	10026	Weischel,Mildred	Pathgroup [01/30/2014 04:14 PM	mbroxson;	N New Order		01/30/2014 04:14:54 PM
O	10026	Weischel,Mildred	Pathgroup [01/22/2014 09:10 PM	mbroxson;	P Pending Results		01/30/2014 04:13:47 PM
M	10026	Weischel,Mildred	Referral from	mbroxson;	2 Important	Needs Rx refill	01/30/2014 04:02:38 PM
O	10026	Weischel,Mildred	Atlas Lab [06/07/2012 09:53 AM]	mbroxson;	P Pending Results		01/22/2014 09:09:41 PM
B	10014	Smith,John	Patient has info in Outbox	mbroxson;	2 Important		01/21/2014 01:25:56 PM
M	10026	Weischel,Mildred	Supplies	mbroxson;	3 At Your Convenie		01/09/2014 02:23:00 PM
O	TEST4	Test,AARPA	In Office Lab [12/11/2013 04:24 I	mbroxson;	N New Order		12/11/2013 04:24:41 PM
N	ABCDEFGHIJK	Zyxv,Utsrqponmlkjihgfedcba	Note 33558	mbroxson;	2 Important		09/09/2013 02:42:03 PM
O	10006	Down,Hanna	Dr. Glasscock Imaging [04/11/2(	mbroxson;	N New Order		04/11/2013 08:47:39 AM

Work List items are created from a patients chart by one of the following methods:

- Creating a Message
- Creating a new Rx/Medication with an attached work list item
- Placing a file in the Pending area of the chart
- Filling out and saving any form on a patients encounter.
- Starting and saving data to a patients charge slip for an encounter

- Entering certain charges defined under "Administration Work List" on a patients charge slip.
- Recording dictation for a patients encounter.
- Saving but not signing off a patients notes for an encounter.
- Creating an Order.
- Placing items in the Patient Outbox.

Work list items may also be automatically put in the system by electronic interface program such as a lab results program.

5.1 Selection Toolbar

The Selection toolbar of the WorkList allows you to limit your search of worklist items.

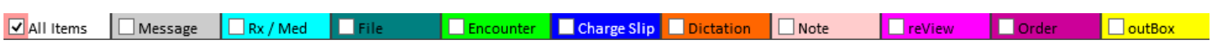
The first option allows you to limit the list to all users or a single user. By default your login will the user defined.

You may also use the Search option to further limit your search. This may be any part of the worklist. For example if you only wanted high priority items you could enter in "High".

The Set controls which worklist you will look at. The default is the "current worklist". You may also select the archive worklist. Once a worklist item is completed it will be put in the archive worklist.

5.2 Worklist Legend

The Work List Legend also allows you to narrow your selection of work list items. If you only want so see work list items of a particular type click in the checkbox next to the type you want. To see all types click on the Legend option.

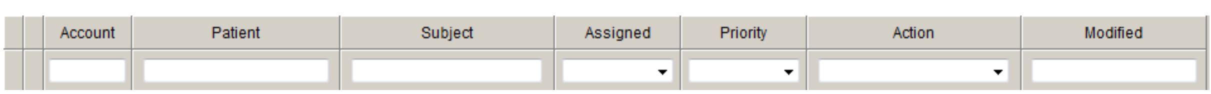


Click on the legend title to display that type of message.

⚠ Dictation work list items will always display in a Frame.

5.3 Worklist Display

The Work List display will show the following header. You may notice up and down triangles on many of the columns. These allow you to sort the displayed list either ascending or descending just by clicking on the column header.



You may filter the data in the list by using the filter boxes beneath the header. Some filter boxes are free text filters while others are drop down select options that show all the available values.

First Column
The first column displays checkboxes next to the File, Encounter, Charge Slip, and Note work list items in order to select multiple items to sign off on at one time.

Second Column
The second column displays the type of work list item.

Third Column
The third column displays a small document icon. You may click on this icon to edit the work list item if you have permission to do so. A window will display showing the work list item. Make any changes and then click save.

Account
This column will display the patients account number.

Patient
This column will display the patient's name in last,first order.

Subject
This column will display the subject of the work list item.

Assigned To
This column will display who the work list item is assigned to

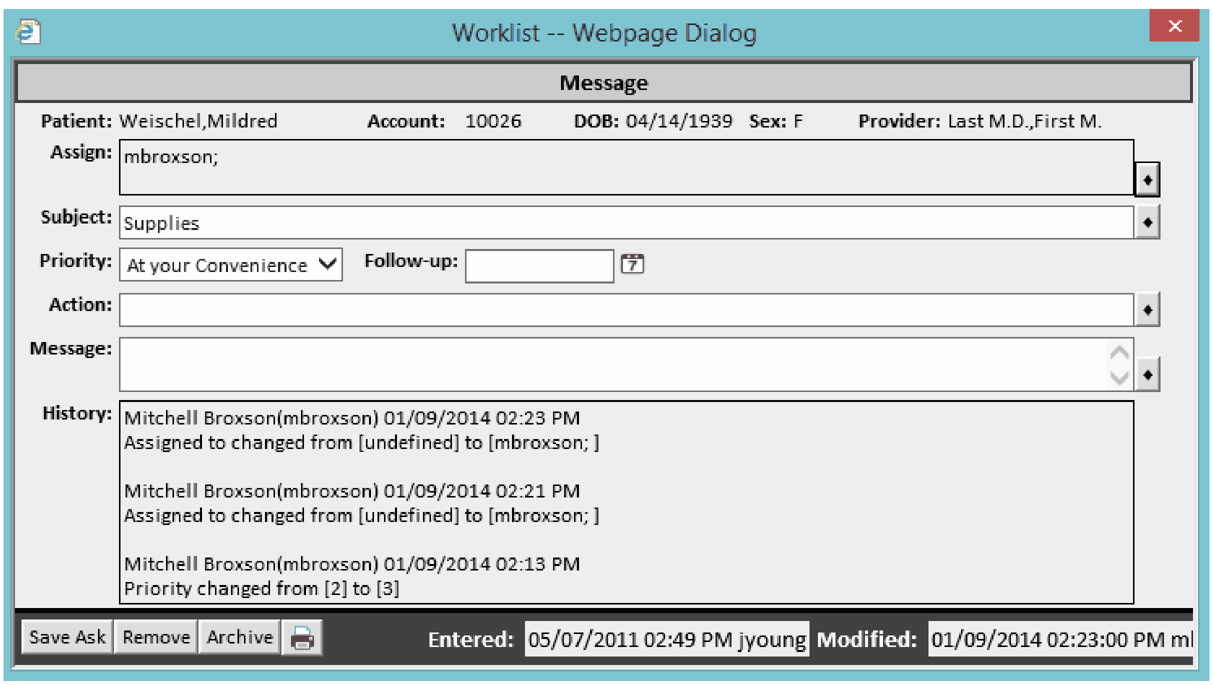
Priority
This column will display the priority of the work list item.

Action
This column will display the action to be taken.

Modified
This column will display when the work list item was last modified.

5.4 Worklist Edit

The Worklist Edit page allows you to add or update a worklist item.



Part 6

The Chart

6 The Chart

The Chart is the core of the PARADIGM EHR system. Everything up to this point has been to help you find a chart. Every attempt has been made to have the PARADIGM EHR electronic chart work the same way as a paper chart. We took concepts from a physical chart and applied them to the Electronic chart. These concepts include:

Patient Header

Tabs

Pending Items

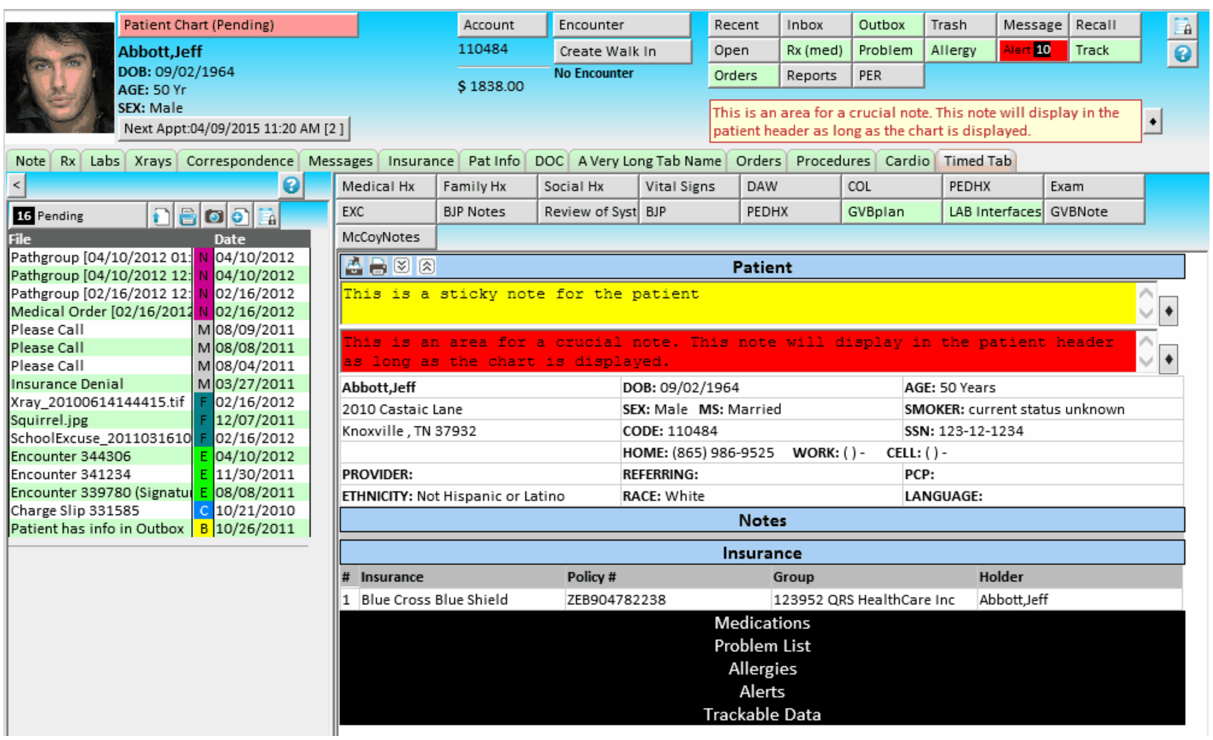
The Chart also includes other items to help you navigate the information in the chart.

File List

File Display Area

6.1 Layout

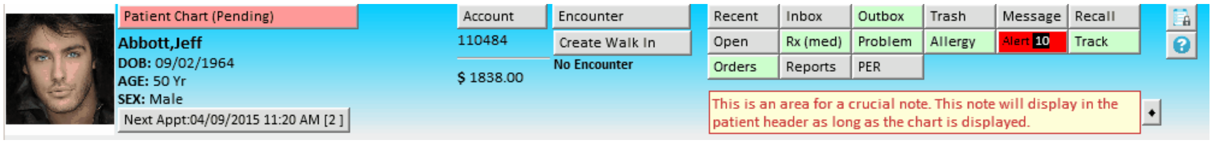
The chart is divided into four main sections. They are the Patient Header, Tabs, File List, and File Display Area.



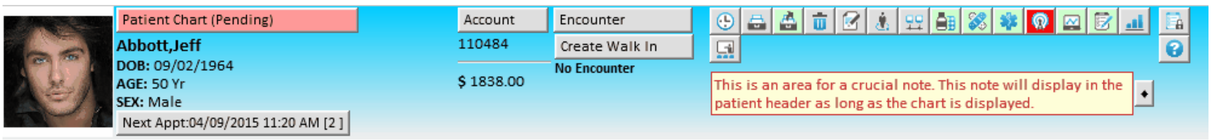
Each of these sections has special controls to help you quickly find information.

6.2 Patient Header

The Patient Header displays at the top of the chart and shows the basic patient information.



Same thing using Icons.



From left to right the Patient Header is divided into six sections.

Patient Photo
Patient Information
Account Information
Encounter Information
Functions and Features
Security and Help

If you hover over the patients name you will see additional information such as the patients address, phone, and notes.

The Patient Headers has several buttons that will help you easily find patient information as well as manage files.

- Patient Chart / Pending Button
- Account Button
- Encounter Button
- Recent Documents Button
- Inbox Button
- Trash Can Button
- Message Button
- Recall Followup Walk in Button
- Duplicate Chart Button
- Medications (Rx) Button
- Problem List (Dx) Button
- Help Button (?)

6.2.1 Patient Photo

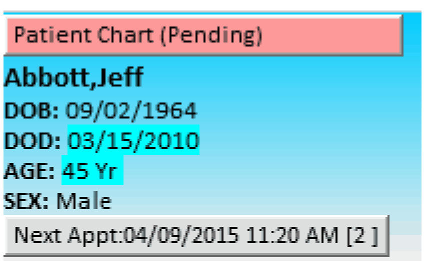
This area will display a photo of the patient or the photo place holder

Clicking on the photo or the place holder will allow you to take a new photo of the patient using the internal photograph software. This can be with either a web camera, or using a Cannon PowerShot with optional software.

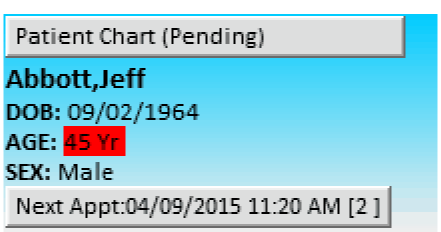
6.2.2 Patient Information

The Patient Information area will display the "Patient Chart (Pending)" button along with relevent information about the patient. If the patient does not have a date of death it will display the Name, Date of Bith, Age and Sex of the patient similar to the following:

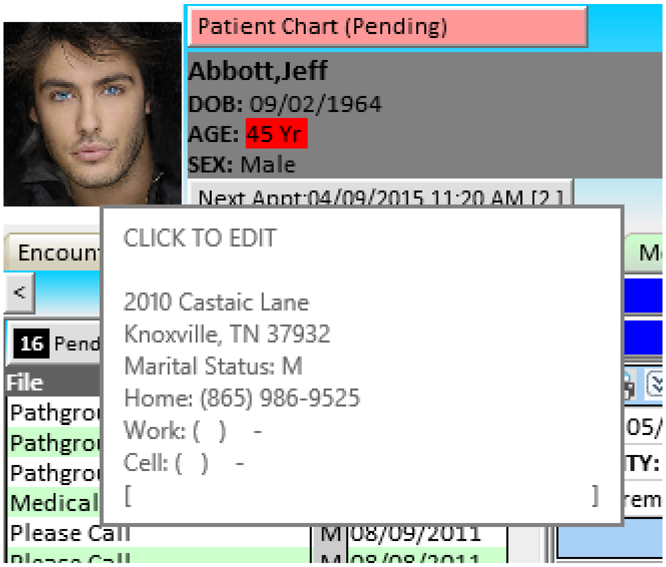
If the patient has a date of death it will also show the Date of Death. The AGE and DOD are colored to represent that is the age of the patient at the time of Death.



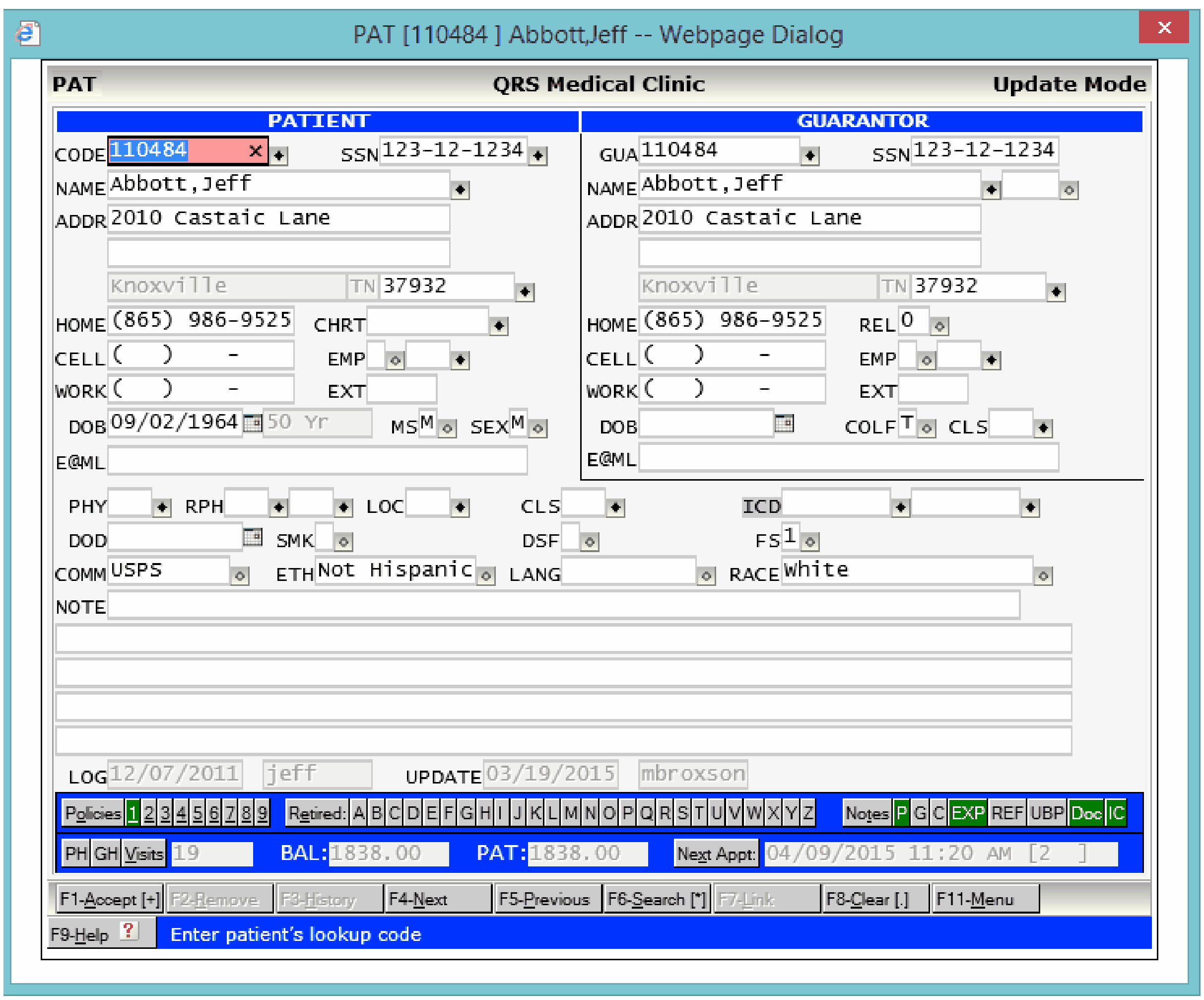
When displaying old encounters you will also notice the age colored in red. This is the age of the patient at the time of that encounter.



By hovering over this area you will see additional information in a pop up about the patient.

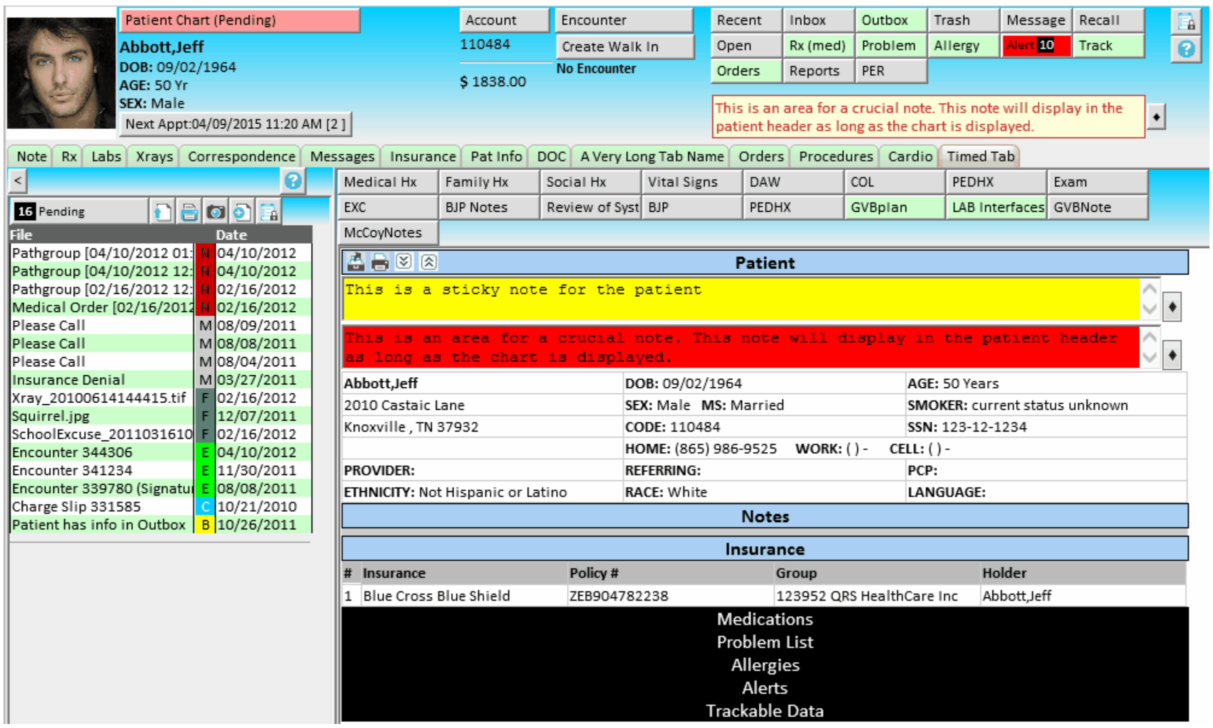


If you have permission to use PARADIGM PLUS, this area will darken when you hover the cursor over it.
Clicking on it will pull up the patient registration form in PARADIGM PLUS with the defined patient.



6.2.2.1 Patient Chart (Pending)

When you first enter a chart this is the default view you will have. The File Display Area will show the EMC buttons and the Patient Cover Page. The File List will display any pending documents and task in the work list for this patient.



At any time you may click this button to redisplay this information for the patient.

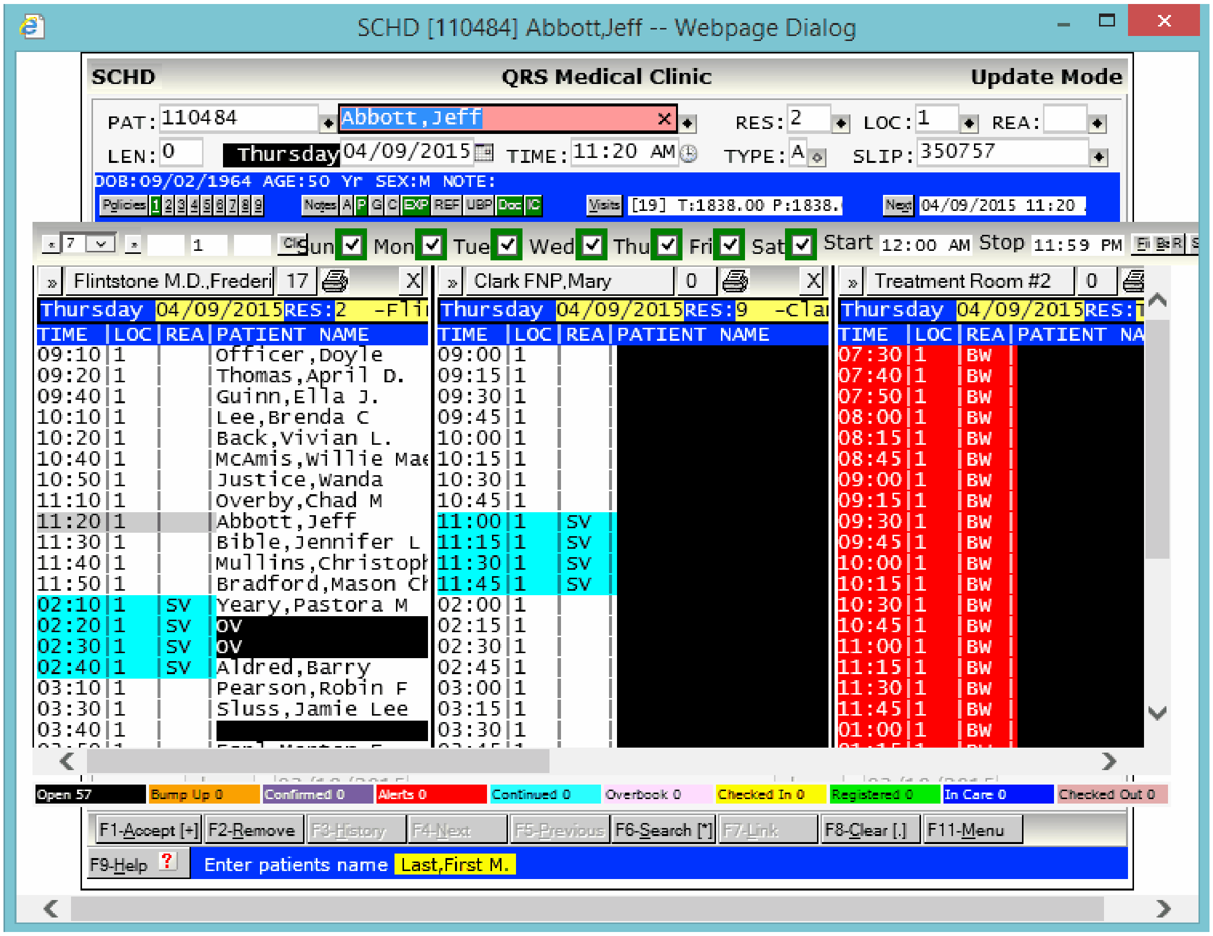
The PENDING file list is synonymous with items that are clipped to a paper chart that need review or completed before being filed in the chart. You may view / edit any of the PENDING items by clicking on the file name.

6.2.2.2 Next Appointment

At the bottom of the patient information a Next Appointment button will display if the patient has a future appointment.

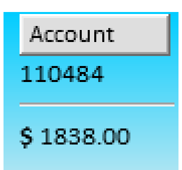
This button shows the date time and resource for the appointment.

If you have permission to access PARADIGM PM, then clicking on this button will display that appointment in the PARADIGM SCHD form.



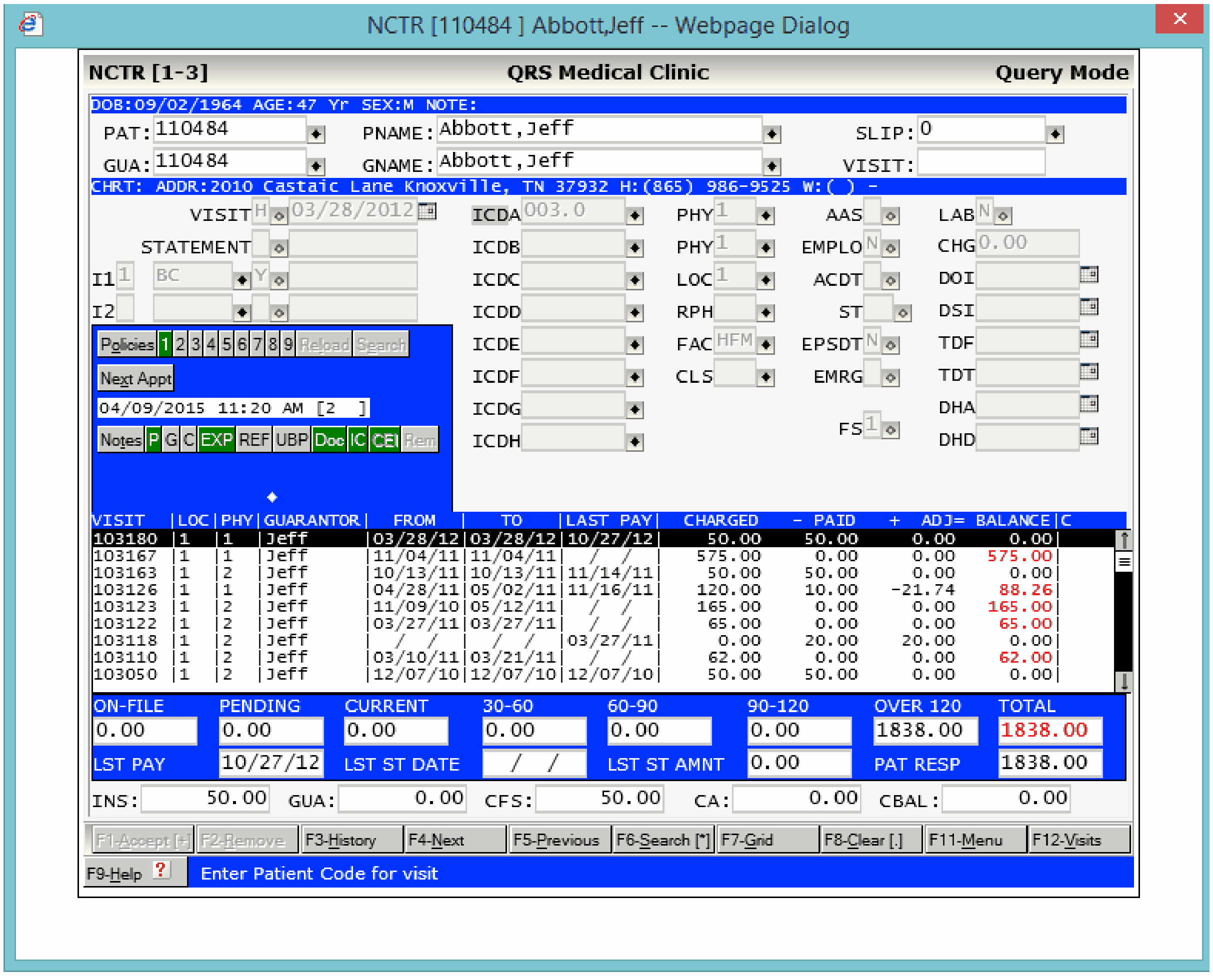
6.2.3 Account Information

The Account area shows the patients account number along with the current outstanding balance for the patient.



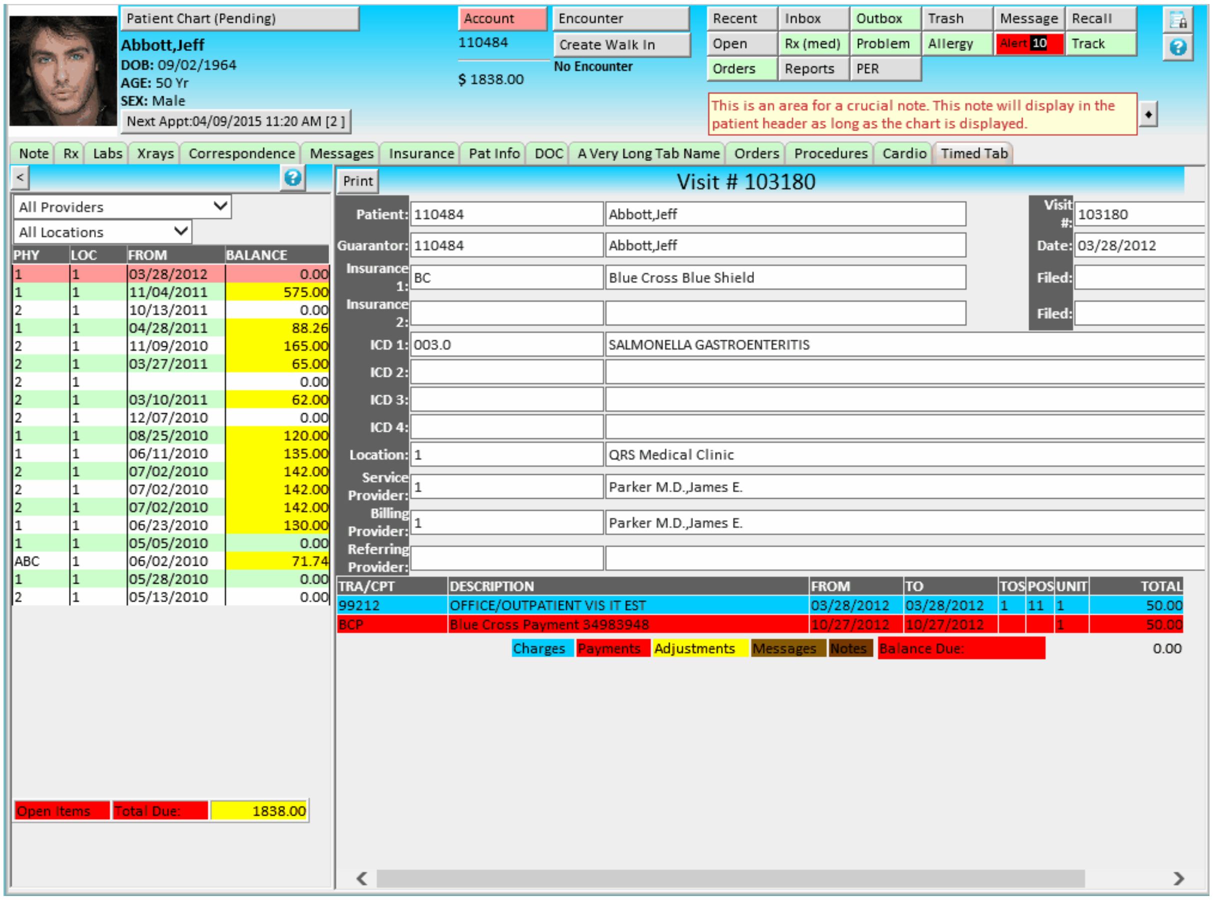
If you have access to PARADIGM PLUS the area will darken when you hover over it.

Clicking on it will allow you to view and edit financial data in the NCTR form of the PARADIGM PLUS system.



6.2.3.1 Account Button

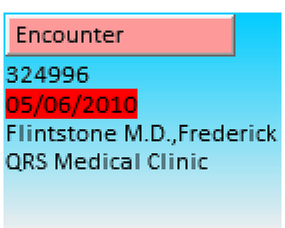
The Account button allows you to see the current financial status of the patient. It will display both a summary of all of the visits for the patient as well as allow you to look at each visit in detail.



On the side of the screen you will see the summary of visits with a total at the bottom. Clicking on any item on the list will display the detail of that visit in the chart area. You may also narrow your selection to either a specific provider and / or location.

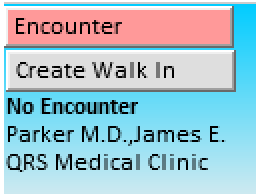
6.2.4 Encounter Information

The Encounter Information area shows information about the Current Encounter.



Including the slip number, date and time of appointment, resource and location.

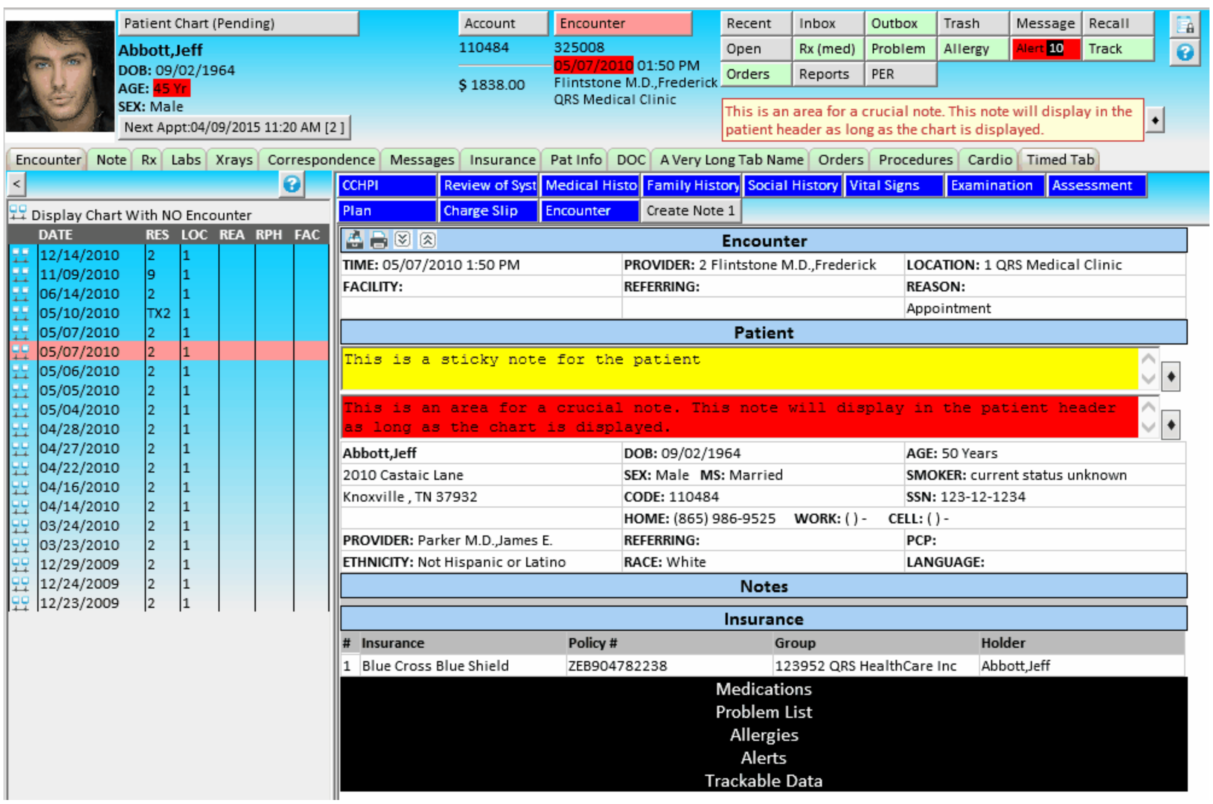
If you entered a chart without an Encounter by searching for just a patient, or from the work list you will see like the following:



In this case it displays "No Encounter" and shows the patients normal provider and location. It also adds the "Create Walk In" button.

6.2.4.1 Encounter Button

The Encounter Button allows you pull up a previous patient encounter from the electronic chart. Clicking on the Encounter button will display a screen similar to the following:

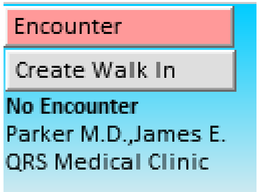


On the side is a list of all of the encounters in the electronic chart. Clicking on one will change the encounter number and display the cover page. You may then review any information about that encounter. You also have the option of displaying the chart without an Encounter.

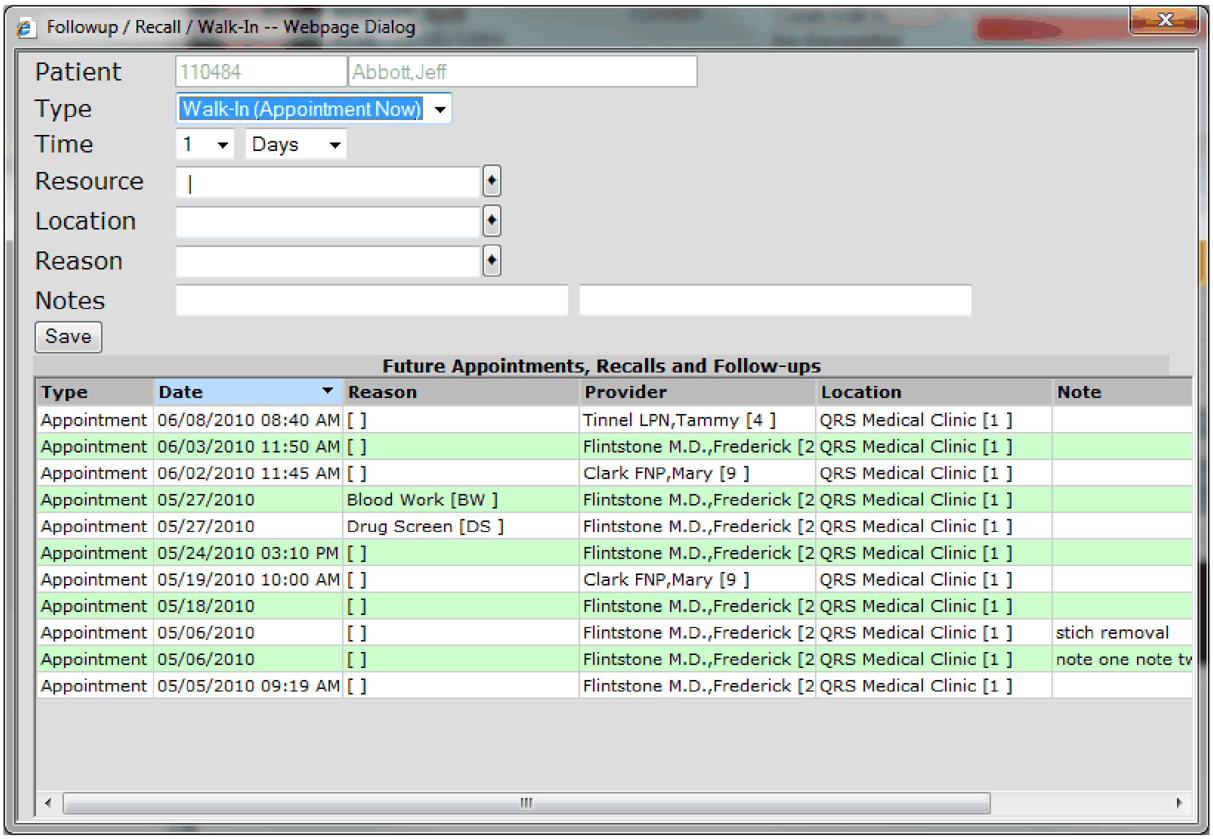
The duplicate icon will allow you to open the chart in a new browser tab / window instead of replacing the chart in the existing browser tab / window.

6.2.4.2 Create Walk In Button

When the patient's chart is displayed without an encounter the Encounter information area will display similar to the following:



The "Create Walk In" button can be used to create an encounter immediately for the patient. Clicking it will pull up the Followup / Recall / Walk in dialog.



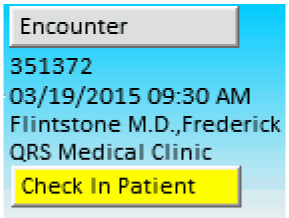
Select the Resource an Location for your encounter and Save. An appointment will be added to the appointment schedule for that resource and location for the present time. The chart will then be redisplayed with the new Encounter.

6.2.4.3 Patient Flow

When a patient is displayed with an encounter number, you will also have options to control the patient flow. (These same thing can be done on the Appointment schedule).

6.2.4.3.1 Check In Patient

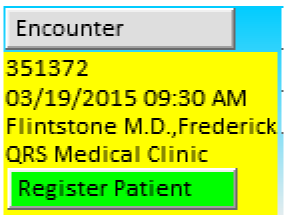
If the patient has not been checked in you will see the following:



By clicking the "Check In Patient" button the patient will go through the check in process and the chart will redisplay.

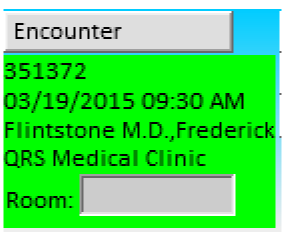
6.2.4.3.2 Register

If the patient has been checked in you will see the following to register the patient.

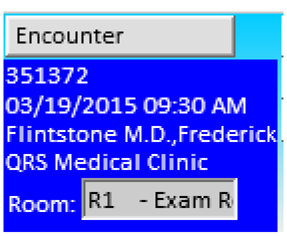


6.2.4.3.3 Place in Care

After registering the patient, you may place them in care by assigning a room number.

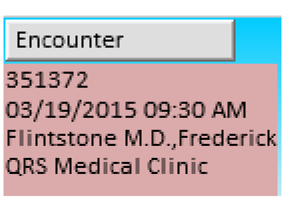


After they are placed in care, you will see the following and can change the room number by clicking on the room number field.



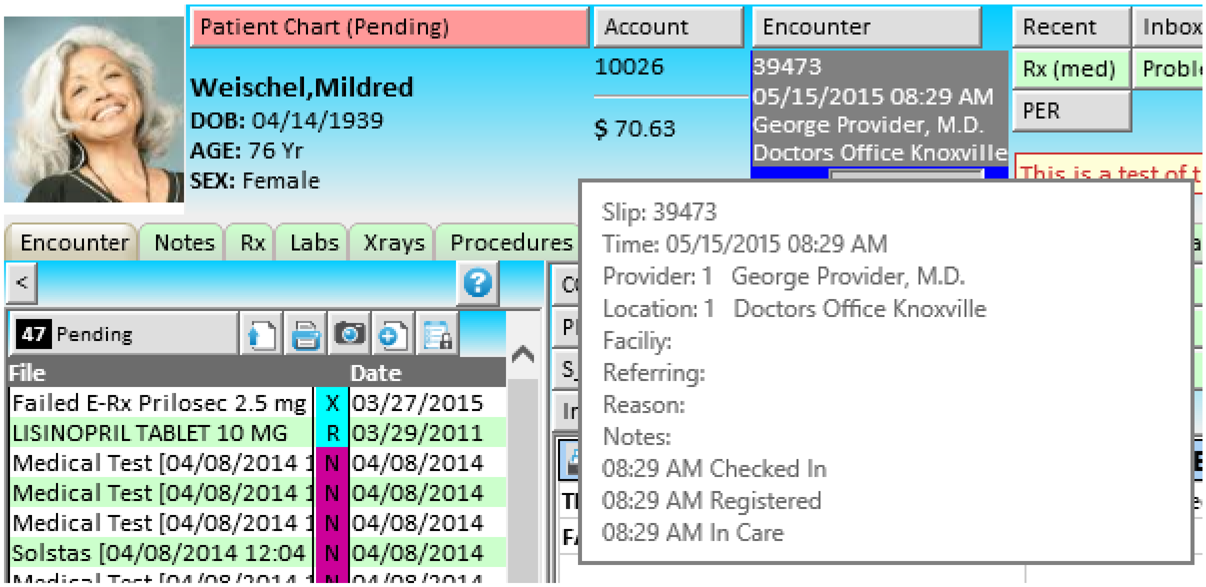
6.2.4.3.4 Patient has checked out

If the patient has checked out and the chart is displayed you will see the Encounter area show as follows:



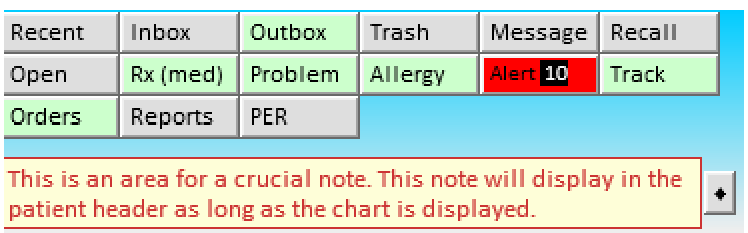
6.2.4.3.5 Hover to show times

When you hover over the Encounter area you will see information about the appointment as well as the flow times.



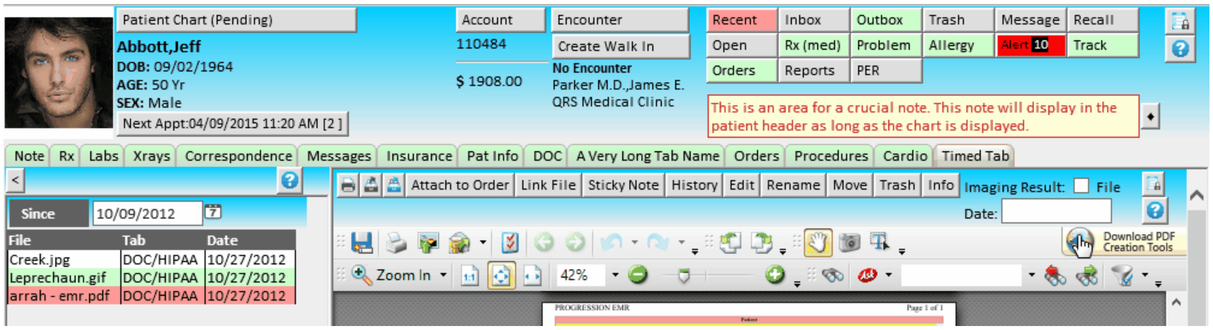
6.2.5 Functions and Features

The functions and Features area displays buttons for related to the patient and security assigned to you. Not all of functions and features may be available to you based on your security profile. This area is also used to display if a patient has alerts that must be addressed.



6.2.5.1 Recent Documents Button

The Recent Documents Button will by default display a list of all documents added to the patients chart since the last encounter. You may change the Since Date to expand you list by clicking on the calendar icon and selecting a new date.



The Date, Tab, and File name are displayed and sortable by clicking on the on the column.

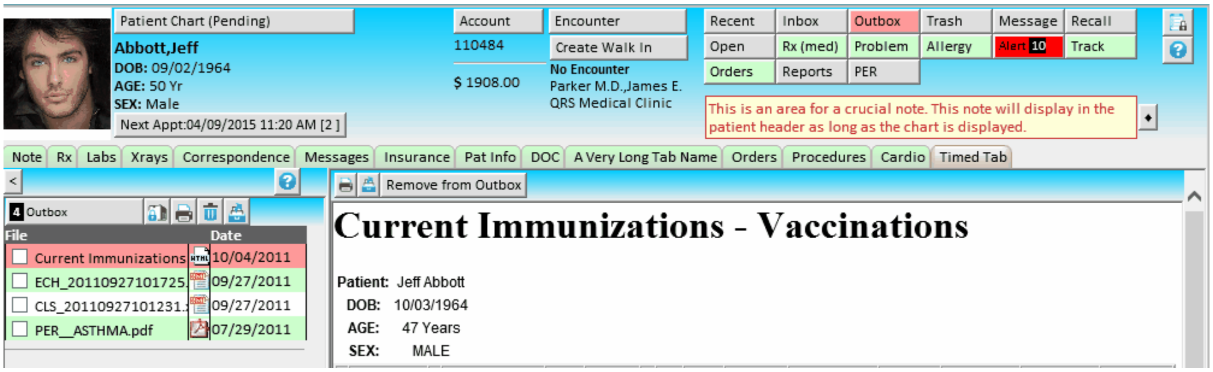
6.2.5.2 Inbox Button

The Inbox button will allow a user to view the content of the inbox while in a patients chart. Upon viewing a file in the inbox you may move it directly into any Tab for the patient displayed. See Inbox Button.

The Inbox can be used as an exchange area for files that are wrongly filed. For example: You accidentally filed a document in one "Smith,John" account then realized it was the wrong "Smith,John". You can move the file to the inbox from the wrong account. Pull up the right account and move the file from the inbox to the proper Tab.

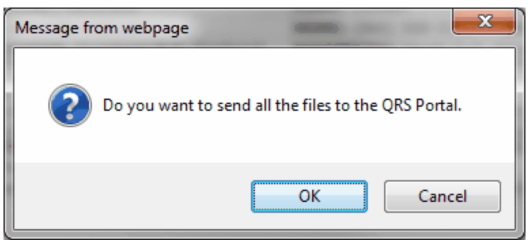
6.2.5.3 Outbox Button

The Outbox button will allow a user to view the content of the patients outbox. Files are places here by clicking on the outbox icon in the Document Header when a document is displayed in the File Display Area.



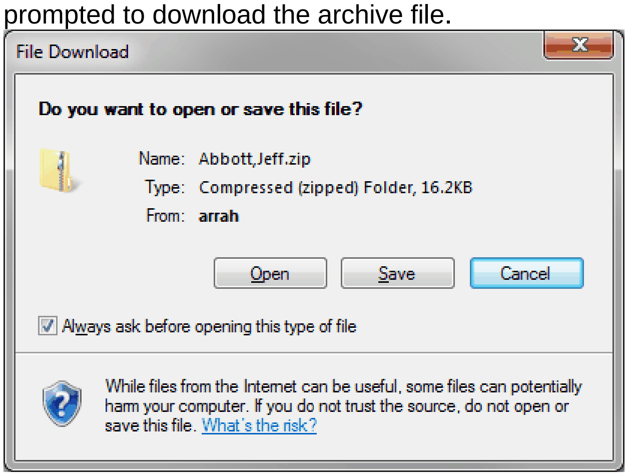
The outbox allows you to create a list of files to export to a patient or other entity specifically for that patient. (IE. Copy of the patients chart). The Outbox has several functions that you may perform.

This is to export the documents to the QRS Patient Portal. If you participate in the Patient Portal and the patient has created an account and elected to receive documents via the portal this button will appear. By clicking on it you will be prompted.



Clicking OK will send them to the QRS Patient Portal. You will then be prompted to remove the files from the outbox.
Files are sent to the PORTAL via the PORTAL interface. This utilizes a VPN (Virtual Private Network) to connect to the PORTAL server. The data is then transmitted through the VPN using SSH protocol for encryption within the tunnel. Thus providing redundant security for the data in transit from your server to the PORTAL server.

This button will allow you to create an archive of the files. After the Archive is created you will be prompted to download the archive file.



From hear you may save the archive to a removable media (IE, CD-ROM, Thumb Drive, Floppy) to give to the patient, or save it to your computer to email to the patient. The Archive created is an encrypted "zip" file and given a password. The Password is the patient's account number.

NOTE Your office should have a policy in place for giving the password for a file to ensure the person asking is who they say they are. Such as, validate SSN, DOB, Address, Phone etc.

After you save the archive you will be prompted to remove the files from the outbox.

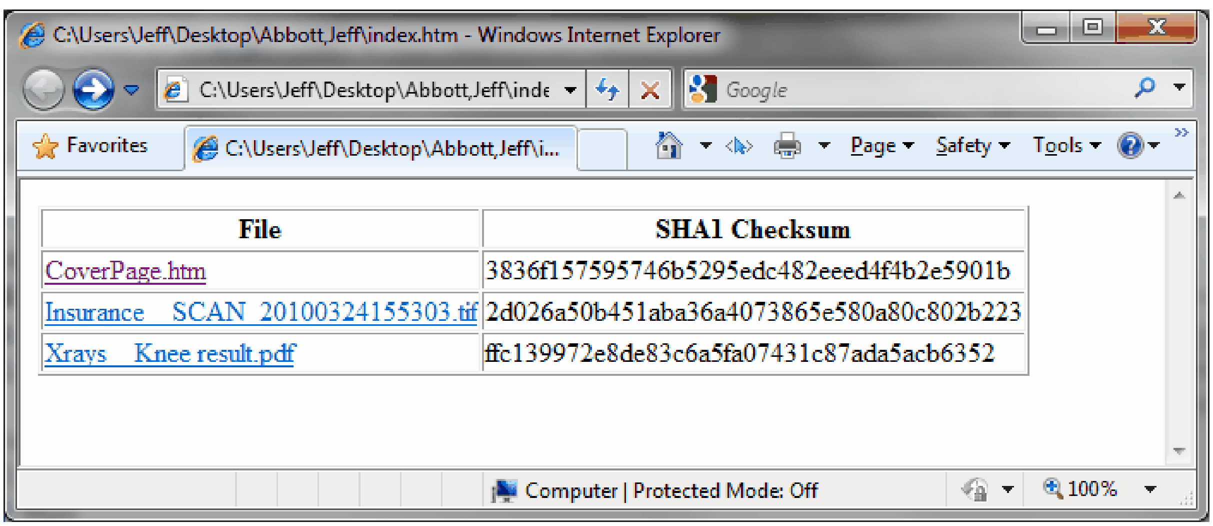
This button will prompt you to remove the files from the outbox. If you click OK, all the files in the outbox will be removed. It is good practice that after you create an archive that you remove the copies of the files in the outbox.

6.2.5.3.1 Viewing the Archive

The Archive Created will include all of the files in the Patients outbox along with an index file. The index file list the contents of the archive and provides a SHA1 checksum of each file to verify integrity.

The Archive is an encrypted ZIP file (AES-256) that will require a password to open. The password is the patient's account number. Most modern operating systems have the ability to extract the zip file. Use your tools to extract the zip file.

Clicking on the index.htm file should display the archive index (manifest) similar to the following. The SHA1 checksum is the for the uncompressed (unzipped) file.



File	SHA1 Checksum
CoverPage.htm	3836f157595746b5295edc482eeed4f4b2e5901b
Insurance SCAN 20100324155303.tif	2d026a50b451aba36a4073865e580a80c802b223
Xrays Knee result.pdf	ffc139972e8de83c6a5fa07431c87ada5acb6352

You should be able to view each file by clicking on the file, assuming your computer has a program capable of reading that file format.

6.2.5.4 Trash Can Button

The Trash Can Button will display the contents of the trash can folder. The Trash can folder is a special folder where files go when put in the trash can.

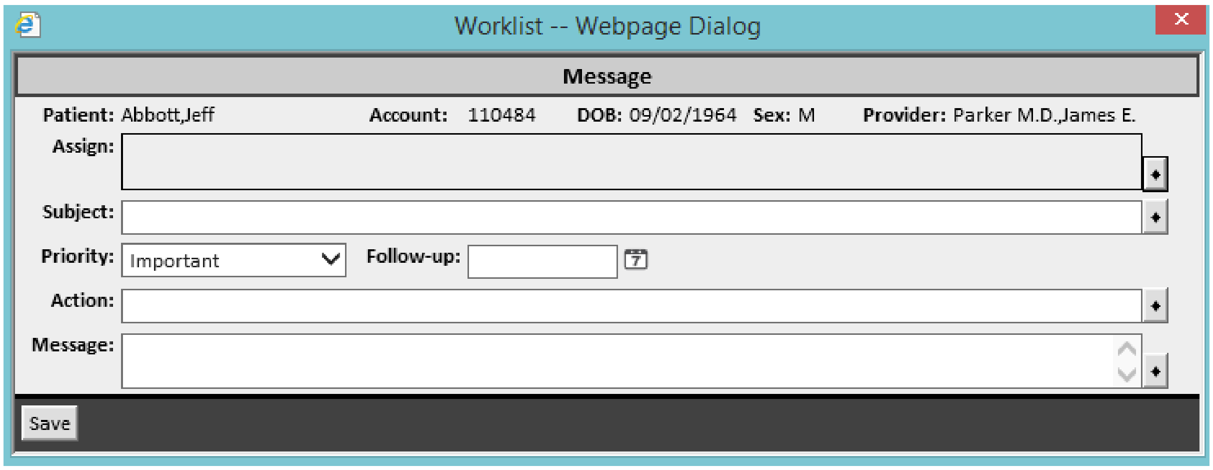
The Trash can be used as an exchange area for files that are wrongly filed. For example: You accidentally filed a document in one "Smith,John" account then realized it was the wrong "Smith,John". You can move the file to the trash from the wrong account. Pull up the right account and move the file from the trash to the proper Tab.

6.2.5.5 Message Button

The Message button will allow you to create a message for the patient. A Message is a work list item and will show on the work list of the user(s) and / or group(s) that it is assigned to. It will also display in the patients Pending folder.

The Message is unique in that when the message is Archived, it will automatically move to the Tab defined for messages in the dataset setup.

After clicking the Messages Button the Message / Work List form will display:

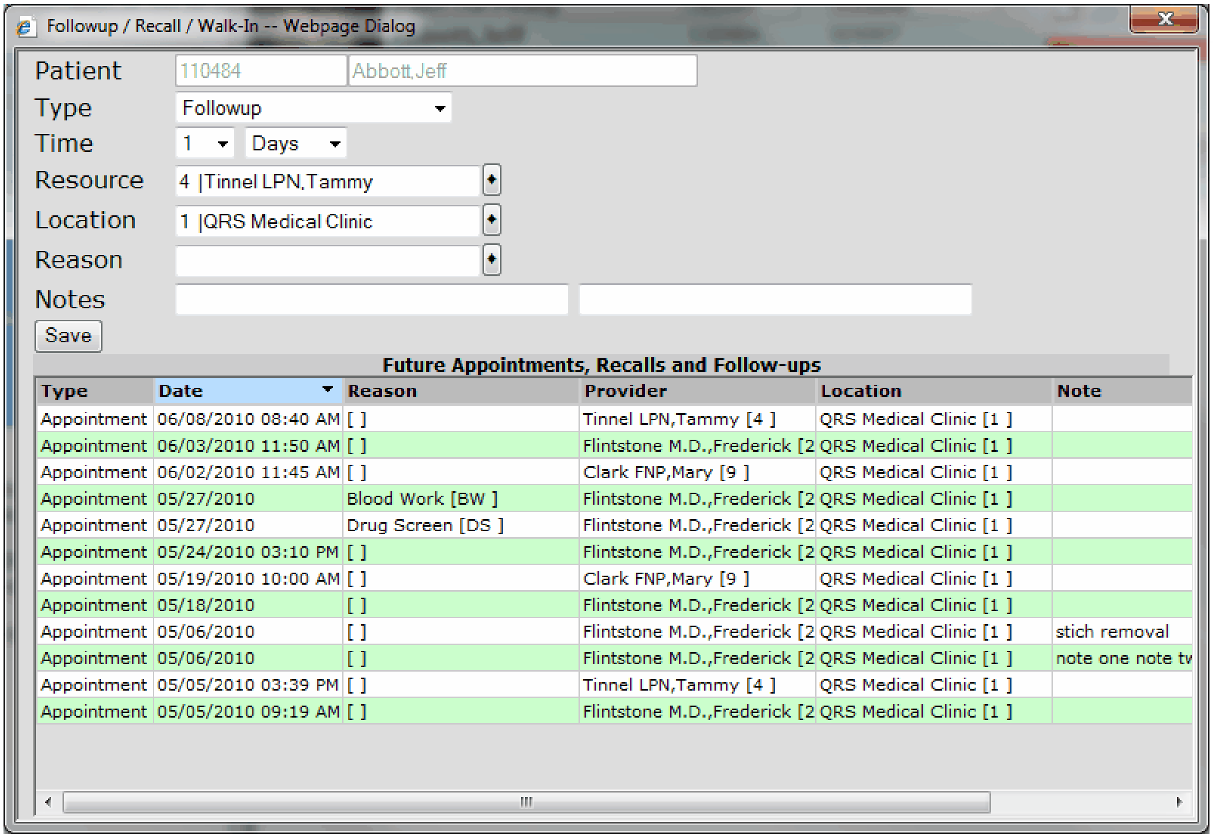


Here you must enter a subject of the message, and assign it to at least one user or group, then save the message.

Quick List are available for the Subject and Action. The Sentence builder is available for Message and Response.

6.2.5.6 Recall Followup Walk in Button

The Recall Followup Walk in button allows you to create any of the defined for the patient. When you click this button a window will display allowing you to enter the information as well as show a list of Future appointments, Recall, and Follow-ups.


Followup / Recall / Walk-In -- Webpage Dialog

Patient 110484 Abbott,Jeff
Type Followup
Time 1 Days
Resource 4 |Tinnel LPN,Tammy
Location 1 |QRS Medical Clinic
Reason
Notes
Save

Future Appointments, Recalls and Follow-ups

Type	Date	Reason	Provider	Location	Note
Appointment	06/08/2010 08:40 AM	[ ]	Tinnel LPN,Tammy [4]	QRS Medical Clinic [1]	
Appointment	06/03/2010 11:50 AM	[ ]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	
Appointment	06/02/2010 11:45 AM	[ ]	Clark FNP,Mary [9]	QRS Medical Clinic [1]	
Appointment	05/27/2010	Blood Work [BW]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	
Appointment	05/27/2010	Drug Screen [DS]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	
Appointment	05/24/2010 03:10 PM	[ ]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	
Appointment	05/19/2010 10:00 AM	[ ]	Clark FNP,Mary [9]	QRS Medical Clinic [1]	
Appointment	05/18/2010	[ ]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	
Appointment	05/06/2010	[ ]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	stich removal
Appointment	05/06/2010	[ ]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	note one note tv
Appointment	05/05/2010 03:39 PM	[ ]	Tinnel LPN,Tammy [4]	QRS Medical Clinic [1]	
Appointment	05/05/2010 09:19 AM	[ ]	Flintstone M.D.,Frederick [2	QRS Medical Clinic [1]	

Follow-ups are put into the PARADIGM appointment schedule and instruct the administrative staff to schedule an appointment on or about that time for the resource, location, and reason that you specify. These are typically things such as follow-up in two weeks for lab work.

Recalls are put into the PARADIGM appointment schedule and are used to contact the patient in the future to schedule a new appointment. Such as 6 months form check up.

Walk-ins are used to schedule patients immediately for a resource, location or reason. When scheduling a Walk In, the Encounter will change to the new Walk in when it is saved.

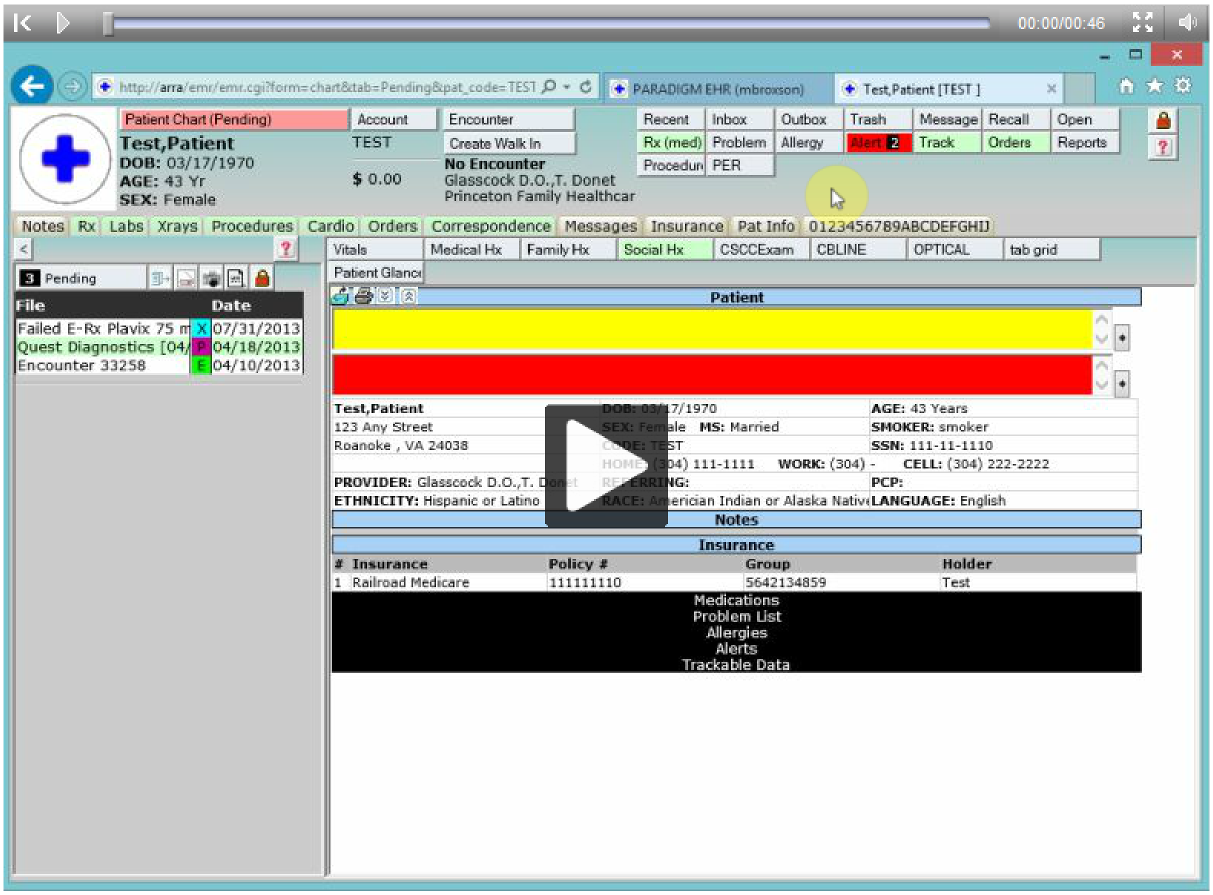
By hovering and clicking on an appointment in the appointment list it will open the appointment in the PARADIGM scheduling form if you have access.

6.2.5.7 Duplicate Chart

The Duplicate Chart (Open) button will open the same chart in a new Tab / Window. (even if your default is frames).
This can be helpful when needing to look or copy some text from another part of the chart to the form you are reviewing.

6.2.5.8 Medications (Rx) Button

To view or modify a patient's medication record, click on the ‘Rx (med)’ button in the Patient Header section of the chart. The top section of this screen is the action section that allows you to work with multiple medications at the same time. This rest of the screen is broken up into Current Medications, Discontinued Medications, and Cancelled Medications. In the top-right corner of the screen, you will see a "Reload Data" button. This button allows you to reload the patient's information that is currently saved to the server. You can use this button to discard any changes you've made to a patient's medication record during the current session.

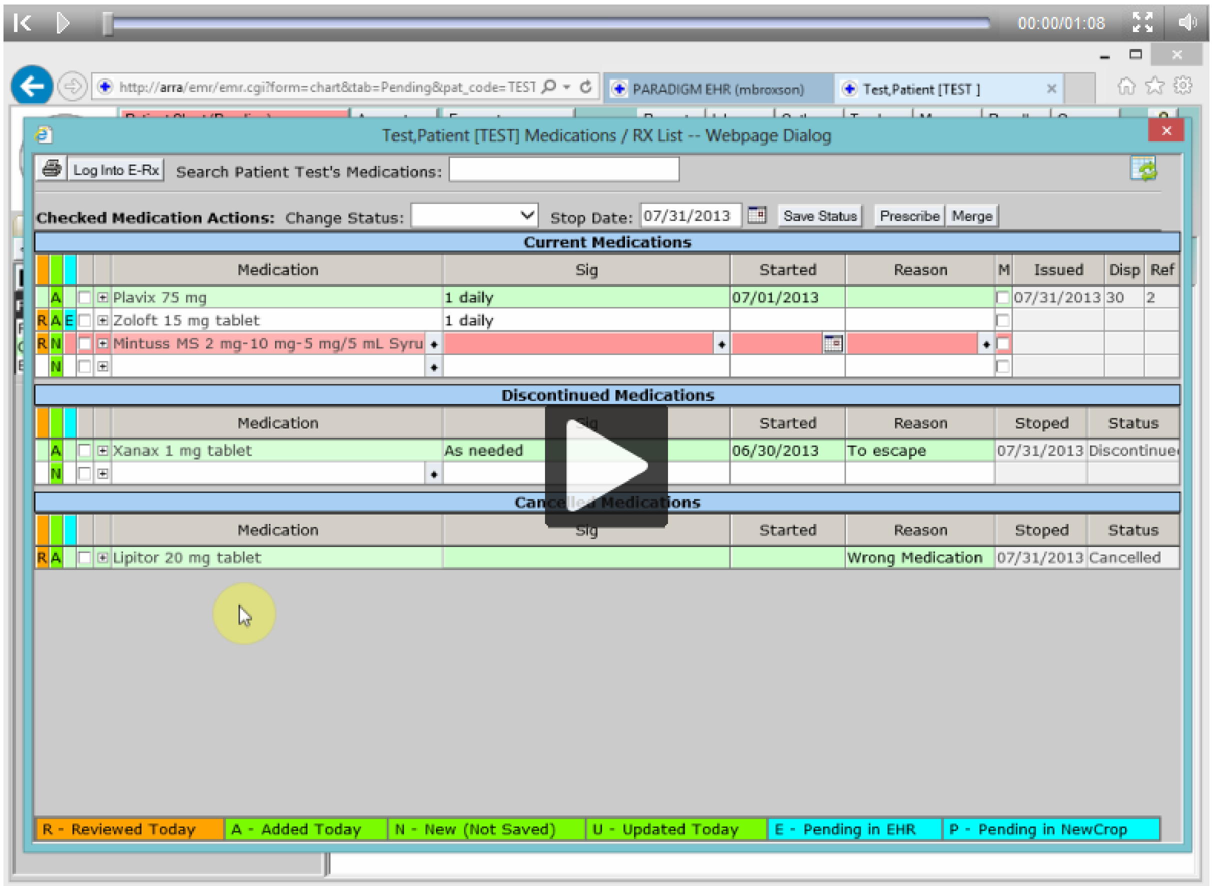


6.2.5.8.1 Indicators

The left column of each medication record is a 'Reviewed' column; this column indicates if any user has reviewed a medication with a patient on the current day. To set a medication as 'Reviewed', click the left column and the box will turn orange with a black "R" in it; you can un-mark the medication as being reviewed by re-clicking the "R".

The next column to the right indicates that a medication has been Added Today, Updated Today, or is New. This column will have a green background and a black "A", "N", or "U" for Added, New, or Updated. A New medication is one that has not yet been saved to the patient's chart; these are the only medication records that can be removed from the patient's chart by clicking on the "N". After a medication has been saved to the patient's chart, it changes to an "A" (Added today) and can no longer be removed; instead, you must change the status of the medication to ‘Cancelled’ and then select a reason.

The third column is a worklist indicator. This column can contain an “E”, for Pending in EHR, or a “P”, for Pending in NewCrop. If this column has one of these indicators in it, you can click on the letter to open the worklist item.



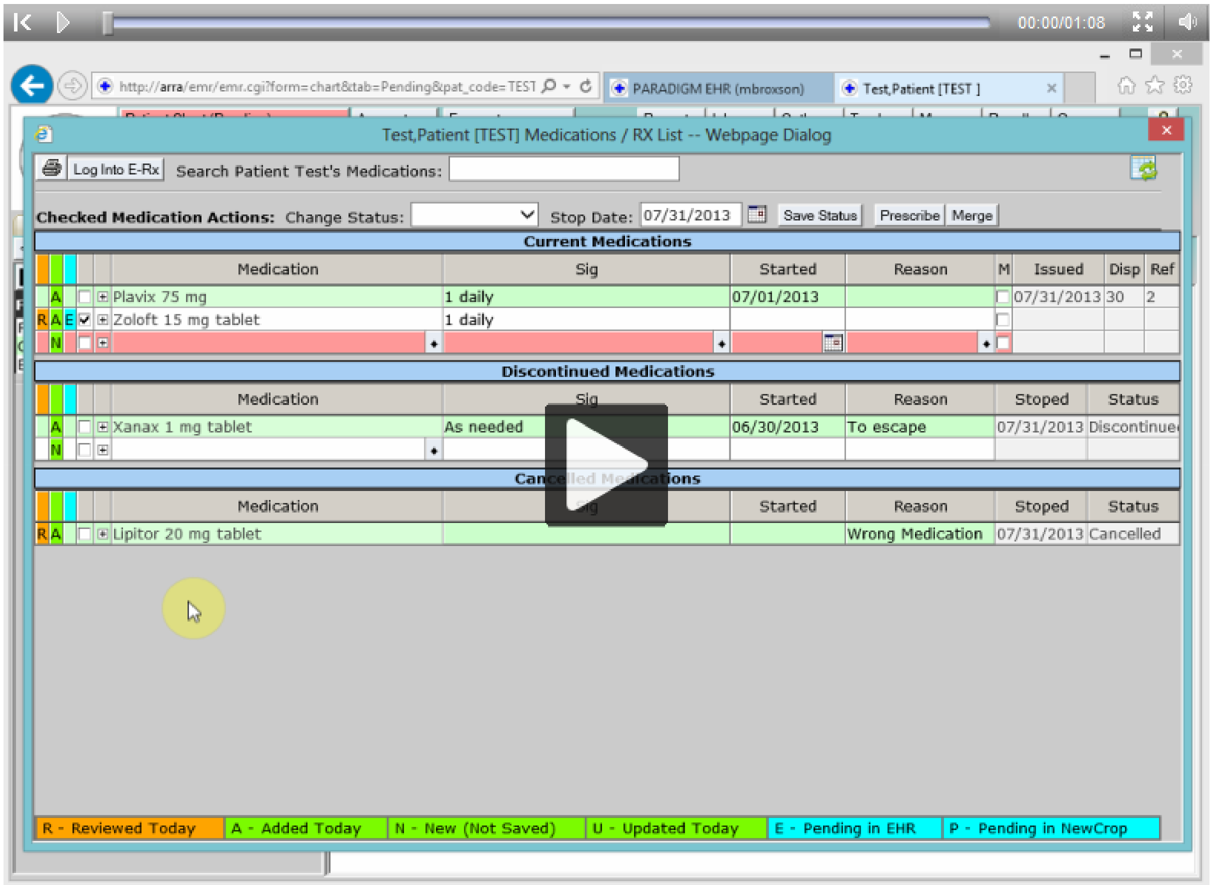
6.2.5.8.2 Fields

The forth column of a medication is a checkbox that allows you to select multiple medications and perform actions to all of them at one time. The actions that can be performed are: change the status of medications, prescribe medications, and merge medications. These actions are in the top section of the screen and can only be performed if you have at least one medication selected.

The next column contains a plus sign that is used to expand the view of a medication. From this expanded view of the medication, you can add or edit notes, administered by, dispense quantity, and number of refills. Below this row, you will see any history that is associated with this medication.

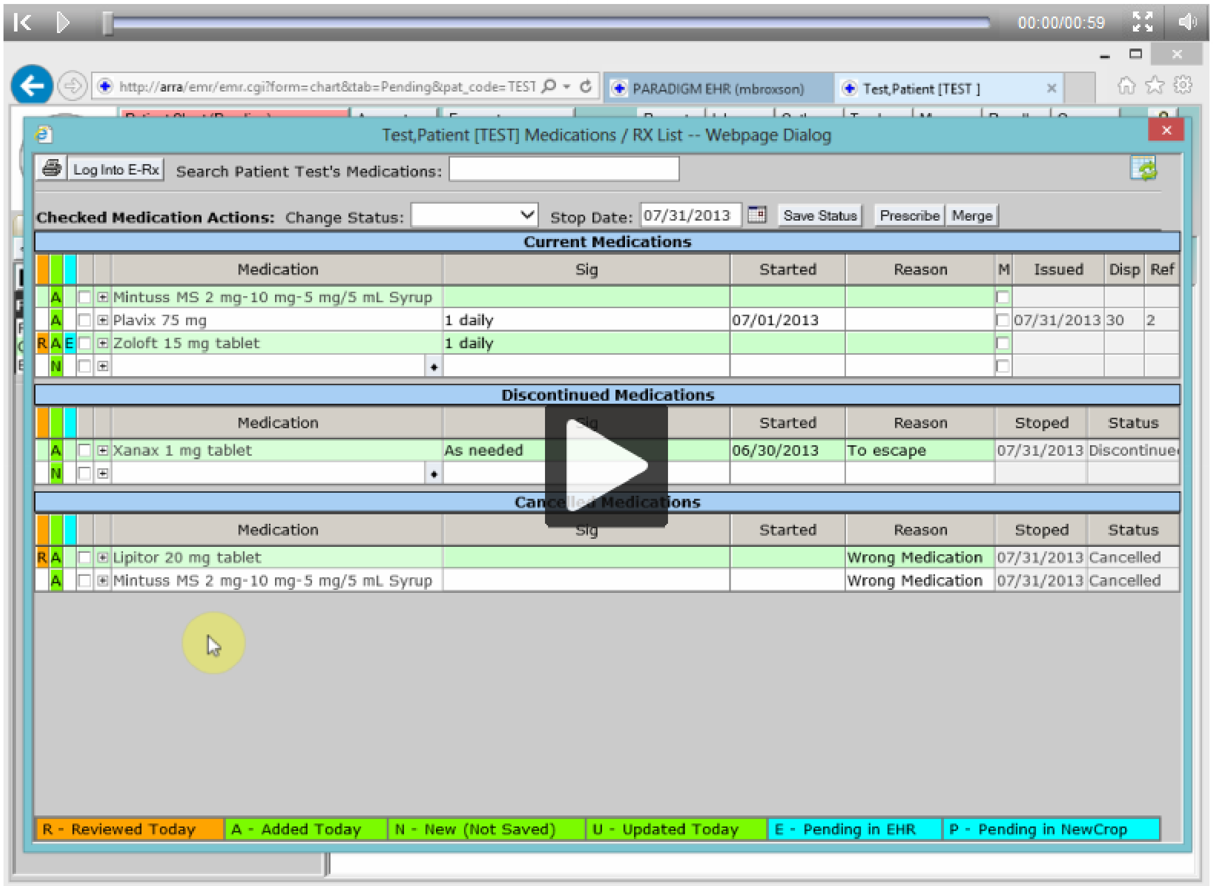
The next columns are the specific information related to a medication record. You may modify the record directly by clicking on the table cell and typing directly into it. You will also notice that after you click on one cell for a medication, all of the quick list widgets become active for that medication.

The right three columns on the current medication list are the last issuance details. These are the last date the medication was prescribe, the quantity dispensed last, and the last number of refills given.



6.2.5.8.3 Prescribing

To prescribe a medication, or multiple medications, start by entering the medications you want to prescribe. Select the corresponding checkbox for all of the medications you want to prescribe and click the ‘Prescribe’ button. This will prompt the ‘Prescribe Medication’ dialog box to pop up. Enter the prescription and issuance information for each medication. If you need any medications placed on the worklist for follow-up at a later date or by another user, you can set that information here as well. When you are done with all changes, you must click the Save bar at the bottom of the page.



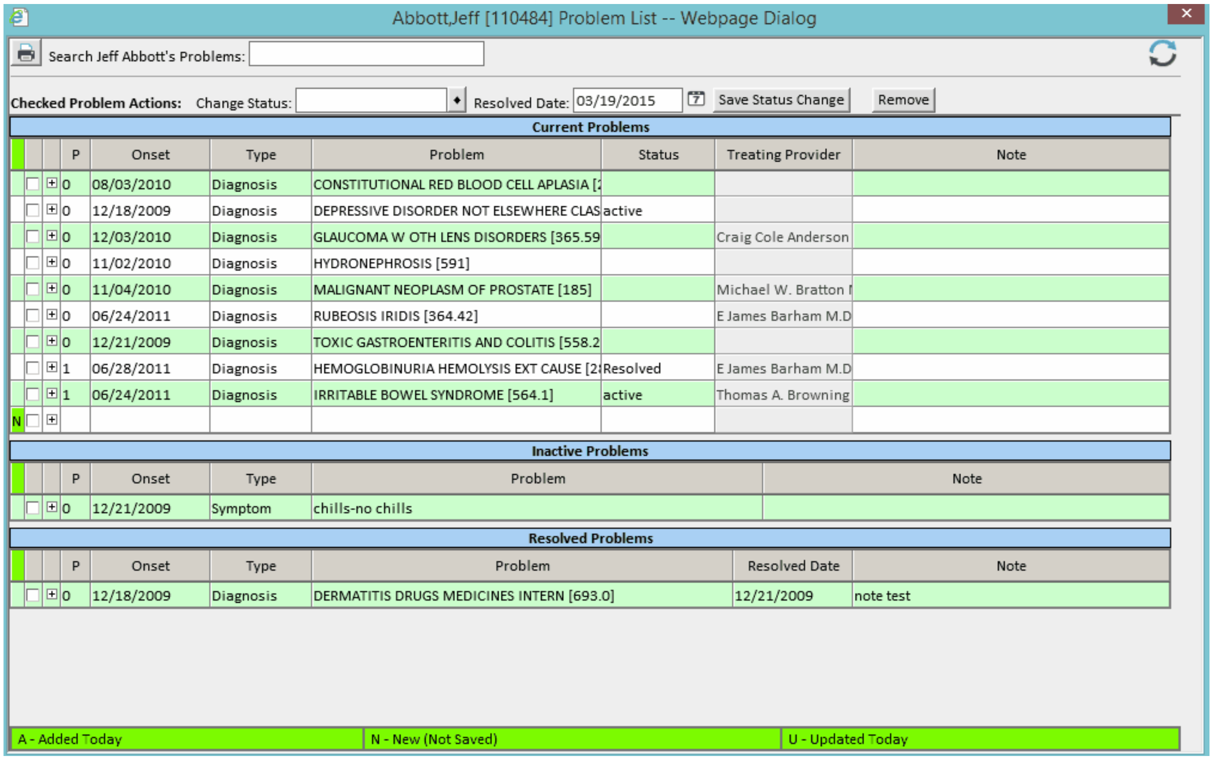
6.2.5.9 Problem List (Dx) Button

 Clicking the Problem List (Dx) button will display the patients problem list in a window.

This list is divided into active, inactive and resolve problems.

You can add, modify, and remove Problems directly within the grid layout.

Problem History can be seen by expanding a Problem record by clicking the plus sign.


Abbott,Jeff [110484] Problem List -- Webpage Dialog

Search Jeff Abbott's Problems:

Checked Problem Actions: Change Status: Resolved Date: 03/19/2015 Save Status Change Remove

Current Problems

	P	Onset	Type	Problem	Status	Treating Provider	Note
	0	08/03/2010	Diagnosis	CONSTITUTIONAL RED BLOOD CELL APLASIA [2			
	0	12/18/2009	Diagnosis	DEPRESSIVE DISORDER NOT ELSEWHERE CLAS	active		
	0	12/03/2010	Diagnosis	GLAUCOMA W OTH LENS DISORDERS [365.59		Craig Cole Anderson	
	0	11/02/2010	Diagnosis	HYDRONEPHROSIS [591]			
	0	11/04/2010	Diagnosis	MALIGNANT NEOPLASM OF PROSTATE [185]		Michael W. Bratton I	
	0	06/24/2011	Diagnosis	RUBEOSIS IRIDIS [364.42]		E James Barham M.D	
	0	12/21/2009	Diagnosis	TOXIC GASTROENTERITIS AND COLITIS [558.2			
	1	06/28/2011	Diagnosis	HEMOGLOBINURIA HEMOLYSIS EXT CAUSE [2	Resolved	E James Barham M.D	
	1	06/24/2011	Diagnosis	IRRITABLE BOWEL SYNDROME [564.1]	active	Thomas A. Browning	
N							

Inactive Problems

	P	Onset	Type	Problem	Note
	0	12/21/2009	Symptom	chills-no chills	

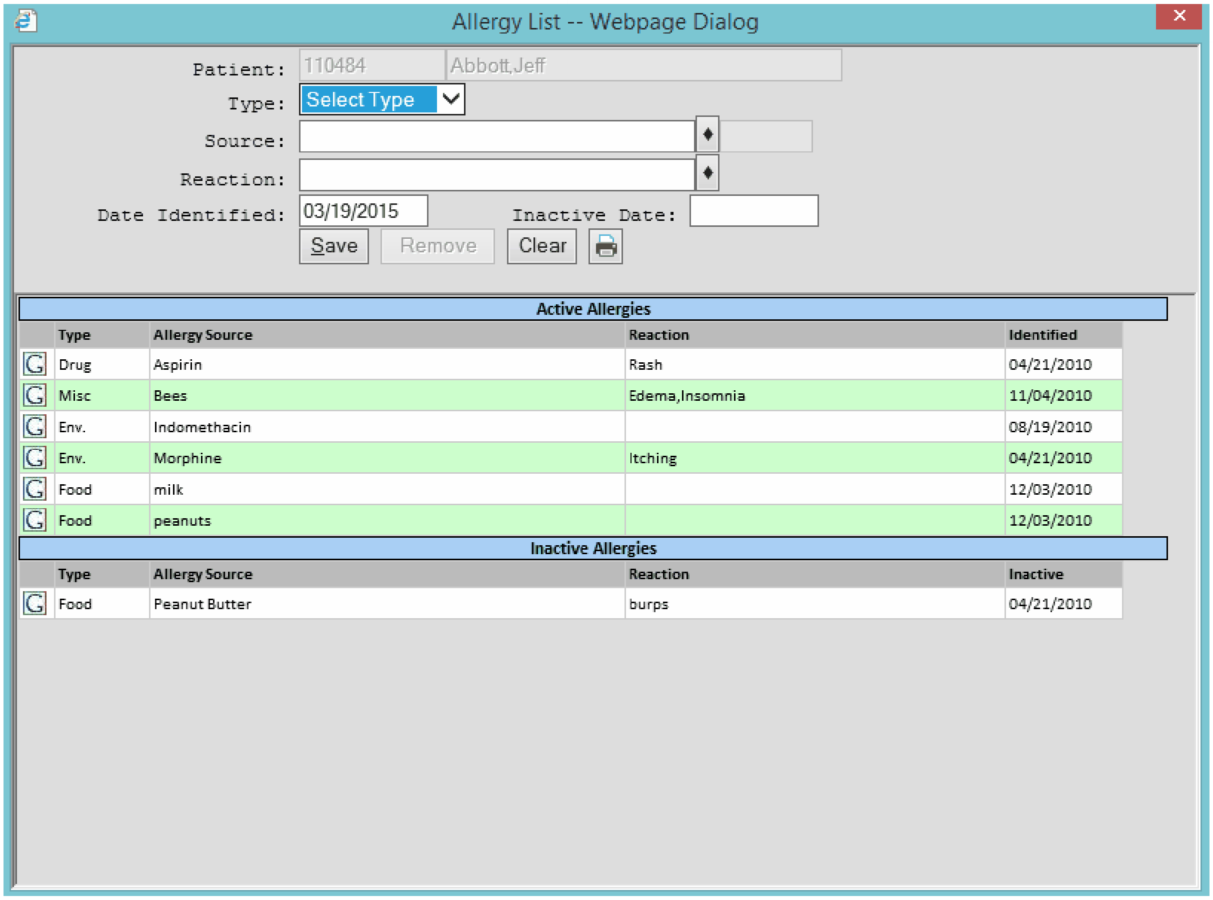
Resolved Problems

	P	Onset	Type	Problem	Resolved Date	Note
	0	12/18/2009	Diagnosis	DERMATITIS DRUGS MEDICINES INTERN [693.0]	12/21/2009	note test

A - Added Today | N - New (Not Saved) | U - Updated Today

6.2.5.10 Allergy

Clicking the Allergy button will display the patients allergy list in a window.

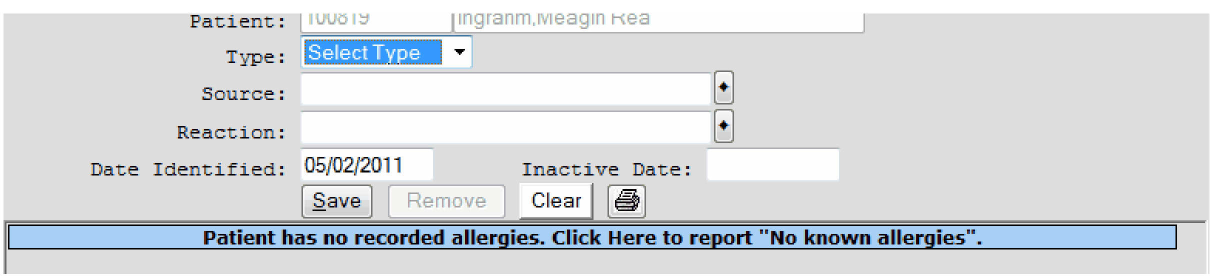


This list is divided into active and inactive allergies.

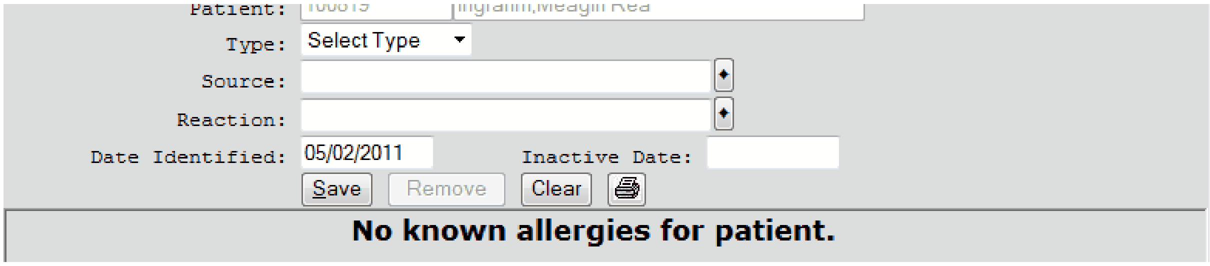
From here you may Enter new Allergies, Update Allergies, Remove Allergies or print the Allergy list.

6.2.5.10.1 No Allergies

The patient may have no allergies. When you first enter the allergy form and the patient has no allergies recorded it will display as follows:



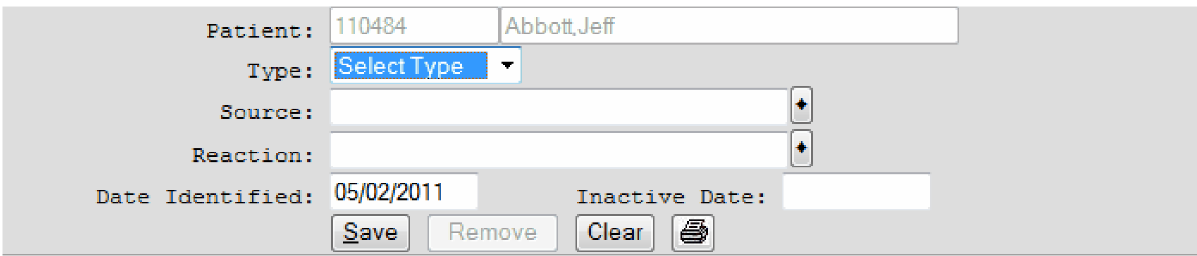
By clicking on the button bar, it will record that there are no known allergies for the patient and display as follows:



By adding an allergy it will change the status and display them. If you remove all the allergies it will revert back to no recorded allergies.

6.2.5.10.2 Add a new Allergy

You may Add new allergies to the allergy list by completing the form and pressing the Save button.



Select the Type of allergy. (Food, Drug, Misc)
Identify the source and reaction of the allergy.
And Set the date of onset or reported.

Click "Save" to save the information.

6.2.5.10.3 Edit Exisiting Allergy

By hovering over the allergy in the allergy list and clicking you may edit or remove an existing Allergy. The allergy you selected will be displayed in the form.

Make the changes and press the "Save" button.

If you enter and Inactive date and save the allergy it will appear on the Inactive allergies list.

6.2.5.10.3.1 Remove an Allergy

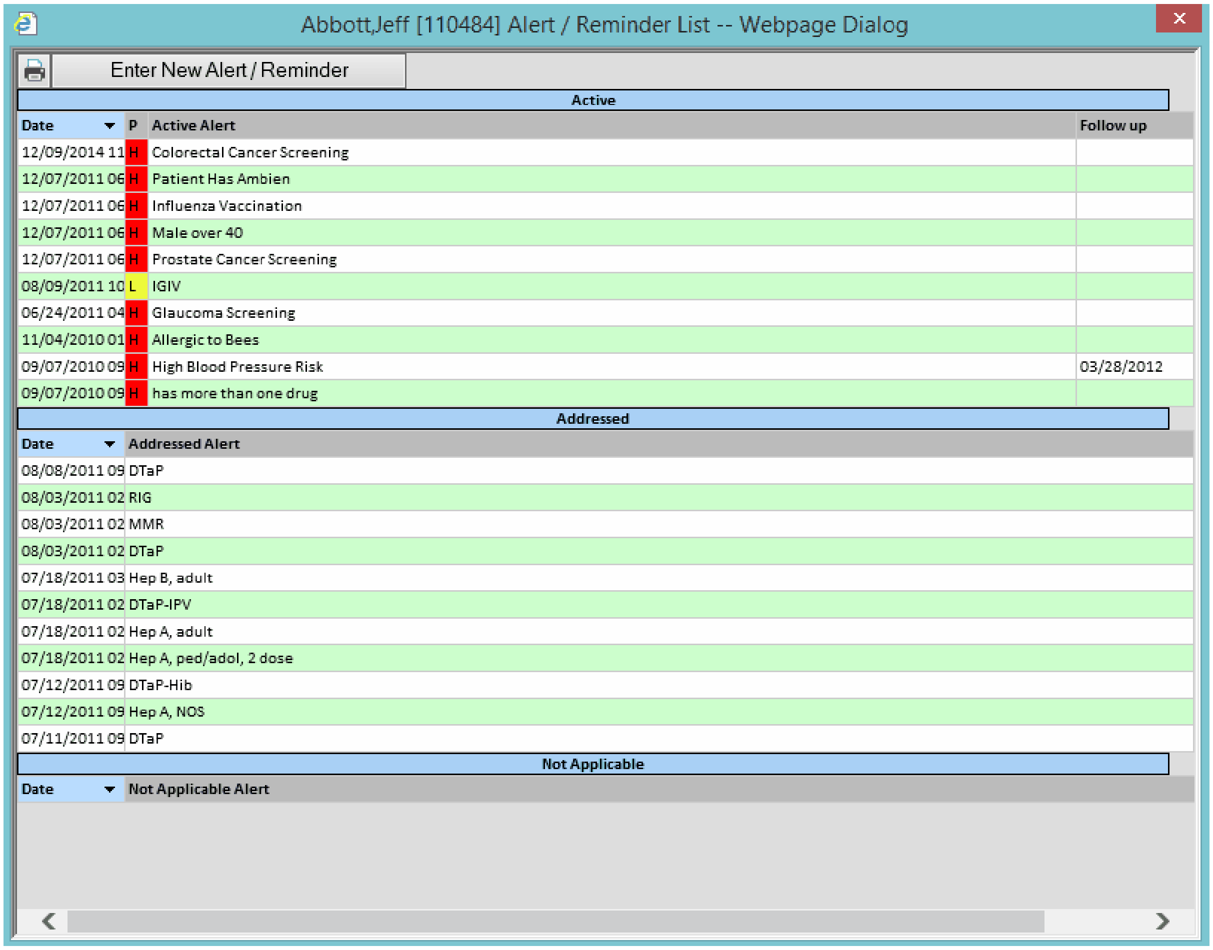
Follow same procedure as above and click Remove button.

6.2.5.10.4 Print Allergies List

Press the Printer Icon button to print the allergy list. It will only print the sections of the list that you have displayed using the button bars.

6.2.5.11 Alerts and Reminders

 Clicking the Alerts button will display the patients Alert list in a window.



This list is divided into three areas active, addressed and Not Applicable.

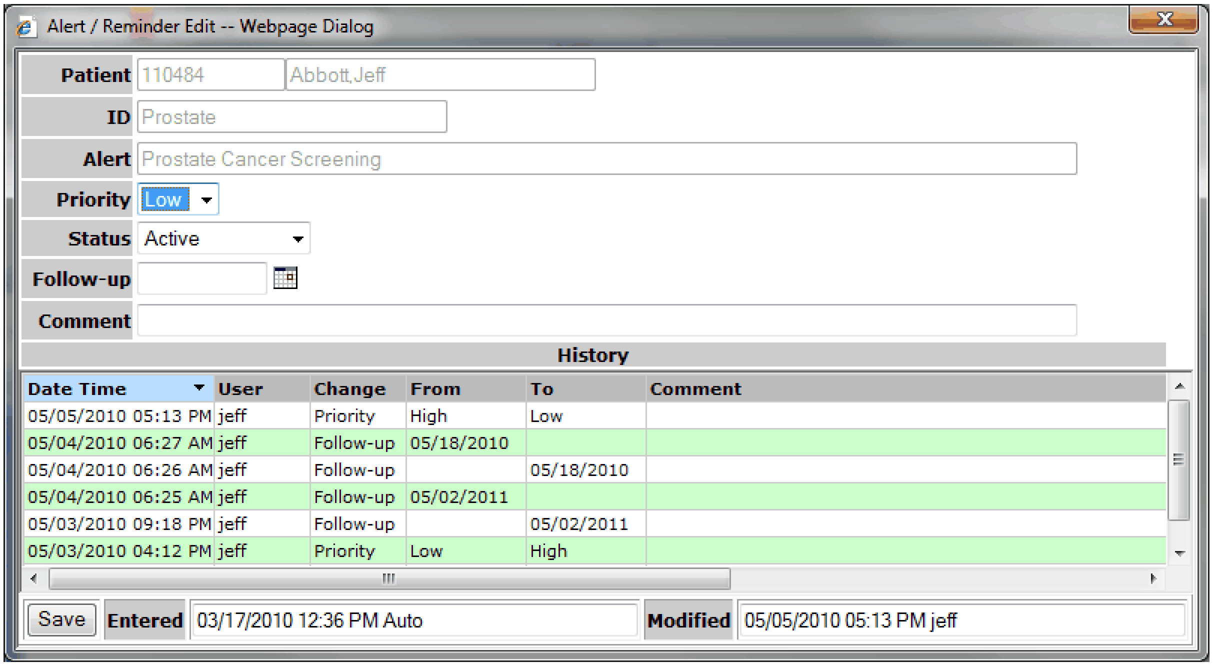
The Active List shows the Priority of the alerts as either High (in red) or Low (in yellow). It also displays the Follow up date if defined. The Alert button and notification area of the Functions and Features will display in red if there are active alerts that are in need of attention because the follow up date has been reached.

Alert definitions are created by the administrator. These definitions are reviewed each time a chart is entered to see if the patient meets the criteria for that alert. If so the alert will be added to the patients active alert list to be worked. Alerts can be based on
patient data, problem data, medication data, allergy data and track able data. Contact your system administrator for the setting up alerts and reminders.

From here you may also Enter new Alerts and Reminders specific for this patient, As well as modify them and print the list.

6.2.5.11.1 Edit / Work and Alert

By hovering over the Alert in the list and clicking you may edit or work it. This will display the Alert in a window.



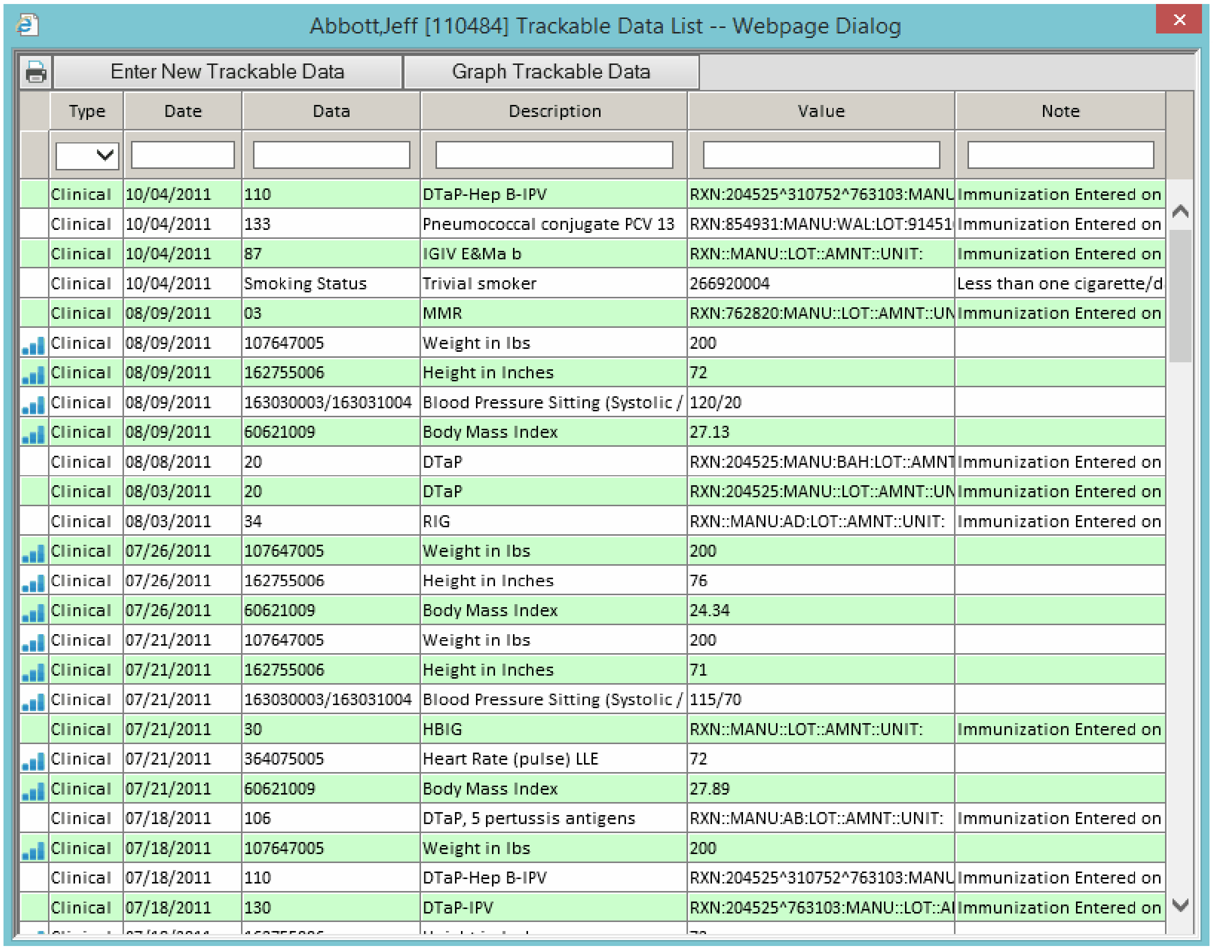
Make the changes and Update press the Save button.

Your changes will be logged in the History of the alert and saved.

6.2.5.12 Trackable Data

Trackable Data are data elements that you may want to track over time. These include things such as vitals, lab results etc.   This data can then be used to generate reports or graphs plotting trends on the information. Trackable data can also be used for more static information that must be captured for reporting purposes such as Race.

Clicking the Track button will display the current trackable data for the patient.

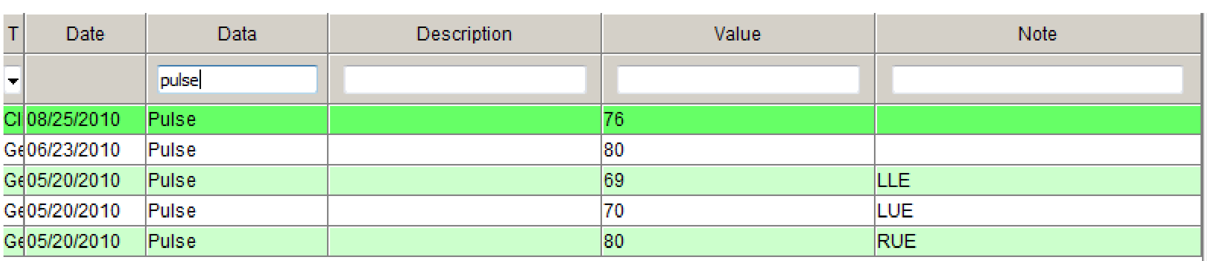


Type	Date	Data	Description	Value	Note
Clinical	10/04/2011	110	DTaP-Hep B-IPV	RXN:204525^310752^763103:MANU	Immunization Entered on
Clinical	10/04/2011	133	Pneumococcal conjugate PCV 13	RXN:854931:MANU:WAL:LOT:91451	Immunization Entered on
Clinical	10/04/2011	87	IGIV E&Ma b	RXN::MANU::LOT::AMNT::UNIT:	Immunization Entered on
Clinical	10/04/2011	Smoking Status	Trivial smoker	266920004	Less than one cigarette/d
Clinical	08/09/2011	03	MMR	RXN:762820:MANU::LOT::AMNT::UN	Immunization Entered on
Clinical	08/09/2011	107647005	Weight in lbs	200	
Clinical	08/09/2011	162755006	Height in Inches	72	
Clinical	08/09/2011	163030003/163031004	Blood Pressure Sitting (Systolic /	120/20	
Clinical	08/09/2011	60621009	Body Mass Index	27.13	
Clinical	08/08/2011	20	DTaP	RXN:204525:MANU:BAH:LOT::AMNT	Immunization Entered on
Clinical	08/03/2011	20	DTaP	RXN:204525:MANU::LOT::AMNT::UN	Immunization Entered on
Clinical	08/03/2011	34	RIG	RXN::MANU:AD:LOT::AMNT::UNIT:	Immunization Entered on
Clinical	07/26/2011	107647005	Weight in lbs	200	
Clinical	07/26/2011	162755006	Height in Inches	76	
Clinical	07/26/2011	60621009	Body Mass Index	24.34	
Clinical	07/21/2011	107647005	Weight in lbs	200	
Clinical	07/21/2011	162755006	Height in Inches	71	
Clinical	07/21/2011	163030003/163031004	Blood Pressure Sitting (Systolic /	115/70	
Clinical	07/21/2011	30	HBIG	RXN::MANU::LOT::AMNT::UNIT:	Immunization Entered on
Clinical	07/21/2011	364075005	Heart Rate (pulse) LLE	72	
Clinical	07/21/2011	60621009	Body Mass Index	27.89	
Clinical	07/18/2011	106	DTaP, 5 pertussis antigens	RXN::MANU:AB:LOT::AMNT::UNIT:	Immunization Entered on
Clinical	07/18/2011	107647005	Weight in lbs	200	
Clinical	07/18/2011	110	DTaP-Hep B-IPV	RXN:204525^310752^763103:MANU	Immunization Entered on
Clinical	07/18/2011	130	DTaP-IPV	RXN:204525^763103:MANU::LOT::A	Immunization Entered on

From here you may search, print, enter new data, or edit existing data.

6.2.5.12.1 Search

At the top of the columns are filter headers that allow you to filter the data (search) for specific values.



T	Date	Data	Description	Value	Note
		pulse			
Cl	08/25/2010	Pulse		76	
Ge	06/23/2010	Pulse		80	
Ge	05/20/2010	Pulse		69	LLE
Ge	05/20/2010	Pulse		70	LUE
Ge	05/20/2010	Pulse		80	RUE

Enter the value into the filter header to refine your search.

6.2.5.12.2 Print

Pressing the Print Icon button will print the list that is currently displayed.

6.2.5.12.3 Enter New

Pressing the "Enter New Trackable Data Object" will allow you to enter a new patient trackable object for the patient. The following form will appear.

Select the object you want to track and assign it a value.

The Note is optional

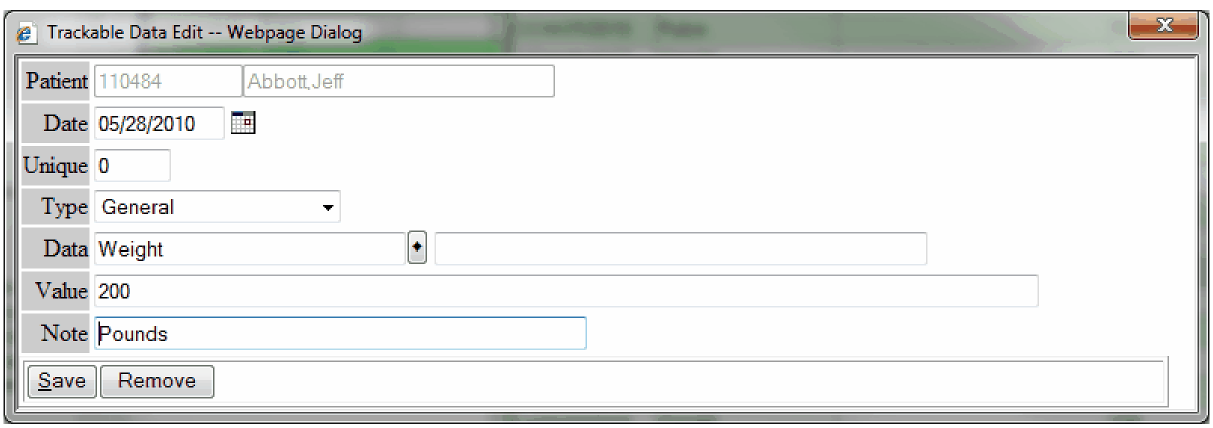
The Date defaults to the current date. If the data you are tracking is static and does not change over time, set the date to "00/00/0000"

If you have multiple of the same item for the same date use the Unique field to assign a sequence.

Save the data.

6.2.5.12.4 Edit

By Hovering over the Item you want to edit and clicking. It will pull up the record in the form.



Make the changes and press the Save Button.

6.2.5.12.4.1 Remove

Follow the procedure above but click the Remove button.

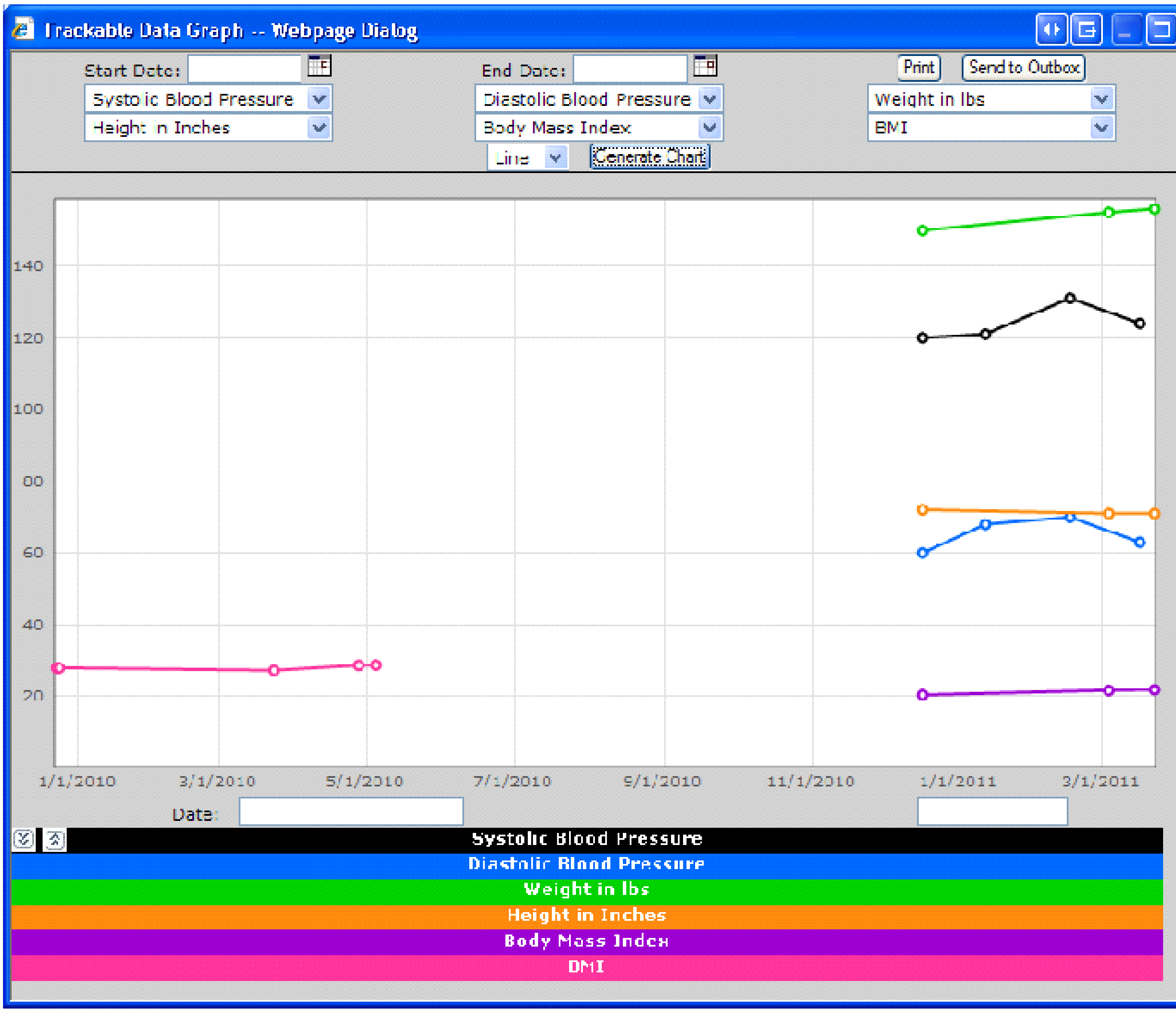
6.2.5.12.5 Graph

The Trackable Data Graph is a way of displaying Trackable Data Objects in a line or point graph that have a numeric value. These two objects will have independent lines/points to represent them. The graphs can be used to see trends either over a set period of time or the entire period of the patient's data. They can be printed or sent to the patient's outbox where you can archive them or send them to the PARADIGM® Patient Portal.

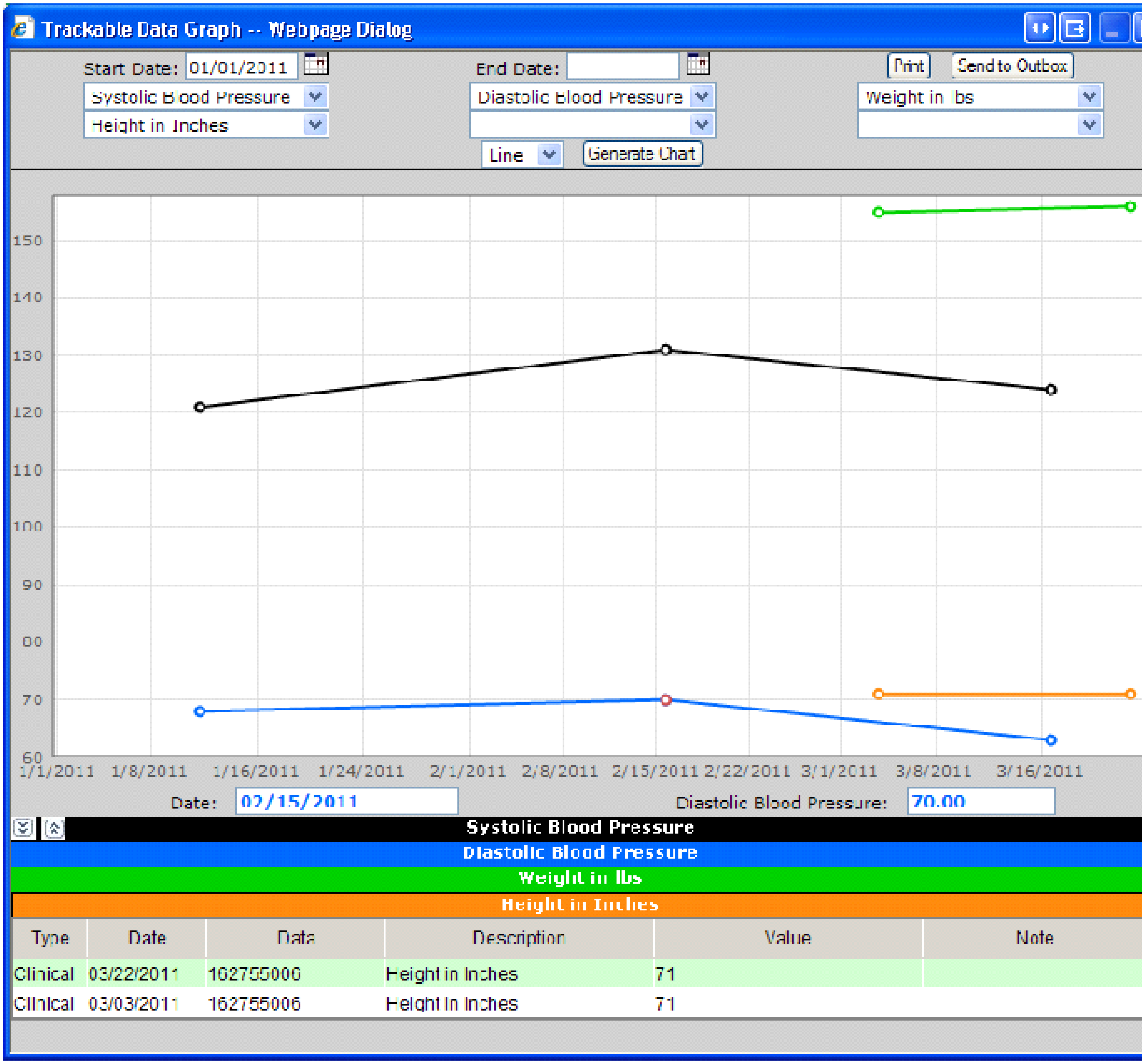
A blank graph can be launched from the Reports menu inside of the patient's chart. The graph can also be launched through the Trackable Data List by clicking on the icon. This will automatically graph the item that you selected. Note: Only items with numeric values will have the graph icon. Additionally, Blood Pressure is split into Systolic and Diastolic so that it can be graphed.

The dropdown selections allow you to choose up to six objects to be graphed. These objects are built dynamically to only include objects in the patient's Trackable Data that have a numeric value.

By default, the graph uses a date range of the first and last items found for the objects selected to be graphed. By clicking on the bars at the bottom, you can display a sort-able table of the data for that object. The color of the line and point match the color of the table headers at the bottom (e.g. the pink line on the left side of the graph below represents the BMI object).



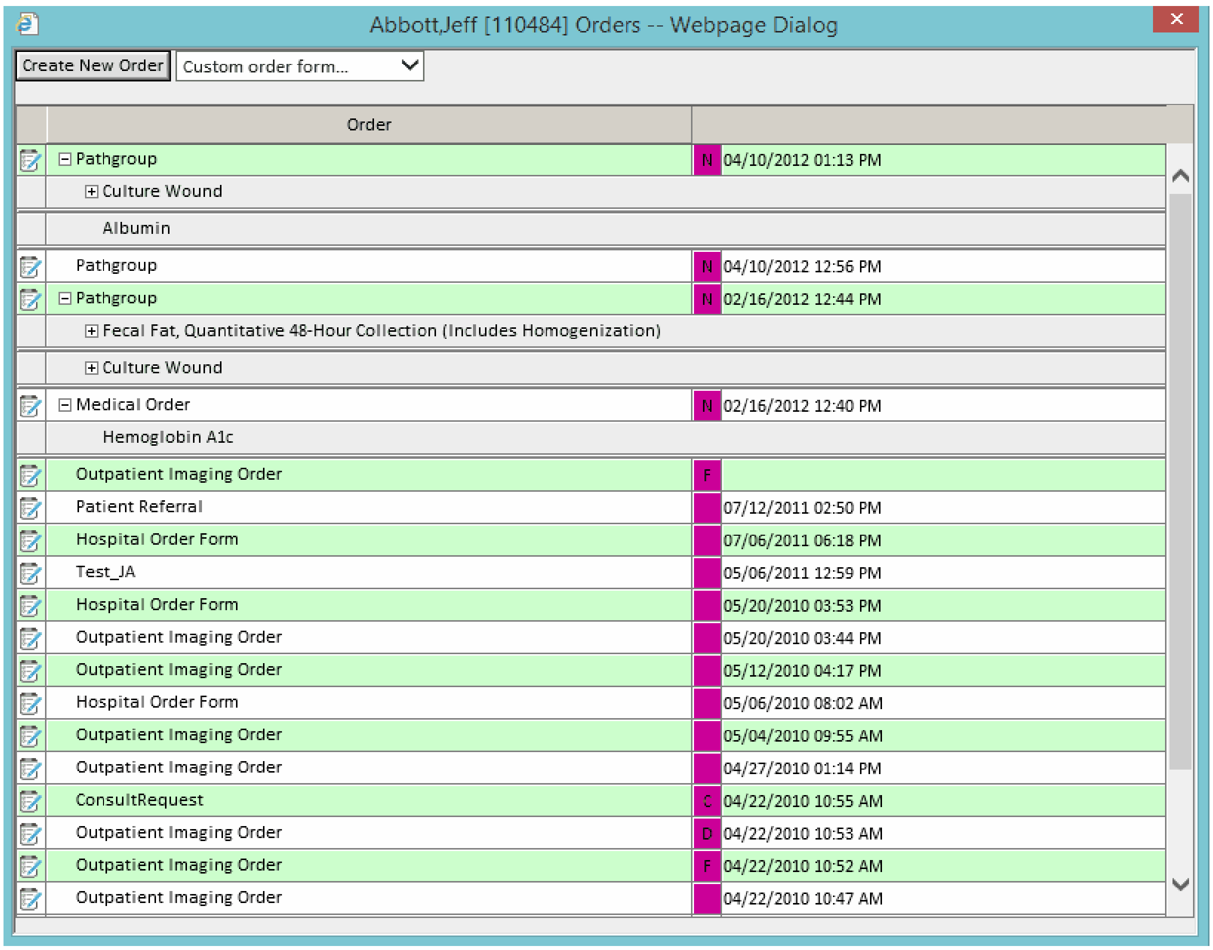
The example below you will see how you can select a date range for the graph to display the objects that you select. When you hover over a point, the tooltip line changes the label to match the point that you are hovering on and the color of the date and object value change to match the color of the line and table header to assist in the interpretation of the graph.



6.2.5.13 Orders

Orders are special forms used to communicate provider instructions for services not performed by the provider, but by another service provider. These include but are not limited to lab, radiology, cardiology, audiology, nuclear medicine, referrals, and consults. When an order is created a work list item is created with it to track the order and keep you abreast of the orders status. When results are returned they are attached to an order so you can then see the order, status, and results all together. Order forms can be created to suit your practice's needs. These forms can be paper based, or generate electronic orders (HL7) that are routed automatically.

Clicking the "Orders" button will display the orders menu. The Orders module allows you to create an order using "New Medical Order" or selecting a "Custom order form..." from the drop down. A grid displays all of the orders for the patient along with the order status and last modified date. Orders created using the Medical Order Form will have plus sign next to them so that you can quickly view the details of that order. Applicable order items will also have a plus sign to signify that there are questions associated with that order using the Ask at Order Entry system. To open an already saved order, click on the clipboard icon to the left of the order.



6.2.5.13.1 Creating a New Order

New orders can be created via the "Create New Order" button or by selecting one of your customized order forms in the "Custom order form..." drop down list.

6.2.5.13.1.1 Medical Order Form

The Medical Order Form consists of three main sections. The header provides relevant order information including patient name, address, date of birth, social security number, and phone number as well as the primary and secondary insurances that are on file for that patient. The header also includes the location name and address for the office that is placing the order, the date and time the order was entered, and the provider that is placing the order. The general order details allow you to enter order appointment information. And the order items are the test/procedures that you will requisition for that patient as well as their associated diagnosis codes.

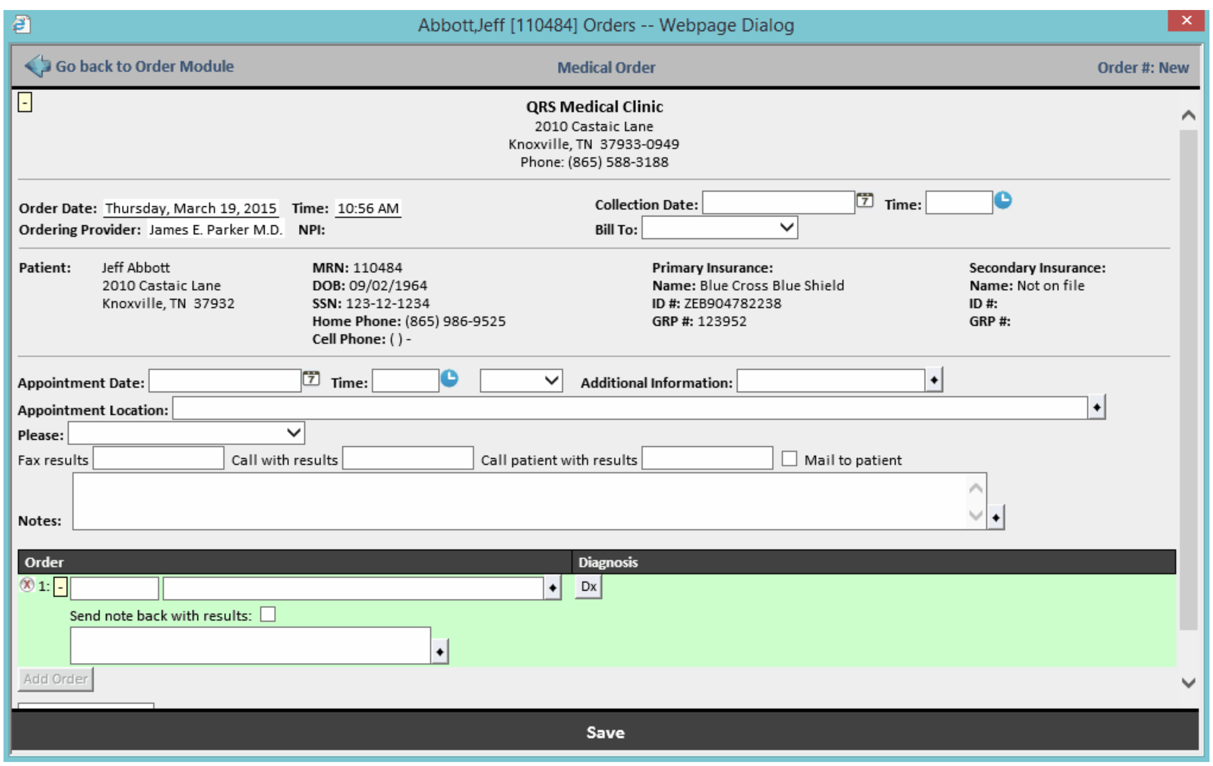
Upon saving a Medical Order you will be prompted to save a worklist item associated with that order. This worklist item is used to track the specific Medical Order that you are saving. The status of the order will default to "New Order" and you must select a user or group to associate the worklist item with.

There are a few features that have been implemented in the Medical Order Form:

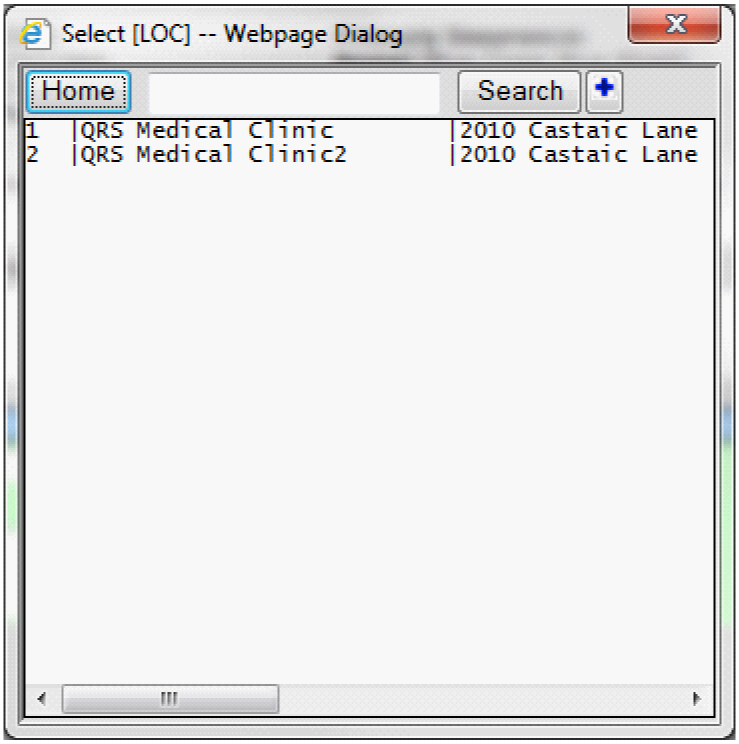
- The first thing that you will notice is that the Save button has been changed to a Save bar that stretches the full width of the window.
- Next, the new Save Bar remains at the bottom of the window even if the form keeps on going. This allows you to change something at the top of the form and save it without having to scroll to the bottom to save your entry.
- The Standard Medical Order Form offers the ability to sign off on the order.
  - Please note that the signature selection at the bottom of the form is different from a user signing off on the order. The signature selection at the bottom of the form allows for any user to include the provider's signature to be printed with the order while signing off on an order can only be performed by users with a signature loaded into the EHR and locks the document from future modification.

General notes about the Medical Order Form:

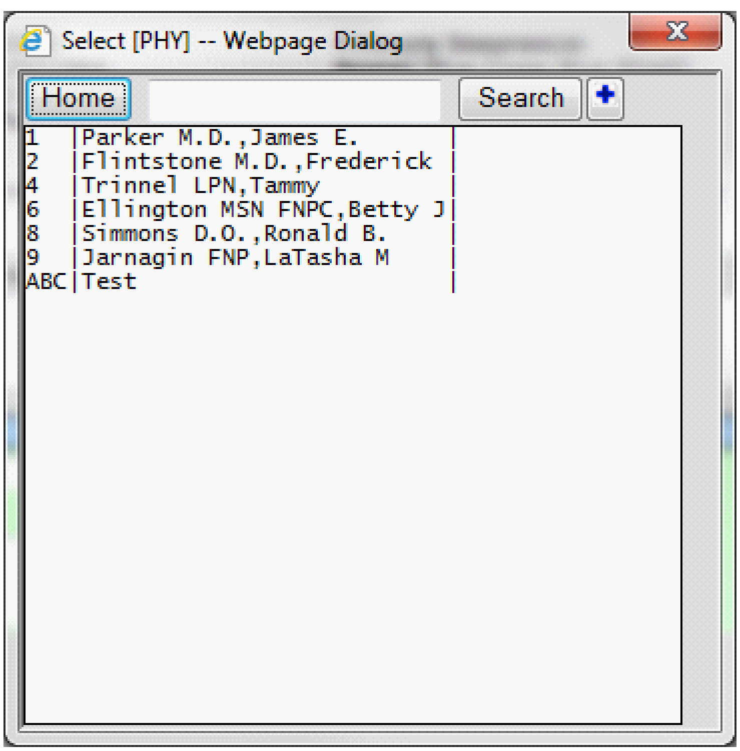
- The Medical Order Form must be printed utilizing the EHR Outbox. After an order is saved, it can be sent to the patient or user outbox.
- The Medical Order Form was designed to be compliant with HL7 standards to allow the processing of electronic orders through PARADIGM EHR. Please contact QRS if you would like to more information about an HL7 interface.



The order header allows you to click on the office information and select another location from the PARADIGM Location table.



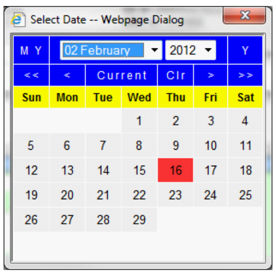
You can also click on the Ordering Provider's Name to select another Provider from the PARADIGM Physician table.



The order details section of the Order form allow you to specify the order date, time, and other appointment information. This section also include the request of what you would like the performing party to do (Evaluate and Recommend, Evaluate and Treat, Second Opinion, or Perform Appropriate Procedures), what to do with the results, and any notes for the order.

There are a couple of features built into this section of the order form that can be utilized as needed.

The first deals with the Appointment Date. The appointment date is set to the current date upon the initial opening of the order form. To change this date, simply click on the date to open the calendar widget.

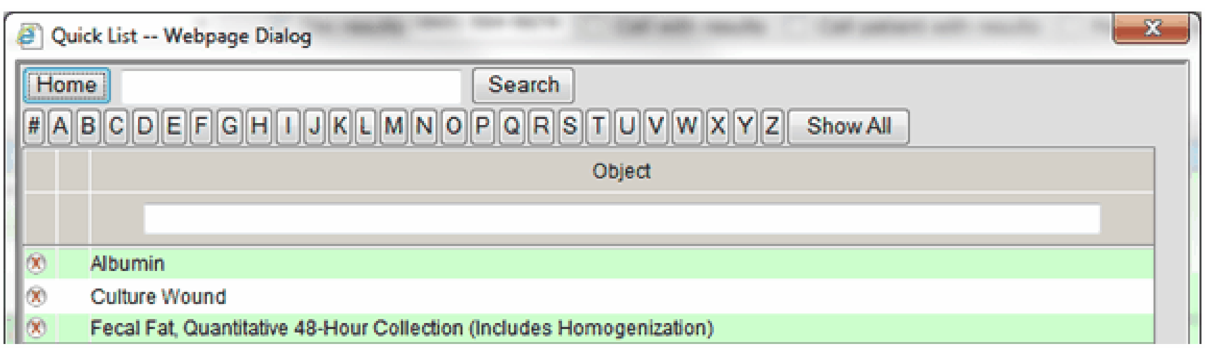


If the date of the appointment is unknown at the time of creating the order, you can select the Clr button in the calendar widget. This will change the date text to an input text area and include a date select icon to the right.

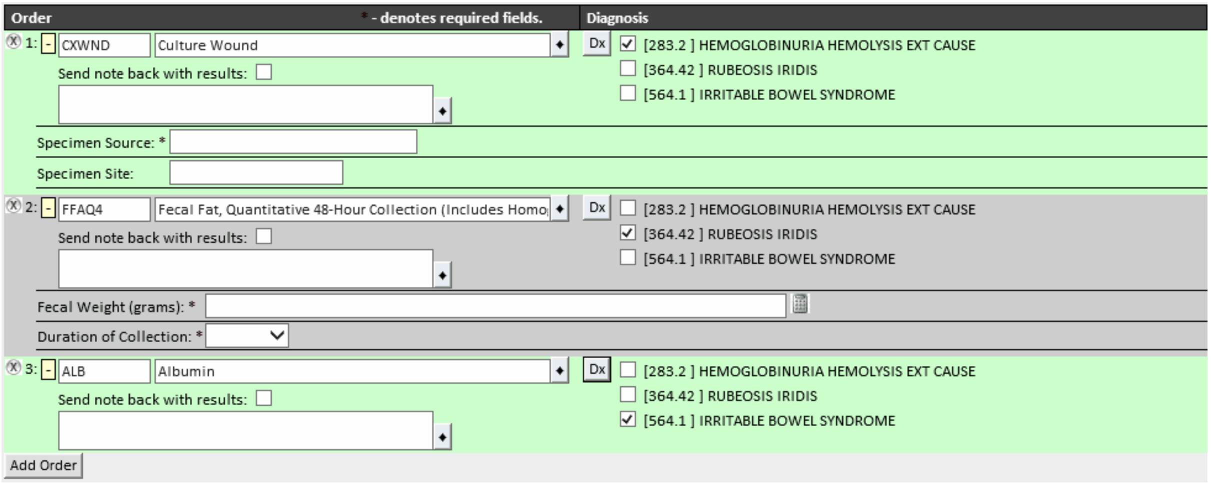
This will allow you to free type into the text box (such as "Patient to make appointment") or select the calendar icon to reopen the calendar widget to select a date.

The next feature deals with the results section of the order details.

The order items are powered by the PARADIGM Quick List with Data Base engine.



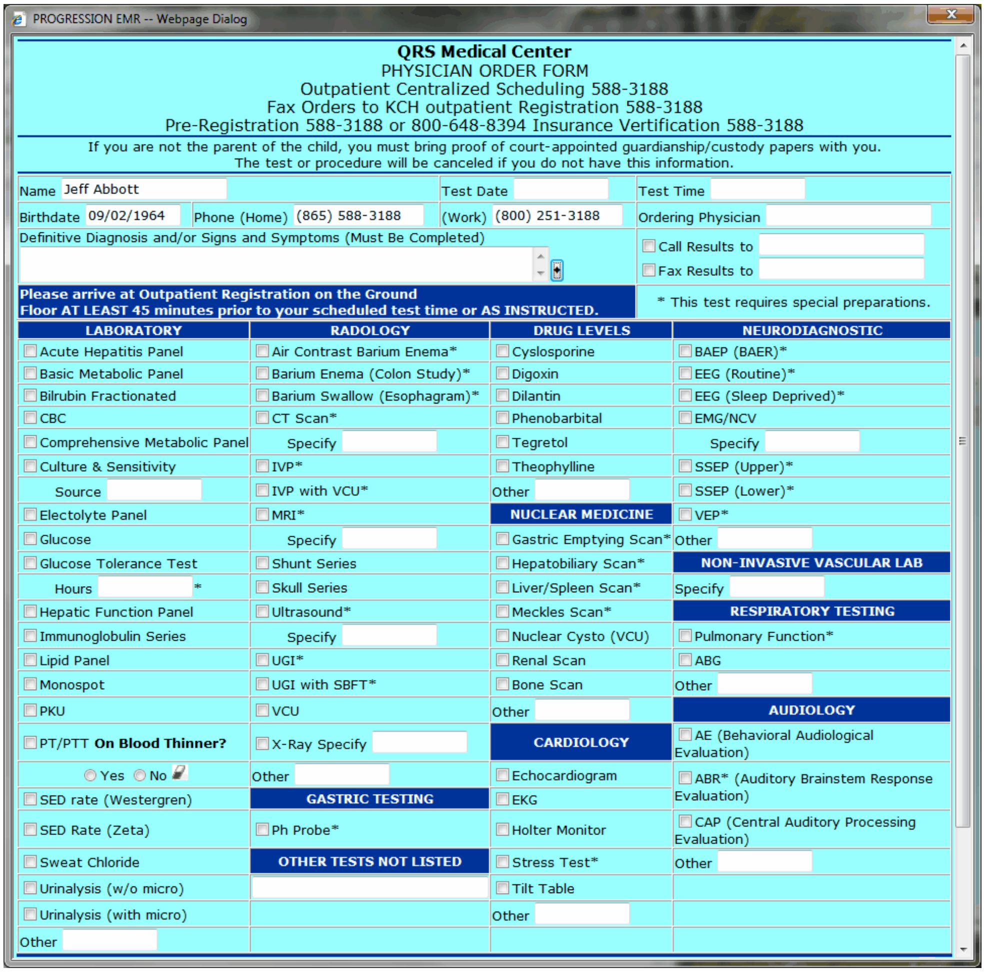
The data base portion of this program is modified through the Administration module of the EHR. Each order item allows you to enter a note specific to that order and select the diagnosis for that order.



The diagnosis selection utilizes the Diagnosis Sentence Builder widget to select the diagnosis that will appear on the order form, then each diagnosis will have a checkbox for you to select the diagnosis that only apply to that order item. Below the notes for the order item is where the Ask at Order Entry system will display the questions that are relative to that order. Questions that are required for that order item are marked with a red asterisk (*). If a question is configured to only accept numeric answers then there will be a calculator icon to the right of the text box. The same will happen for order questions that are configured to only accept dates with a date icon. If an order question is configured to only accept specific options, the Ask at Order Entry system will use those options to build a drop down list for that question.

6.2.5.13.2 Custom Order Forms

Click on the order form from the Order form Menu. Your order form will appear in a new window similar to the following:


PROGRESSION EMR -- Webpage Dialog

QRS Medical Center
PHYSICIAN ORDER FORM
Outpatient Centralized Scheduling 588-3188
Fax Orders to KCH outpatient Registration 588-3188
Pre-Registration 588-3188 or 800-648-8394 Insurance Vertification 588-3188

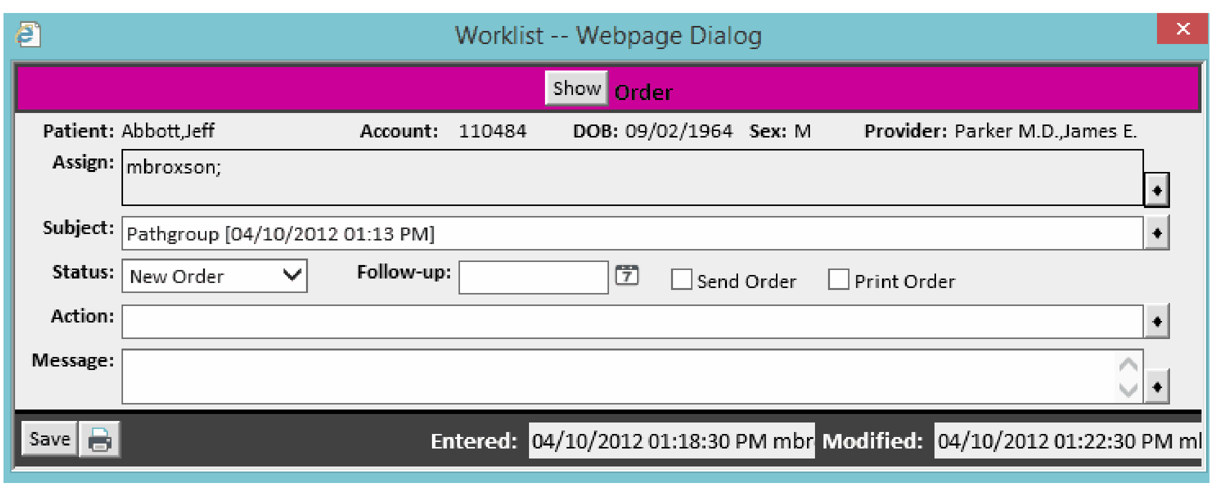
If you are not the parent of the child, you must bring proof of court-appointed guardianship/custody papers with you.
The test or procedure will be canceled if you do not have this information.

Name Jeff Abbott | Test Date | Test Time
Birthdate 09/02/1964 | Phone (Home) (865) 588-3188 | (Work) (800) 251-3188 | Ordering Physician
Definitive Diagnosis and/or Signs and Symptoms (Must Be Completed) | Call Results to | Fax Results to

Please arrive at Outpatient Registration on the Ground Floor AT LEAST 45 minutes prior to your scheduled test time or AS INSTRUCTED.
* This test requires special preparations.

LABORATORY	RADOLOGY	DRUG LEVELS	NEURODIAGNOSTIC
Acute Hepatitis Panel	Air Contrast Barium Enema*	Cyslosporine	BAEP (BAER)*
Basic Metabolic Panel	Barium Enema (Colon Study)*	Digoxin	EEG (Routine)*
Bilrubin Fractionated	Barium Swallow (Esophagram)*	Dilantin	EEG (Sleep Deprived)*
CBC	CT Scan*	Phenobarbital	EMG/NCV
Comprehensive Metabolic Panel	Specify	Tegretol	Specify
Culture & Sensitivity	IVP*	Theophylline	SSEP (Upper)*
Source	IVP with VCU*	Other	SSEP (Lower)*
Electolyte Panel	MRI*	**NUCLEAR MEDICINE**	VEP*
Glucose	Specify	Gastric Emptying Scan*	Other
Glucose Tolerance Test	Shunt Series	Hepatobiliary Scan*	**NON-INVASIVE VASCULAR LAB**
Hours *	Skull Series	Liver/Spleen Scan*	Specify
Hepatic Function Panel	Ultrasound*	Meckles Scan*	**RESPIRATORY TESTING**
Immunoglobulin Series	Specify	Nuclear Cysto (VCU)	Pulmonary Function*
Lipid Panel	UGI*	Renal Scan	ABG
Monospot	UGI with SBFT*	Bone Scan	Other
PKU	VCU	Other	**AUDIOLOGY**
PT/PTT **On Blood Thinner?**	X-Ray Specify	**CARDIOLOGY**	AE (Behavioral Audiological Evaluation)
Yes No	Other	Echocardiogram	ABR* (Auditory Brainstem Response Evaluation)
SED rate (Westergren)	**GASTRIC TESTING**	EKG	
SED Rate (Zeta)	Ph Probe*	Holter Monitor	CAP (Central Auditory Processing Evaluation)
Sweat Chloride	**OTHER TESTS NOT LISTED**	Stress Test*	Other
Urinalysis (w/o micro)		Tilt Table	
Urinalysis (with micro)		Other	
Other			

Complete your order form. Double check before saving the form. Once the form is saved it can NOT be modified. If it is incorrect the order will have to be canceled and redone from scratch. Once complete Save the form. The Order work list will appear. This is used to track an order. The Status will default to "New Order". Assign the order to a user or group, set action if needed and save.


Worklist -- Webpage Dialog

Show Order

Patient: Abbott,Jeff **Account:** 110484 **DOB:** 09/02/1964 **Sex:** M **Provider:** Parker M.D.,James E.
Assign: mbroxson;
Subject: Pathgroup [04/10/2012 01:13 PM]
Status: New Order **Follow-up:** Send Order Print Order
Action:
Message:
Save **Entered:** 04/10/2012 01:18:30 PM mbr **Modified:** 04/10/2012 01:22:30 PM ml

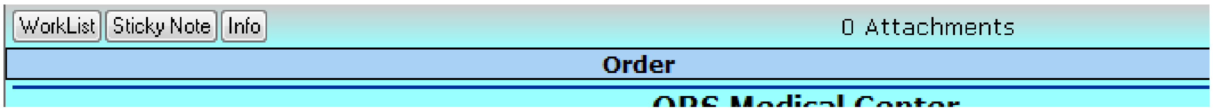
That completes the order creation process

6.2.5.13.3 Outstanding Orders

The Order is now tracked through the work list mechanism. You will see the outstanding orders in two places. One is in the Work List area. The other is in the patients Pending area.

When displaying in the File List of the pending area of the patients chart, An "N" for (New Order), "P" for (Pending Results) or "O" for (On Hold) will display for the order.

When an Order is displayed in the File Display Area, you will notice the following header.



Clicking the WorkList button will display the work list item in a dialog box. Using the work list you may change the status of the order or make other comments, re-route if needed.

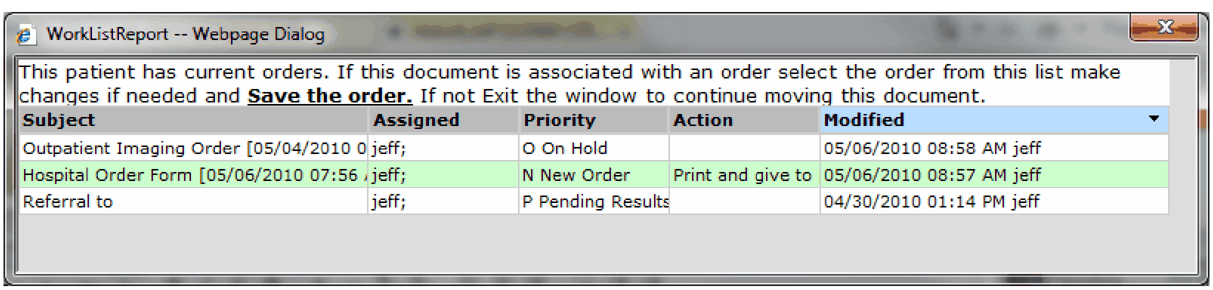
Changing the status of an order to "Canceled", "Discontinued", or "Finished" will remove the work list item from the "WorkList" as well as the patients (Pending) area. You will need to use the "Show all orders for a patient" feature to review that order.

The header shows how many attachments are on the order. If you have attachments you can either scroll down to view the attachments or use the "show/hide bar" to hide the order and view the attachments.

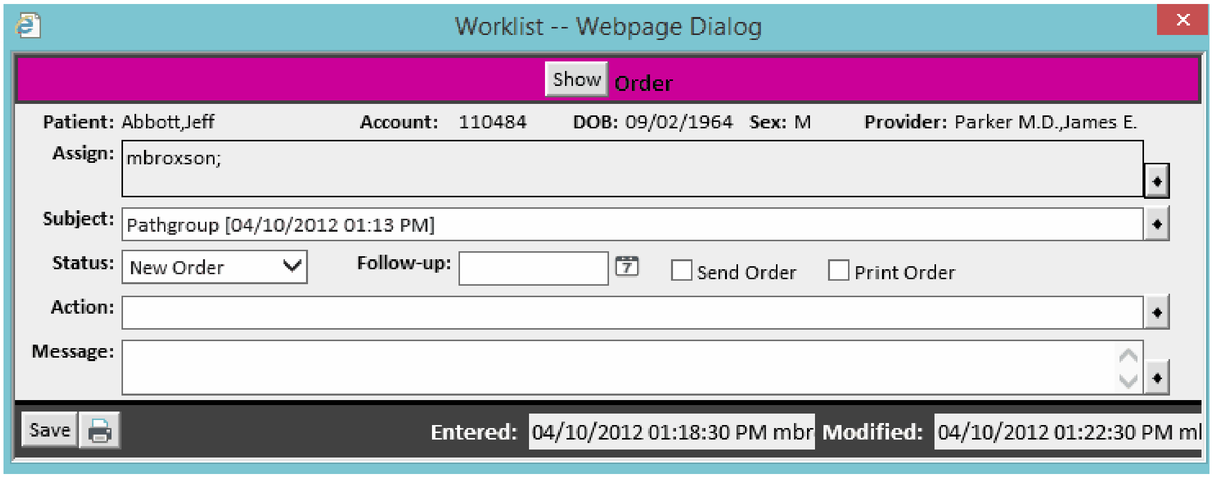
6.2.5.13.4 Attaching Documents to Orders

When you display any document that has not been attached to an order the Document header in the " File Display Area"

Clicking on the "Attach to Order" button will display a list of open orders.



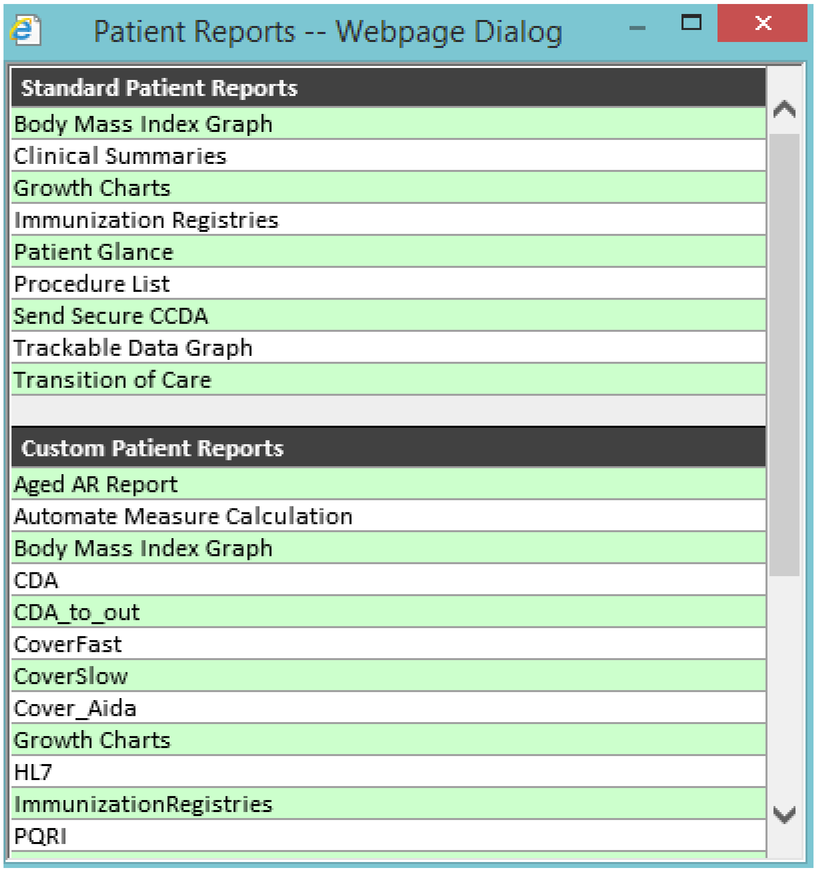
Select the order you want to attach the document to. The Work list item for that order will then display.



If you are still waiting on more results for an order, keep the status as "Pending Results" If this completes the order change the status to "Finished" and save the work list item. This will file the order away.

6.2.5.14 Reports

The Reports Button will show you the reports list. The reports list includes an and all reports you may generate from the PARADIGM EHR system. Reports are programs that collect data and output it in a defined format. These reports programs may be links to reports in the Practice Management System (PARADIGM PLUS), or reports of clinical information from with PARADIGM EHR. Reports can also include Graphs that plot trends based on historical data. The reports show here are patient specific reports. You may also access system specific reports under the user button on the Toolbar.

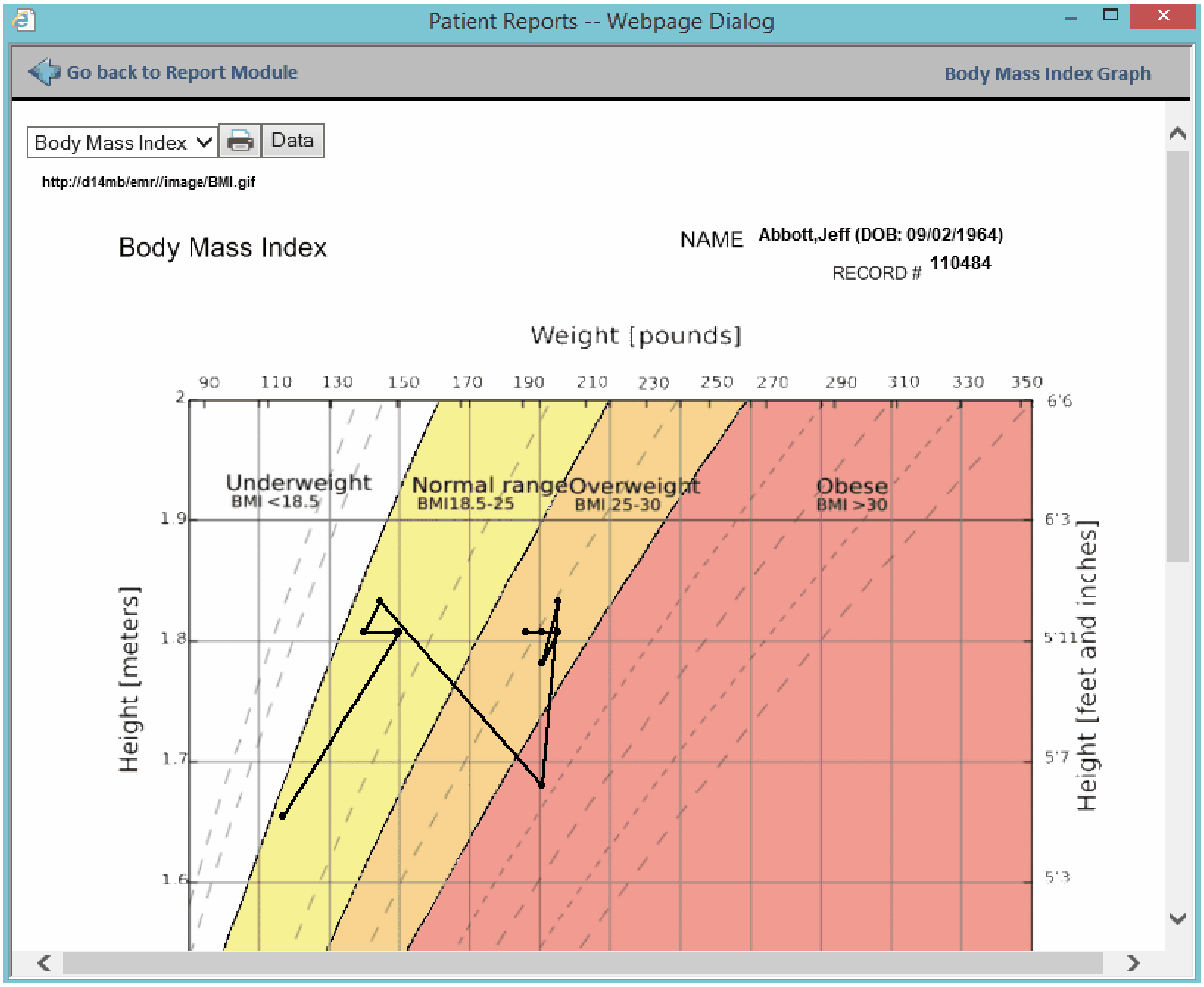


6.2.5.14.1 Standard Reports

Standard EHR Patient Reports

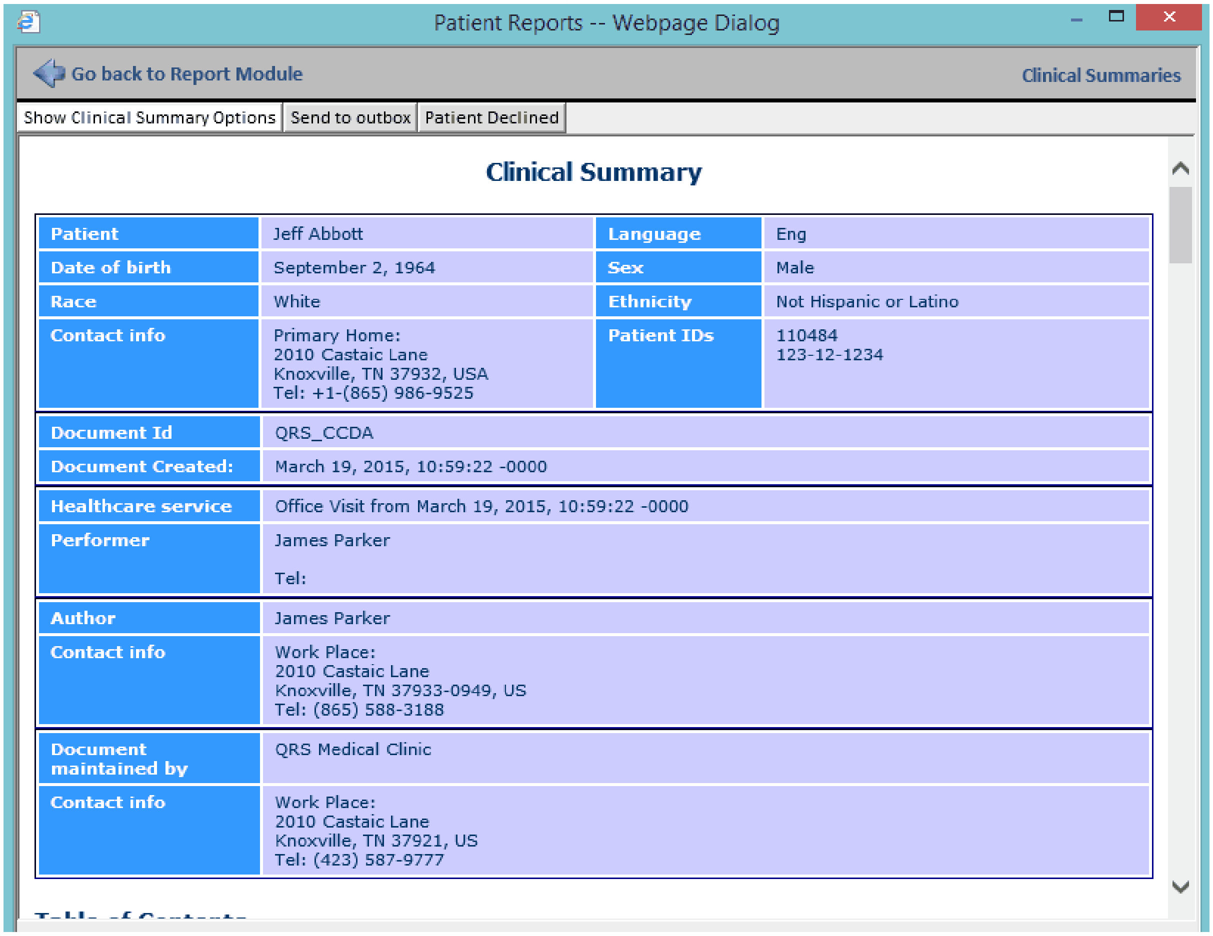
6.2.5.14.1.1 Body Mass Index Graph

This program will plot the BMI for the patient.



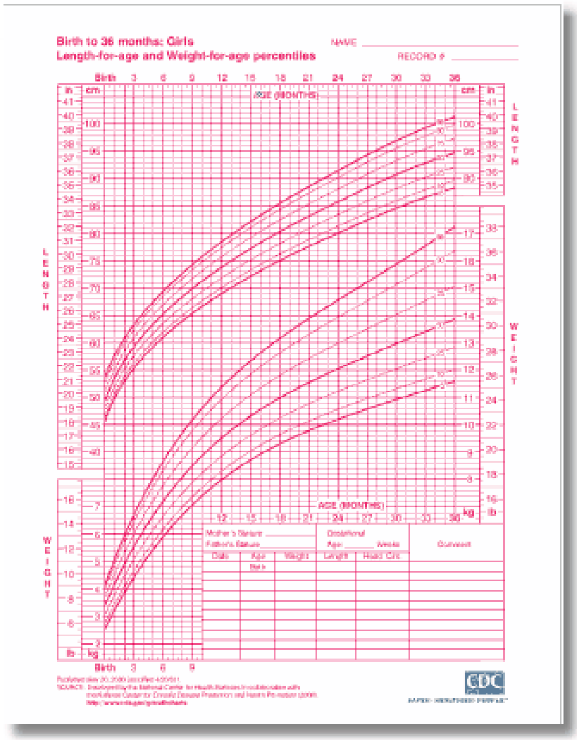
6.2.5.14.1.2 Clinical Summaries

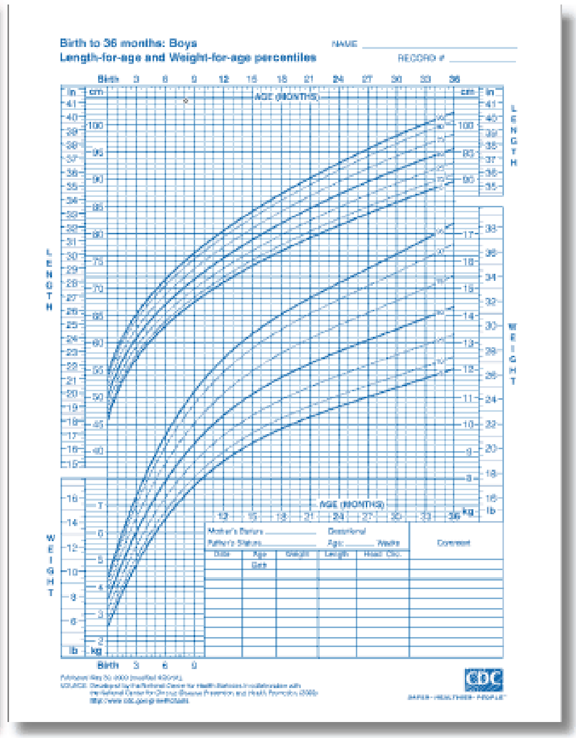
This program will create a clinical summary file for the current encounter. You may send this as an XML file to the patients outbox.

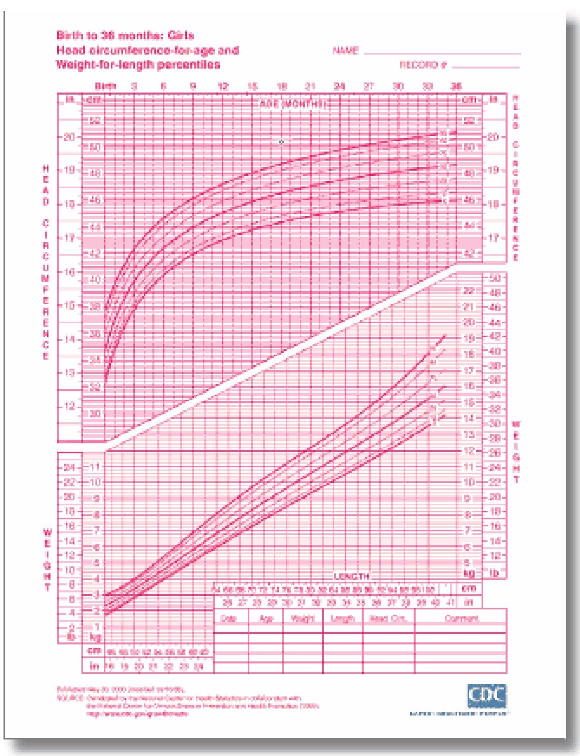


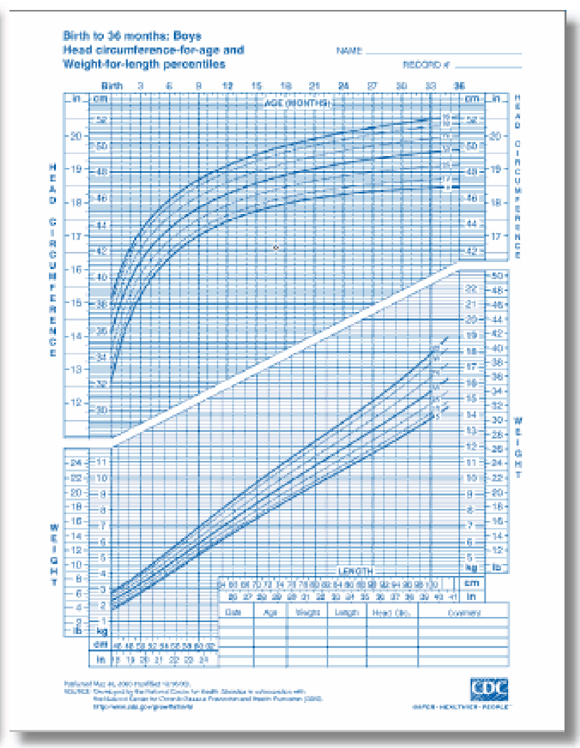
6.2.5.14.1.3 Growth Charts

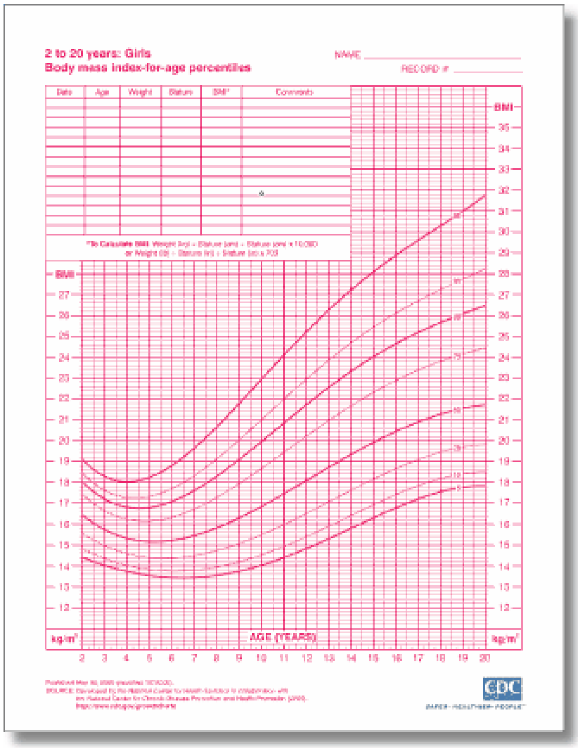
Child Growth Charts

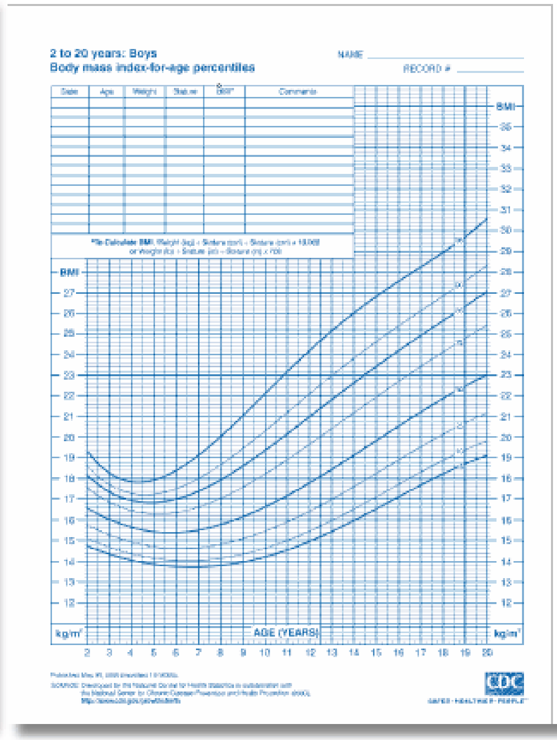

Birth to 36 months: Girls
Length-for-age and Weight-for-age percentiles

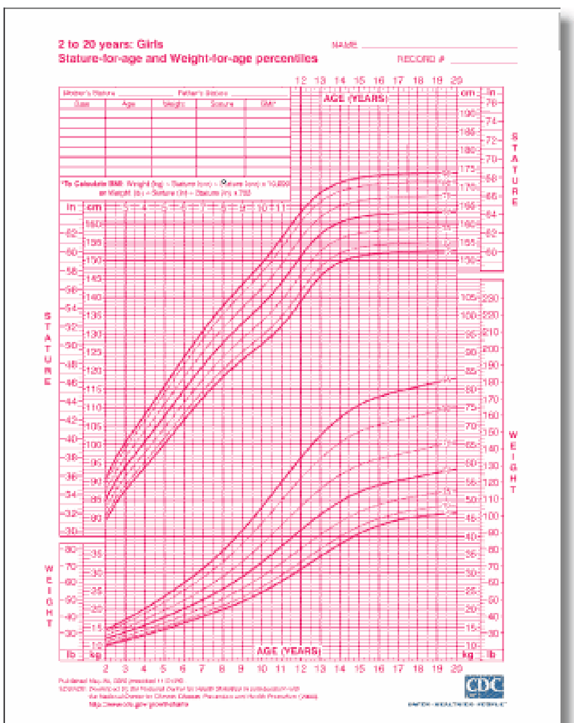

Birth to 36 months: Boys
Length-for-age and Weight-for-age percentiles

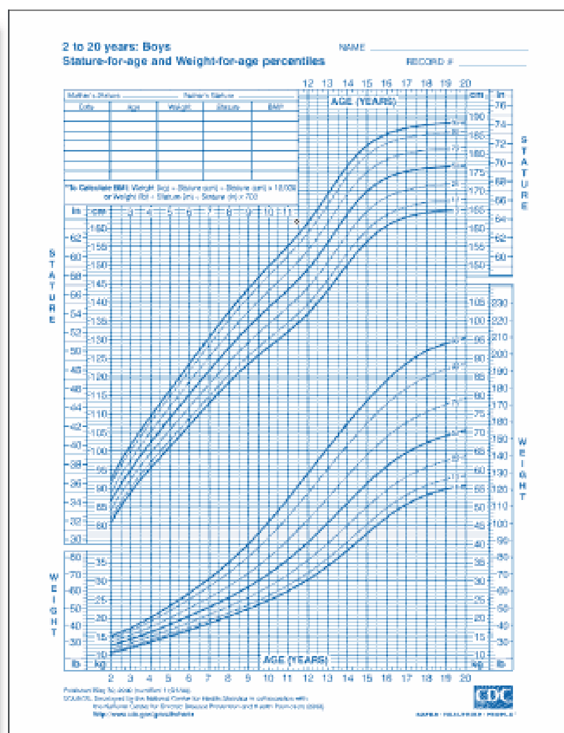

Birth to 36 months: Girls
Head circumference-for-age and
Weight-for-length percentiles

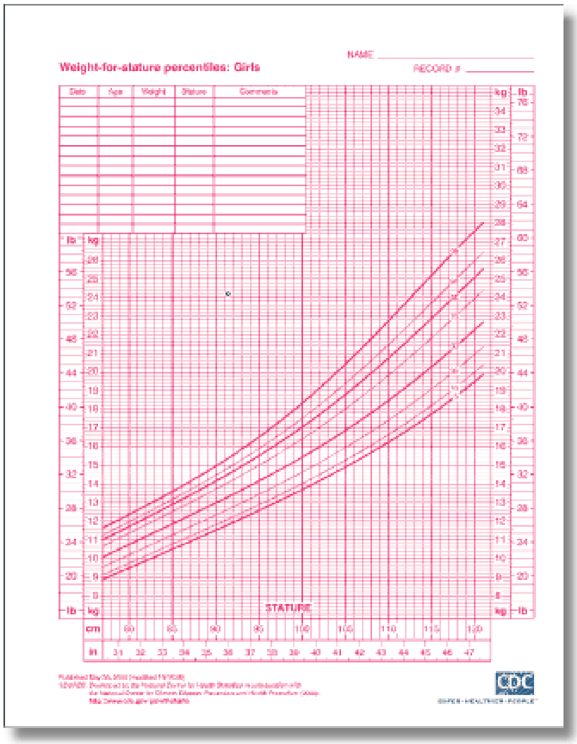

Birth to 36 months: Boys
Head circumference-for-age and
Weight-for-length percentiles

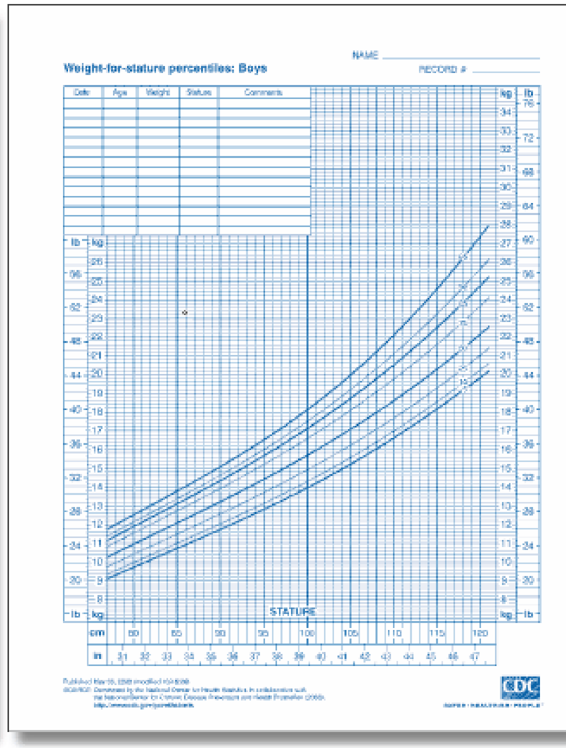

2 to 20 years: Girls
Body mass index-for-age percentiles
AGE (YEARS)
CDC


2 to 20 years: Boys
Body mass index-for-age percentiles
AGE (YEARS)
CDC


2 to 20 years: Girls
Stature-for-age and Weight-for-age percentiles
AGE (YEARS)
CDC

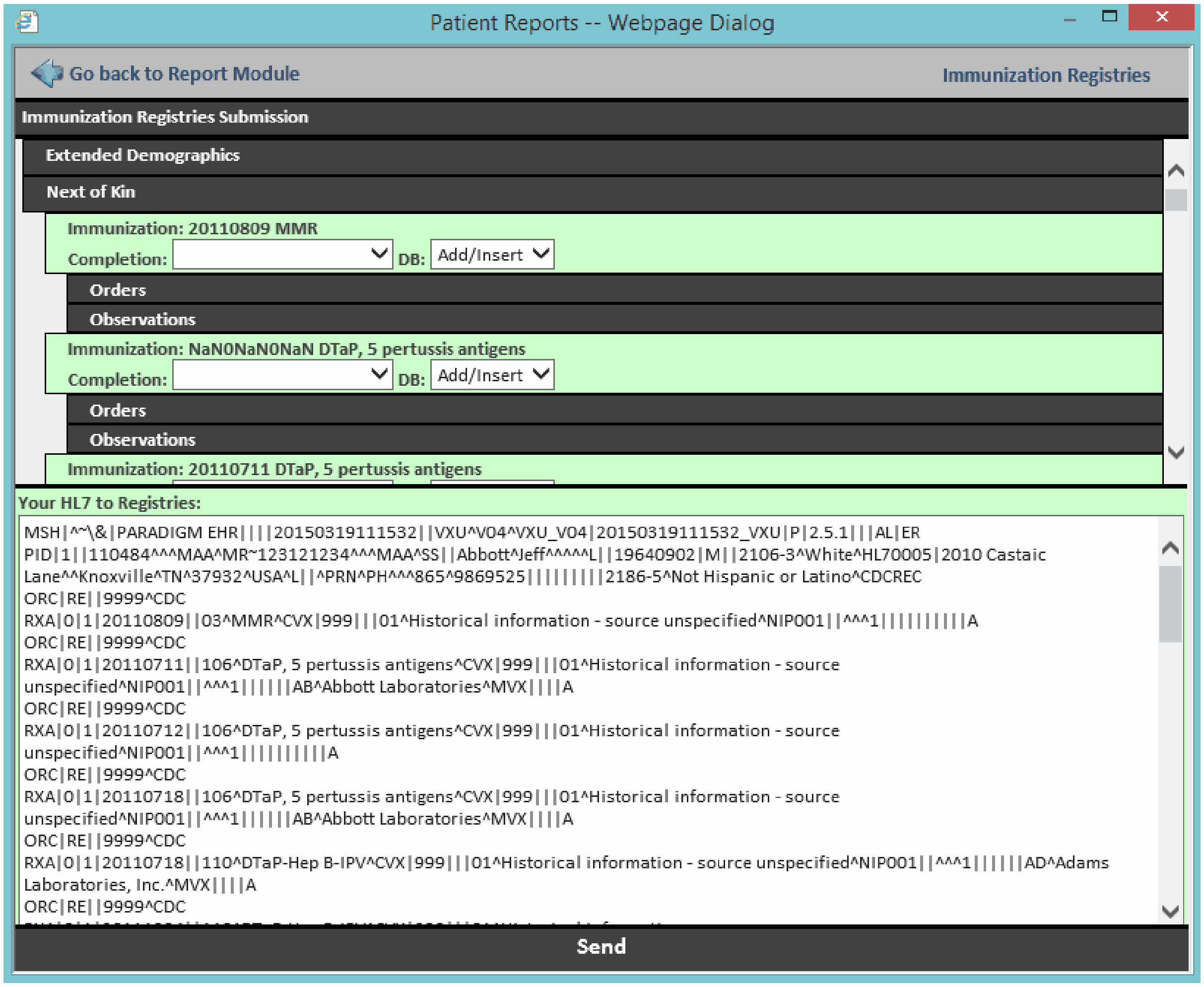

2 to 20 years: Boys
Stature-for-age and Weight-for-age percentiles
AGE (YEARS)
CDC





6.2.5.14.1.4 Submission to Immunization Registries

This program will produce HL7 data to send to the Immunization registry.



**** NOTE ** this requires the IMM interfaces be installed and configured to function.**

6.2.5.14.1.5 Patient Glance

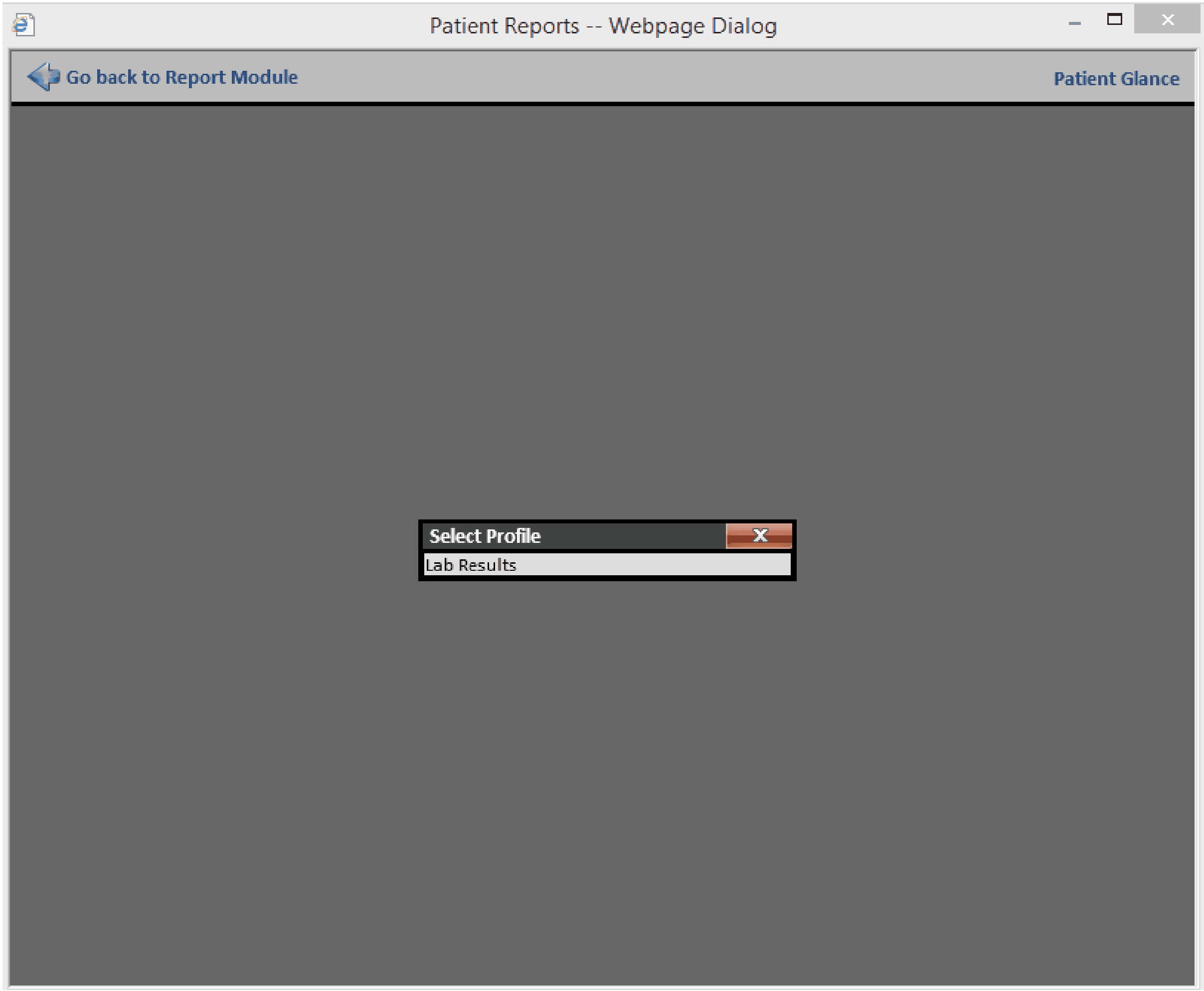
The Patient Glance is a split view window that allows you to view multiple files at the same time.

When you first go into the Patient Glance you will see one of several screens depending on the patient that you are in and the profiles you have set up.

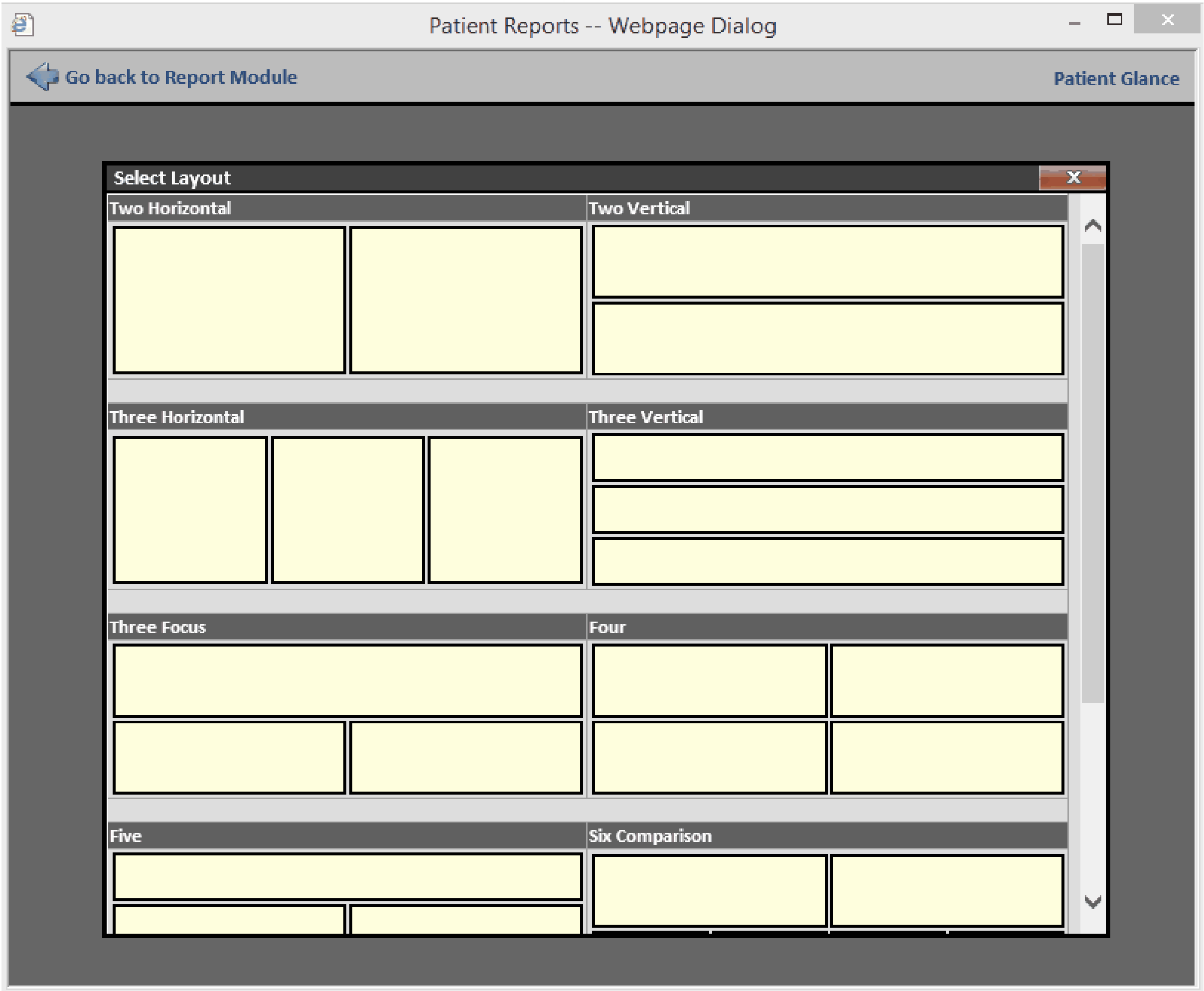
The first view that the program looks for is a previously saved Patient Profile. If anyone in the office has saved a Patient Profile, the exact files and layout that they saved will be pulled up in the Patient Glance.

Next, the Patient Glance looks for a profile named Default in your configured profiles. If you have a Default profile set up, it will be opened.

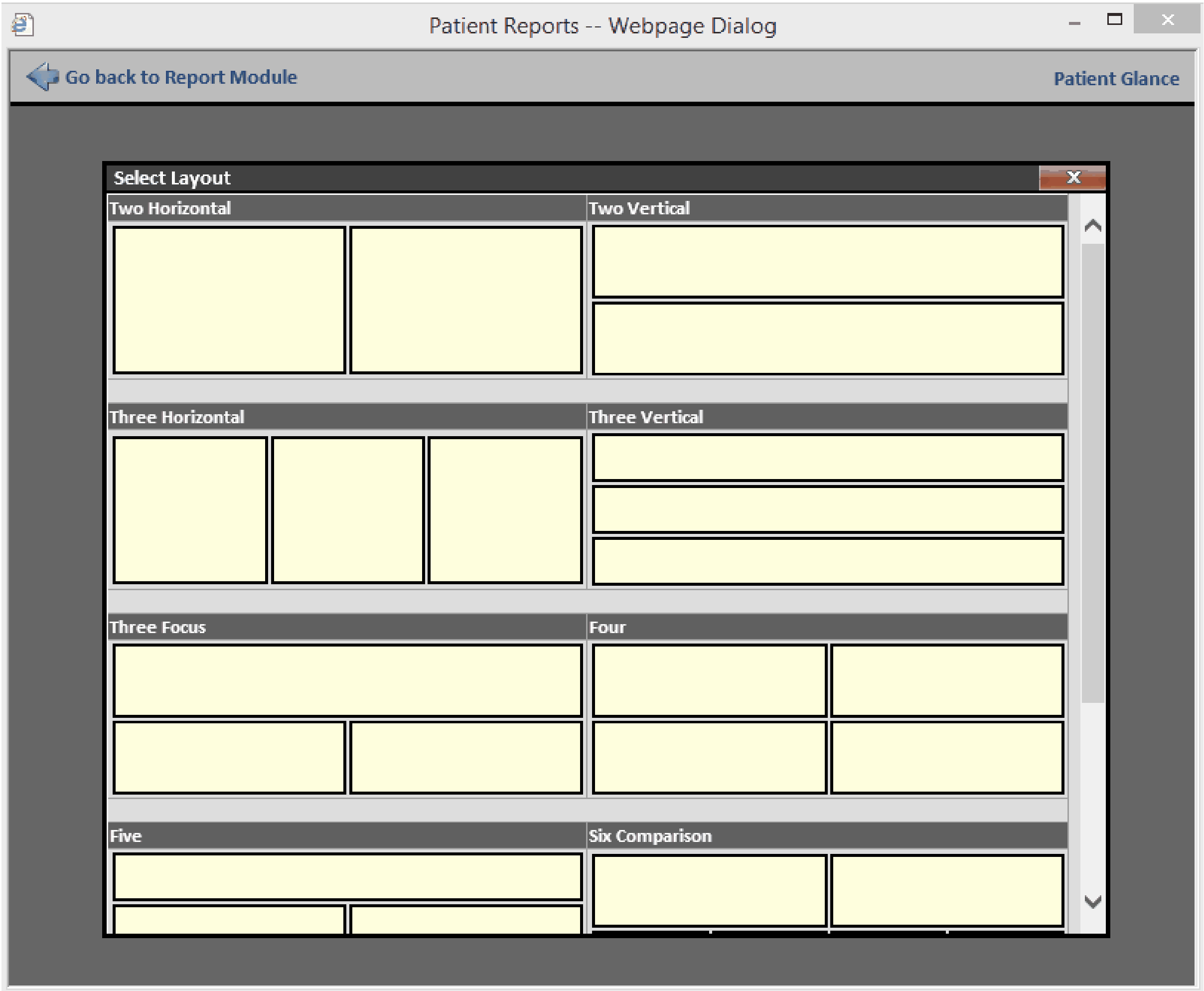
Next, the Patient Glance looks to see if you have any profiles set up for your user. If you have any profiles set up you will be presented with the profile selection view.



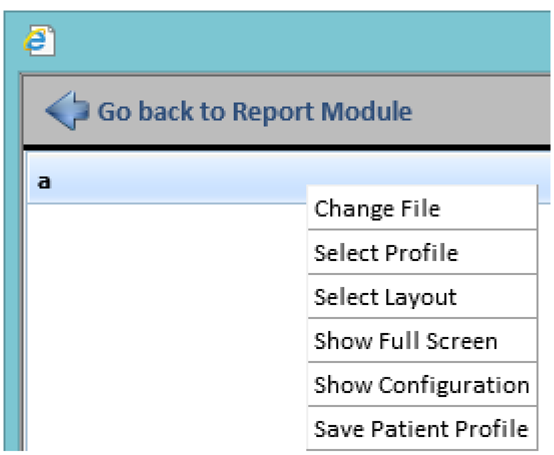
The last view that the Patient Glance will show on opening will be select layout view. This will be the default view if you have not set up any profiles and have not save a patient specific profile.



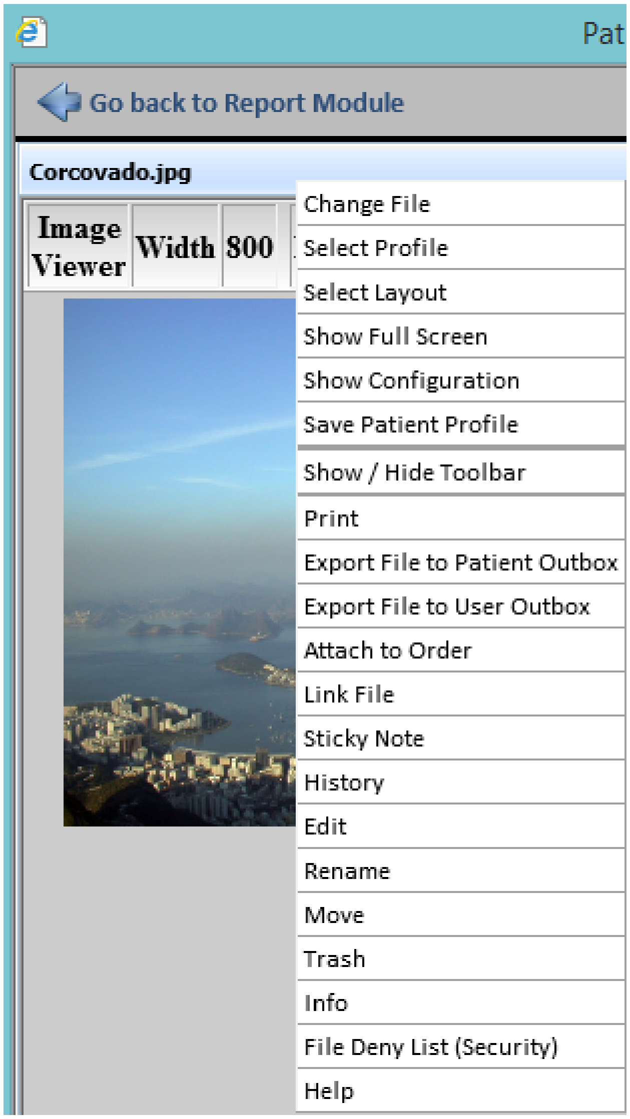
The Patient Glance has multiple layouts to allow you to view from two to six documents in different layouts.



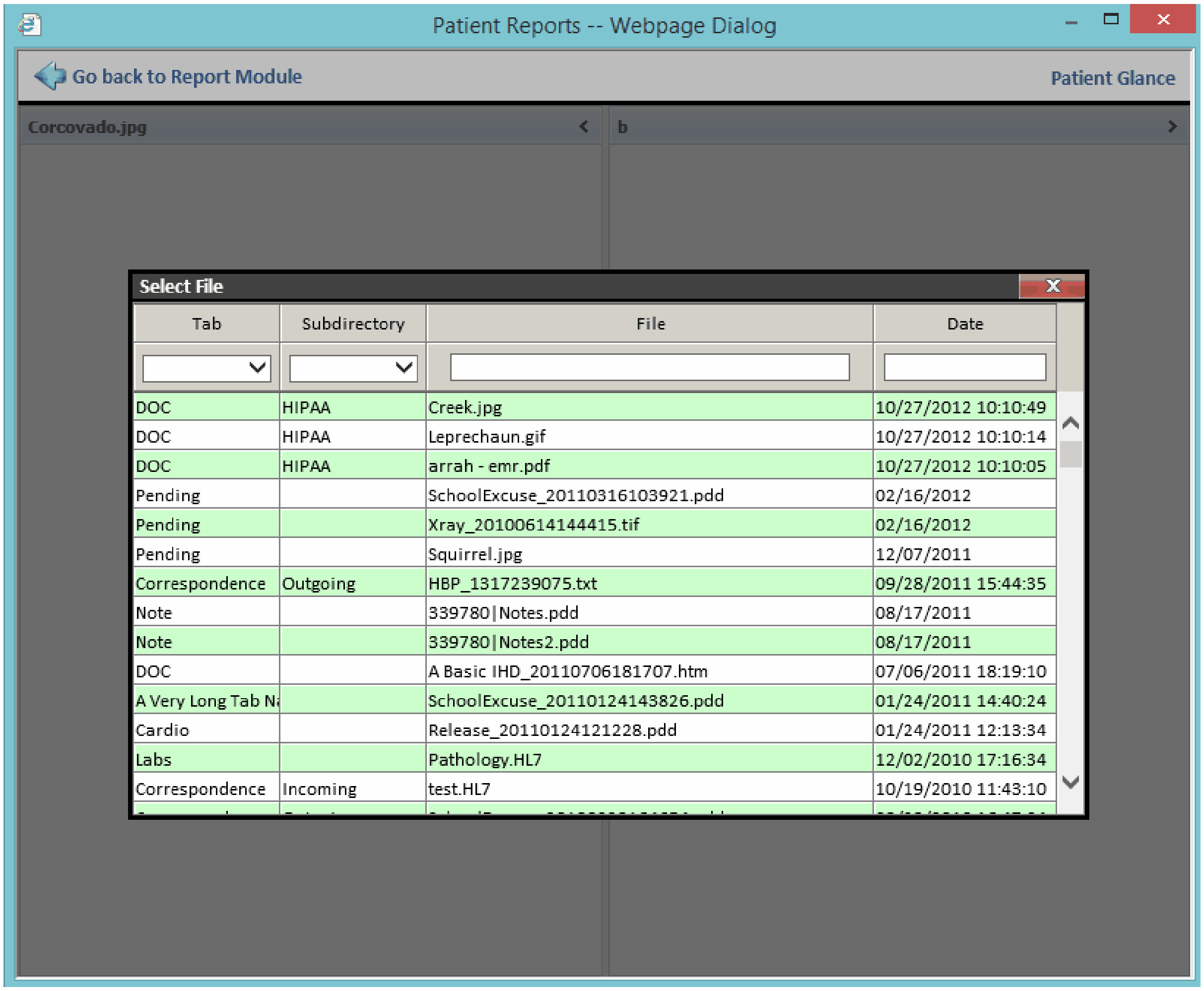
The Header Menu is accessible by right-clicking on the blue file label bar.



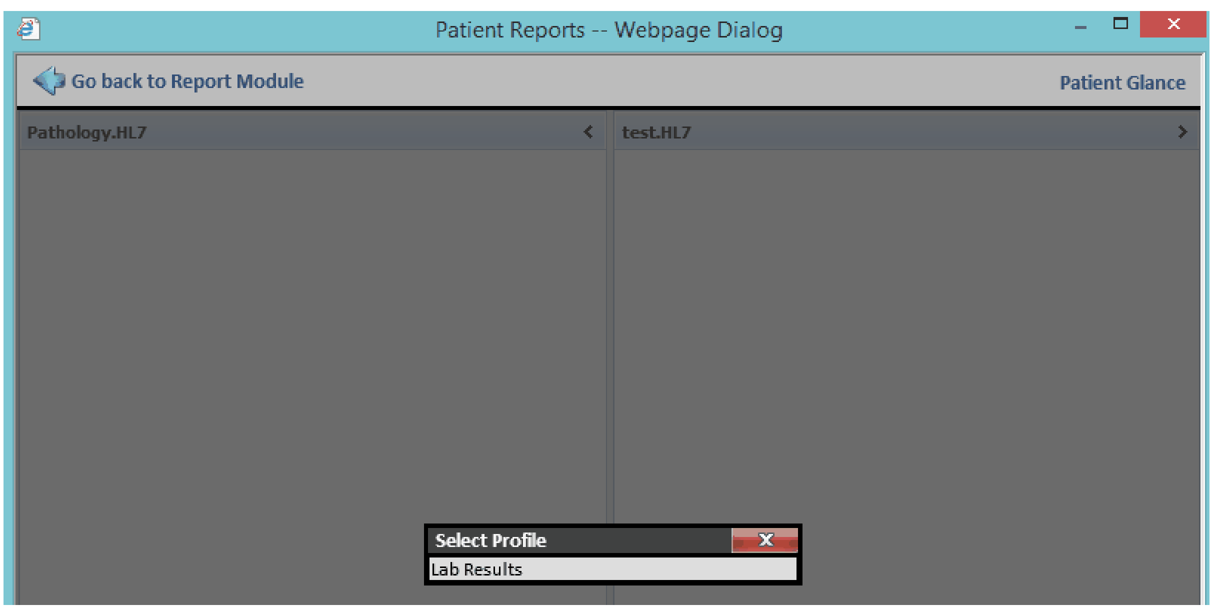
From this menu you can select multiple options depending on the patient you are in and file you have displayed. When you have a file displayed from within the EHR, the buttons that would normally appear on the file header toolbar are shown as header menu items below the default Patient Glance menu items.



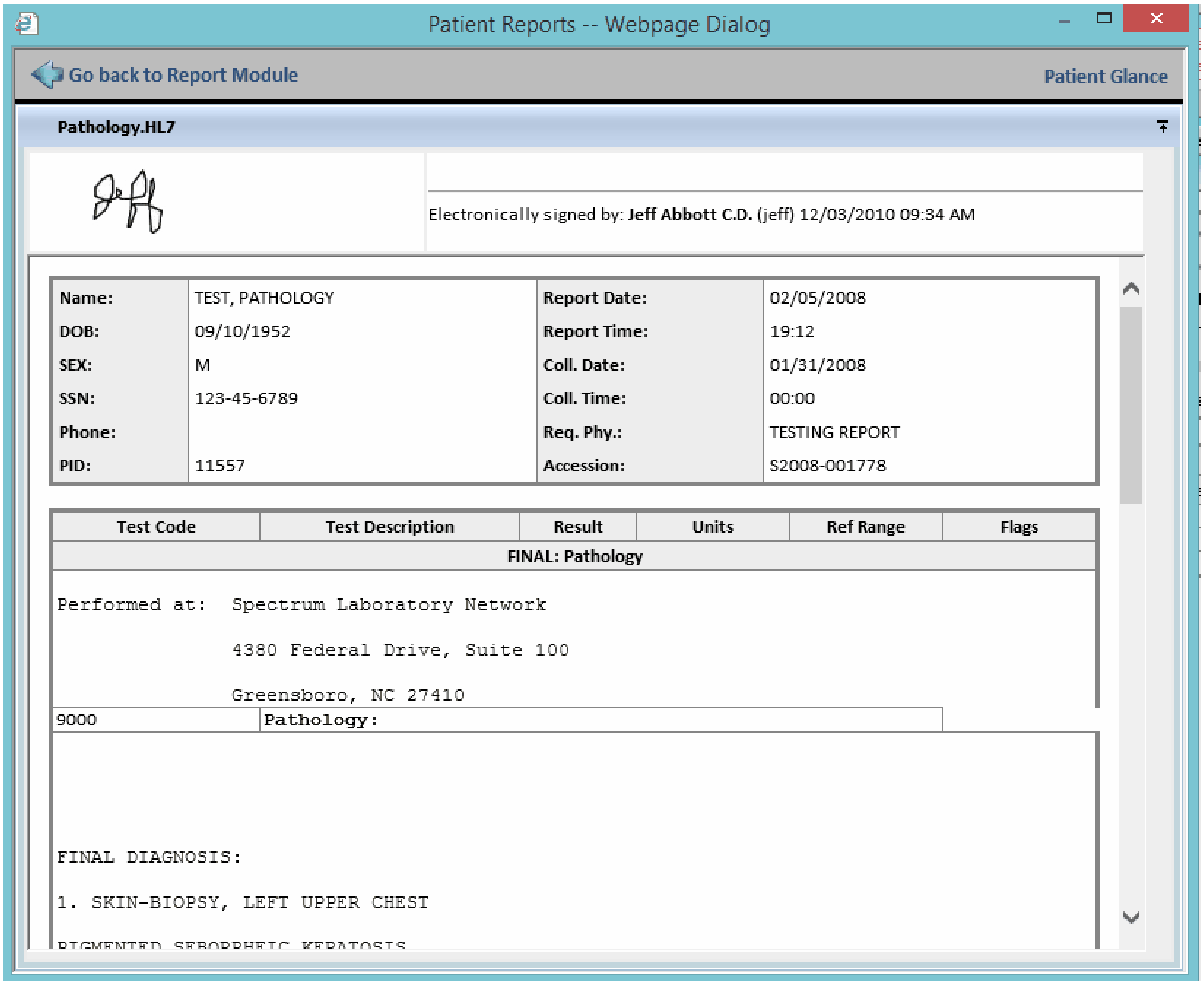
After choosing the Select File option in the Header Menu you will be presented with a grid view of all files in the patient's chart. To display a file, select the file out of the grid.



If you have profiles configured for your username under the Patient Glance you can see and select from any of those profiles using the Select Profile option in the Header Menu.

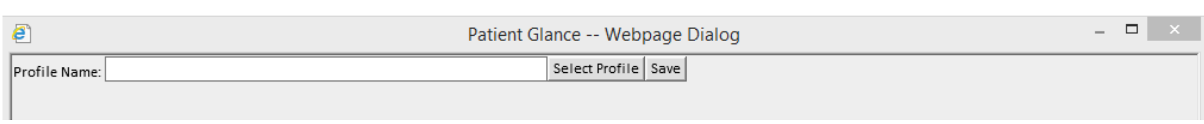


If you would like to see a fullscreen view of one file that is being displayed in the Patient Glance you can select the Show Fullscreen option in the Header Menu or you can double-click on the blue file header bar.



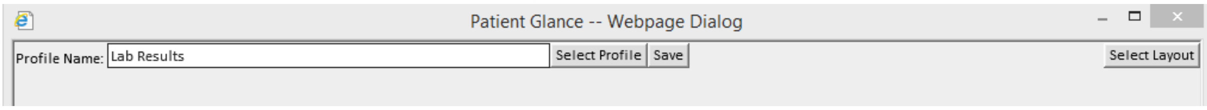
You can go back to the layout view by clicking on the collapse button.

The Profile Configuration page is shown when you select the Show Configuration option in the Header Menu. From here, you can create, modify, or delete profiles for the Patient Glance. Profiles allow you to configure some of your usual viewing options that you would like to use the Patient Glance for. An example profile that might be configured would be to view the current lab results side-by-side with the last set of lab results.

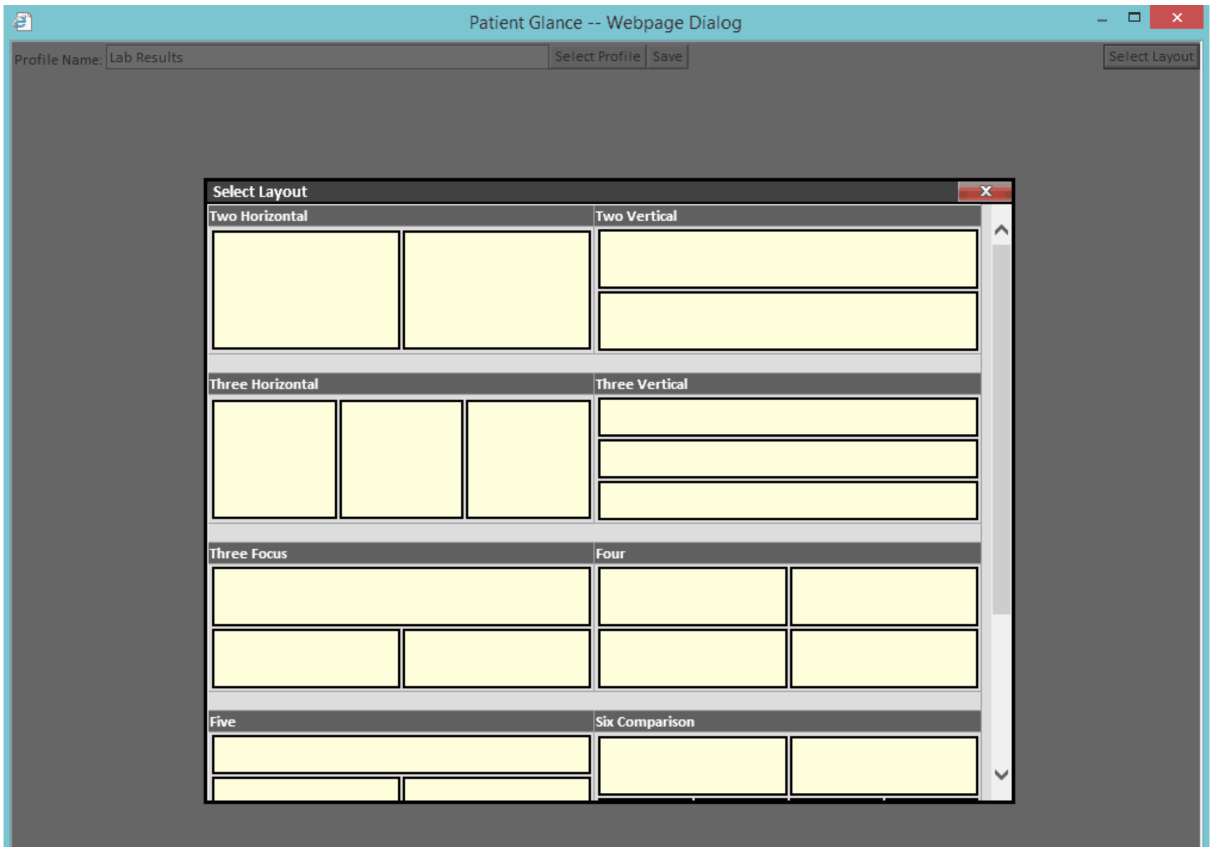


To create a new Profile for the Patient Glance: Enter the profile name that you would like to use. If you would like to set up a profile that opens when you open the Patient Glance, create a profile named Default with the configuration you would like.

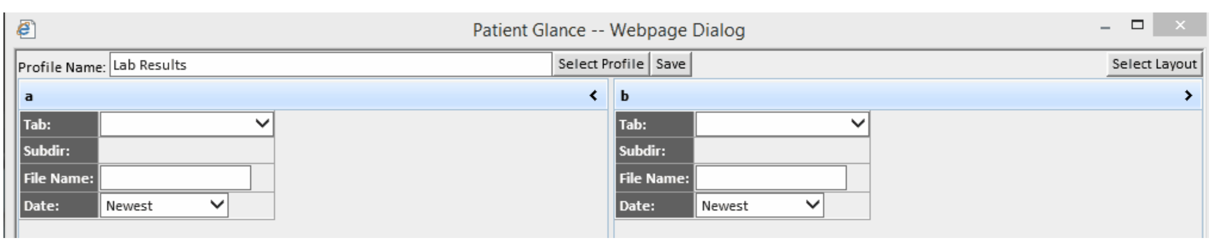
In this example we will use "Lab Results" as the profile name. After entering a profile name, the Select Layout button on the top right of the screen will become active.



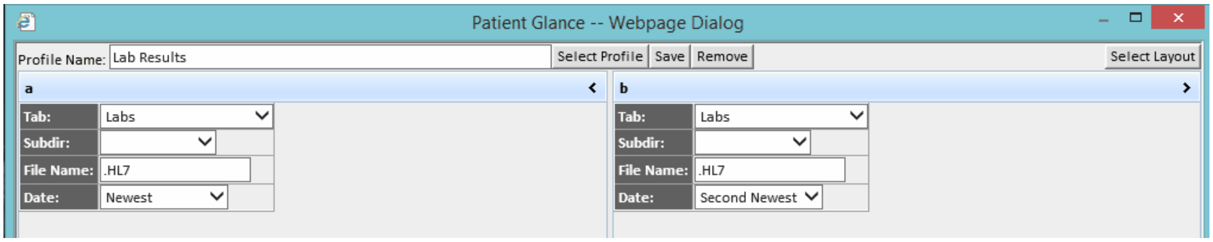
Click the Select Layout button. Next you will choose the layout that you would like to view your files with. In this example we will use the "Two Horizontal" layout.



After selecting the layout that you want to view your files with you will be presented with the file selection options for each cell in the layout selected.

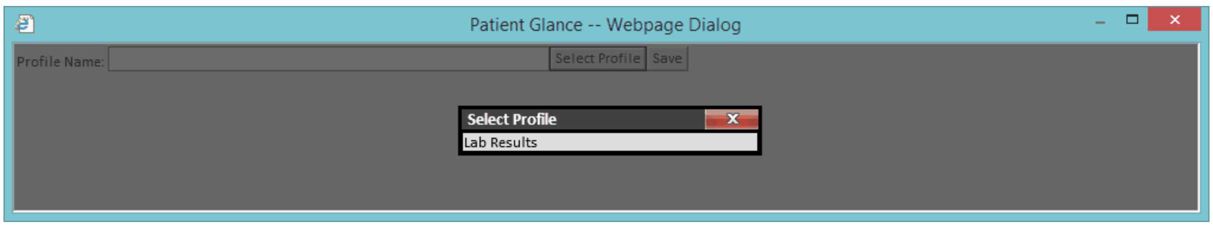


To set up our two most recent lab results we need to configure each cell. For cell a: we select a Tab of Labs, File Name of .HL7 (this is just a searching name, not a full file name), and a Date of Newest. For cell b: we select a Tab of Labs, File name of .HL7, and a Date of Second Newest.

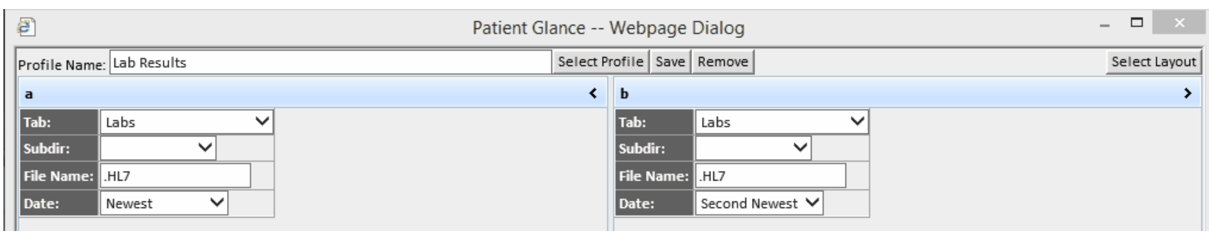


We then click the Save button to save our profile.

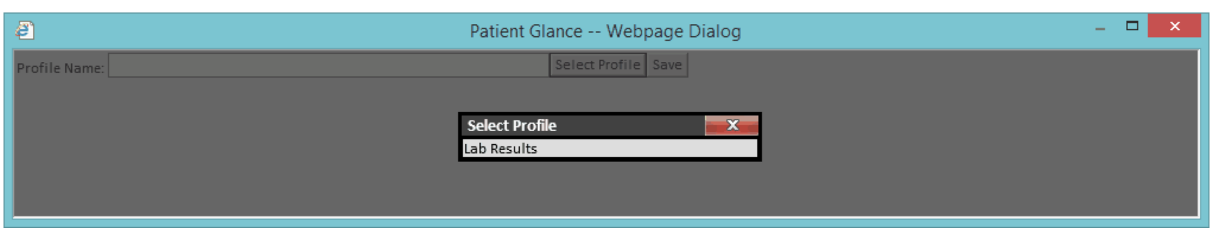
Editing an existing profile works much like creating a new profile for the Patient Glance. While on the Profile Configurations screen click the Select Profile button. You will be presented with the list of profiles that you have saved under your username.



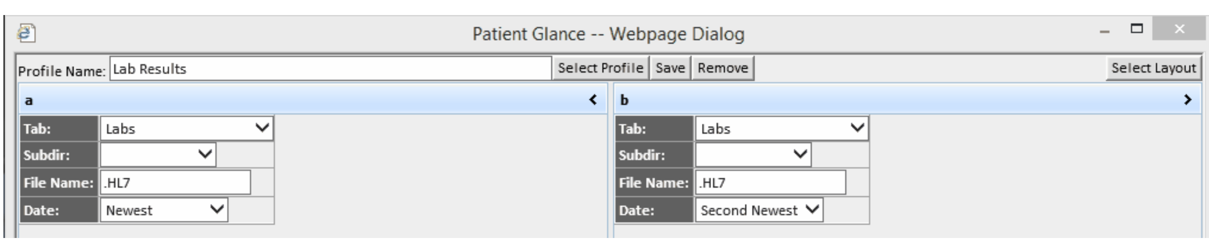
After selecting the profile you would like to edit, the program will load that profile's settings into the configuration screen. From here, you can make any wanted changes and click the Save button to update your profile.



Removing a profile works much like editing an exiting profile for the Patient Glance. While on the Profile Configurations screen click the Select Profile button. You will be presented with the list of profiles that you have saved under your username.



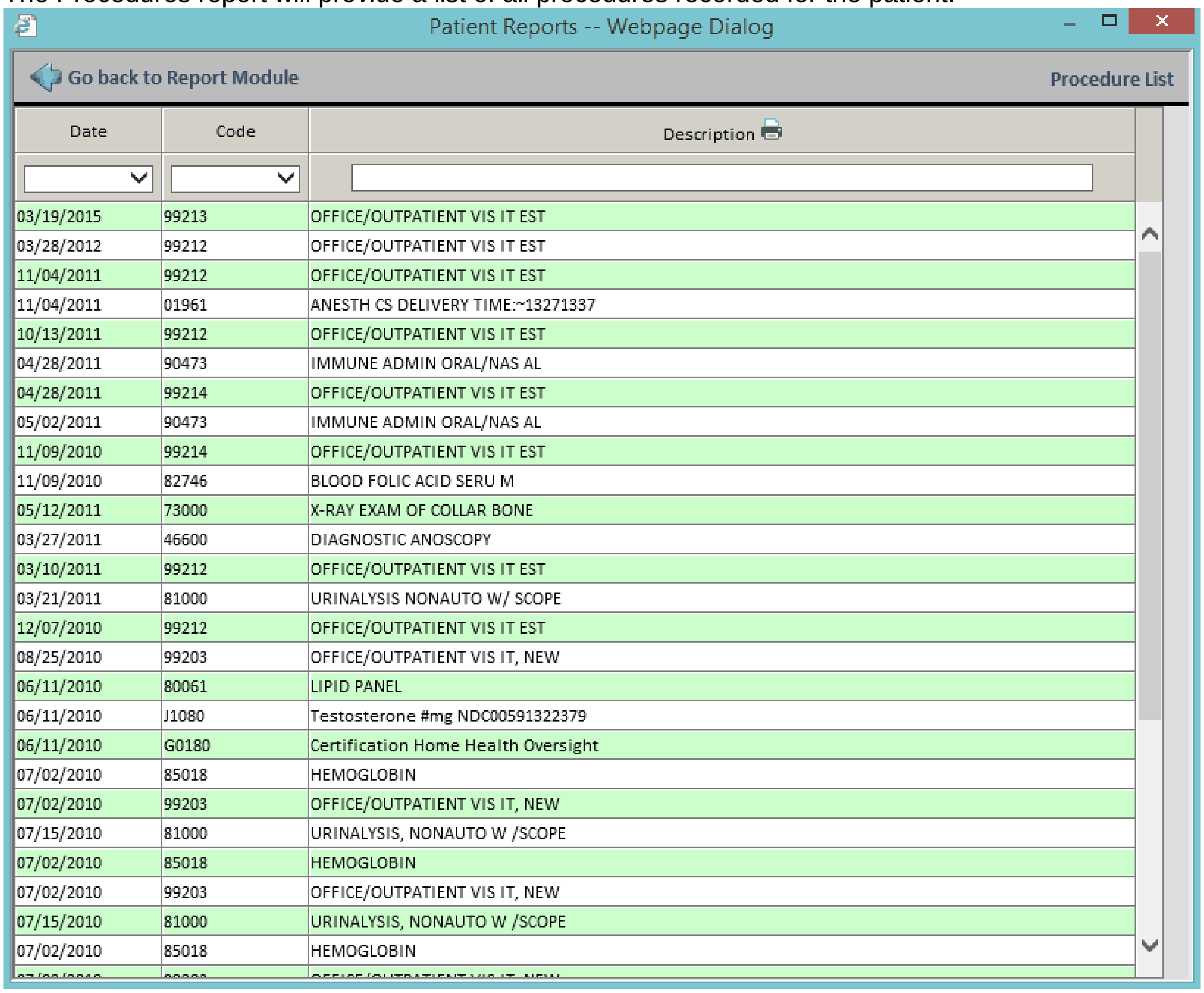
After selecting the profile you would like to remove, the program will load that profile's settings into the configuration screen. From here, you click the Remove button.



If you would like to configure a profile that all users will see for a particular patient you can use the Save Patient Profile option in the Header Menu options. If a patient already has a profile saved specifically to them, you will also have a Remove Patient Profile option in the Header Menu.

6.2.5.14.1.6 Procedures

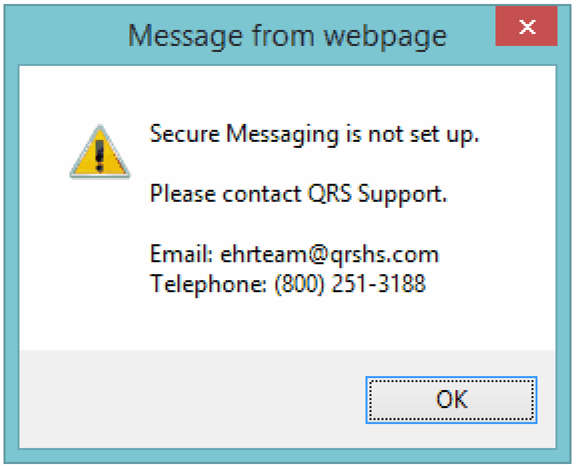
The Procedures report will provide a list of all procedures recorded for the patient.



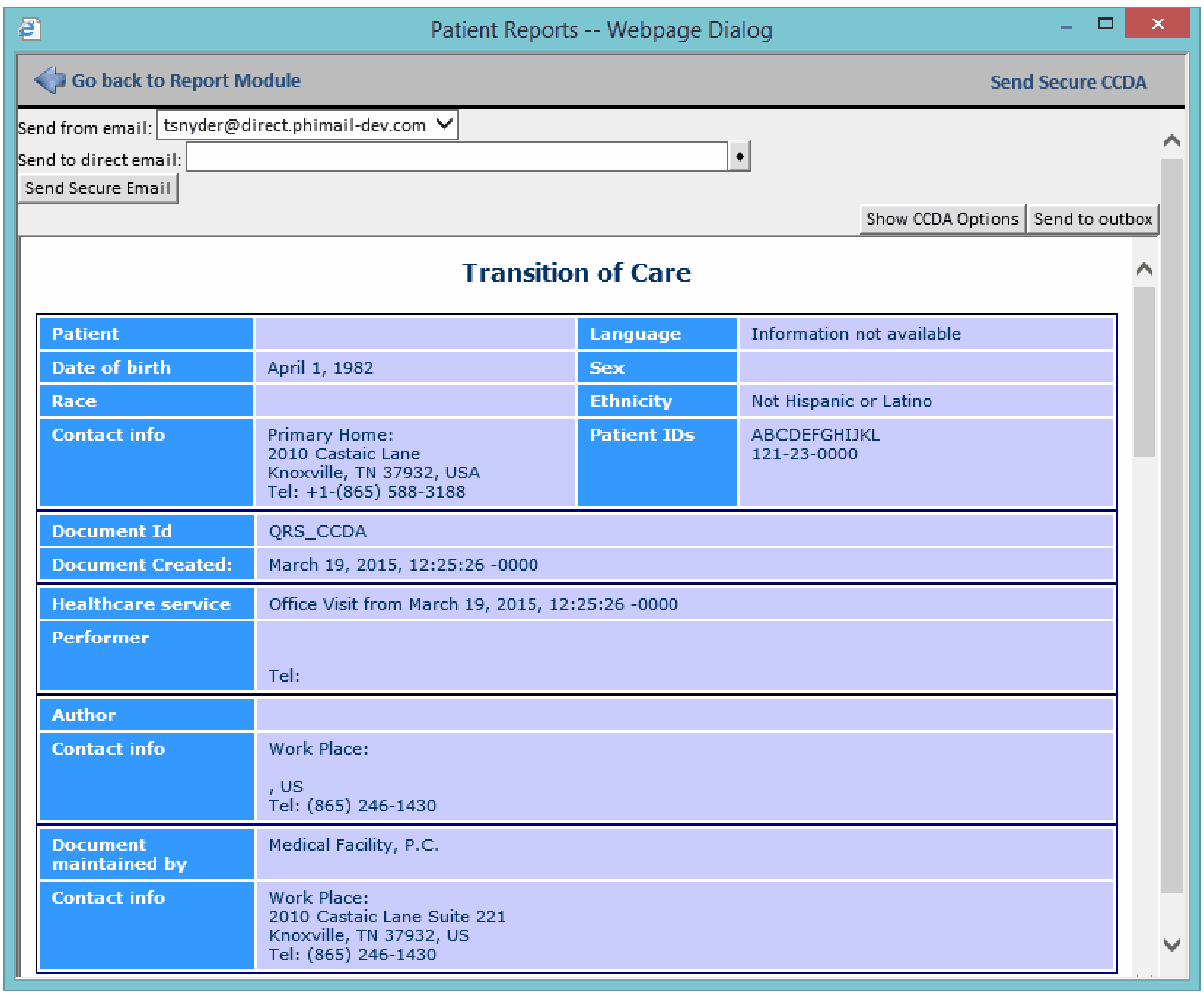
Date	Code	Description
03/19/2015	99213	OFFICE/OUTPATIENT VIS IT EST
03/28/2012	99212	OFFICE/OUTPATIENT VIS IT EST
11/04/2011	99212	OFFICE/OUTPATIENT VIS IT EST
11/04/2011	01961	ANESTH CS DELIVERY TIME:~13271337
10/13/2011	99212	OFFICE/OUTPATIENT VIS IT EST
04/28/2011	90473	IMMUNE ADMIN ORAL/NAS AL
04/28/2011	99214	OFFICE/OUTPATIENT VIS IT EST
05/02/2011	90473	IMMUNE ADMIN ORAL/NAS AL
11/09/2010	99214	OFFICE/OUTPATIENT VIS IT EST
11/09/2010	82746	BLOOD FOLIC ACID SERU M
05/12/2011	73000	X-RAY EXAM OF COLLAR BONE
03/27/2011	46600	DIAGNOSTIC ANOSCOPY
03/10/2011	99212	OFFICE/OUTPATIENT VIS IT EST
03/21/2011	81000	URINALYSIS NONAUTO W/ SCOPE
12/07/2010	99212	OFFICE/OUTPATIENT VIS IT EST
08/25/2010	99203	OFFICE/OUTPATIENT VIS IT, NEW
06/11/2010	80061	LIPID PANEL
06/11/2010	J1080	Testosterone #mg NDC00591322379
06/11/2010	G0180	Certification Home Health Oversight
07/02/2010	85018	HEMOGLOBIN
07/02/2010	99203	OFFICE/OUTPATIENT VIS IT, NEW
07/15/2010	81000	URINALYSIS, NONAUTO W /SCOPE
07/02/2010	85018	HEMOGLOBIN
07/02/2010	99203	OFFICE/OUTPATIENT VIS IT, NEW
07/15/2010	81000	URINALYSIS, NONAUTO W /SCOPE
07/02/2010	85018	HEMOGLOBIN

6.2.5.14.1.7 Send Secure CCDA

The Send Secure CCDA relies on Direct Messaging being configured by QRS for you. If you have not had Direct Messaging set up you will receive the following message:

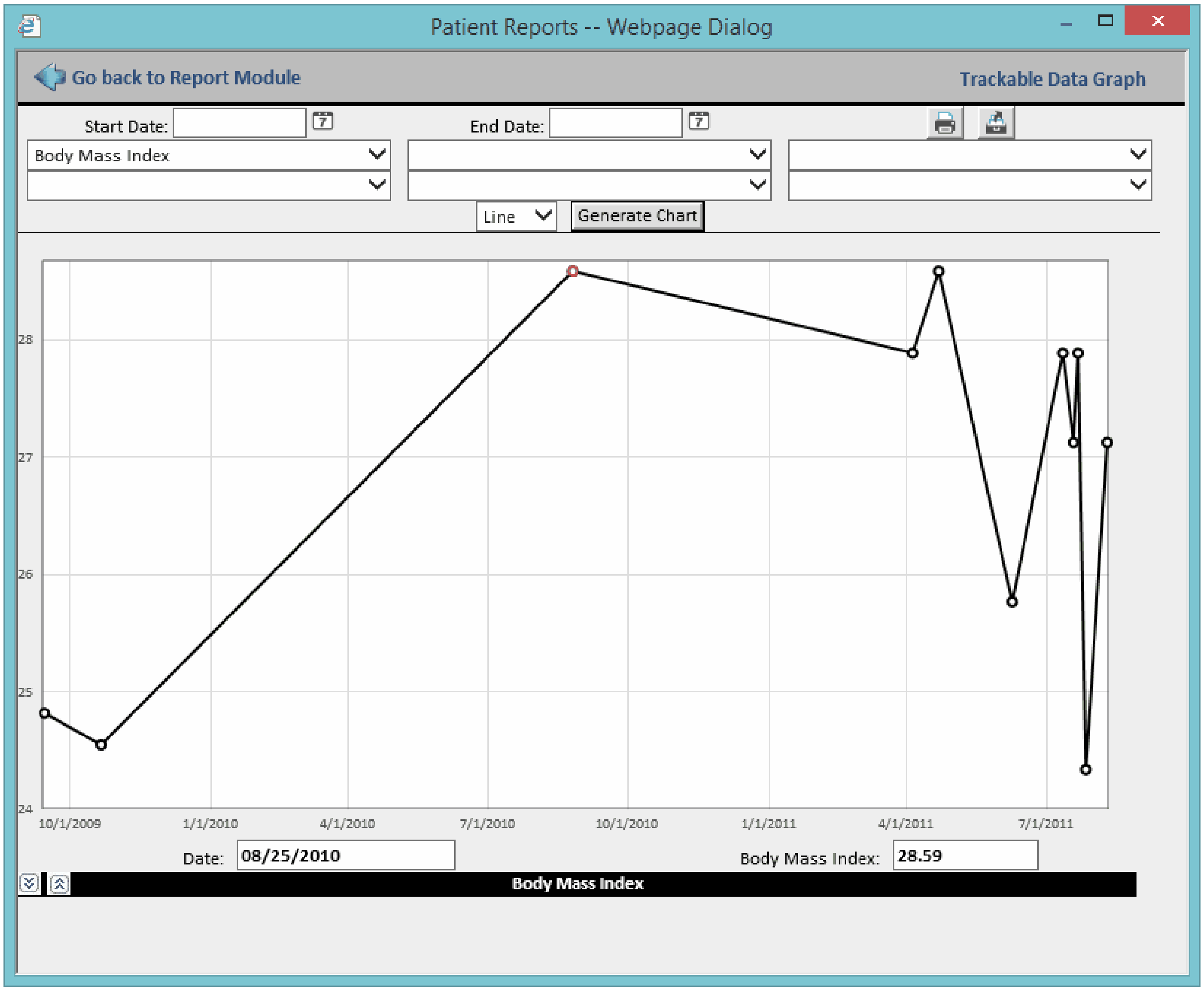


After Direct Messaging has been configured for you, this report will allow you to send the CCDA to other providers via Direct Messaging.



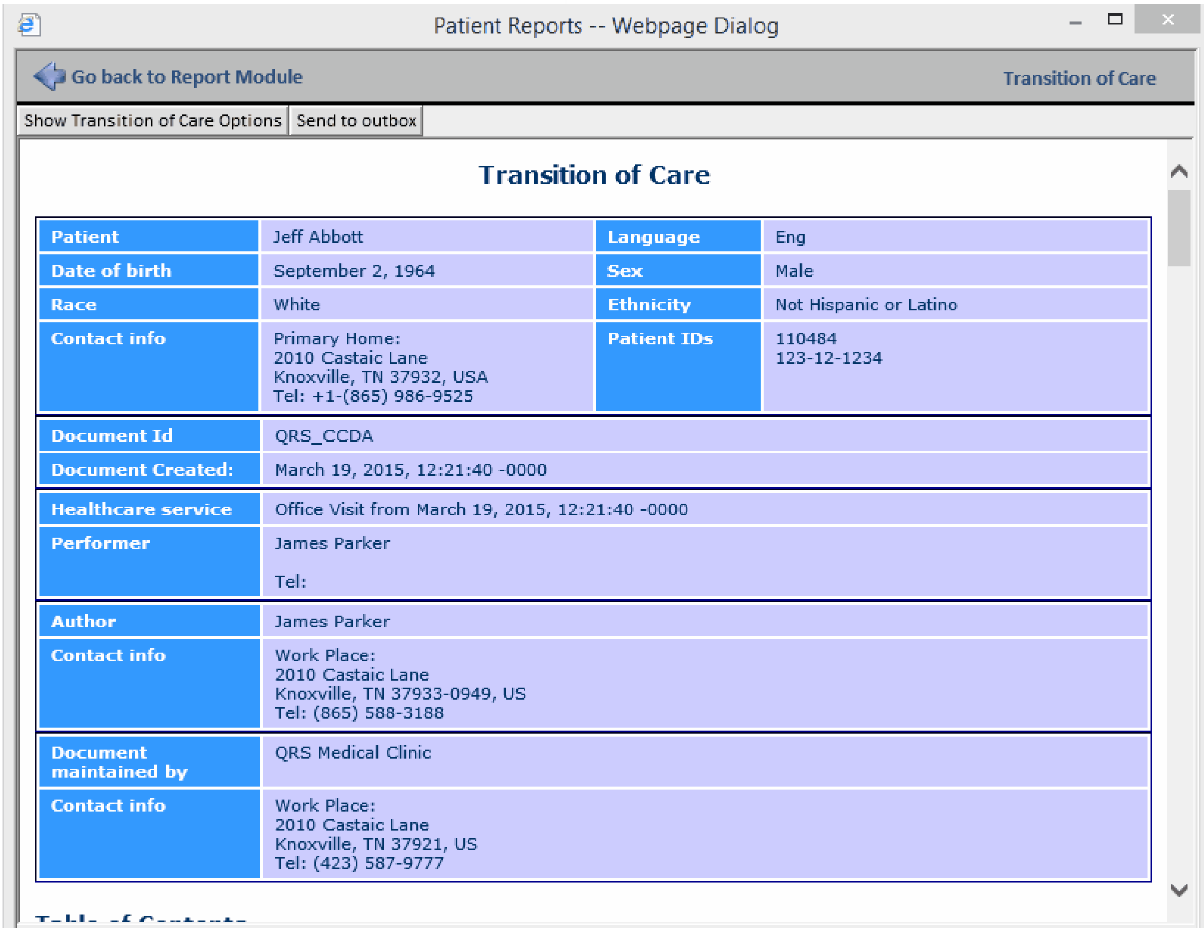
6.2.5.14.1.8 Trackable Data Graph

The Trackable Data Graph allows you to generate a graph from any numeric trackable data that you have saved in the system.



6.2.5.14.1.9 Transition of Care

This report will provide you with a CCDA document for this patient. This document can be sent to the outbox and then processed on from there.


Patient Reports -- Webpage Dialog

Go back to Report Module | Transition of Care

Show Transition of Care Options | Send to outbox

Transition of Care

Patient	Jeff Abbott	Language	Eng
Date of birth	September 2, 1964	Sex	Male
Race	White	Ethnicity	Not Hispanic or Latino
Contact info	Primary Home: 2010 Castaic Lane Knoxville, TN 37932, USA Tel: +1-(865) 986-9525	Patient IDs	110484 123-12-1234

Document Id	QRS_CCDA
Document Created:	March 19, 2015, 12:21:40 -0000
Healthcare service	Office Visit from March 19, 2015, 12:21:40 -0000
Performer	James Parker Tel:
Author	James Parker
Contact info	Work Place: 2010 Castaic Lane Knoxville, TN 37933-0949, US Tel: (865) 588-3188
Document maintained by	QRS Medical Clinic
Contact info	Work Place: 2010 Castaic Lane Knoxville, TN 37921, US Tel: (423) 587-9777

6.2.5.15 PER (Patient Education Resources)

The PER (Patient Education Resources) button will provide a list of all PER files you have available. It will automatically check the resources that are relevant to the patients problems, medications, and results. If a PER file has already been given to the patient it will show the date it was given. You may automatically send all of the checked files to the patients outbox.

The top section is a list of Problems, Orders, Results, and Medications that can be searched on the National Library of Medicine for educational resources.

The Match column will display each match of the indexed words for the resource file to the Problems, Medications, and Lab Results. The Match will display as underlined bold text. If you hover over this column it will display the index assigned to the resource file.

Send Files to Outbox

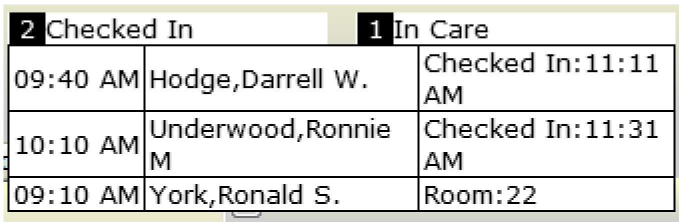
Search the National Library of Medicine				
Send	Type	Date	Description	Notes
✓				
	Problem	06/21/2010	UNS GASTRITIS GASTRODUODENITIS [535.50]	
	Medication	01/11/2012	Lipitor 20 mg	1 tablet by mouth daily
	Medication	01/31/2012	Xanax 1 mg	1 tablet by mouth daily as needed (
	Order	01/10/2012	Phyllostachys pubescens Ab.IgE	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Phyllostachys pubescens Ab.IgE	
	Order	01/10/2012	Phyllostachys pubescens Ab.IgE	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Phyllostachys pubescens Ab.IgE	
	Order	01/10/2012	Phyllostachys pubescens Ab.IgE	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Urate crystals.microscopic observation	
	Order	01/10/2012	Phyllostachys pubescens Ab.IgE	

In-office Patient Educational Resources		
Send	Resource File	Match
✓		
	Acne.pdf	
	Acne_NIAMS.pdf	
	Amylase.pdf	
	Aspirin.pdf	
	Asthma.pdf	
	Avandia.pdf	
	Breast Cancer_ACS.pdf	
	Breast Cancer_Men_ACS.pdf	

6.2.5.16 Checked In / In Care

If the user defaults option "Patient Check-In" is set to yes the chart header will notify the user of patients being check in or placed in care. This is base on the "Resource" setting in the user defaults. If left blank it will show for all resources, other wise it will only show for the resource defined.

When the status of either of these items change it will show both list combined. It will leave this on the screen for 2 seconds for each patient.

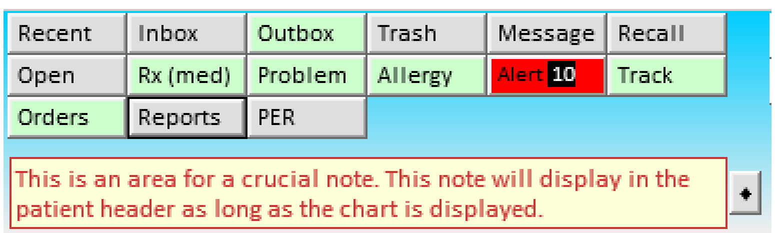


You may hide this by hovering over either area and then moving the cursor.

You may also display either list by hovering over the appropriate header. It will display until you move the cursor away.

6.2.5.17 Critical Note

The Crucial Note is entered on the patients cover page or using the sentence builder button in the Patient Header.



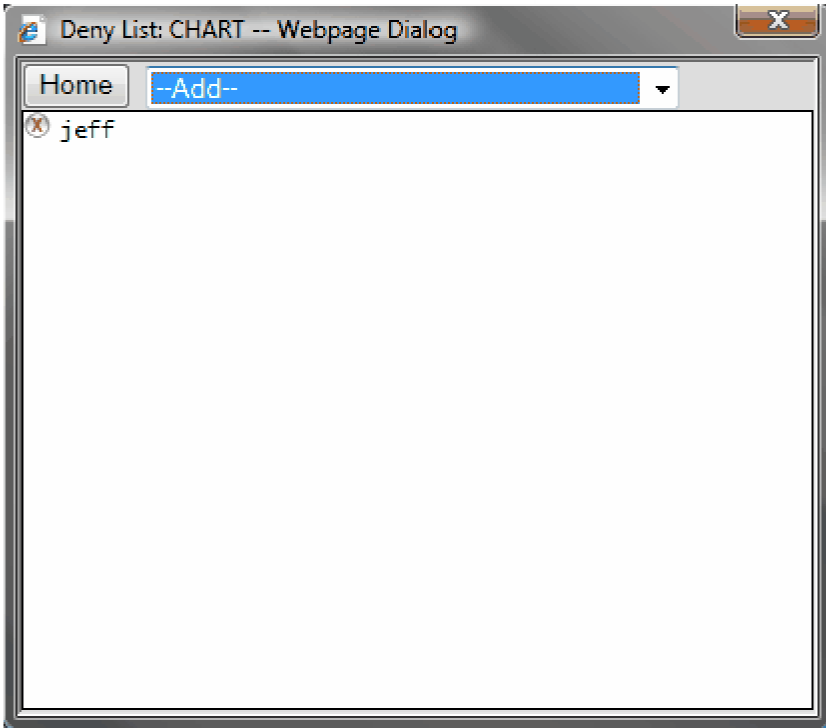
6.2.6 Security and Help

Security and Help Buttons

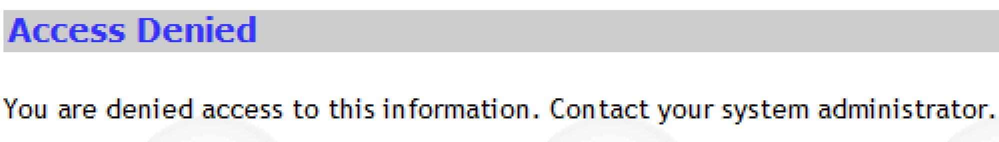
6.2.6.1 Chart Deny List (Security)

This button will only display if you are an Administrator.

It allows the administrator to create a deny list for the chart.



Any user or group on this list will not have access to the chart and will see the following when they attempt to open the chart.



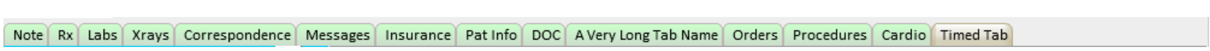
It is also possible to lock the administrator out of a chart using this option. If that is the case it can only be manually overridden by calling support. Be prepared to present in writing your request with a signature from the patients provider.

6.2.6.2 Help Button (?)

The Help button will open up this help document in a separate window. See Help Central.

6.3 Tabs

Tabs are section dividers for the contents of your chart. The Tabs (names) are defined by the system administrator. The tabs will display directly under the patient header, and appear similar to the following:



If you the tab is tinted Pink that is the tab you are currently reviewing. You may change tabs simply by clicking on the tab you want to view the contents of. The tabs contain the documents that have already been filed in the patients chart. When you enter most tabs by clicking on the tab button the files will be displayed in the file list with the most recent file at the top of the list. That file will also be displayed in the file display area.

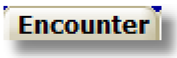
6.3.1 Special Tabs

There are several special tabs that you may find in a chart, they are:

- Encounter Tab
- Notes Tab
- Rx Tab
- Messages Tab

6.3.1.1 Encounter Tab

There are several special tabs used by PARADIGM EHR. The first is the Encounter Tab.



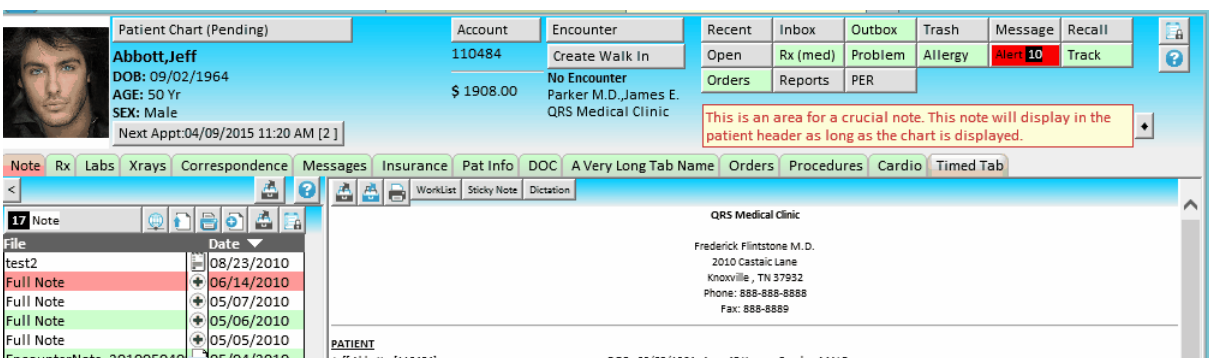
The Encounter Tab will only appear when you are viewing an Encounter, either from a current or past appointment.

The Encounter Tab allows you to access the Encounter Buttons and document that allow you to document that patients encounter and generate progress notes for that encounter. The Encounter Tab also allows you to store documents that are relevant only to that encounter.

6.3.1.2 Notes Tab

The Notes tab is a user defined tab that stores the notes (progress notes) files fore review. Your tab name may be called something else but for this example we will assume it is call Notes.

When looking in the Notes Tab you will see that it not only contains a file list as other tabs do, but also a list of Encounters. These are historical notes that have been filed in the patients chart.



Clicking on any of these Encounters will display the notes compiled for the encounter listed.

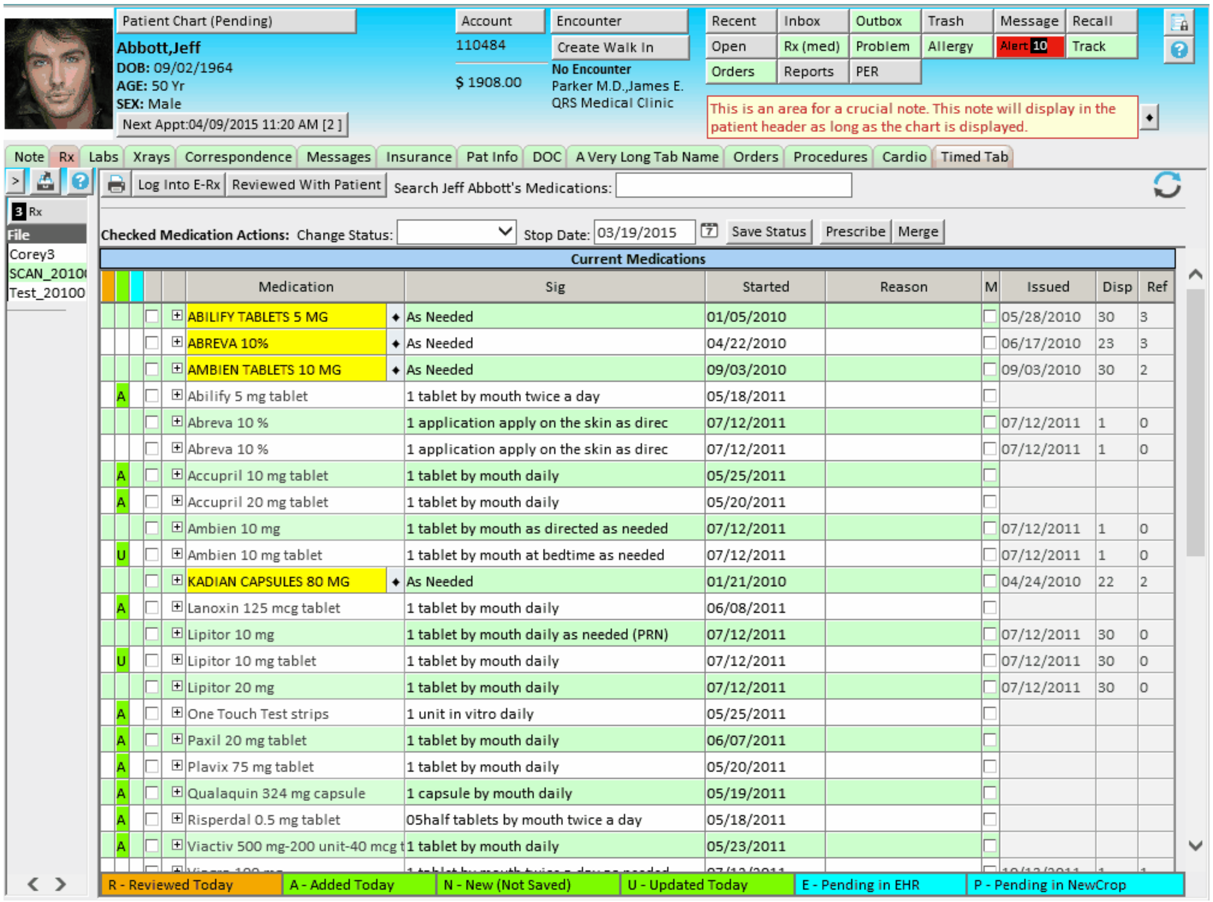
You will also have a file list beneath the PARADIGM EHR generated note list. These files may have been scanned from paper charts, or converted from a previous EMR system. You may also view these by clicking on the file name.

Signed encounter notes will always display here or in the encounter. They may also be linked to other tabs if the Note has been programmed to do so.

6.3.1.3 Rx Tab

The Rx Tab (name) is defined by the system administrator and may be called something other than Rx, but for the description here we will use Rx.

The Rx Tab is where prescription records are stored. And when you first enter the Rx tab you will see the Medications list for the patient.



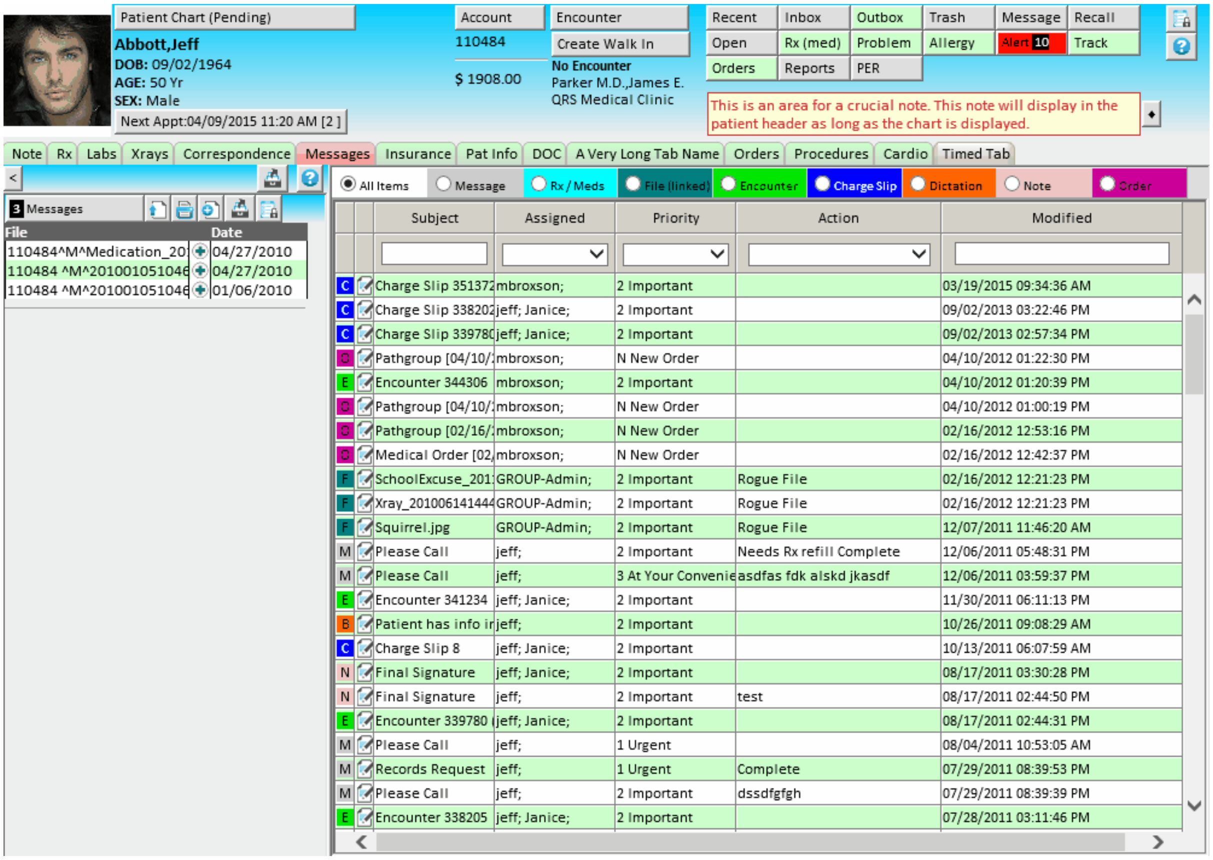
You may also click on any File to display the full detail of that medication or prescription.

Other documents that contain medication information may also be stored along with PARADIGM EHR medication documents.

6.3.1.4 Messages Tab

The Message Tab (name) is defined by your system administrator, but for this documentation we have called it Messages.

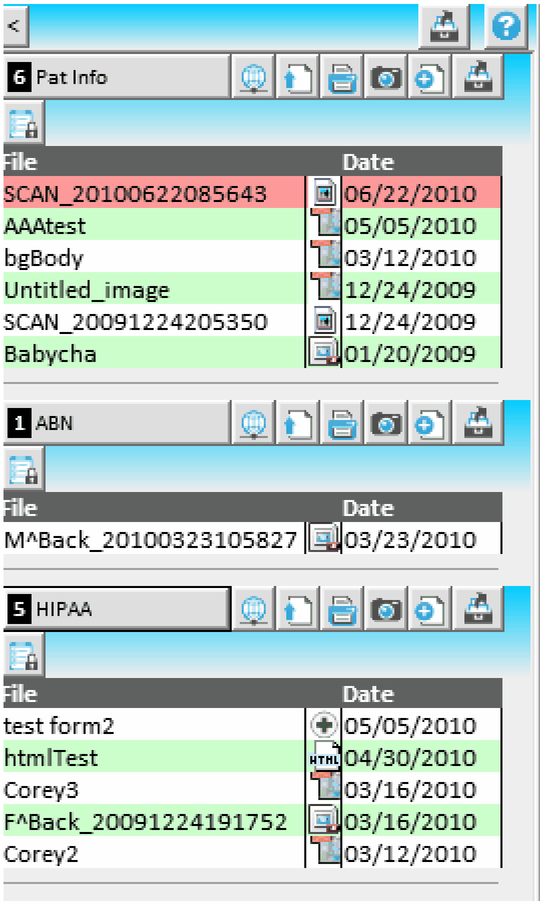
The Messages Tab is used to store messages create by the Message Button. The Message is initially put in the Pending area of the chart. When the message is complete and filed it will automatically be placed in this tab.



You may also store other documents in this Tab.

6.4 File List

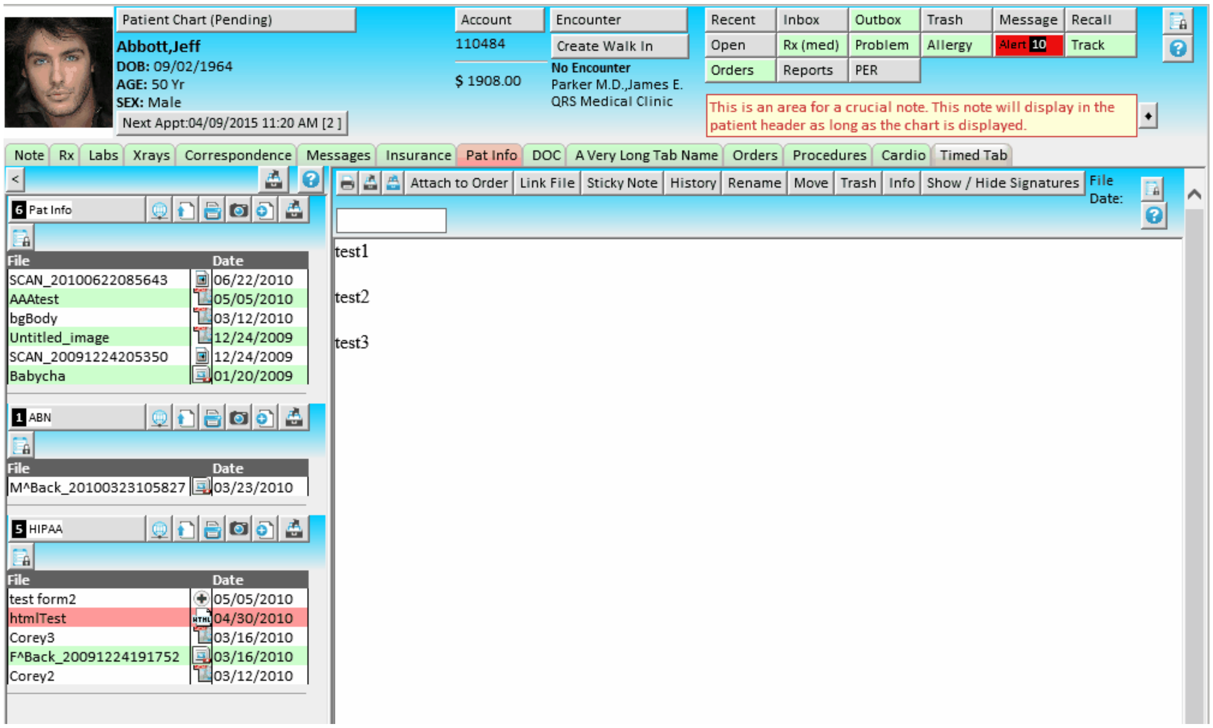
The file list will display on either side of you File Display Area depending on your user preferences. It displays the files that are present in that tab of the patients chart. To view any file simply click on the file name.



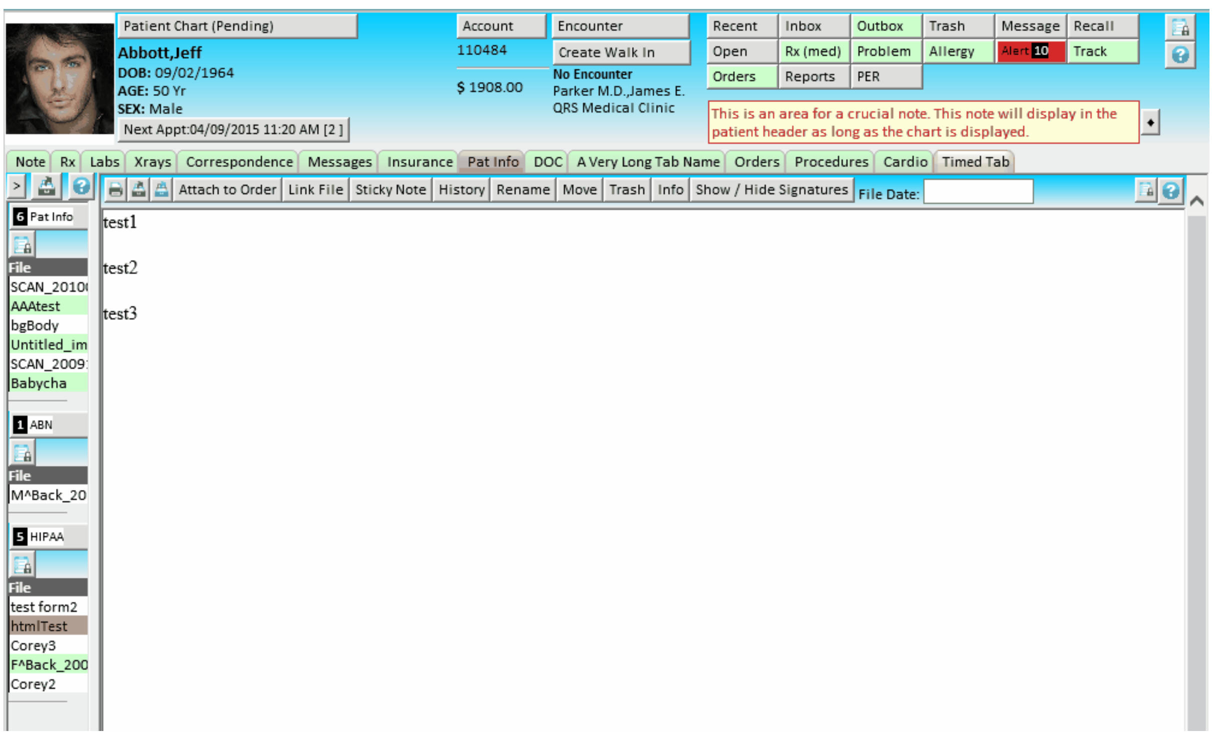
6.4.1 List Show / Hide Button

At the top of the file list you will see a tool bar with a arrow button. This is used to hide and display the file list. This is very useful if using a tablet computer in portrait mode. After selecting a file, you may click this button to move the file list out of the way and display much more of the file you have selected.

Before Hiding List:



After Hiding List:



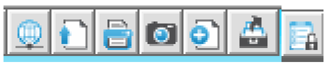
You may unhide the list by pressing on the arrow button again.

6.4.2 Folder Button

Each folder will show the folder name preceded by the number file file found in that folder. Clicking on this button will show or hide the files in that folder.

6.4.3 Folder Buttons

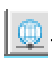
Each folder may have a set of buttons that allow you to either link to other web based systems, or exchange data within that folder. The buttons will look similar to:



They are known as:

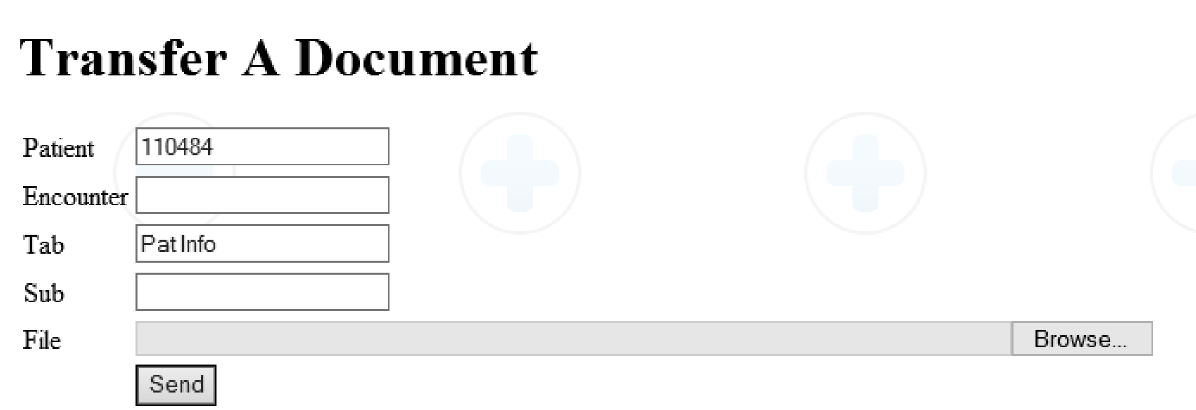
Link Button
Transfer Button
Scan Button
Photograph Button
New Document Button
Outbox Button
Folder Deny List (Security)

6.4.3.1 Link Button

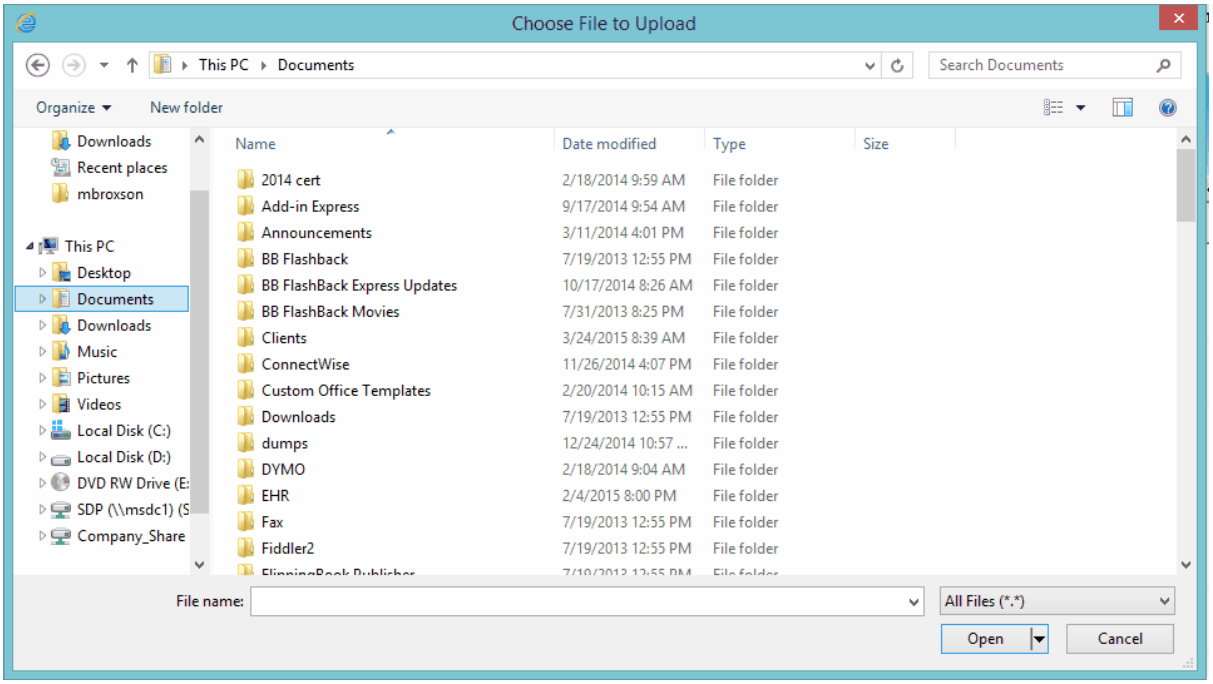

The link button will be present if this tab is in conjunction with other web services. For example you may use an E-prescribe service. So on your medications or RX tab you may have a link to that service. Or you may have a service for Medical information pamphlets. The link could take you to that service.

6.4.3.2 Transfer Button


The Transfer button will allow you to transfer a file from your workstation into the patient's chart. You may have the file on your hard drive, a network drive, a CD ROM, a DVD ROM, or a thumb drive. Any file you can access from your workstation can be transferred into a patients chart. By clicking on the Transfer Button a form similar to the following will display:



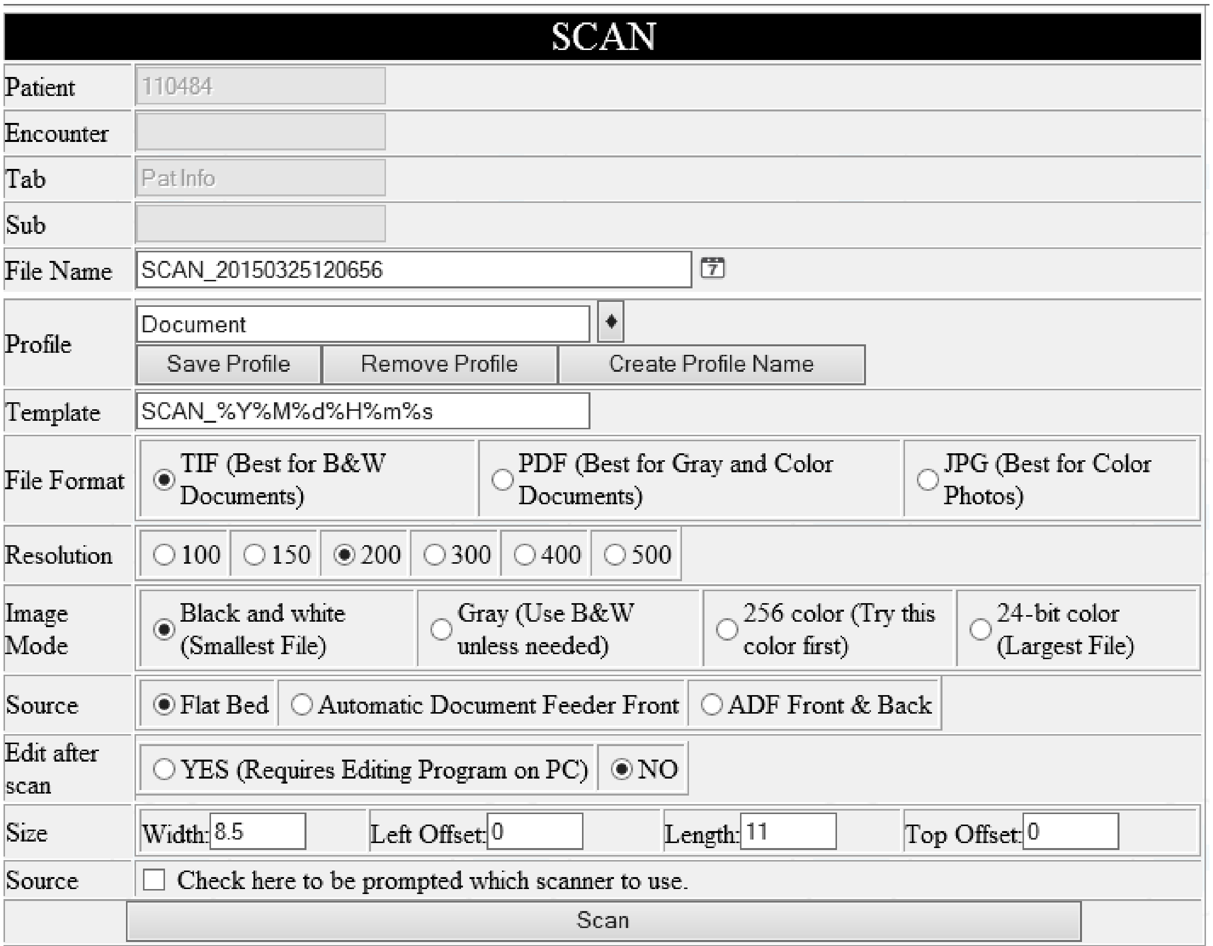
Click of the Browse button to allow you to select the file you want to transfer.



After you select the file it will fill in the File block for you. Then click the Send button. The file will transfer into the chart and display in the file Display Area.

6.4.3.3 Scan Button

 The Scan Button allows you to scan a document directly into a patients chart. PARADIGM EHR has it's own scanning software built in, and it supports TWAIN compliant scanners. Most scanners made today are TWAIN compliant. After clicking on the Scan Button a screen similar to the following will display:



SCAN	
Patient	110484
Encounter	
Tab	Pat Info
Sub	
File Name	SCAN_20150325120656
Profile	Document Save Profile · Remove Profile · Create Profile Name
Template	SCAN_%Y%M%d%H%m%s
File Format	◉ TIF (Best for B&W Documents) ○ PDF (Best for Gray and Color Documents) ○ JPG (Best for Color Photos)
Resolution	○ 100 ○ 150 ◉ 200 ○ 300 ○ 400 ○ 500
Image Mode	◉ Black and white (Smallest File) ○ Gray (Use B&W unless needed) ○ 256 color (Try this color first) ○ 24-bit color (Largest File)
Source	◉ Flat Bed ○ Automatic Document Feeder Front ○ ADF Front & Back
Edit after scan	○ YES (Requires Editing Program on PC) ◉ NO
Size	Width: 8.5 Left Offset: 0 Length: 11 Top Offset: 0
Source	☐ Check here to be prompted which scanner to use.
	Scan

This form allows you to define how you would like to scan the document. The first four you will not have access to, they are completed by the program. The following details the other fields.

New File Name
Enter the name of the file. This field will default to template defined.

Profile
This field will display the profile name. On first login the profile will default to document, If you change the profile and scan, the profile name will default to the last profile that you have used. See Scanning Profiles.

Template
This field is used to enter the naming template used by the profile. This allows for the following special characters to be used in a file name.

%Y	4 character year
%y	2 character year
%M	2 character month
%d	2 character day
%H	24 hour
%h	12 hour
%m	minute
%s	second
%a	AM or PM

Do NOT use "/" or ":" in file names.

File Format
PARADIGM EHR can scan in either TIFF, PDF, or JPG format. TIFF images are best for black and white documents because they take up the least amount of space. If you are scanning a document that is grey scale or color PDF will be more efficient. If you are scanning a color photo then JPG will be the most efficient. A photo can not be more than one page, a document can be multiple pages, but to scan multiple pages your scanner must have an automatic document feeder.

Resolution
This defines how many dots per inch will be scanned. The higher the resolution the cleaner the scan usually is. When scanning text documents, 200 DPI is usually sufficient for a clean, legible copy without creating unnecessarily large files. However if you are scanning a high resolution color photograph you may need to increase this value.

Image Mode
Here you may select if the document you are scanning is black and white or color. Black and white documents use the least amount of space to store the images. 24-bit color creates the largest file.

Source
Here you may select if you are scanning from a flat bed scanner or one with an Automatic Document Feeder. If your scanner supports an ADF in duplex mode (both front and back) you may select it.

Edit after scan
Here you may select if you want to edit the document immediately after scanning. You must have a program on your workstation that allows editing of the document File Format that you select.

Size
The following four fields define the size and layout for the scan.

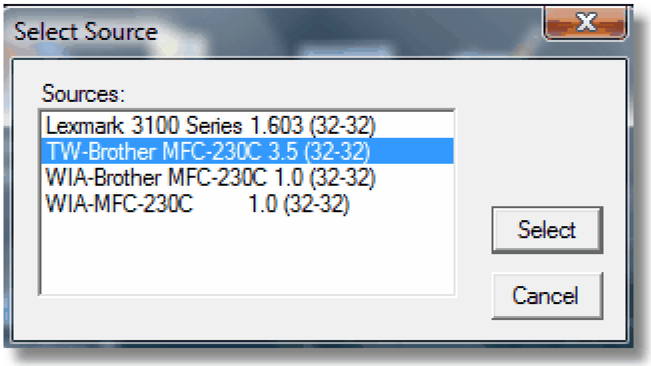
Width
Enter with Width of the document. Most documents are 8.5 inches by 11 inches, but your document is irregular you may change it here.

Left Offset
This tells the scanner how far from the left edge before the width is scanned.

Length
Enter with Width of the document. Most documents are 8.5 inches by 11 inches, but your document is irregular you may change it here.

Top Offset
This tells the scanner how far from the top edge before the length is scanned.

Source
You may need to check this box if you have more than one scanner connected to your workstation. Typically the scanner that is used will be the last scanner used. If you want to select another scanner check this box and a window similar to the following will display to allow you to select the scanner after you click the scan button.



After you have competed the form click on the SCAN button at the bottom of the form.

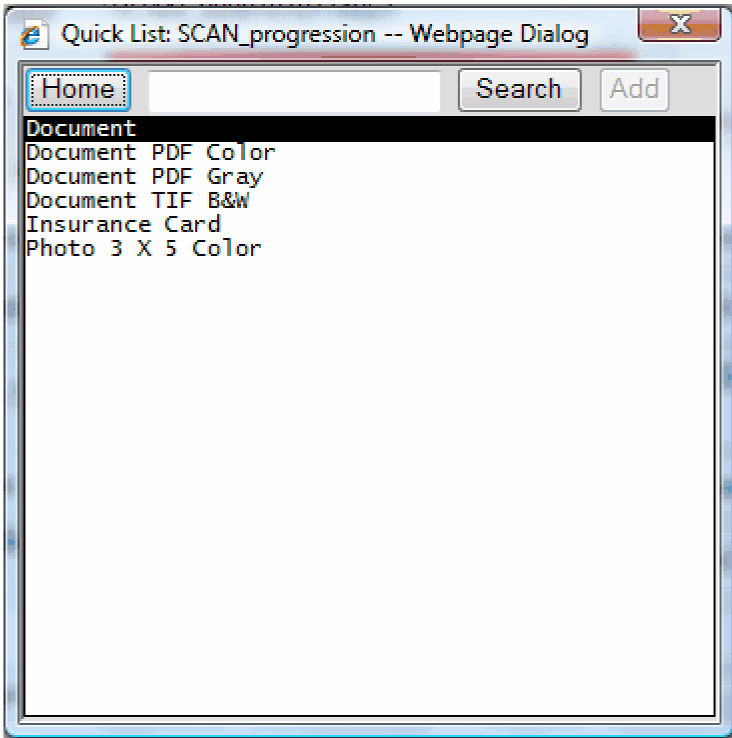
The form will remember your settings while you are logged in.

6.4.3.3.1 Scanning Profiles

Scanning profiles allow you to pre-define scanner configurations to fit your scanning needs. Profiles are stored by User name. The first time you enter the Scanning program two profiles will be created by default for you. They are:

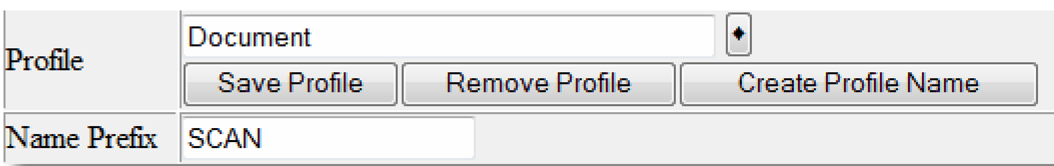
Document
Insurance Card

Selecting Profiles
To Select a profile Click on the Black Diamond button next to the Profile field. This will display a list for you to choose from.



Saving Profiles

You may then select from either of these profiles, make any changes and then save them again (using the Save Profile button to store your changes.



Naming Profiles

You may also create new profile and save them. When creating new profiles you may name them anything you want or use the Create Profile Name button to have the computer generate a name for you based on the setup you selected.

Do NOT use "_" underscore characters in your profile names.

Removing Profiles

To remove a profile click on the Remove Profile button. A confirmation box will display prompting you to remove the profile that you currently have loaded.

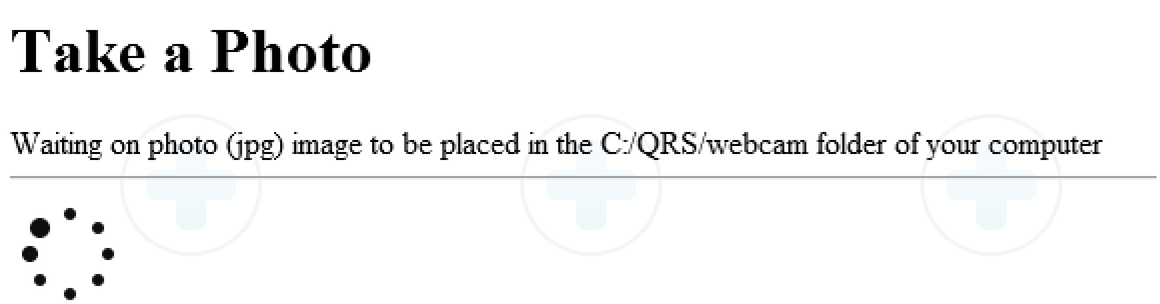
6.4.3.4 Photograph Button

 PARADIGM EHR supports the ability to take a photograph and put it directly in the patients chart. The Photograph button will allow you to take a photo. If a camera is set up on your work station you will see the following when you click the photograph button.

Click on the Take Photo button.

If your Capture device is PSRemote and the PSRemote software is running the camera will immediately take the picture and import it into the patients chart.

If your Capture device is WebCam you will see the following on your screen.

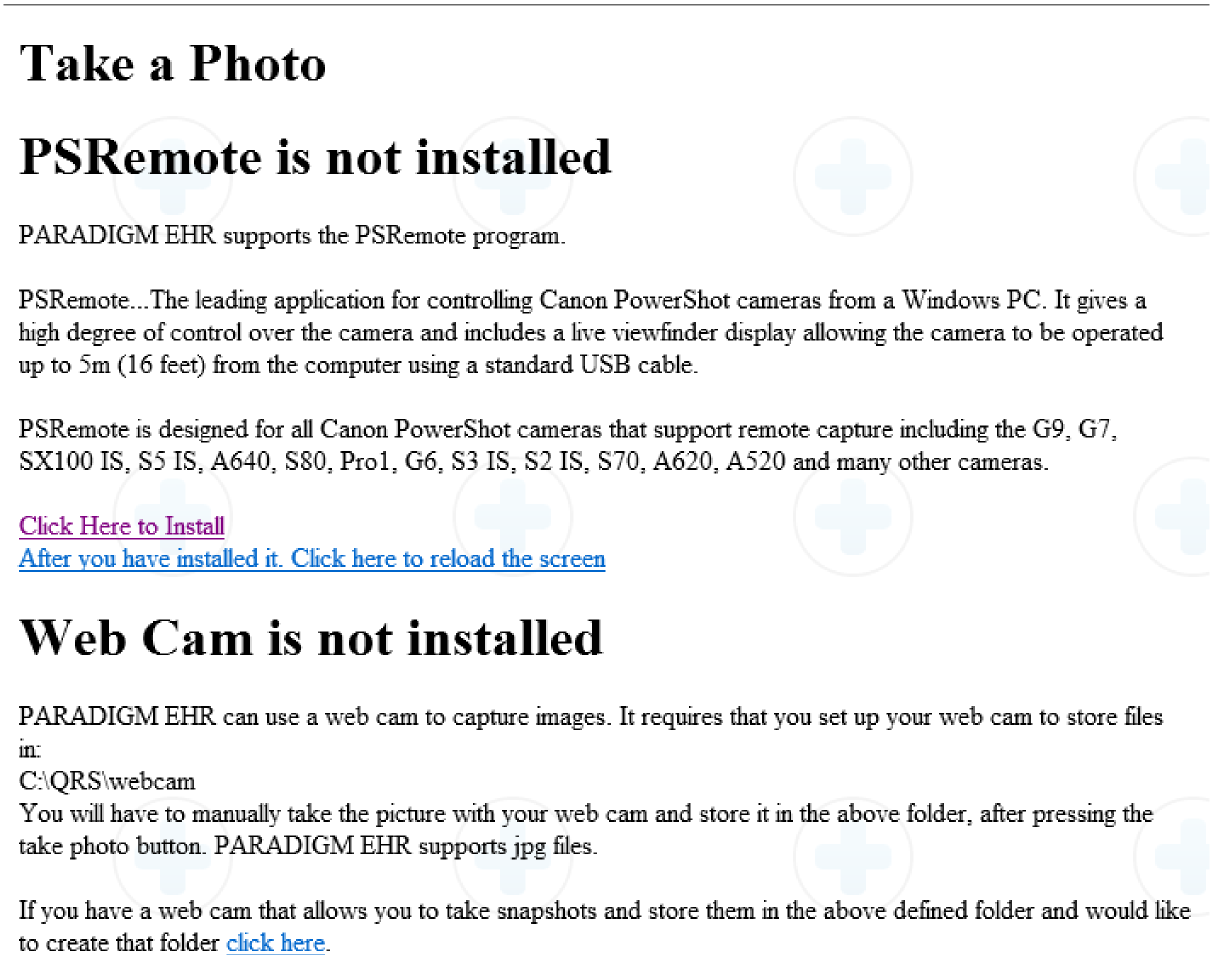


Use your web cam software to take a photo and store it in the C:\QRS\webcam folder on your workstation.

As soon as it sees the photograph there it will transfer it back to the workstation and display it.

6.4.3.4.1 Photo software not installed

If the photo software is not installed for your workstation you will see the following:



Take a Photo

PSRemote is not installed

PARADIGM EHR supports the PSRemote program.

PSRemote...The leading application for controlling Canon PowerShot cameras from a Windows PC. It gives a high degree of control over the camera and includes a live viewfinder display allowing the camera to be operated up to 5m (16 feet) from the computer using a standard USB cable.

PSRemote is designed for all Canon PowerShot cameras that support remote capture including the G9, G7, SX100 IS, S5 IS, A640, S80, Pro1, G6, S3 IS, S2 IS, S70, A620, A520 and many other cameras.

Click Here to Install
After you have installed it. Click here to reload the screen

Web Cam is not installed

PARADIGM EHR can use a web cam to capture images. It requires that you set up your web cam to store files in:
C:\QRS\webcam
You will have to manually take the picture with your web cam and store it in the above folder, after pressing the take photo button. PARADIGM EHR supports jpg files.

If you have a web cam that allows you to take snapshots and store them in the above defined folder and would like to create that folder click here.

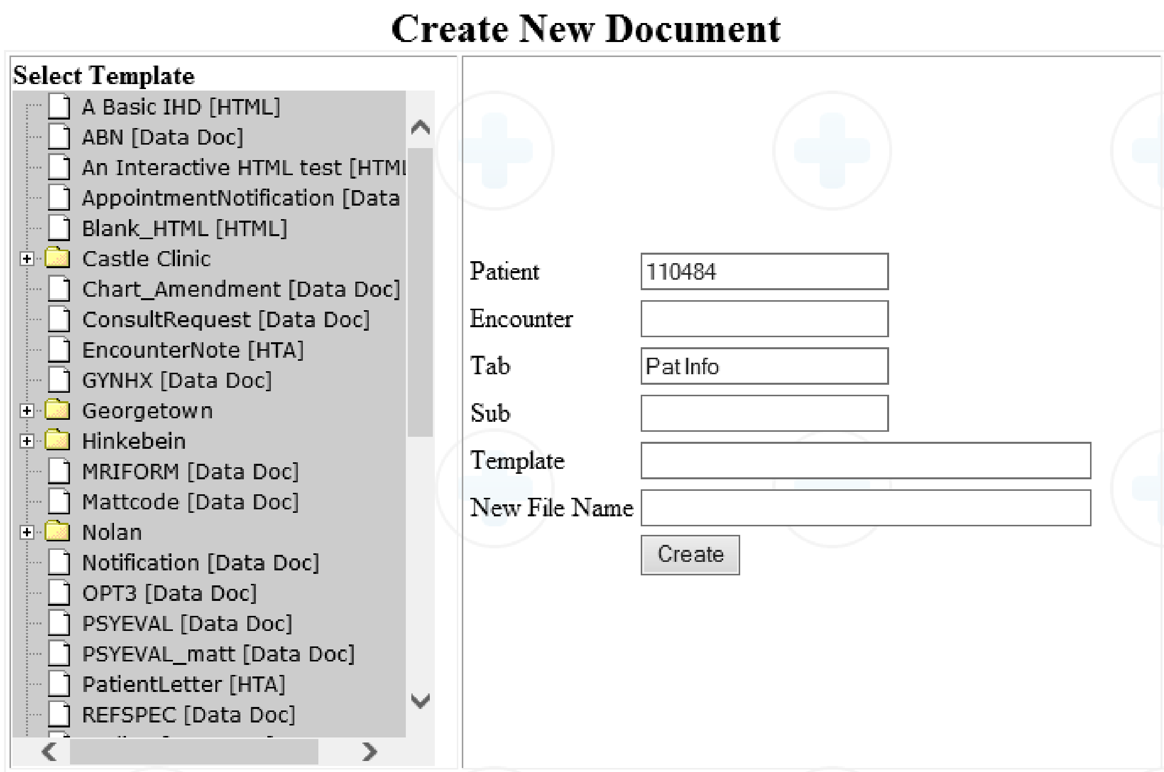
PARADIGM EHR support two types of photograph imports. The first is using a program call PSRemote.
PSRemote allows PARADIGM EHR to control POWERSHOT cameras directly to take the picture and import it. If your needs are for high quality images this may be the option you want.

PARADIGM EHR also supports the use of web cams that have the ability to take snapshots and store them in a defined folders. Webcams from logitech usually have this ability. Webcam photos are usually not that high in quality because the optics used are inferior to those found in good quality cameras such as the Cannon PowerShots series. However this solution is generally much less expensive.

6.4.3.5 New Document Button

Many of the documents that you will use in PARADIGM EHR are known as templates. Templates can be any type of document, Word, Excel, Images, audio, as well as PARADIGM EHR Data Documents. Your templates have been put into a special area that allows you to quickly copy one of these templates into a patients chart and edit it. The New Document Button allows you to select the template you want, edit the document, and file it in the chart.

After pressing the New Document Button you will see a screen similar to the following:

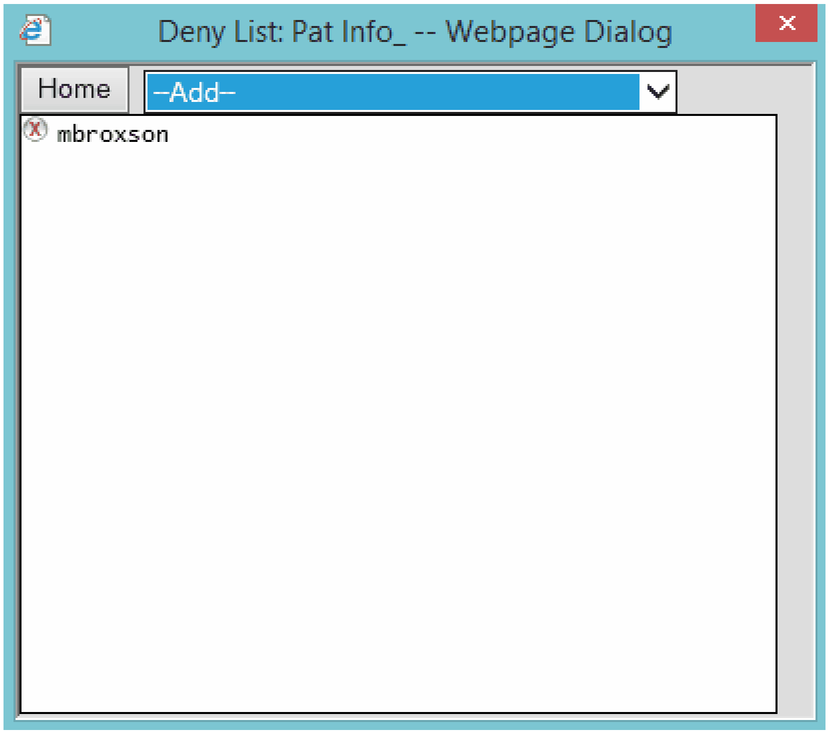


First you must select a template, the New File Name will automatically fill in once you select a template, you may change it if you wish.

Click the Create button and you will then be editing the new document.

6.4.3.6 Folder Deny List (Security)

 This button will only display if you are an Administrator. It allows the administrator to create a deny list for a tab or folder.



Any user or group on this list will not have access to the folder and will see the following when they attempt to open the tab or folder.

If access is blocked at the TAB level the user will be denied access to all folders in the tab, and the following message will show in the file display area of the chart.

If a folder in a tab is locked you will see the following on the Folder header instead of the normal buttons.

It is also possible to lock the administrator out of a chart using this option. If that is the case it can only be manually overridden by calling support. Be prepared to present in writing your request with a signature from the provider.

6.5 File Display Area

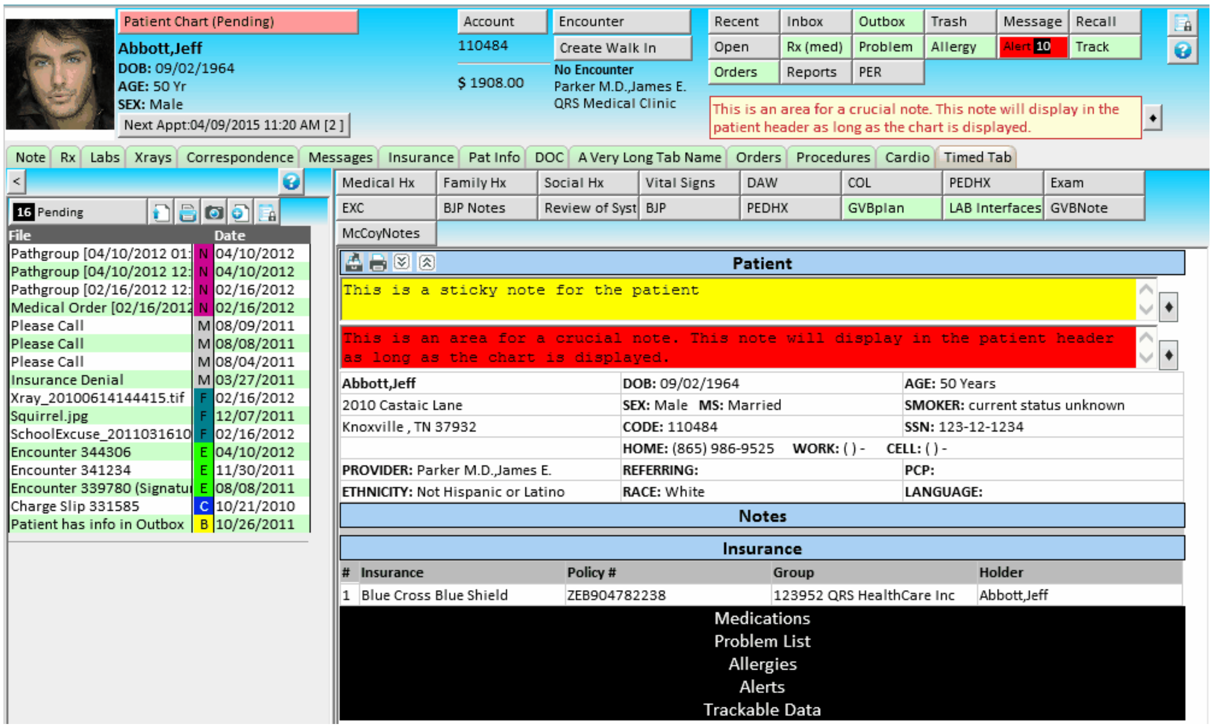
The File Display Area is where the contents of a document or documents will display.

If you are in the Pending area of the folder this area will display the Encounter Buttons and the Patient Cover Page. The Encounter Buttons will allow you create up update information about the patient. If you have selected a file from the Pending File List the Encounter Buttons will go away. You may always redisplay the Encounter buttons by pressing the "Patient Chart (pending)" button.

If you are displaying a file from any tab or file list, it will display the document(s) along with a Document Header that gives you all your options for the file and signatures if they exit on the file.

6.5.1 Patient Chart (Pending)

When you first enter a chart you will be in the Pending Area. This is like you have just been handed a chart. Thefile list will show all pending items.



This is synonymous with all of the documents, sticky notes, reminders, etc. that you will find clipped or in some way attached to the outside of a paper chart. This area contains the list of all things that need to be addressed for this patient. It gets these items from the Work List and they include: Messages, Rx / Meds that need approval, Files (documents) that need to be put in the chart, Encounters that need signing, Charge Slips that need signing, Dictation that needs to be done, Notes that need signing, and Orders that are outstanding.

The File Display Area will display The Encounter Buttons as well as the Cover Page.

6.5.1.1 Encounter Buttons

Encounter Buttons are customized to the practice or provider. These buttons allow access to forms and files that are primarily used for collecting data on an encounter to generate the summary note. They also allow access to the charge slip for billing as well as maintenance programs needed to complete the note generation process.

The Encounter Buttons will display any time the system is displaying the "Pending" files. These buttons will display at the top of the chart in either text form:

There are both custom buttons and standard buttons that make up the button list, and the buttons that display depend upon if you are looking at only a patient account, or have an encounter displayed.

When you query a patient by name only, and are not looking at an encounter, only the buttons that patient buttons display, so the list will look shorter similar to the following:

6.5.1.1.1 Custom Buttons

Custom buttons are defined in the administrative setup of the PARADIGM EHR system. There the administrator may assign a name and icon to a button as well as a template to use when that button is pressed. Because your templates and buttons are customized to fit your needs, there is no way this document can describe your buttons and templates in any detail.

However the following is a list of commonly used buttons:

- Chief Complaint
- Review of Systems
- Medical History
- Family History
- Social History
- Vital Signs
- Examination
- Assessment
- Plan

Most of this information is unique to an encounter and these buttons will only display when you are in an encounter. If you are displaying a chart and not in an encounter only the buttons that are patient relative will display. This is defined by the system administrator when setting up the button profile.

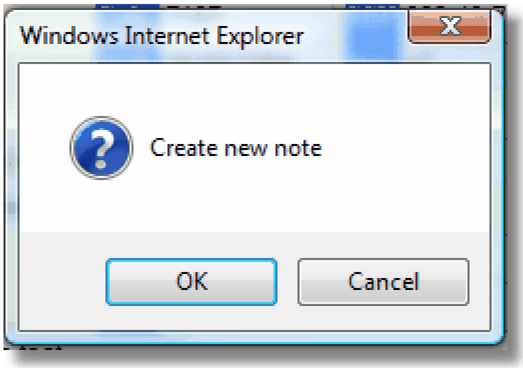
6.5.1.1.2 Standard Buttons

The Standard Buttons are built into the program because they perform additional task that a custom button can't do.
These buttons are as follows:

- Duplicate Encounter
- Charge Slip
- Encounter Sign Off
- Dictation
- Notes

6.5.1.1.2.1 Duplicate Encounter

The Duplicate Encounter button will create a new appointment based on the current encounter. An confirmation box will prompt you if this is what you want to do.



If you select OK, the new Encounter will be created and the system will switch to it.

This is used if you need to create a separate encounter for the patient for that day.

THIS BUTTON IS NO LONGER ACTIVE BY DEFAULT, AND ONLY SET UP IF NEEDED. The ability to create multiple notes per encounter has rendered it obsolete.

6.5.1.1.2.2 Super Bill / Charge Slip

The Super Bill / Charge Slip button allows you to quickly enter and edit diagnosis and charge information for an encounter. This button displays when you are in an Encounter. This electronic charge slip will be sent to PARADIGM where the charges can be reviewed and claims will be filed and statements sent.

The Super Bill allows for quick entry of both diagnosis and charge information by clicking checkbox and saving the form. The Charge slip allows for more precise editing of these codes when needed.

The Super Bill is automatically generated from the diagnosis and procedure codes classified in the PARADIGM system unless you have a custom Super Bill. Items entered from other forms such as assessment or plan forms as well as default patient diagnosis information will be checked automatically when entering the form.

Simply click any other items you want to save, and uncheck any items you don't want. When finished scroll to the bottom of the form and click the "Save and Close" button. The information will be saved and placed into the charge slip.

By clicking on the "Charge Slip" header at the top of the charge slip you can open the Super Bill back up to use it to make changes. When this is done the old charge slip will be removed and a new one is created using the data from the Super Bill. So any changes to fees, or diagnosis relations will be lost.

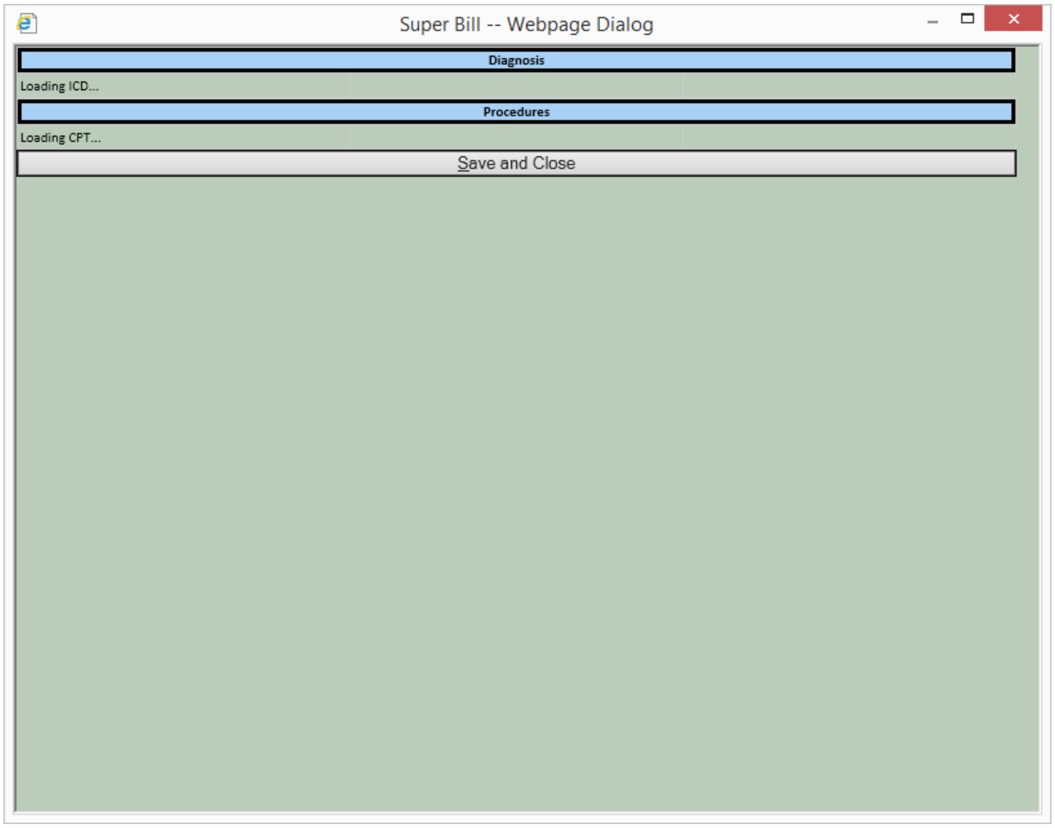
E-Slips are an extension to the Super Bill program found under the Charge Slip button in the patient chart of the PARADIGM EMR.

The Super Bill program will create the fee slip dynamically based on the classified ICD and CPT codes defined in the PARADIGM data base. The main issues with this dynamic generation is that it can be slow if the the associated tables are large. With the introduction of ICD-10 codes these tables will only grow larger and thus dynamic generation is not a viable solution.

It is still possible to create custom Super Bill programs as in the past but the E-Slip extension should make this process much easier and faster.

E-Slips are just the html content of the fee slip displayed in the default Super Bill program. By storing just the content and recalling it instead of dynamically generating it each time the program is called, the users experience will be much better due to much (much) faster response times.

When you first enter the Super Bill program from the Charge Slip button of the patients chart, the system will dynamically generate the Super Bill. You may see a screen similar to the following as the program gathers the ICD and CPT information from the PARADIGM database.



This process can take from several seconds to minutes depending on the amount of data, speed of the server and workstation. Several seconds is acceptable but several minutes is not.

By pressing "Alt-G" from the Super Bill program a new window will open "Generate New E-Slip". This window looks like the Super Bill program and will do the same thing. It will generate the Dynamic Fee Slip. The difference is when you click "Save and Close" after it is complete it will store the fee slip information as it exists in the window as an E-Slip.

The next time you use the Super Bill program it will recall this E-Slip to display (almost instant) as apposed to dynamically creating the fee slip (time consuming)

It is important to understand that when generating an E-Slip, it will save just as it exists in the Generate window. That means that if you check any boxes, or add any additional Other Diagnosis using the "Diagnosis Selector" they will be in the E-Slip just as it is displayed.

Once an E-Slip is generated it will be stored in:
/usr/paradigm/etc/emr/{DataSet}/E-Slip.htm

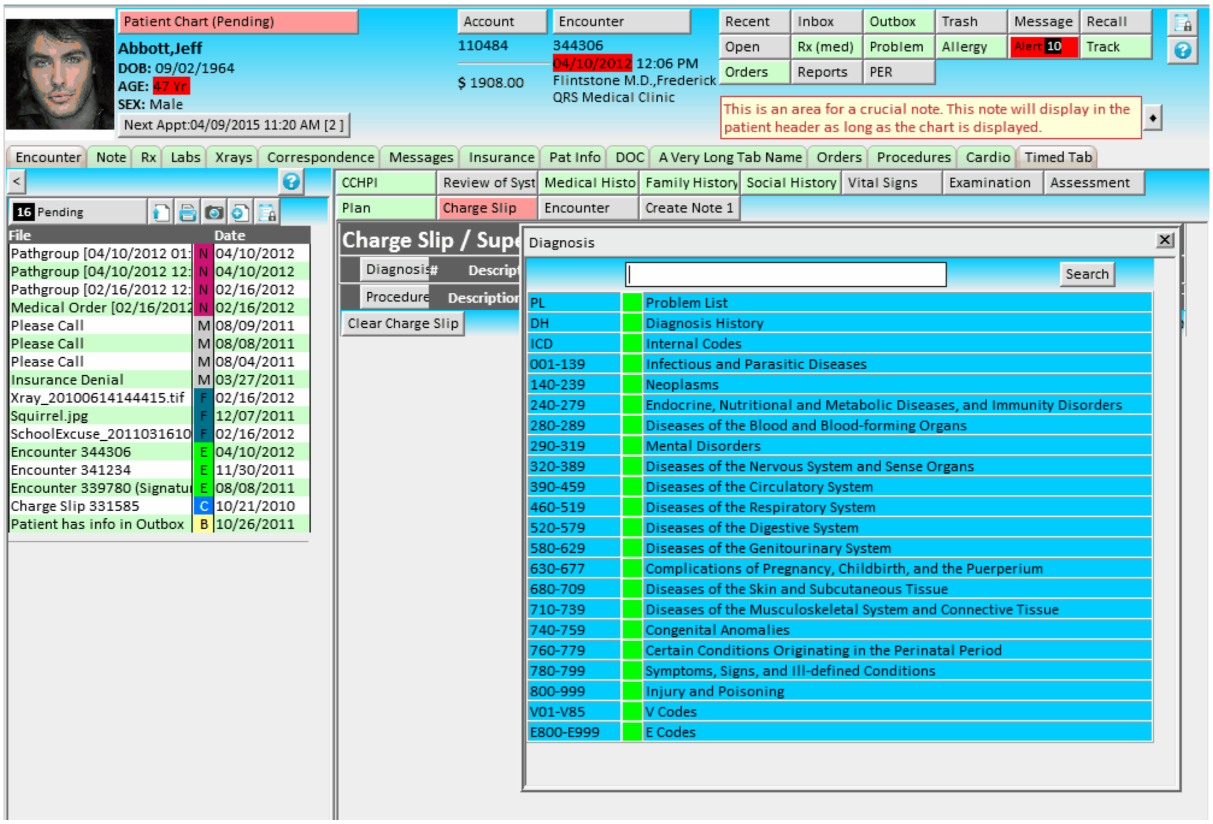
You can manually edit this file to change the content.

Just like with the Super Bill program you can create custom E-Slips for a resource. The file name for the E-Slip file is "E-Slip.htm". By Adding an underscore and the resource code and saving the file it will take priority when an appointment for that resource is being accessed by the Super Bill program.

Ie. E-Slip_JWA.htm

Would be the name of an E-Slip file if the resource code is "JWA".

Clicking on this button will display a form similar to the following:



A charge slip is comprised of both diagnosis and procedure codes. You must first select at least one diagnosis code, and may select up to 8. You may then Click on the Procedure Button to select Procedure codes.

Once you have added all codes close the popup window that displays your selection by pressing the (X) in the upper right corner. You will then see the completed charges slip.

Charge Slip / Super Bill

Diagnosis	#		Description
250.00	A	DX	DIABETES UNCOMPL TYPE II

Procedure	Description	CPT4 MODS	ICD REL	UNITS	AMOUNT
99213	OFFICE/OUTPATIENT VIS IT EST	99213	A	1	70.00
Clear Charge Slip	Submit Charge Slip			Total:	70.00

If everything is good you may submit the charge slip. Until you submit the charge slip you will have a work list item reminding you that you have started to create a charge slip but have not completed it for that encounter.

If you clear the charge slip it will remove all the entries and remove the reminder.

You may also edit the charge slip, removing individual items by clicking on the (x) preceding the code you want to remove.

If using the standard note generation forms the program will gather diagnosis codes from the assessment form and procedure codes from the plan form.

PARADIGM EHR allows you to select one of three lists.

The Problem List, Diagnosis History, Internal Codes, or "The Book".

Diagnosis

	Search
PL	Problem List
DH	Diagnosis History
ICD	Internal Codes
001-139	Infectious and Parasitic Diseases
140-239	Neoplasms
240-279	Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders
280-289	Diseases of the Blood and Blood-forming Organs
290-319	Mental Disorders
320-389	Diseases of the Nervous System and Sense Organs
390-459	Diseases of the Circulatory System
460-519	Diseases of the Respiratory System
520-579	Diseases of the Digestive System
580-629	Diseases of the Genitourinary System
630-677	Complications of Pregnancy, Childbirth, and the Puerperium
680-709	Diseases of the Skin and Subcutaneous Tissue
710-739	Diseases of the Musculoskeletal System and Connective Tissue
740-759	Congenital Anomalies
760-779	Certain Conditions Originating in the Perinatal Period
780-799	Symptoms, Signs, and Ill-defined Conditions
800-999	Injury and Poisoning
V01-V85	V Codes
E800-E999	E Codes

Clicking on Patient Problem List you will see just that. The same diagnosis codes that show in the Patients Problem List.

Diagnosis

<< BACK Patient Problem List Diagnosis

ICD	Description
185	MALIGNANT NEOPLASM OF PROSTATE
283.2	HEMOGLOBINURIA HEMOLYSIS EXT CAUSE
284.01	CONSTITUTIONAL RED BLOOD CELL APLASIA
311	DEPRESSIVE DISORDER NOT ELSEWHERE CLASSIFIED
364.42	RUBEOSIS IRIDIS
365.59	GLAUCOMA W OTH LENS DISORDERS
558.2	TOXIC GASTROENTERITIS AND COLITIS
564.1	IRRITABLE BOWEL SYNDROME
591	HYDRONEPHROSIS
693.0	DERMATITIS DRUGS MEDICINES INTERN

Click on one of these to put it in your charge slip.

This option will show a history of all diagnosis that the patient has ever had in a billing encounter. With it it shows the date it was first used.

Diagnosis

<< BACK Patient Diagnosis History

ICD	Description	Date
250.00	DIABETES UNCOMPL TYPE II	03/19/2015
003.0	SALMONELLA GASTROENTERITIS	03/28/2012
364.42	RUBEOSIS IRIDIS	11/04/2011
284.01	CONSTITUTIONAL RBC APLASIA	04/28/2011
V10.04	HISTORY MALIGNANCY STOMACH	11/09/2010
311	DEPRESSIVE DISORDER OTHER	03/27/2011
558.2	TOXIC GASTROENTERITIS/COLITIS	03/27/2011
564.1	IRRITABLE BOWEL SYNDROME	
382.2	CHR ATTICOANTRAL SUPP OTITIS MEDIA	03/10/2011
273.2	OTH PARAPROTEINEMIAS	06/11/2010
789.05	ABDOMINAL PAIN PERIUMBILIC	07/02/2010
585.1	CHRONIC KIDNEY DISEASE STAGE I	05/05/2010
789.31	ABDOM/PELVIC SWELLING RUQ	06/02/2010
789.46	ABDOMINAL RIGIDITY EPIGASTRIC	06/02/2010
789.07	ABDOMINAL PAIN GENERALIZED	05/28/2010
789.06	ABDOMINAL PAIN EPIGASTRIC	05/13/2010
V70.2	GENERAL PSYCHIATRIC EXAMINATION	05/13/2010

Internal Codes are codes that are established and classified in the PARADIGM system. When you first enter the form you will see the classifications of codes as defined.

Diagnosis

<< BACK Search

CLS		Description
DER		Dermatology
RX		Prescription Drug
ABD		Abdominal
END		Endocrinology
CKD		Chronic Kidney Disease
SCR		Screening Codes
HX		History

Clicking on any of the groups will display the codes that are in that group.

Diagnosis

<< BACK

ICD		Description
250.0		DIABETES MELLITUS WO COMPLICATION
250.00		DIABETES UNCOMPL TYPE II

Clicking on one of these will put the code in your Charge Slip.

"The Book" is the comprised of the reset of the options on the first screen.

001-139		Infectious and Parasitic Diseases
140-239		Neoplasms
240-279		Endocrine, Nutritional and Metabolic Diseases, and Immunity Disorders
280-289		Diseases of the Blood and Blood-forming Organs
290-319		Mental Disorders
320-389		Diseases of the Nervous System and Sense Organs
390-459		Diseases of the Circulatory System
460-519		Diseases of the Respiratory System
520-579		Diseases of the Digestive System
580-629		Diseases of the Genitourinary System
630-677		Complications of Pregnancy, Childbirth, and the Puerperium
680-709		Diseases of the Skin and Subcutaneous Tissue
710-739		Diseases of the Musculoskeletal System and Connective Tissue
740-759		Congenital Anomalies
760-779		Certain Conditions Originating in the Perinatal Period
780-799		Symptoms, Signs, and Ill-defined Conditions
800-999		Injury and Poisoning
V01-V85		V Codes
E800-E999		E Codes

Here you may drill down by category until you find the correct code.

317		MILD INTELLECTUAL DISABILITIES
318		OTHER MENTAL RETARDATION
319		UNS INTELLECTUAL DISABILITIES

While drilling down you will notice either a Green or Red block next to the code. The Red means that is as far as you can go and clicking that option will put that code into your Charge Slip. Green means you have not found the specific code yet, keep going.

318.0		MODERATE INTELLECTUAL DISABILITIES
318.1		SEVERE INTELLECTUAL DISABILITIES
318.2		PROFOUND INTELLECTUAL DISABILITIES

Procedure codes are charge codes that are defined and classified in the PARADIGM Transaction code table. You will first see the the classifications that are established.

Procedure

Search

HV		Home Visit
SP		Surgical Procedures
ASP		Aspiration/injection
SOL		Send Out Labs
OSP		Office Service/Procedures
LP		Lab Panel
IOL		In Office Labs
INJ		Injection
ADM		Administration Charge
VAC		Vaccine
NP		OV New Patient
EP		OV Established
PV		OV Preventive
NPV		New Preventive Visit
OS		Oversight Services

Upon clicking on a category you will see the codes for that category.

Procedure

<< BACK

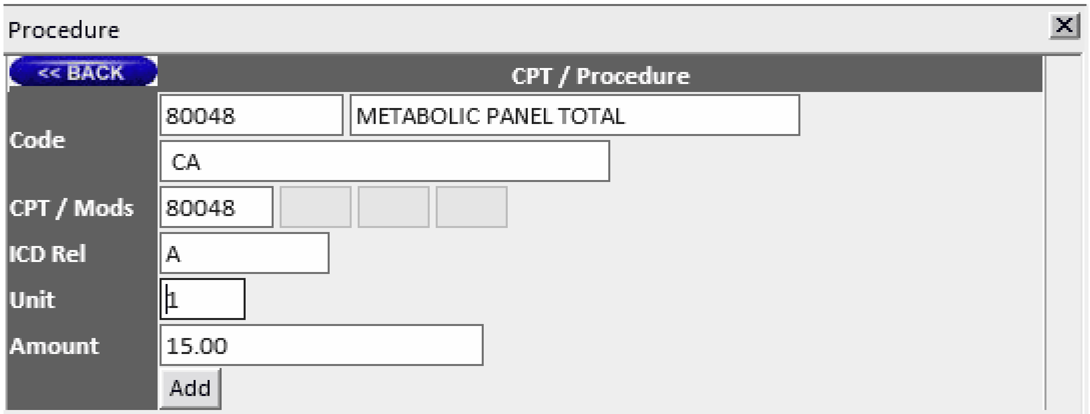
Search

HV | SP | ASP | SOL | OSP | LP | IOL | INJ | ADM | VAC | NP | EP | PV | NPV | OS

80048		METABOLIC PANEL TOTAL CA	15.00
80050		GENERAL HEALTH PANEL	70.00
80053		COMPREHEN METABOLIC P ANEL	20.00
80061		LIPID PANEL	30.00

You may notice codes with a red block after the code. These codes have passed edits and may be added without any issues.
Codes with a black box may list requirements that will cause a claim to be rejected if the code is selected.

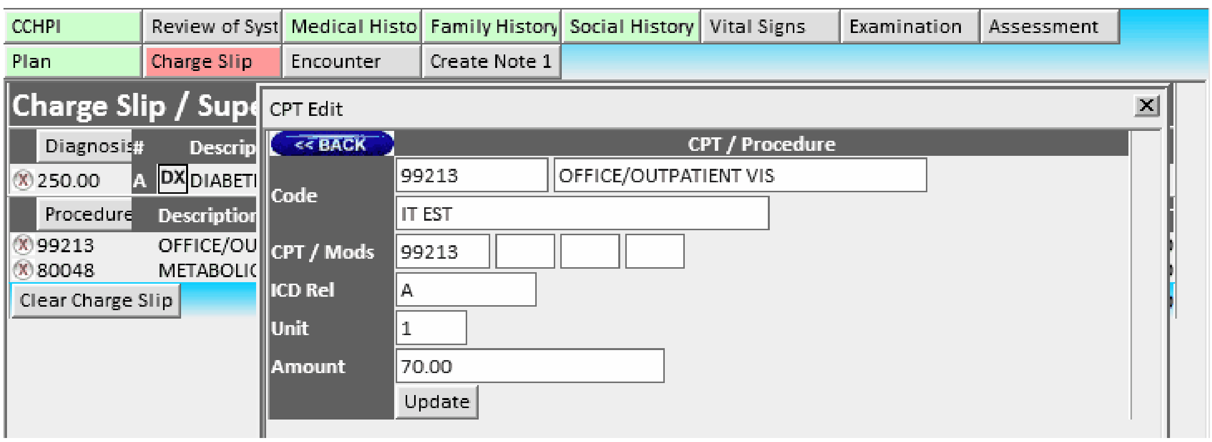
After selecting a code you will see a form that allows you to adjust the code.



Here you may enter modifiers, adjust the ICD relationship change the units, amount, and add documentation if needed.

Click on the "Add" button to add the procedure to your charge slip.

By clicking on the procedure code on the charge slip it will display the charge entry form for that code.



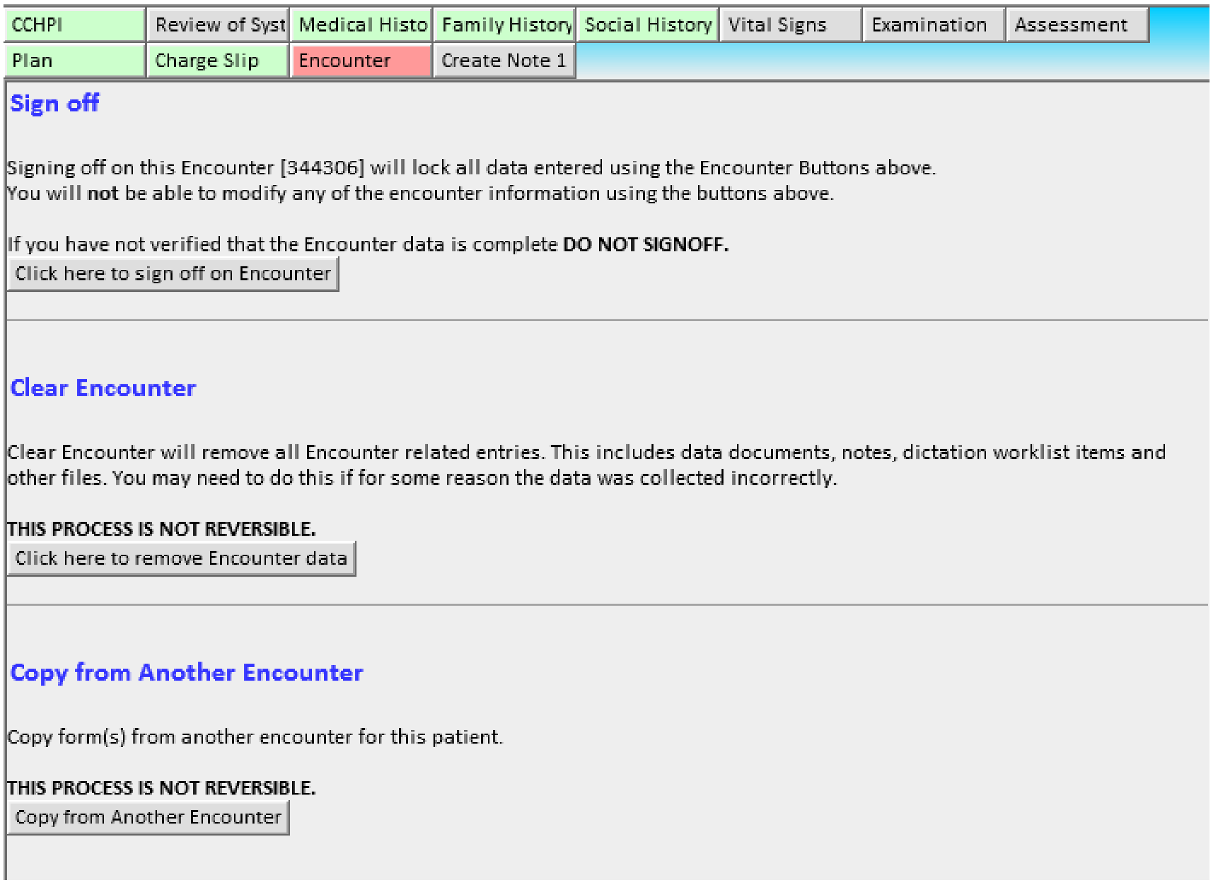
You may make changes to the code and click the Update Button. Click on the [X] in the upper right corner if you don't want to make any changes.

6.5.1.1.2.3 Encounter Sign Off

After all data is collected for an Encounter, you will need to sign off on the Encounter.
Until the Encounter is signed off you will have a work List item reminding you of an open encounter.

The process of signing off on an encounter will lock all of the data collection forms for this encounter and keep a historical record of the data at the time of sign off.

Clicking on the Encounter Sign Off button you will see the following:

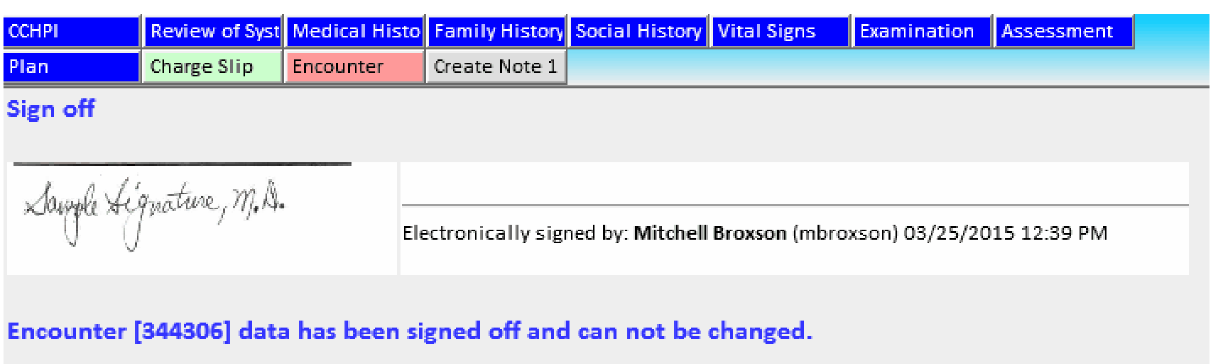


There are two options here:

1. Sign off on the Encounter
2. Clear the Encounter.

When you sign a note it will prompt you if you want to sign off on the encounter. If you do not plan to create more than one note, that is a good time to sign off.

After signing off on the Encounter the following will display.

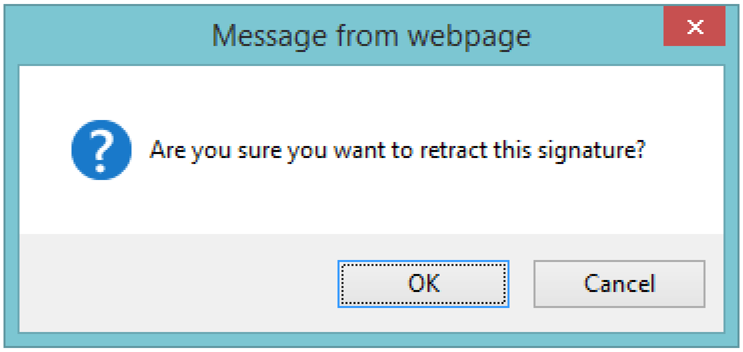


You may also notice that all of the encounter data buttons are now Blue.

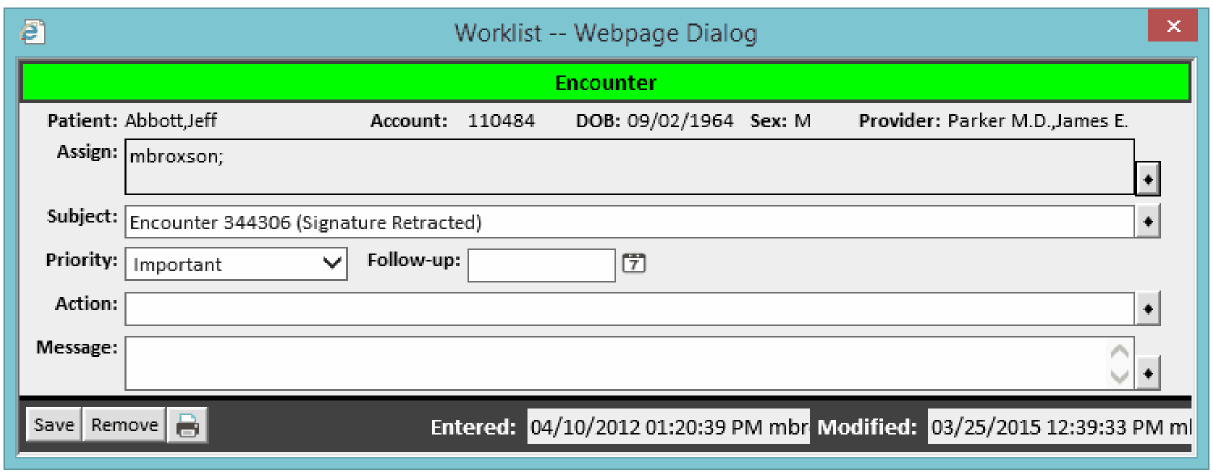
The Encounter work list item removed and the process is considered complete.

You may want to use this option if you do NOT intend on creating a Note for the Encounter. However if you do decide to create a note simply click on the note button and the note will be automatically created with the work list item.

The user that created the signature may retract the Encounter Signature, if the note has also not been signed. This is done by hovering over the signature and clicking. You will then be prompted.



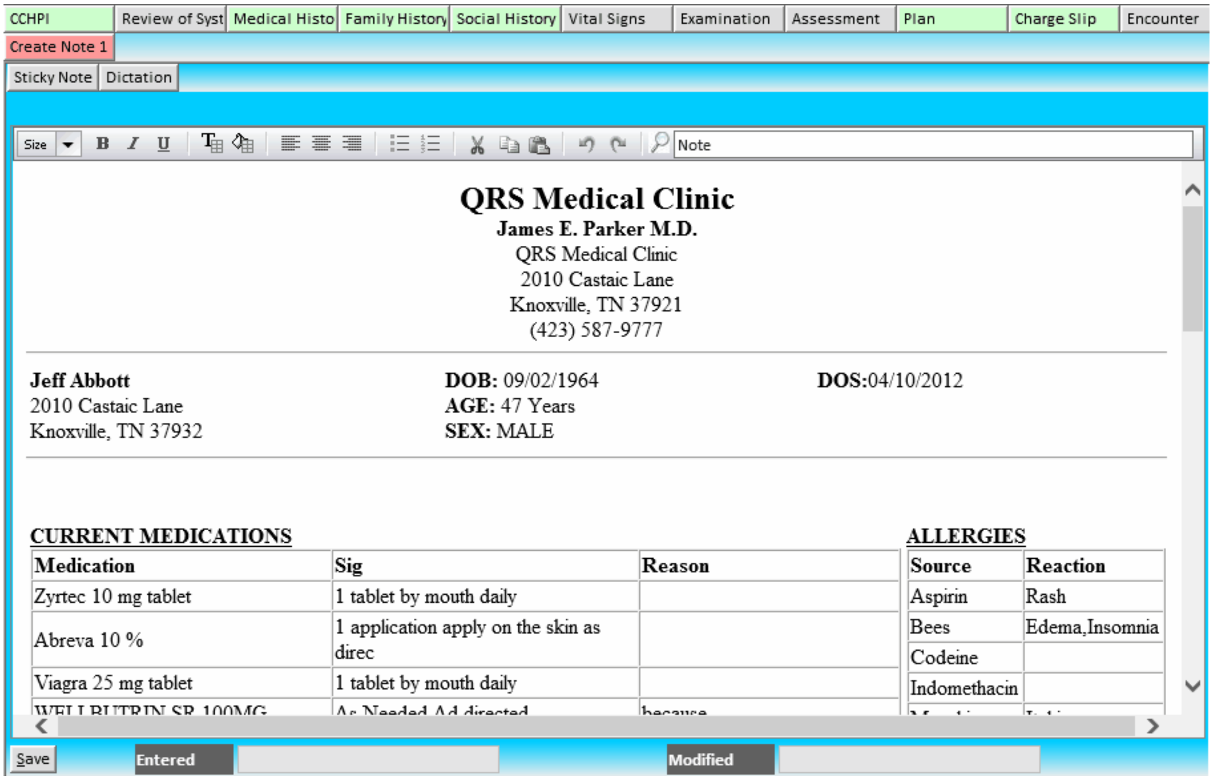
By pressing OK you will be required to complete an Encounter Worklist item.



once this is saved the signature will be retracted and the signoff form will show once again.

6.5.1.1.2.4 Notes

This is where the Encounter all comes together. All the data has been collected and now it is time to generate the Encounter Note. This program will gather the data from all of the forms and generate and display the note.



The information is displayed in a word processor that allows you to make changes and save it directly. If you have transcribed additional information, your typist may enter the changes directly into the note and save it for your review.

Once your notes have been saved you will have additional buttons at the top of the screen.

If your notes are compete you may sign off on them and file them by clicking the button. Once they have been filed you may no longer make any changes to the document but only add amendments to the document.

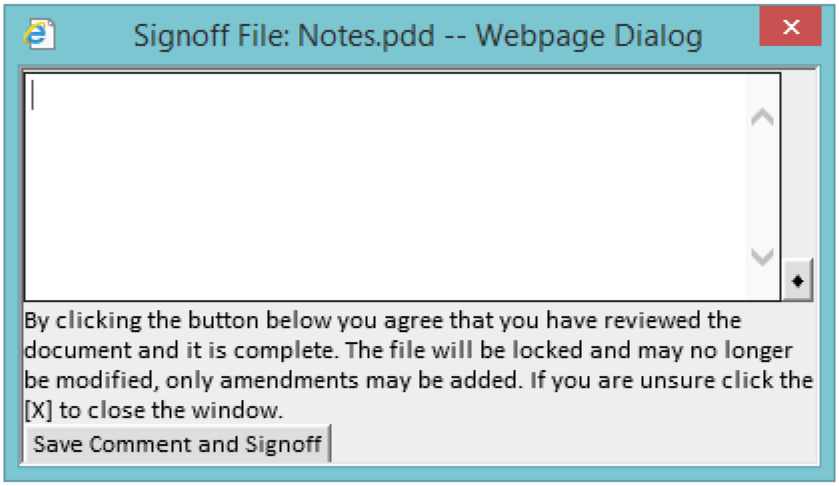
The "Work List" button will allow you to edit the work list item for the note.

After signing off on your notes they will redisplay. You will notice two things.

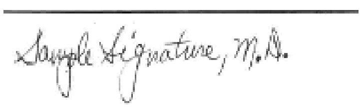
The first is that your electronic signature is at the bottom of the form. The other is at the top are two buttons. A printer icon and the "Add Amendment" button. Use the Printer icon if you need a hardcopy of the note.

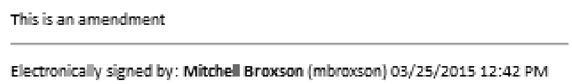
In the event you need to add additional information to the note click on the "Add Amendment" button.

A dialog box will appear for you to enter your amendment.

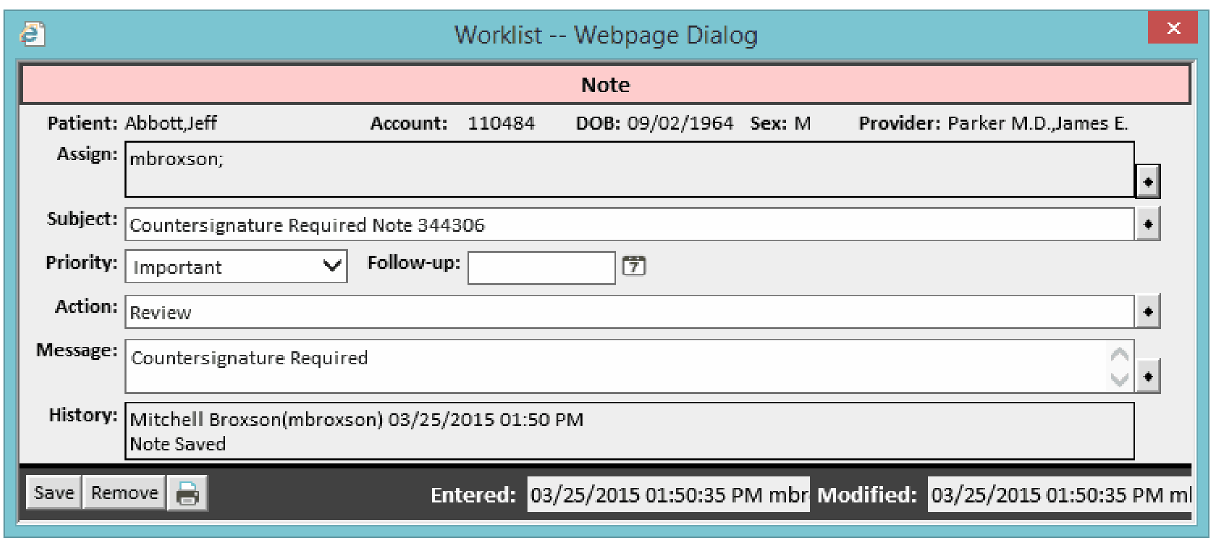


When you save the amendment it will immediately be added to the original note with an electronic signature.





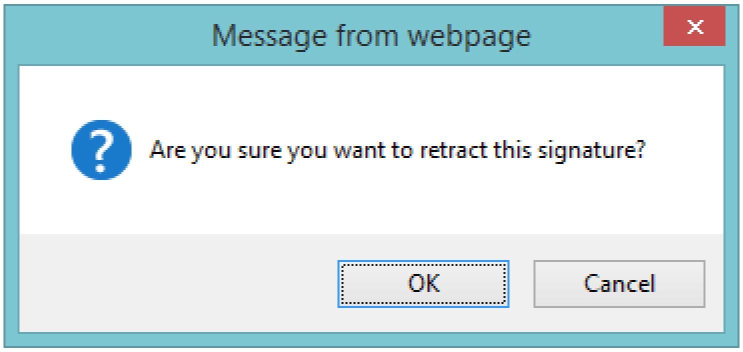
If a note requires a counter signature it will force you to create a worklist item for the note to send to a user who is authorized to provide the countersignature.



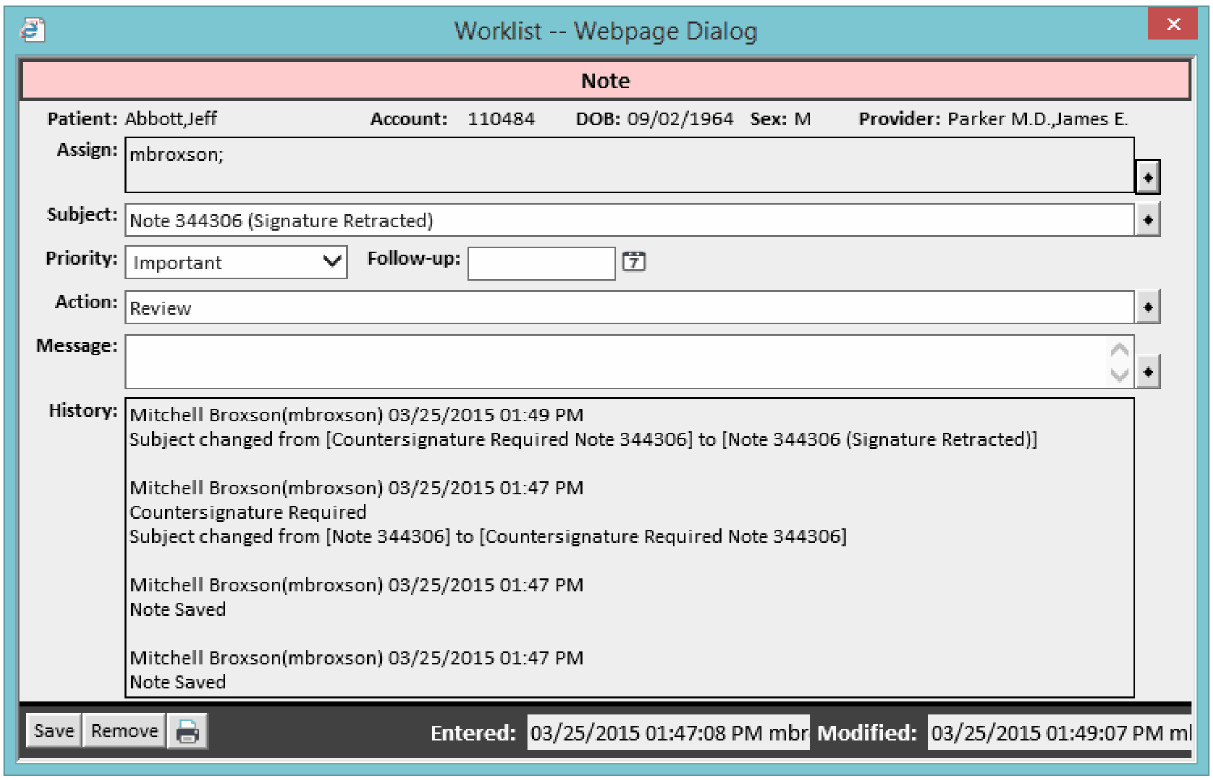
When that user access the note they will see the following at the top of the note.

They may then click the Countersignature button to counter sign the note. The note will then display two signatures at the bottom.

The user that created the signature may retract the Note Signature. This is done by hovering over the signature and clicking. You will then be prompted.



By pressing OK you will be required to complete an Note Worklist item.



once this is saved the signature will be retracted and the note editor will show once again.

This button will show the work list item for the note.

This item will display and allow you to edit the a sticky note for a note. You do not have to have a saved note to create a sticky note.

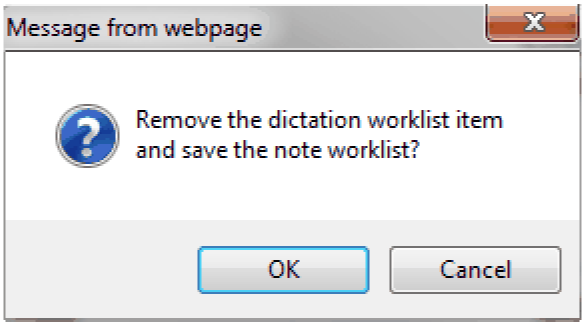
The Dictation button will only display if the "Dictation.wav" file is configured as a button file template. This button is unique in that it allows you to record dictation that is stored with the Note. When you perform your initial recording it will also create a Dictation work list item for the provider on record for the Note.

When the dictation is saved it will save a base note along with it.

The typist may then review the providers dictation work list. Selecting a dictation item from the work list will pull up the Notes for the Encounter, and start the dictation playback in a separate window. The typist may then listen to the dictation while typing in the Notes on the Encounter.

If using a program such as "transcription buddy" the typist may also use foot controls to start / stop / rewind / etc. the dictation recording.

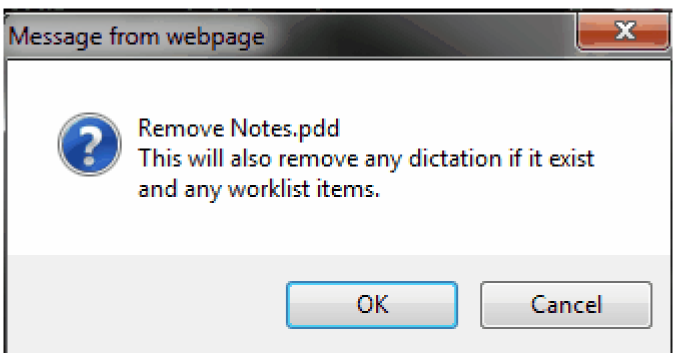
When the typist saves the notes, they will be prompted.



The provider may then review the notes and sign off on them.

This button will show the dictation work list item if it exist.

This button will prompt you.

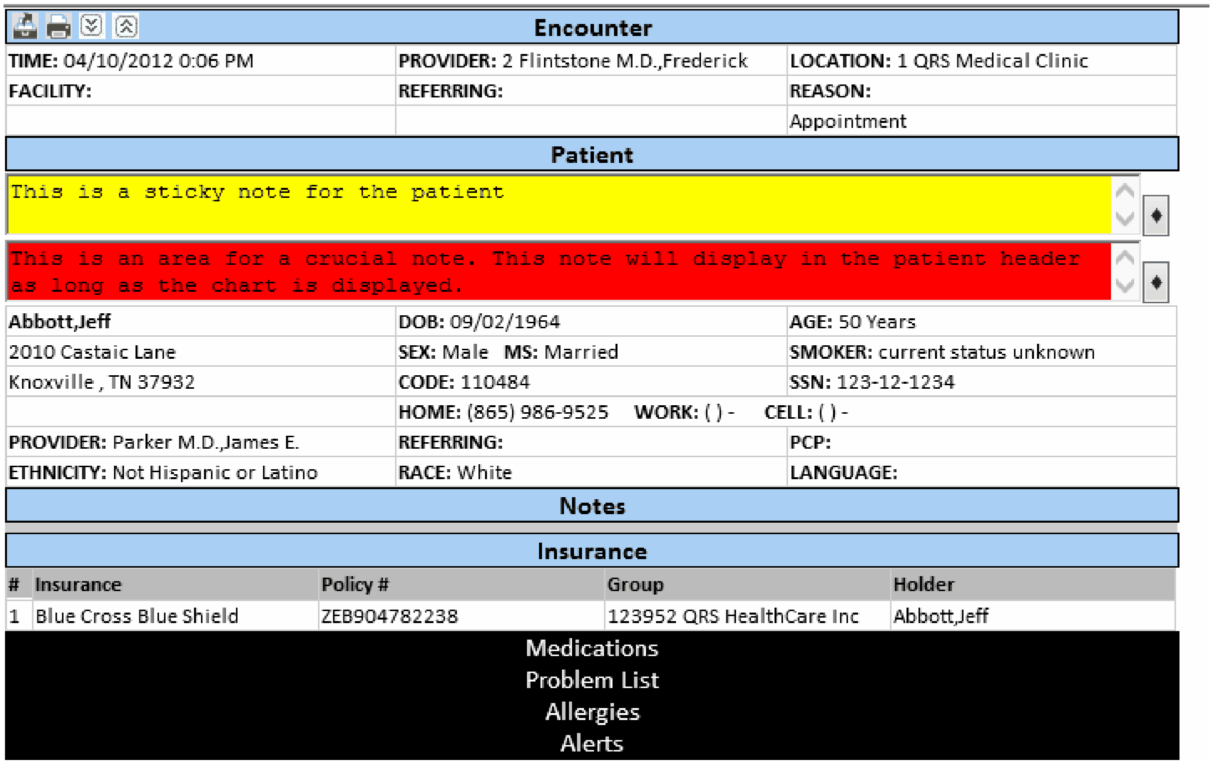


By clicking OK the notes, dictation and any work list items will be removed.

6.5.1.2 Cover Page

The Cover page gives a global overview of the Patient and Encounter if your are working in an Encounter. The Cover Page is fully customizable by practice, or by user. The Cover Page discussed here is the default cover page that is shown if a custom cover page is not in place.

The Cove page make use of the "show/hide bars". Be default the Encounter Patient Notes and Insurance information is displayed with the Medications, Problem List, Allergies, Alerts, and Trackable Data hidden.



In the Patient section you will see a yellow area that stores a patient sticky note.

You may show or hide any section of the cover page by clicking on the "show/hide bar" above the section.

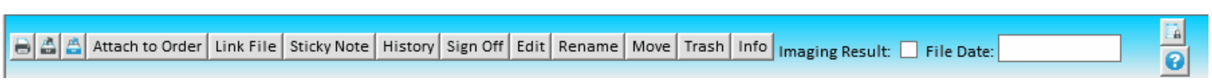
At the top of the cover page you may notice a small toolbar.

The Printer icon lets you print the cover page. It will print only the sections that are shown, and the sticky notes will NOT print, they are internal.

The other two icons let you either show all items or hide all items.

6.5.2 Document Header

When a document is displayed in the file display area a header will be above it that list all the actions and functions available with that document for you. It will appear similar to the following:



The Buttons will change depending on your security, the document, where it is located and various other data. The following are all of the buttons and when they will display.

6.5.2.1 Print

 The Print button will only display on HTML / TEXT documents that can not be edited, either they have been signed off or the folder is locked down. This will allow you to print these documents. All

other documents will have there own print abilities.

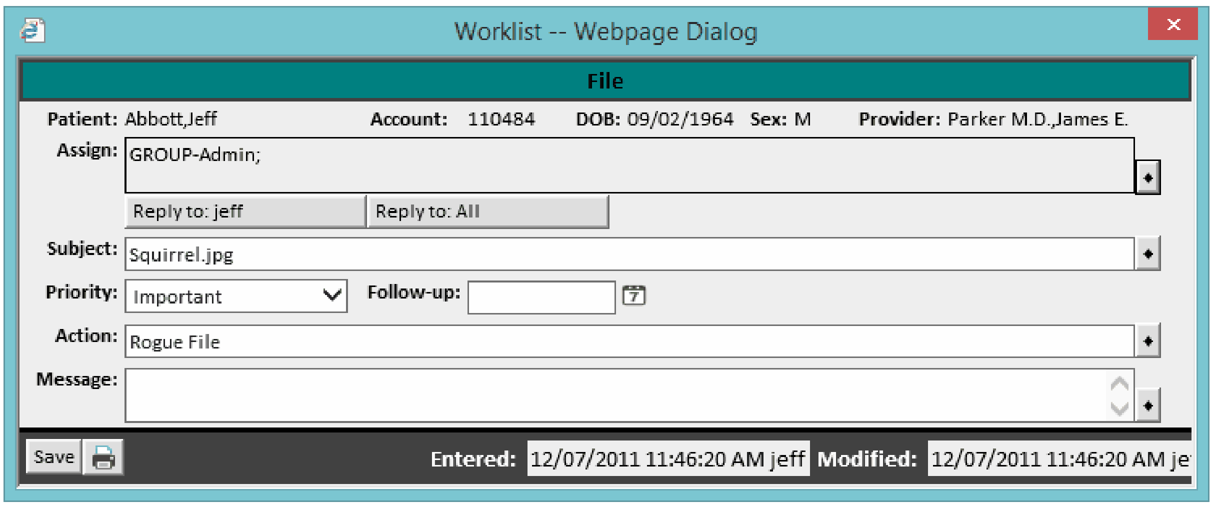
6.5.2.2 Outbox

The black outbox button will allow you to send a copy of that document to the patient outbox. From there you may archive the document or send to the QRS Patient Portal.

The blue outbox button will allow you to send a copy of that document to the user outbox. From there you may archive the documents to send to a third party.

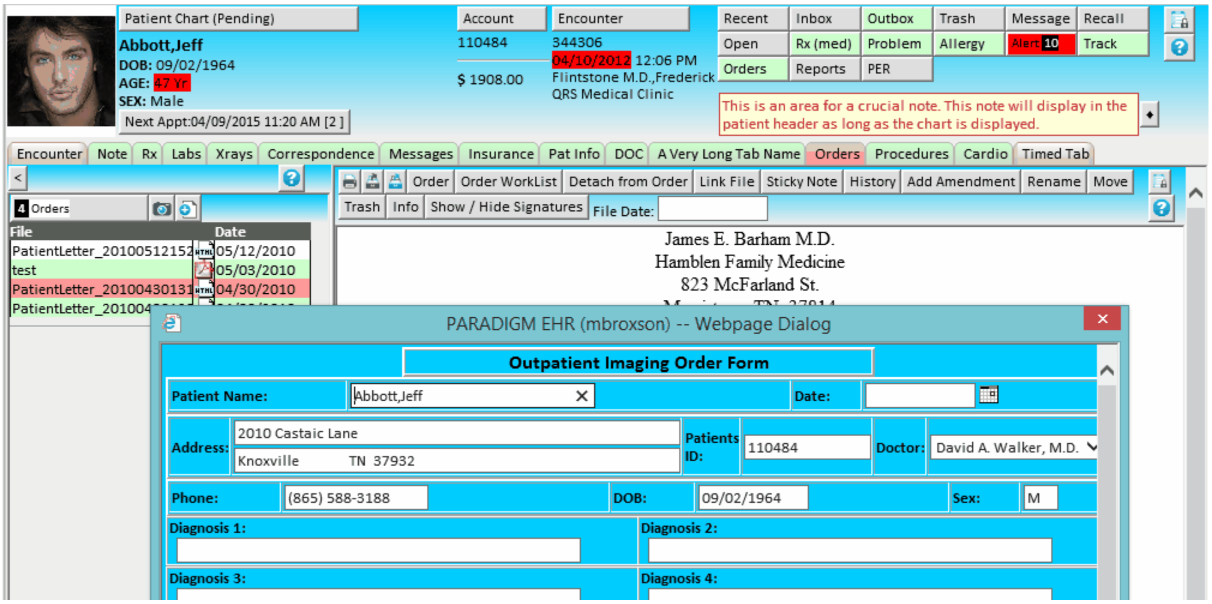
6.5.2.3 WorkList

The WorkList button will appear if the chart is displaying the Pending files or the Patient Orders. Clicking on this button will display the work list item for the file and allow you to edit it, if you have privilege.



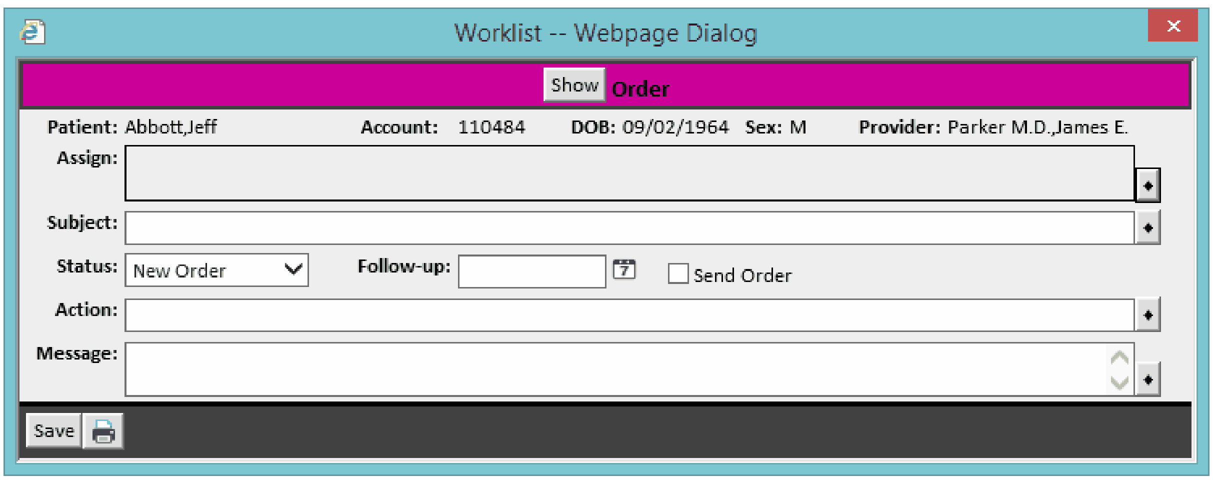
6.5.2.4 Order

The Order button will appear in any tab, if the document has an Order attached to the document (or the document is attached to an order). Pressing this button will show the order for the document in a pop up window.



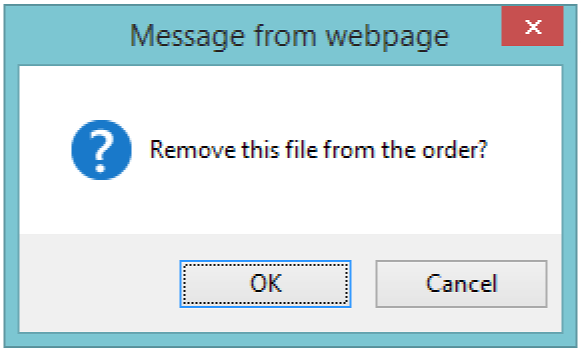
6.5.2.5 Order WorkList

The Order WorkList button will appear in any tab with the exception of the "Patient Orders" area, if the document has an Order attached to the document (or the document is attached to an order). Pressing this button will show the order work list for the document in a pop up window.



6.5.2.6 Detach from Order

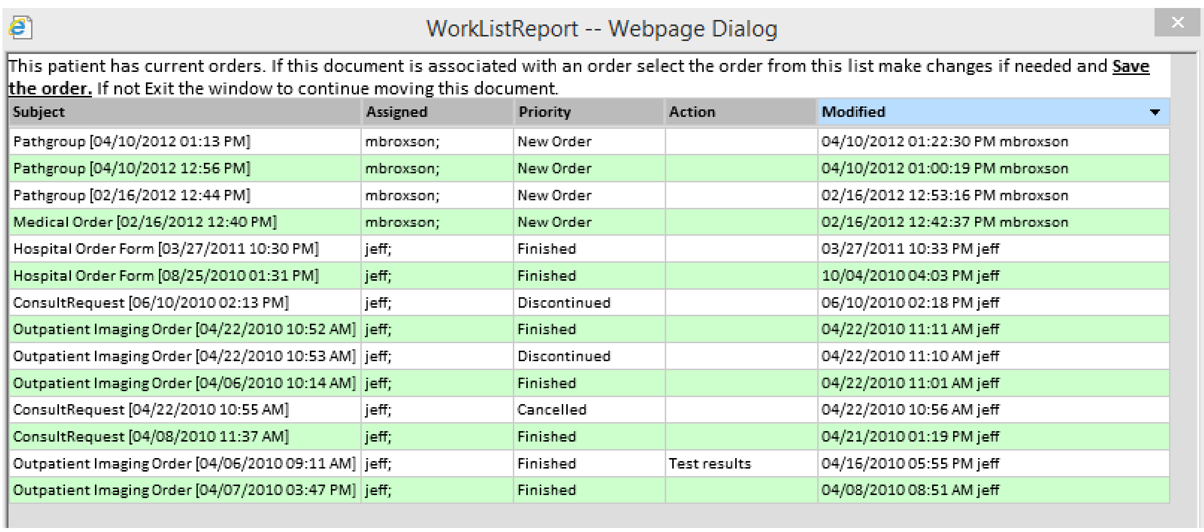
The Detach from Order button will appear in any tab with the exception of the "Patient Orders" area, if the document has an Order attached to the document (or the document is attached to an order). Pressing this button will show the following confirmation box.



Clicking OK will remove the link that connects the document to an order and redisplay the file. You may now notice the Attach to Order button.

6.5.2.7 Attach to Order

The Attach to Order button allows you to attach a document to an open order. Open orders have a status of New Order, Pending Results, or On Hold.
By pressing this button the following window will appear:

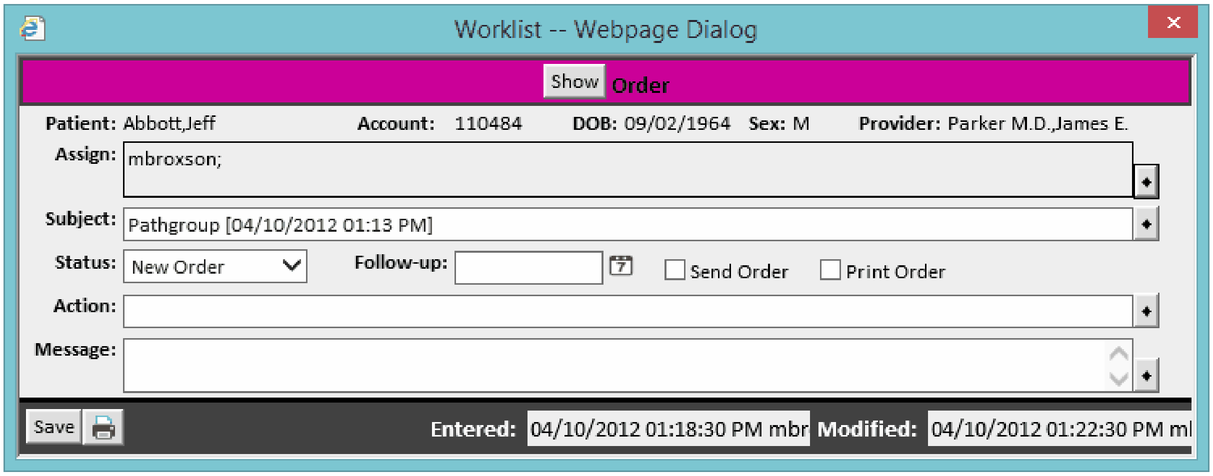


WorkListReport -- Webpage Dialog

This patient has current orders. If this document is associated with an order select the order from this list make changes if needed and **Save the order.** If not Exit the window to continue moving this document.

Subject	Assigned	Priority	Action	Modified
Pathgroup [04/10/2012 01:13 PM]	mbroxson;	New Order		04/10/2012 01:22:30 PM mbroxson
Pathgroup [04/10/2012 12:56 PM]	mbroxson;	New Order		04/10/2012 01:00:19 PM mbroxson
Pathgroup [02/16/2012 12:44 PM]	mbroxson;	New Order		02/16/2012 12:53:16 PM mbroxson
Medical Order [02/16/2012 12:40 PM]	mbroxson;	New Order		02/16/2012 12:42:37 PM mbroxson
Hospital Order Form [03/27/2011 10:30 PM]	jeff;	Finished		03/27/2011 10:33 PM jeff
Hospital Order Form [08/25/2010 01:31 PM]	jeff;	Finished		10/04/2010 04:03 PM jeff
ConsultRequest [06/10/2010 02:13 PM]	jeff;	Discontinued		06/10/2010 02:18 PM jeff
Outpatient Imaging Order [04/22/2010 10:52 AM]	jeff;	Finished		04/22/2010 11:11 AM jeff
Outpatient Imaging Order [04/22/2010 10:53 AM]	jeff;	Discontinued		04/22/2010 11:10 AM jeff
Outpatient Imaging Order [04/06/2010 10:14 AM]	jeff;	Finished		04/22/2010 11:01 AM jeff
ConsultRequest [04/22/2010 10:55 AM]	jeff;	Cancelled		04/22/2010 10:56 AM jeff
ConsultRequest [04/08/2010 11:37 AM]	jeff;	Finished		04/21/2010 01:19 PM jeff
Outpatient Imaging Order [04/06/2010 09:11 AM]	jeff;	Finished	Test results	04/16/2010 05:55 PM jeff
Outpatient Imaging Order [04/07/2010 03:47 PM]	jeff;	Finished		04/08/2010 08:51 AM jeff

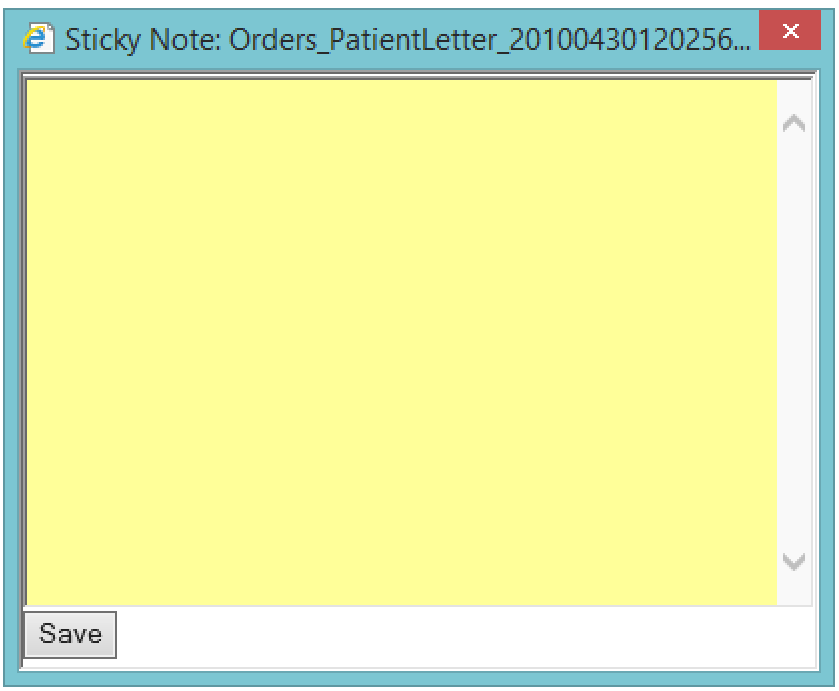
Select the Order you want to attach the document to from the list. The Order Work List item will then appear.



Make any necessary change to the order work list and ***save*** it to attach the order. Failure to save the order work list item will return control back to the Order list.

6.5.2.8 Sticky Note

The Sticky Note button allows you to attach a sticky note to a document. These notes are internal and will not print with the documents. Pressing this button will show the Sticky Note form.



Enter the information you want to save in the sticky note and press the Save button. The Sticky Note will automatically appear each time the file is displayed in the future.

6.5.2.9 Sign Off

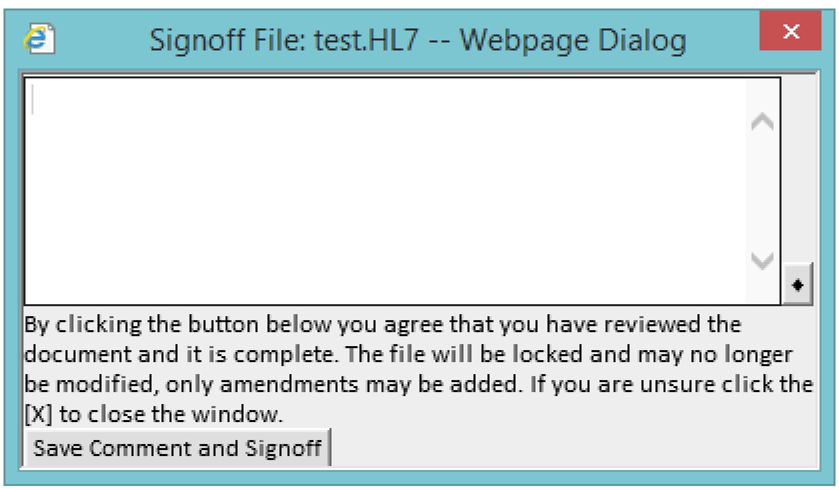
The Sign Off button allows you to place an electronic signature on a document. The electronic signature meets the definition of such based on the
Personal Information Protection and Electronic Documents Act.

PIPEDA definitions

(1) An electronic signature is "a signature that consists of one or more letters, characters, numbers or other symbols in digital form incorporated in, attached to or associated with an electronic document";
(2) A secure electronic signature is as an electronic signature that
  (a) is unique to the person making the signature;
  (b) the technology or process used to make the signature is under the sole control of the person making the signature;
  (c) the technology or process can be used to identify the person using the technology or process; and
  (d) the electronic signature can be linked with an electronic document in such a way that it can be used to determine whether the electronic document has been changed since the electronic signature was incorporated in, attached to or associated with the electronic document.

You must have a signature file for your user name in order to sign off on any documents.

When you press the Sign Off button the following will appear.

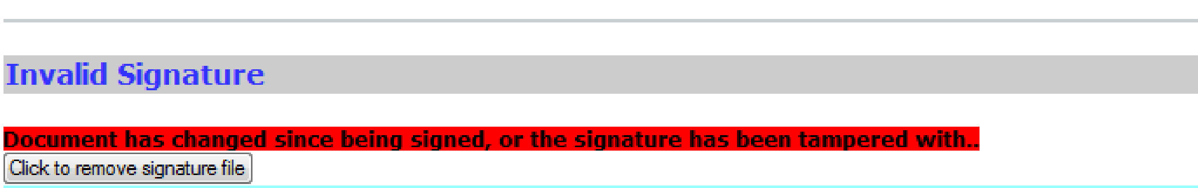


In the dialog box you may make a comment to store with your signature. Click on the Save Comment and Signoff button to save your signature.

The Document will then redisplay with the signature and comment below the Document Header and above the actual documents.

Once a document has been signed off, it will no longer be able to edit it from within the PARADIGM EHR system.

If either the document or the signature file attached to the document are modified in any way the signature will be rendered invalid and the following will display.

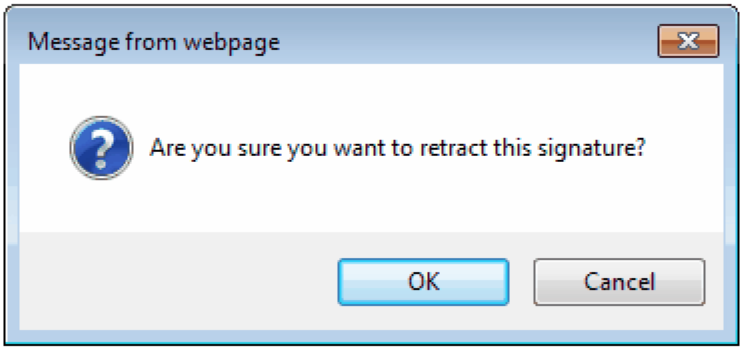


You must then remove the signature file and sign the document again if you wish to lock it within PARADIGM EHR.

Sign Off does not apply to Patient Orders.

6.5.2.9.1 Retract a Signature

The user that signs a document has the right to retract the signature. This is done by hovering over the signature area of the document and clicking. The will then be prompted.



By pressing OK the signature will be retracted and normal file operations will resume.

6.5.2.10 Add Amendment

If a document has already been signed off and you want to add an additional comment to it you may use this button. This will also add another signature to the file as well.

You must have a signature file defined for your account to sign off documents.

Add Amendment does not apply to Patient Orders.

6.5.2.11 Edit

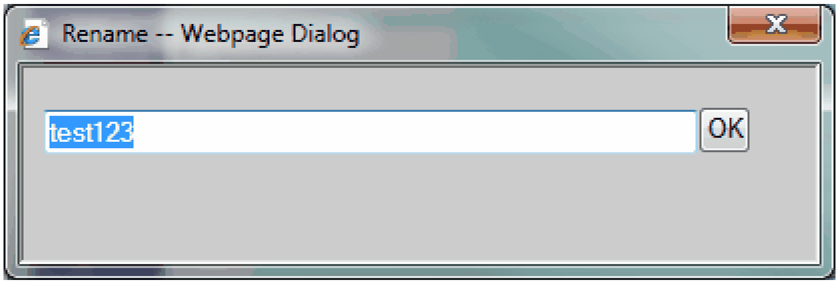
The Edit button applies to all external type documents such as PDF, JPG, TIF, DOC, XLS that are edited externally of the PARADIGM EHR software using an application on your PC. If the file has edit ability because it has not been signed off or locked down because of the tab it is in.

Pressing this button download the file to your PC (MSIE only) and execute the program designated to edit the file. When you save the file it will automatically upload back into the chart and be filed in the same place.

Internal HTML, Text, and PDD documents will allow you to save them if editing is allowed.

6.5.2.12 Rename

The Rename button allows you to rename a file. Pressing the button the following dialog will appear.

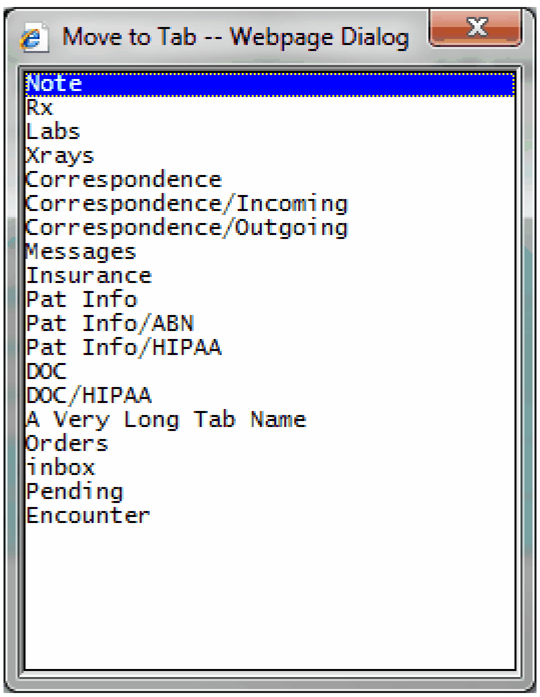


Enter the new name of the file and press OK. The file will be redisplayed with its new name.

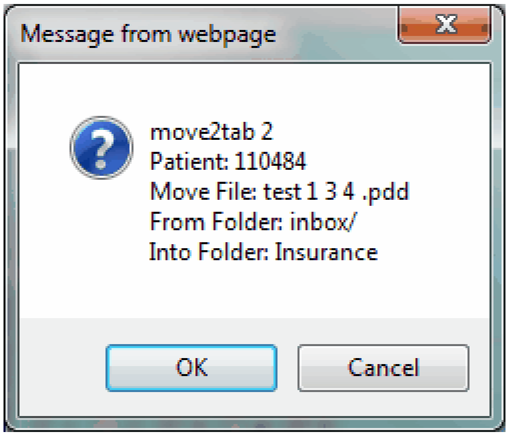
This does not apply to patient orders.
To Rename a file you must be able to edit the file or have administrative access defined in RBAC.

6.5.2.13 Move

This will allow you to move a file to another tab within the patients chart. Pressing the button will display a dialog that allows you to select from a list of tabs and sub folders.



After selecting from the list a confirmation box will display.

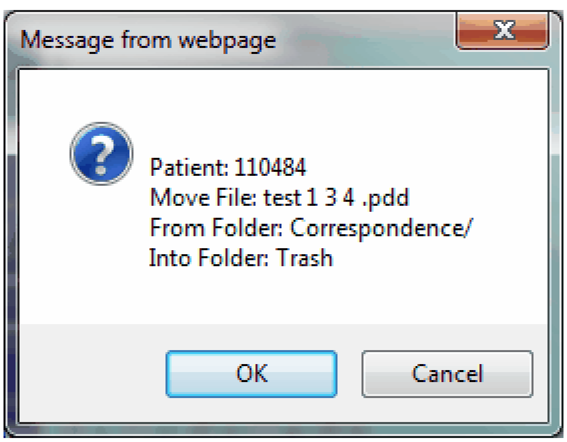


Click OK to complete the move.

This does not apply to patient orders.
To Move a file you must be able to edit the file or have administrative access defined in RBAC.

6.5.2.14 Trash

The Trash button allows you to move a file to the Trash can. By Pressing this button you will see a confirmation box similar to the following:

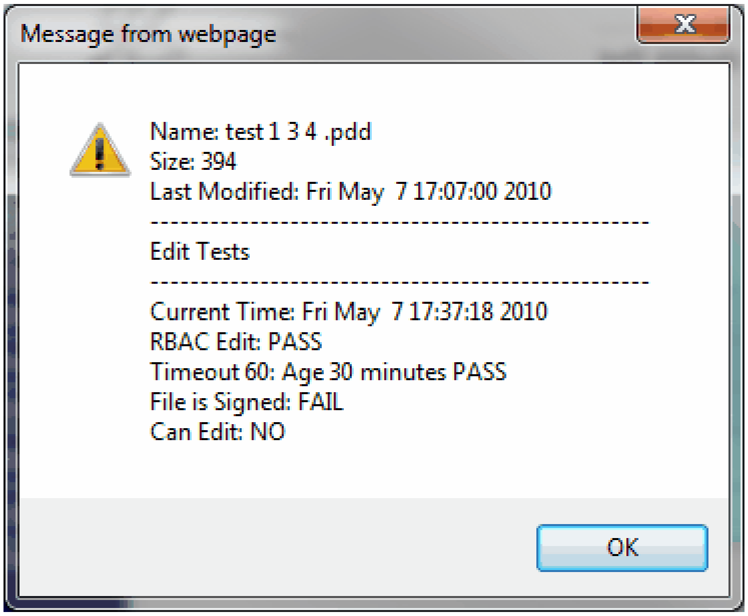


Press OK to complete the Move.

This does not apply to patient orders.
To Trash a file you must be able to edit the file or have administrative access defined in RBAC.
You must also have RBAC access to "Trash".

6.5.2.15 Info

The Info button gives you information on the file displayed. By Pressing it you will see an information box similar to the following:



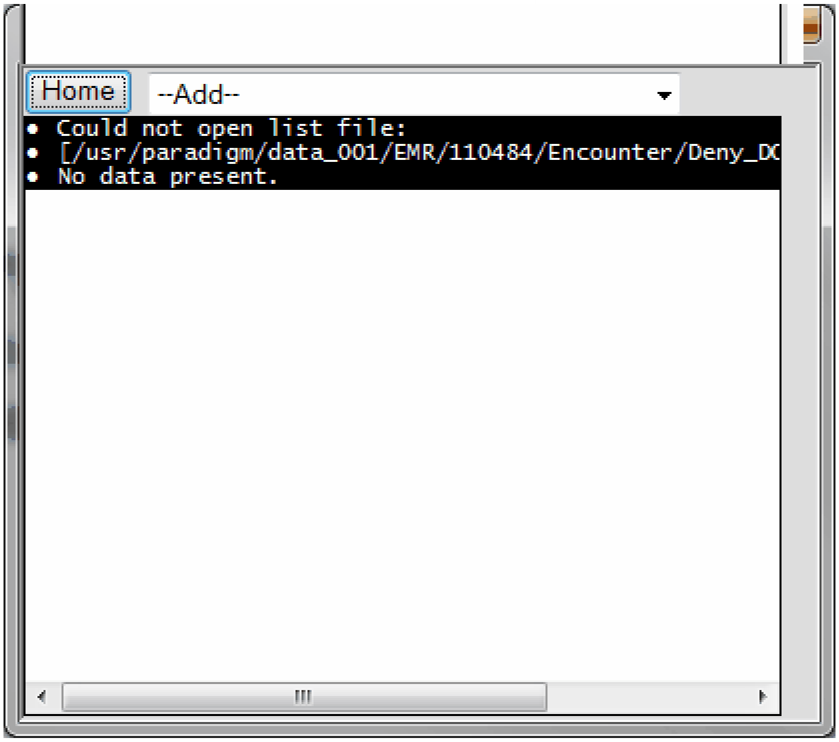
This tells the full file name, size, last modified and it Edit Test.

6.5.2.16 Show / Hide Signatures

The Show / Hide Signatures button will display if there are signatures attached to the document. The Signatures will display directly under the Document Header that includes this button. By default a document will display with the signatures. Pressing this button will hide the signatures and display the document only. Pressing the button again will display the signatures along with the document.

6.5.2.17 Lock document

 Clicking this will display the Deny List for the document displayed.

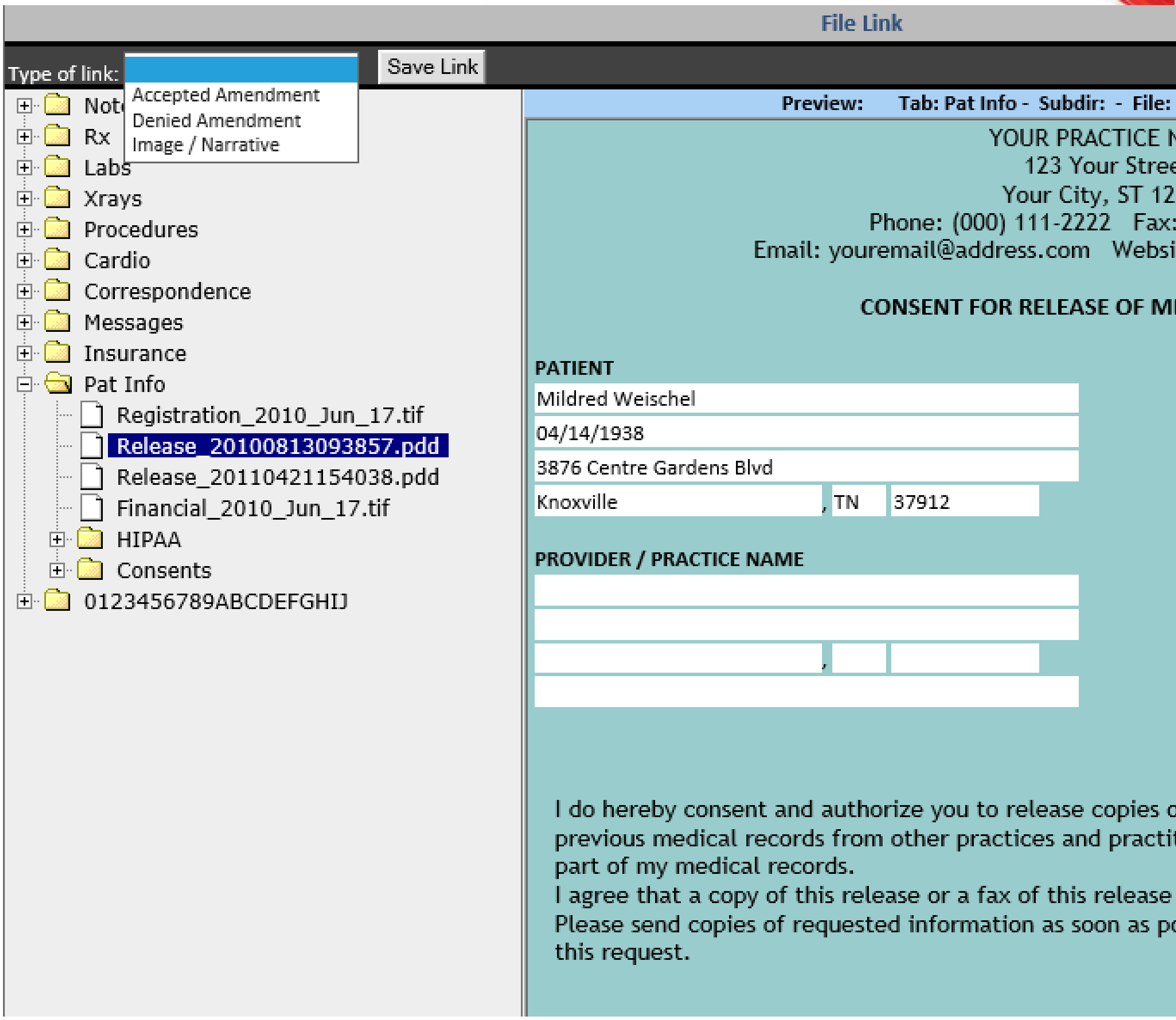


Here you may add users or groups that you do not want to have access to this file.

6.5.2.18 Link File

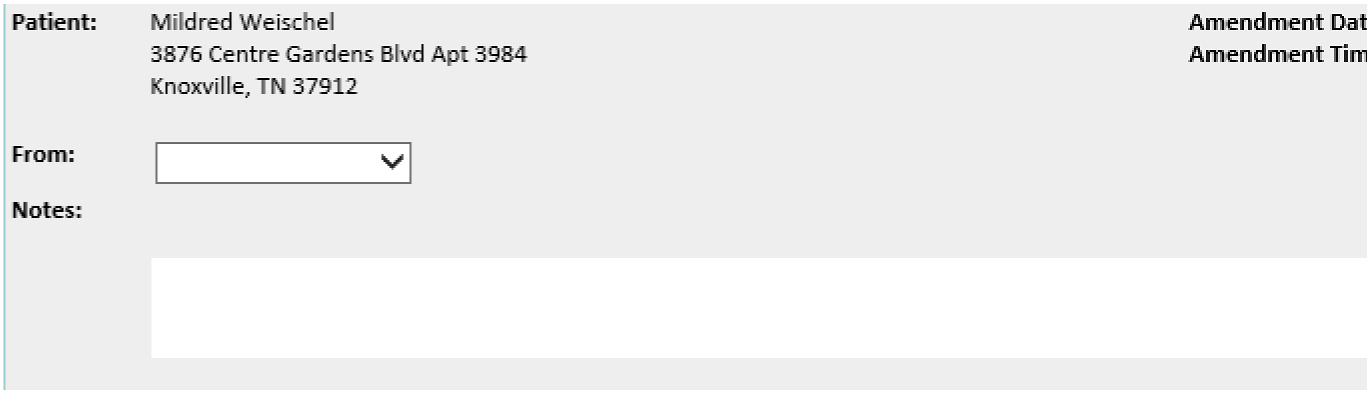
The Link File button on the Document Header section of the chart allows for two files within the patient's chart to be linked to each other.

The types of links allowed are:
Accepted Amendment - Used to accept an amendment to the chart from the patient, another provider, or another party.
Denied Amendment - Used to document that the patient, another provider, or another party has requested an amendment to the patient's chart and you are denying their request.
Image / Narrative - Used to link an Imaging Result to the Narrative interpretation of that result.



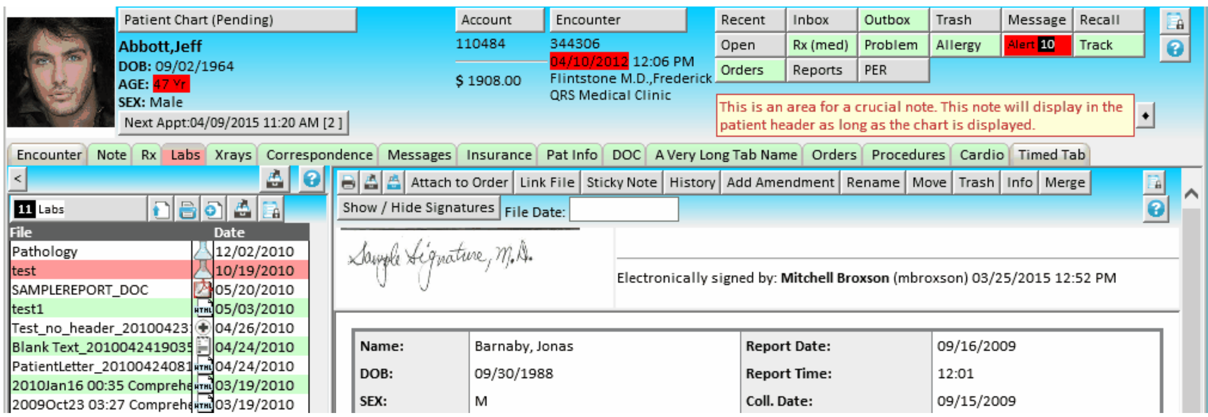
6.5.2.18.1 Chart Amendment

The Chart Amendment Template can be created to document any amendment request that comes from the patient, another provider, or another party. When used in conjunction with the Link File mechanism, the Chart Amendment can be documented as accepted into the patient's chart or denied as an amendment to the patient's chart.



6.5.3 Document Signatures

The area between the Document Header and the Document Display area will show any signatures attached to that document.



You may use the "Show / Hide Signatures" button to hide the signatures.

6.5.4 Document Display

The area under the Document Header and Document Signatures will display the actual document.

6.6 Working with PARADIGM Data Documents

PARADIGM EHR allows you to store and retrieve many document types. These can be simple text documents, word, excel, images, audio, or even video. But all of these documents are know as external documents and require that an external program on you workstation be used to edit or make any changes to these documents.

PARADIGM EHR has its own internal document type known as a PARADIGM EHR Data Document. The PDD allows you to quickly and enter information on for a patient and store that data within the patients chart. When retrieved the data tells PARADIGM EHR what form was used to create the data and displays the form with the data that was stored. This data is also accumulated on a nightly basis an put into (Comma Separated Value) CVS tables. This allows the data to easily be imported into other applications for the purpose of analysis or reporting.

PDD documents can be used anywhere within a patients chart but are commonly used for gathering Encounter Data. This data is then retrieved by the Note Generator to create an encounter note for the patient. You will also see all other system type forms such as medications, work lists, recalls and followup's using PDD forms.

PDD forms are written by programmers skilled in HTML and Javascript. The Programmers have been given many programming tools at their disposal to make writing the forms easier, faster, and more consistent. These "widgets" as they are known also allow for added flexibility and generally make PARADIGM EHR more user friendly.

6.6.1 The PDD Toolbar

You will find the PDD Toolbar at the bottom of each PDD form. It will appear similar to the following:

This toolbar will have up to four buttons on it. The buttons that display depend upon several factors.

Save Button
The Save Button will save the data data you entered in the PDD form. The Save button will not display if your user defaults are set to "Ask to Save" or "Automatic Save" until a change is made on the form. Upon Saving the PDD form will validate the data entered in the form and display any validation errors.

Cancel Auto Save
If your user default is set to "Automatic Save" the "Cancel Auto Save" button will display once the Save button displays. This allows you to cancel the automatic save if for some reason you do not want the form to be saved when you exit the form.

Print Button
The Print Button will display after a form has been saved with data. Clicking the Print button will regenerate the form in a pop up window, execute a printer dialog and close the pop up window. This allows you to only print a form if that is what is stored in the form, it also allows a header to be placed at the top of the form showing the patient information. (Some forms may not display this header because the programmer opted not to)

History Button
The History Button will open up a pop up that displays the history of each time the form was modified and by whom.

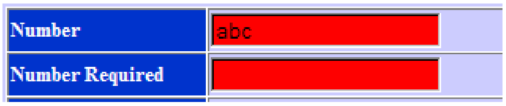
The PDD Toolbar also displays when the data was originally entered and last modified.

6.6.2 Form Validation

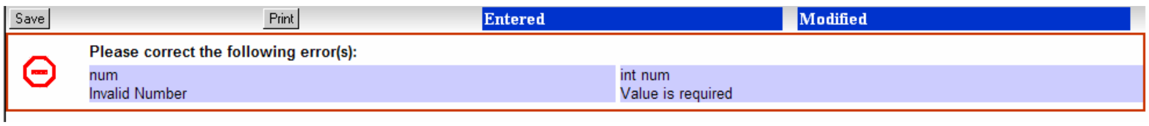
Whenever a form is saved it will first execute a validation function. This function ensures that the data stored in the form meets the criteria that the programmer specified when creating the form. This includes checking the form for any of the following:

- Required Field
- Integer Numeric Entry
- Floating Point Numeric Entry
- String Entry
- Alpha Numeric Entry
- Zip Code Format
- Date Format
- Email Format
- SSN Format
- Money Format
- Phone Number Format

When a you attempt to save (submit) the data, any field that is not completed properly or is required and does not have any data in it, will display in error.



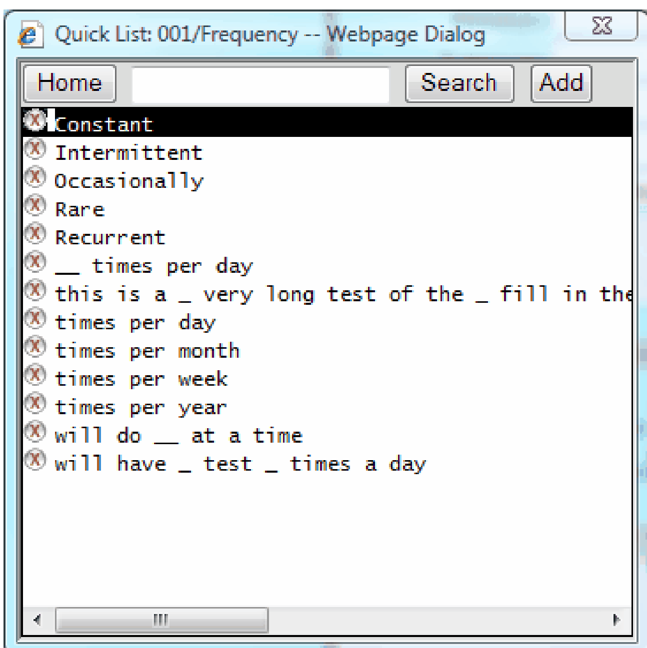
Also, at the bottom of the form, after below the Save Button, an error box will display showing all the fields in error along with the error.



You must correct the errors and Save (submit) the form again.

6.6.3 Quick Lists

Quick Lists are a "widget" that a programmer may use if they want to give you a list of items to choose from. Quick Lists are similar to "Select Boxes" also known as "drop down selects", but offer much more flexibility.



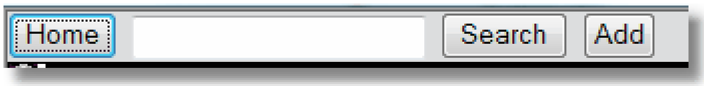
QuickList provides several advantages over a traditional select:

- It is dynamic
- values can be stacked
- Items can be added to list by the user
- It is searchable
- Lists can be gobal (all data sets), by data set, by user
- Supports *Fill in the Blank* data

With the traditional select list, the programmer must statically define, or use a predefined function to populate this options. The drawback to this is that all of this data has to be included on the HTML form. This slows down the HTML form, especially on forms that may include long list, such as diagnosis or procedure list. Multiples of these type of select list will just exaseparate the problem. Because the QuickList is dynamic it does not gather the data to display until you request it.

6.6.3.1 Quick List Toolbar

At the top of the quick list you will find the Quick List Toolbar. This toolbar will have up to three buttons and one field.

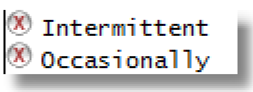


Home Button
The Home Button will reset the display list.

The Search Field and Button
The Search Field and Button will perform a search on the data displayed in the list and only display entries that contain your search criteria.

The Add Button
If this button is active, you may enter a value in the Search field, then press this button. It will add the data to your Quick List.

Removing Entries
If the Add Button is active you will also have the ability to remove entries from your Quick List. You will notice each entry is preceded by an icon.



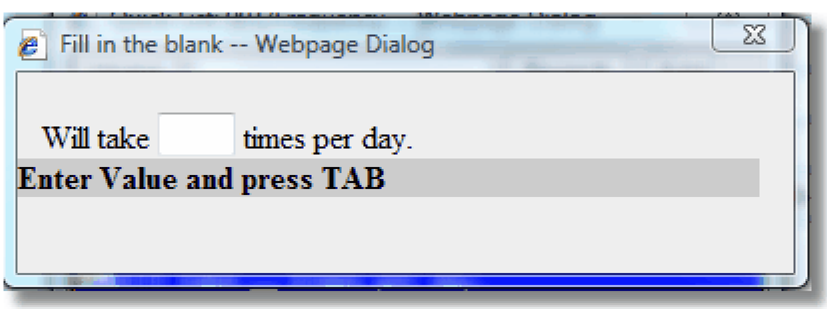
Clicking on the (X) icon will prompt you to remove the entry. If you confirm, the item will be removed.

6.6.3.2 Fill in the Blank

It is possible to create data entries for you Quick List that have "Fill in the Blank" portions. This is done by using the underscore "_" character in the text of your entry, as in:

Will take __ times per day.

When the Quick List program sees this it will prompt you for a value to enter in the fill in the blank area.

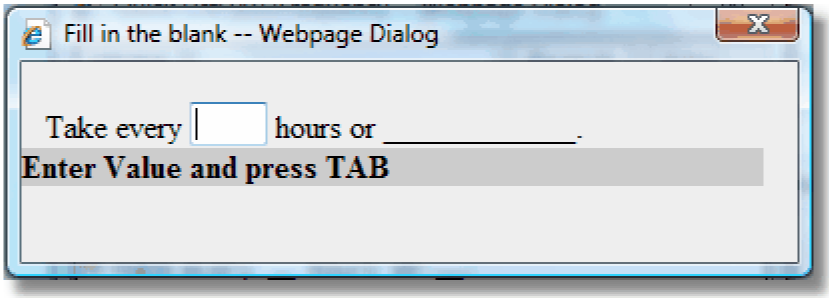


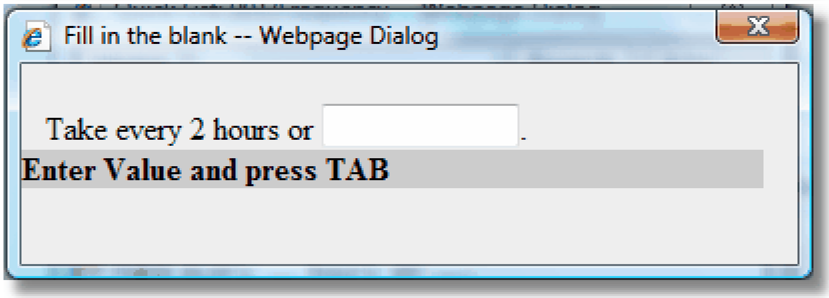
Enter the value and press the TAB key and the entire new value will be sent back to the form.

You may multiple "Fill in the Blanks" as in"

Take every __ hours or ____________.

You will then be prompted for each "Fill in the Blank" Separately.

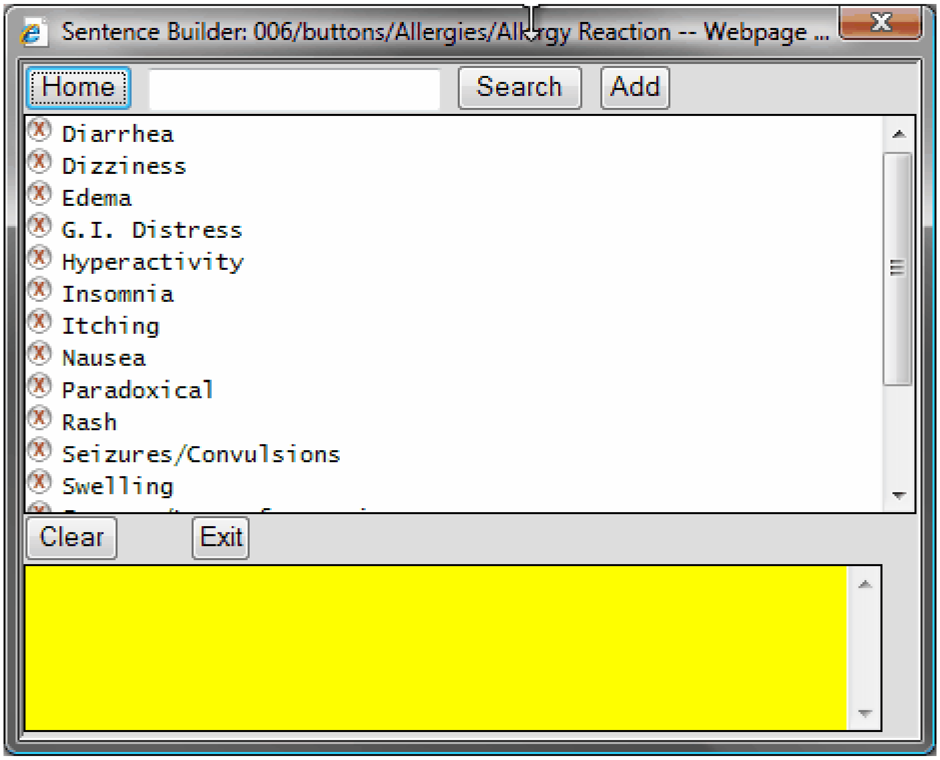




You may also notice that the size of the fill in the blank entry field is directly related to the size of the underscores "_" that you enter in your data.

6.6.4 Sentence Builder

The Sentence Builder is similar to the Quick List, but it allows you to select multiple items to form a sentence to return to the field.



As you select the item it will put them in the yellow box at the bottom. You may edit this box if you like. When you exit the value in the yellow box will be returned to the field.

Then sentence builder also support the PARADIGM Select as options within the sentence builder. You may add entries to reference data from the the PARADIGM data base to pull into your sentences. For example: You want to get a referring providers name and phone number. You could add and Sentence builder item as follows:

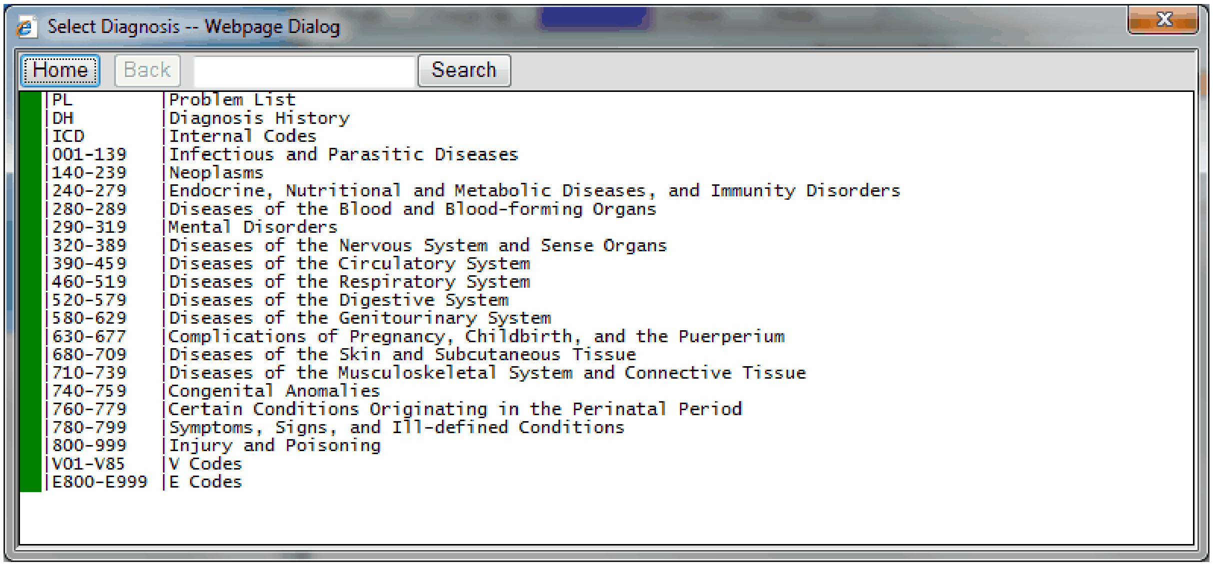
RPH~rph_name~rph_name|rph_phon

This tells sentence builder to pull up PARADIGM select, using the RPH file (referring physician), sort the the rph_name (referring physician name) and display the name and phone number.

Get with your system administrator to help you build any PARADIGM select entries for sentence builder.

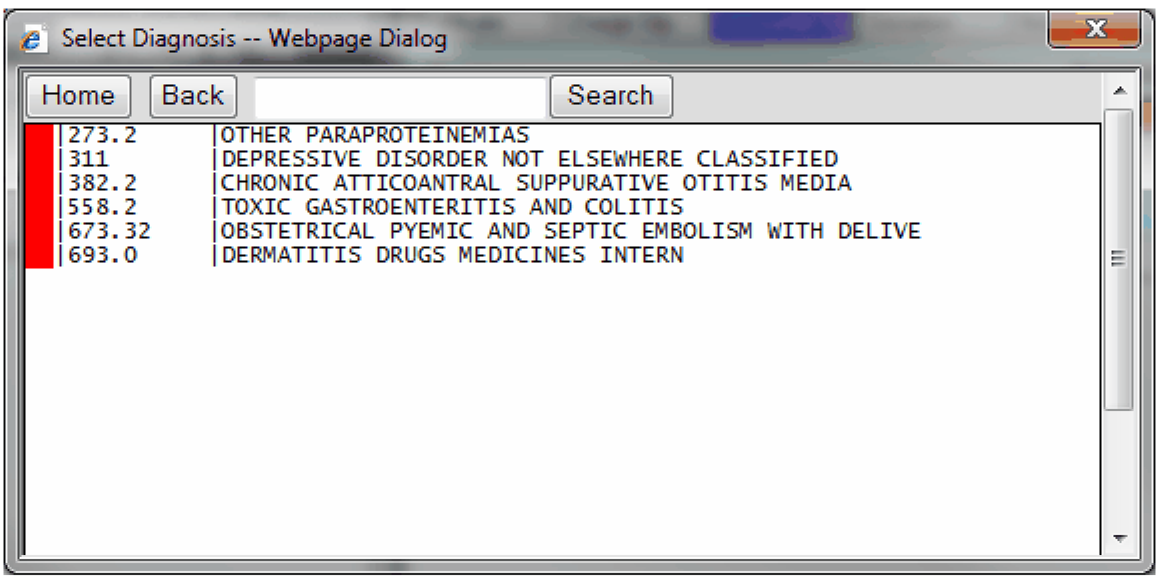
6.6.5 Diagnosis Select

The Diagnosis Select widget allows you to select a diagnosis code on a form. It actually consists of three lists:
The Patient Problem List, Diagnosis History, Internal Codes and "The Book". The widget works very much the same as the diagnosis selector for the Charge Slip.



6.6.5.1 Patient Problem List

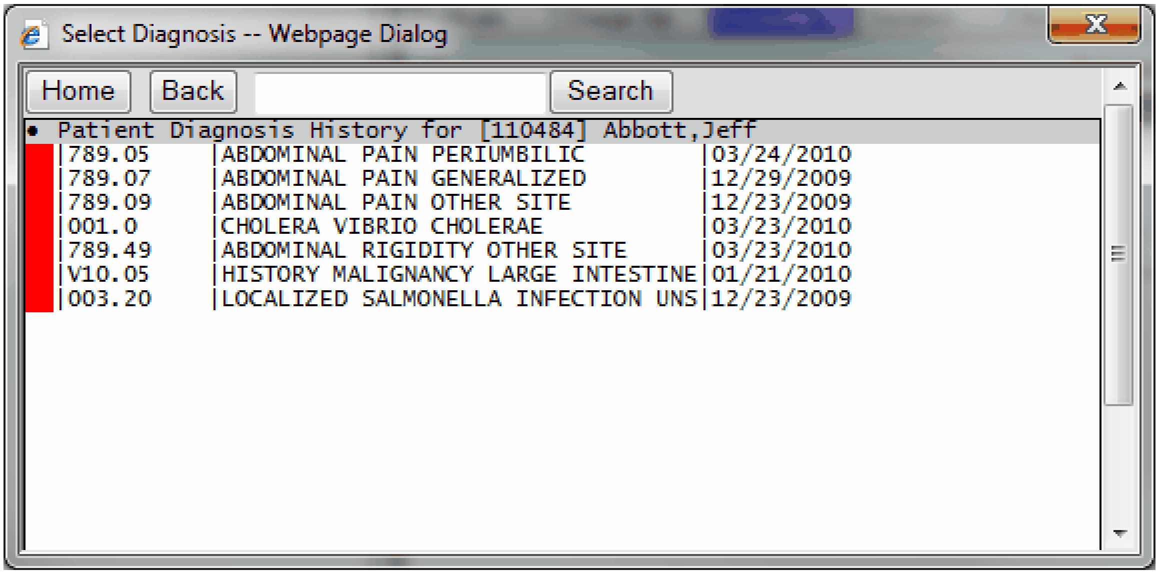
Clicking on Patient Problem List you will see just that. The same diagnosis codes that show in the Patients Problem List.



Click on one of these to put it in your form.

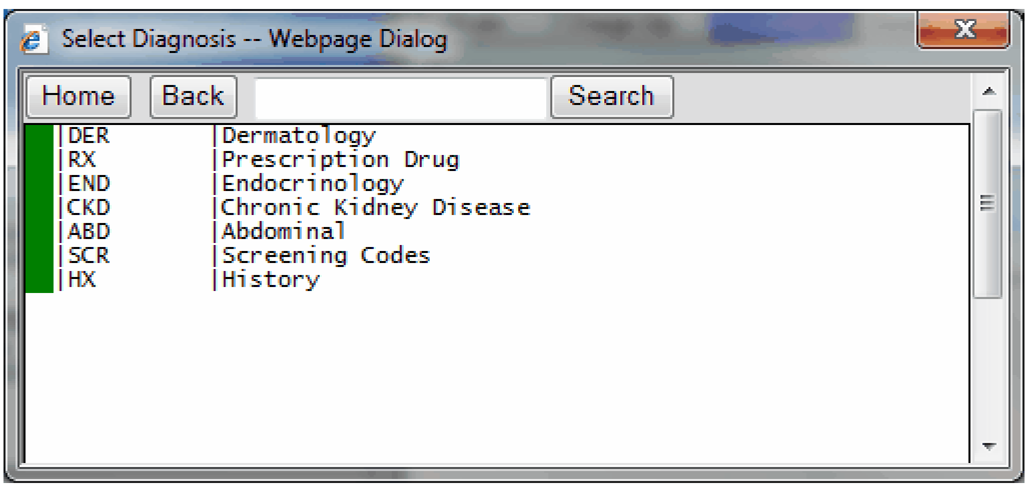
6.6.5.2 Diagnosis History

This will show diagnosis codes used in billing encounters for this patient along with the date first used.

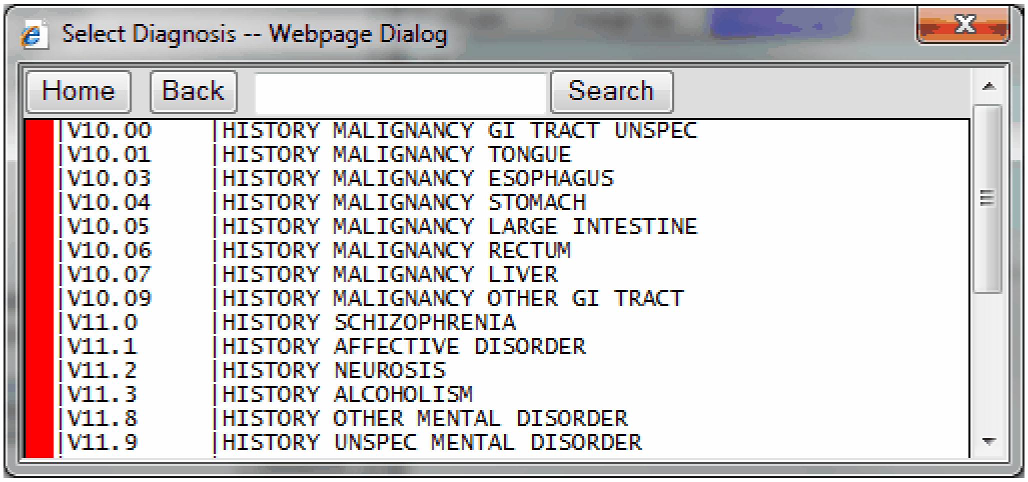


6.6.5.3 Internal Codes

Internal Codes are codes that are established and classified in the PARADIGM system. When you first enter the form you will see the classifications of codes as defined.



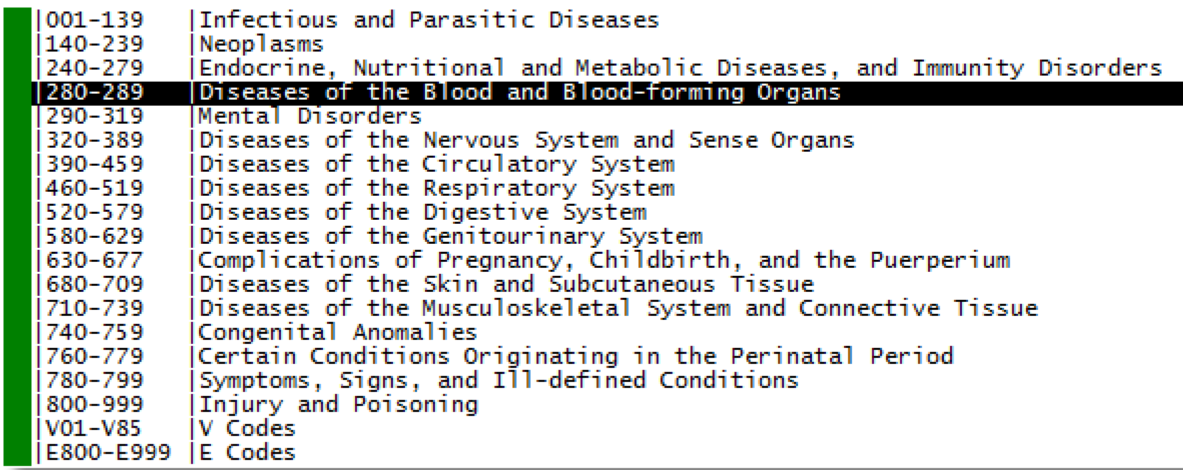
Clicking on any of the groups will display the codes that are in that group.



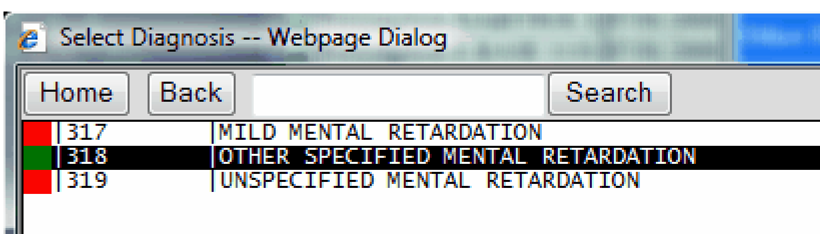
Clicking on one of these will put the code in your form.

6.6.5.4 The Book

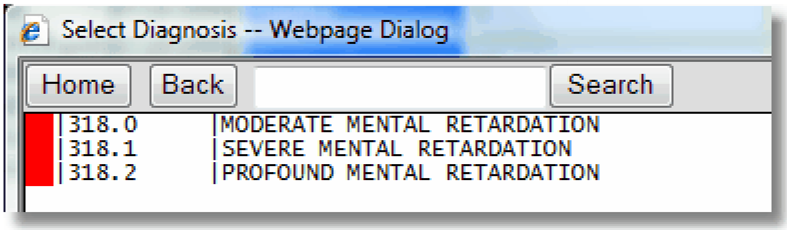
"The Book" is the comprised of the reset of the options on the first screen.



Here you may drill down by category until you find the correct code.

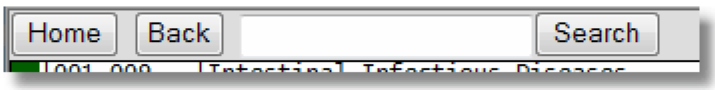


While drilling down you will notice either a Green or Red block next to the code. The Red means that is as far as you can go and clicking that option will put that code into your Charge Slip. Green means you have not found the specific code yet, keep going.



6.6.5.5 Tool Bar

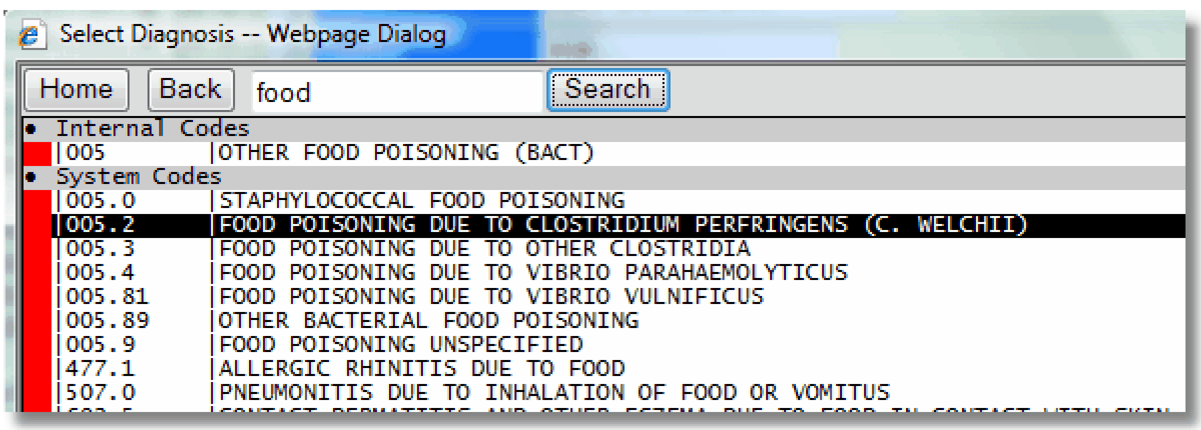
The Tool Bar Controls for the Diagnosis Select are at the top of the window.



Home
The Home Button will take you back to the very top level of the Diagnosis Select.

Back
The Back Button will take you back to the previous level of the Diagnosis Select.

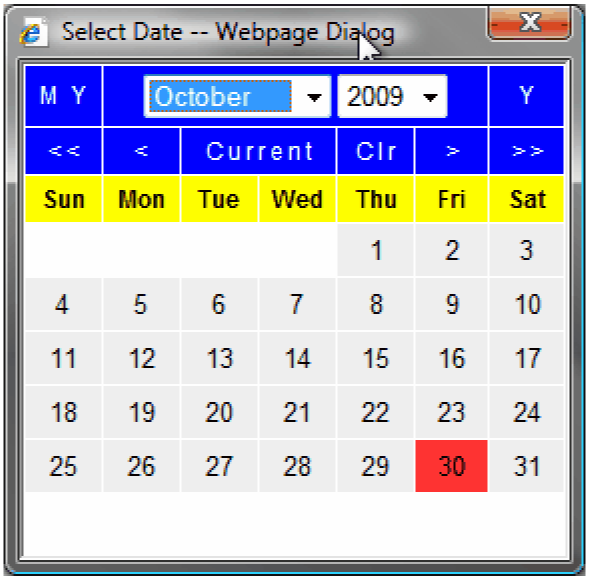
Search
The Search will search through both internal and "The Book" codes and display them. It will only show codes that are complete codes.



6.6.6 Date Select

You will find the Date Selector whenever you find a date field. Some times the date selector will activate just by entering the field, other times you may see a little calendar icon to side of the field.

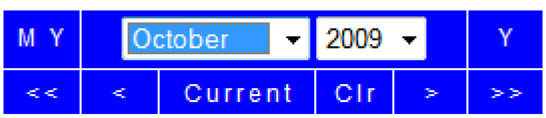
When the date select is activated it will display a popup calendar similar to the following.



6.6.6.1 Date Selector Controls

You may select a date by hovering over the date you want an clicking. But the date you are looking for may not be in the current month.

The Controls are found at th top of the calendar.



Selecting a Month
You may select a month by using either the drop down month selector or the < and > buttons. The < and > buttons will move you forward or backwards one month at a time.

Selecting a Year
You may select a year by using either the drop down year selector or the << and >> buttons. The << and >> buttons will move you forward or backwards one year at a time.

The drop down selector will give you a range from -100 years to +20 years. If you need to go further than that in either direction, select the end of the range, and then open up the year selector again. Now it will display -100 to +20 years from that date.

Selecting the Current Month and Year
The Current button will redisplay the current month and year.

Clearing the entry
The Clr button will return an empty value into the field.

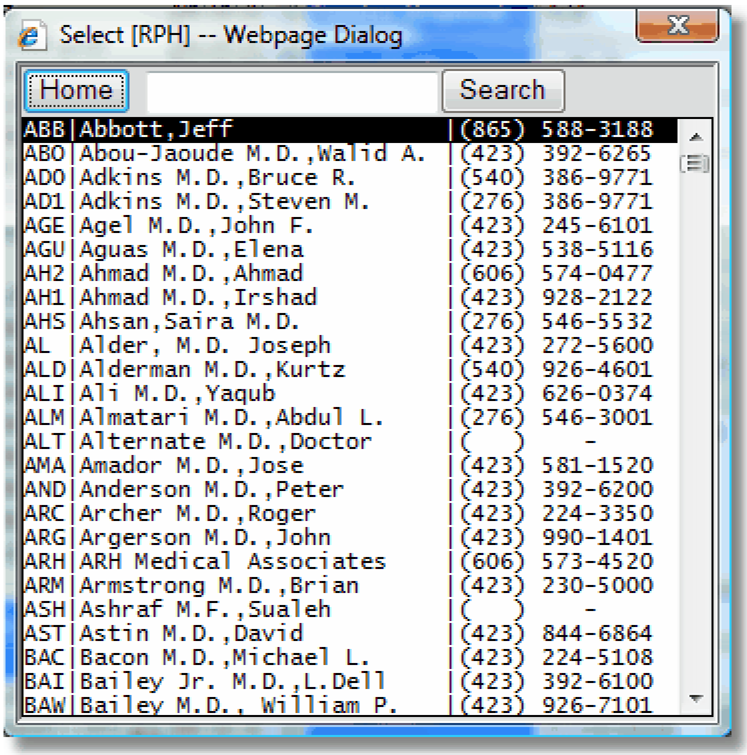
Exiting
Clicking on the [X] in the upper right corner will exit the calendar. It will not change the value in the field.

MY
This will return only the Month and Year

Y
This will return only the year.

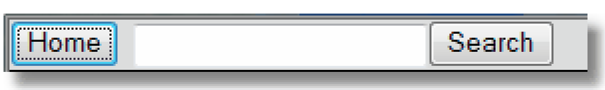
6.6.7 PARADIGM Select

PARADIGM Select allows you to select information from the PARADIGM database. It is commonly used for things such as Referring Providers, Reasons, Procedure Codes, etc.



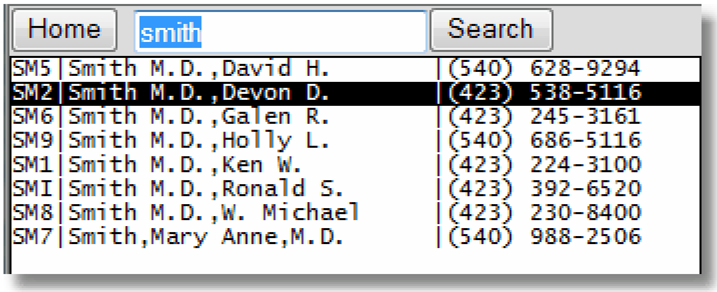
6.6.7.1 Toolbar

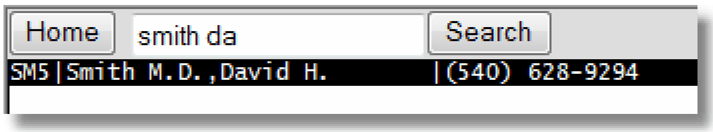
You will find the toolbar controls at the top of the window.

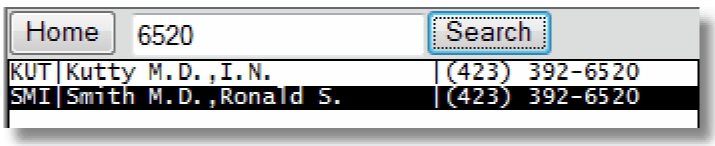


Home
Home will redisplay the window just like when you entered it.

Search
Will allow you to search through the list for the information you need.


Home
smith
Search
SM5|Smith M.D.,David H. |(540) 628-9294
SM2|Smith M.D.,Devon D. |(423) 538-5116
SM6|Smith M.D.,Galen R. |(423) 245-3161
SM9|Smith M.D.,Holly L. |(540) 686-5116
SM1|Smith M.D.,Ken W. |(423) 224-3100
SMI|Smith M.D.,Ronald S. |(423) 392-6520
SM8|Smith M.D.,W. Michael |(423) 230-8400
SM7|Smith,Mary Anne,M.D. |(540) 988-2506


Home
smith da
Search
SM5|Smith M.D.,David H. |(540) 628-9294


Home
6520
Search
KUT|Kutty M.D.,I.N. |(423) 392-6520
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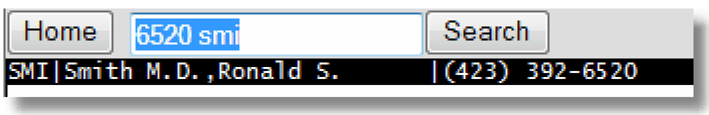
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Part 7

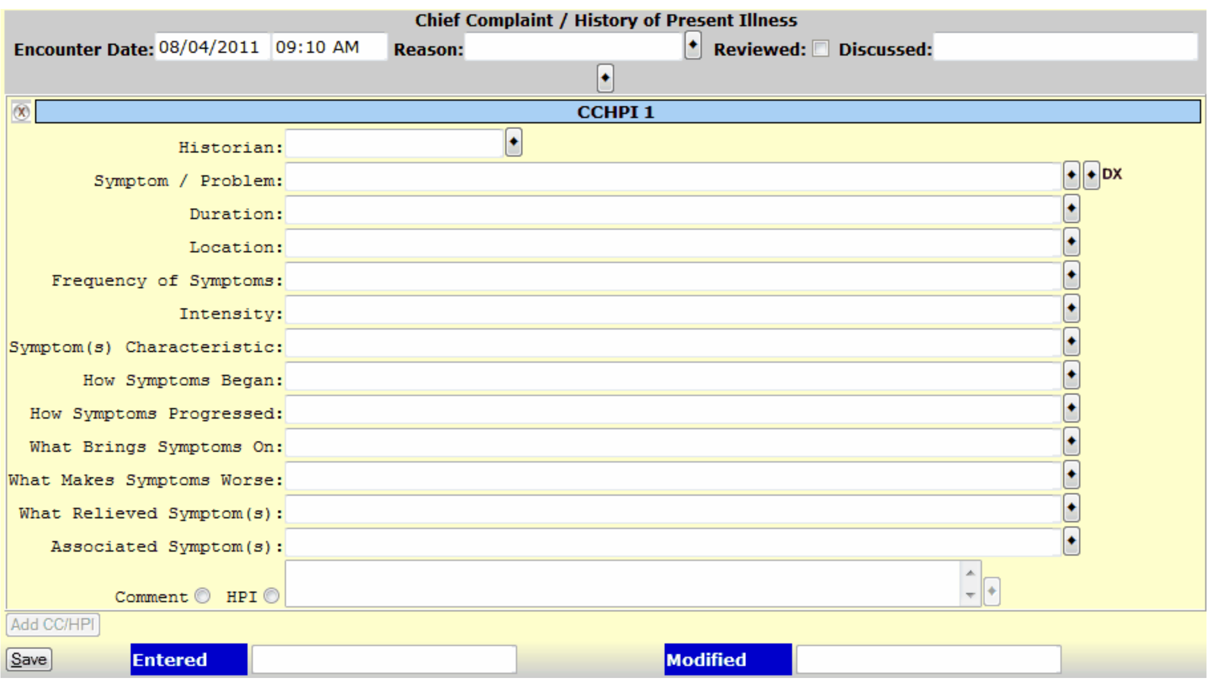
Standard Note Generation

7 Standard Note Generation

One of the strongest features of PARADIGM EHR is its ability to collect data about a visit and generate the documentation (Encounter note) for that visit. This process can be completely customized, but many choose to use the "Standard" for note generation. This section covers the "Standard" Encounter data collection forms and the note that it generates.

The "Standard" note consists of 9 data collection forms and the note generator. They are:
Chief Complaint - History of Present Illness.
Review of Systems
Medical History
Family History
Social History
Vital Signs
Physical Examination
Assessment
Plan
The Note

7.1 Chief Complaint - HPI (CCHPI)



This form is used to collect information for the Chief Complaint and history of the present illness. Data collected here will be used for Evaluation and Management Coding when creating the billing information for the encounter.

You may have multiple CC/HPI for an encounter by clicking the "Add CC/HPI" button.

This button is unique to the encounter.

7.2 Review of Systems / Exam

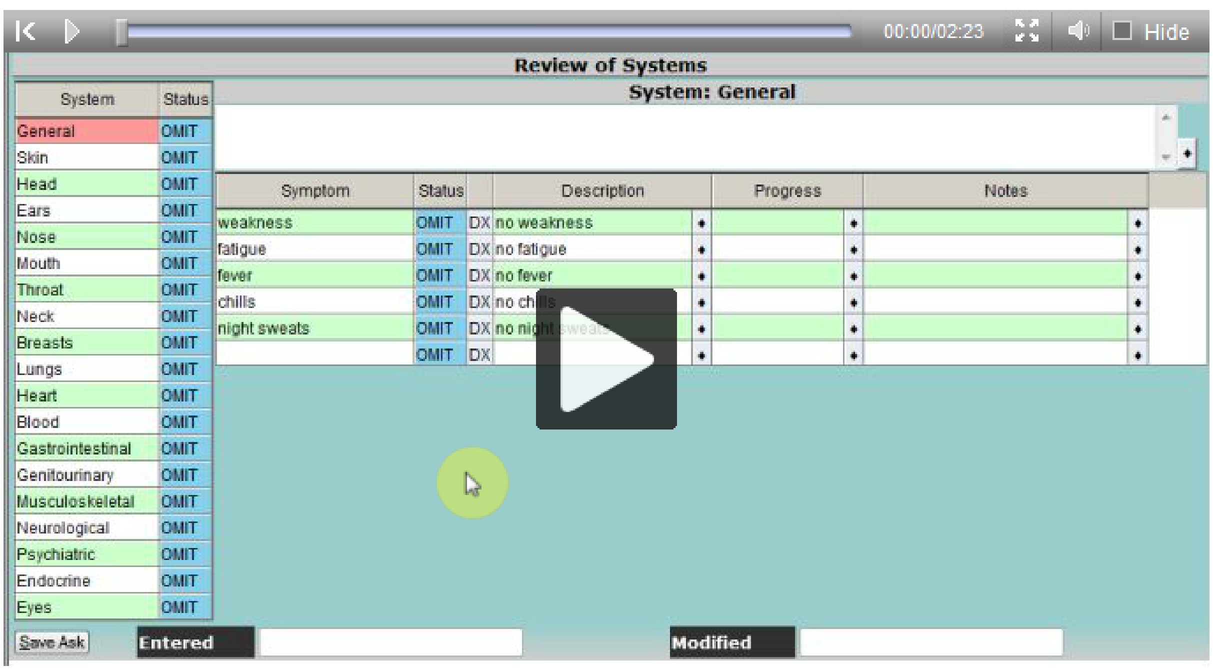
The Review of Systems and Exam forms have the same look and functionality.
When the form loads, it automatically determines which configuration to use based off of the appointment. The hierarchy that the forms look at is: 1st the appointment Resource and Reason, 2nd just the Resource, 3rd just the Reason, 4th the Practice Configuration, and lastly the QRS Standard Configuration. You can force a different configuration than what loads by clicking on the System Label. . When doing so, the form will show you all of the available configurations to use. If you have a resource set up on your user defaults, you will be able to add or edit configurations for that resource from this selection box.

When you open the forms, the systems with the system statuses are aligned to the left. The system comment, symptoms/findings, and all applicable information are to the right

You can change the status of an entire system by clicking on the status to the right of that system and selecting the status that you would like. You can click the Status Label to set all systems to Within Normal Limits or Reset all systems back to their default.

On the right side, you see the information for the selected system. At the top you have a general comment for that entire system. Below that are the Symptoms/Findings for that System. You can set the status of the entire system by selecting the Status Label for that system.

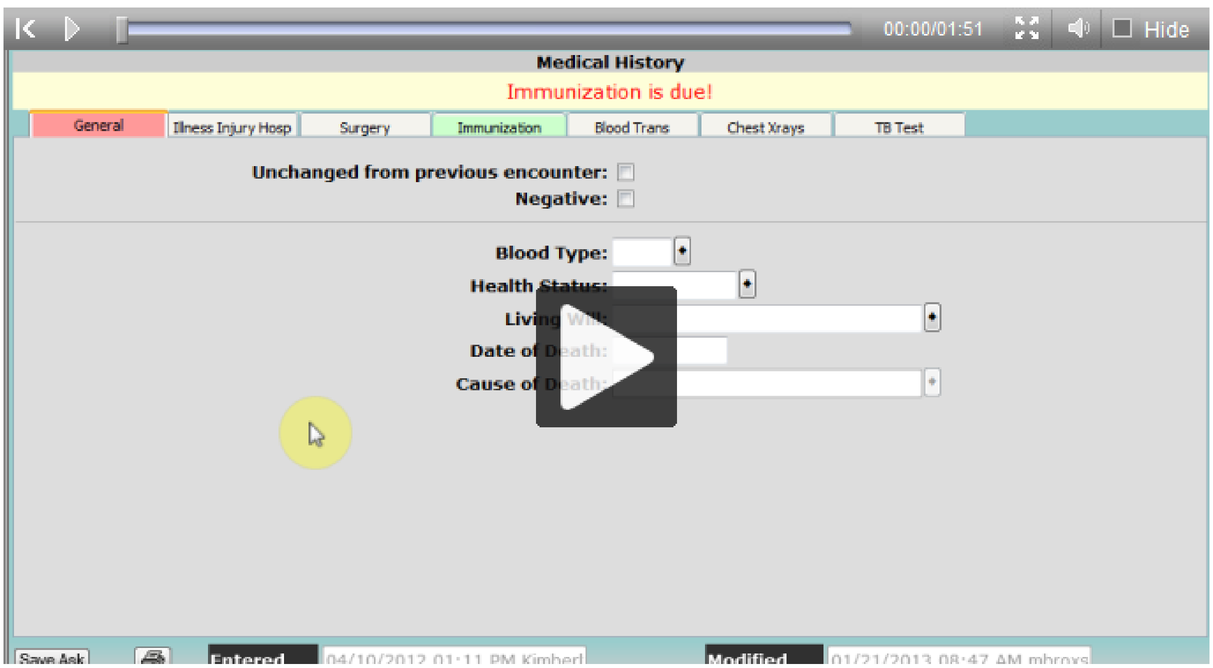
Please note that all of the fields will grow as needed to accommodate the text that is in them.



7.3 Medical History

The Medical History is in a tabbed grid format. If there are any Immunizations that are past due, the Immunization Due Alert appears at the top of the form for all tabs. The General tab contains a form with basic information about the patient, but all other tabs are in the EHR Grid style.
The EHR Grid allows you to type directly into the Grid Cells much like editing an Excel Spreadsheet. Any of the cells with the grey background and black diamond utilize the quicklist that is throughout the EHR.

The Immunization tab is a little more involved than the rest of the tabs. At the top of this tab, you can enter any future Immunization as an EHR Alert. The Immunizations are displayed below the future Immunization form. You may see up to four different colors for the Immunizations. The light grey Immunizations are set up as future Immunizations. The light yellow Immunizations with red text indicate Immunizations that were entered as future Immunizations that are now Past Due based on the date that was entered. The blue Immunizations have been imported from your state registry if you have worked with QRS to set that interface up. The green Immunizations were entered and saved on the Medical History Form.



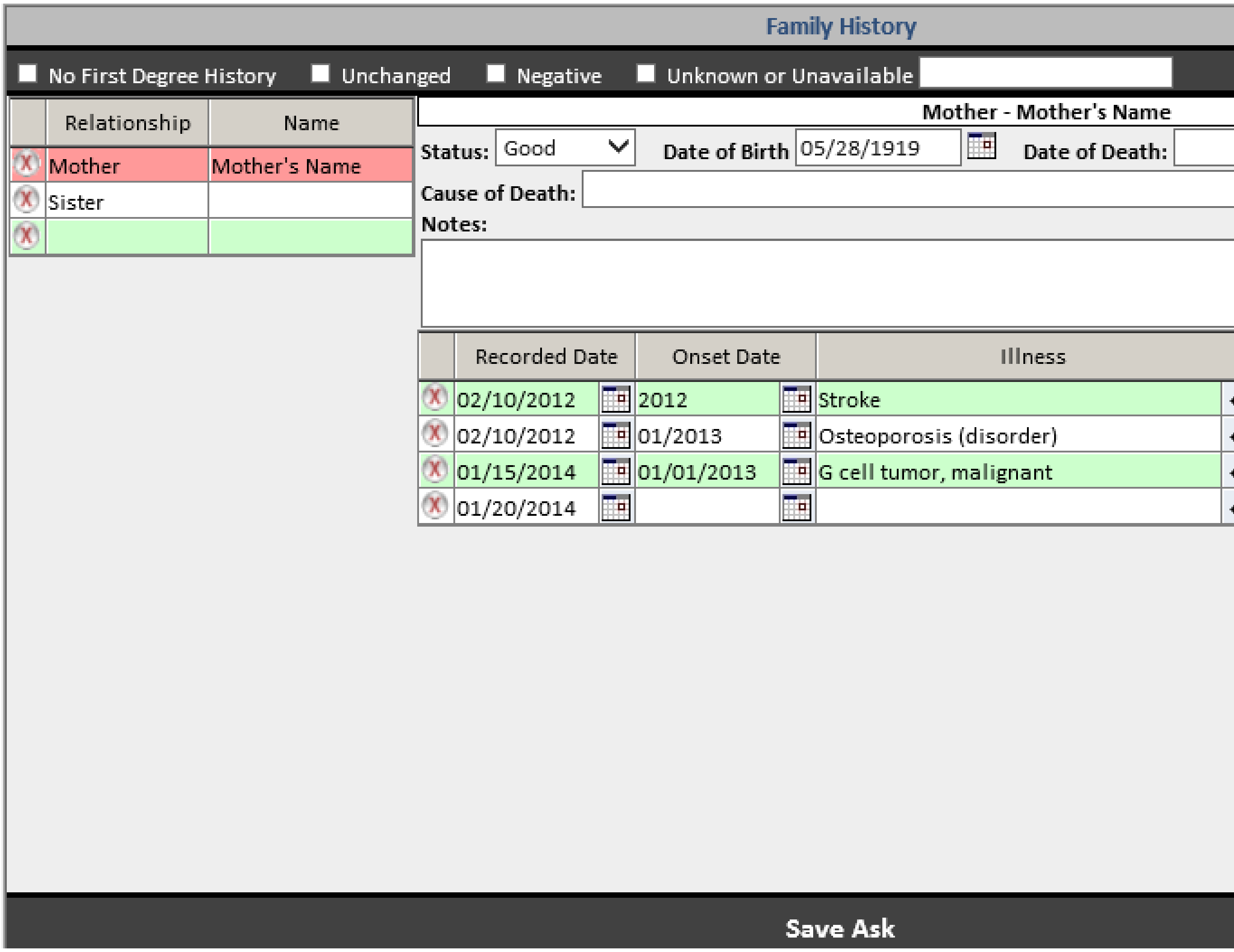
7.4 Family History

The Family History form allows you to enter relevant medical history of any family members.

On the left side of the screen you have the list of relatives and the ability to add a new relative by filling in the blank row.

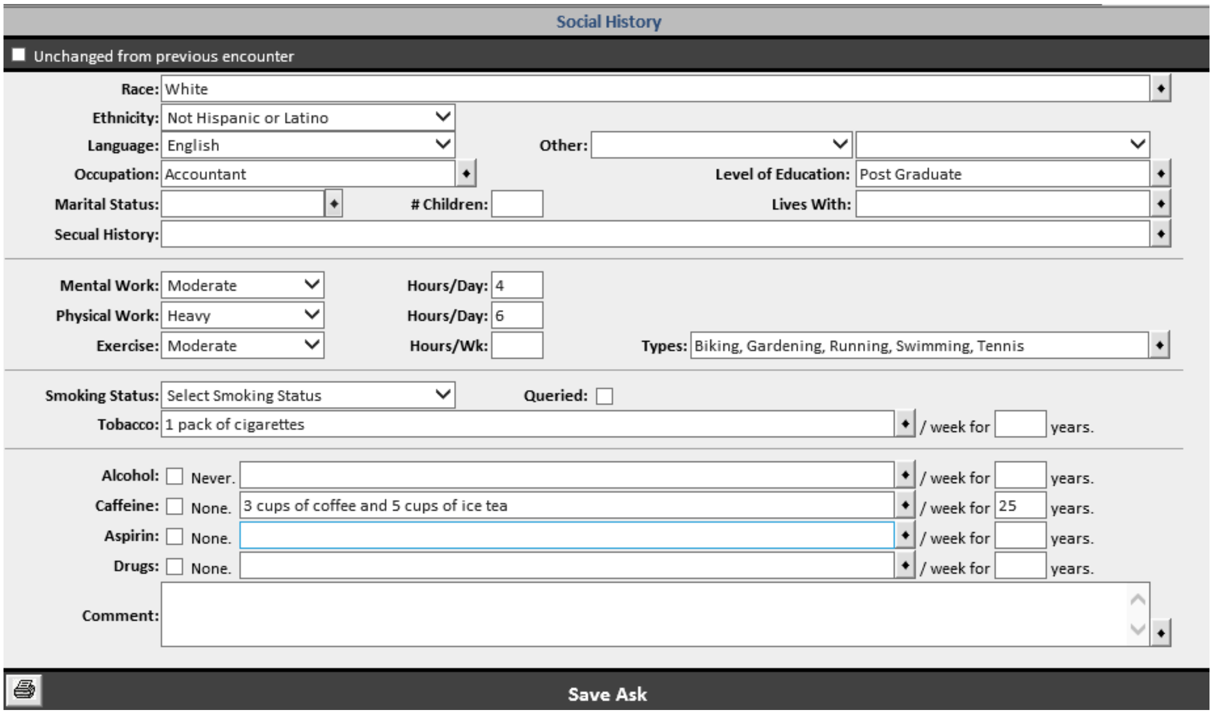
On the right side of the screen you can modify the relative's medical information starting with general information about the relative and then moving into specifics about Illnesses, Treatments, and

Outcomes that this relative has/had.



7.5 Social History

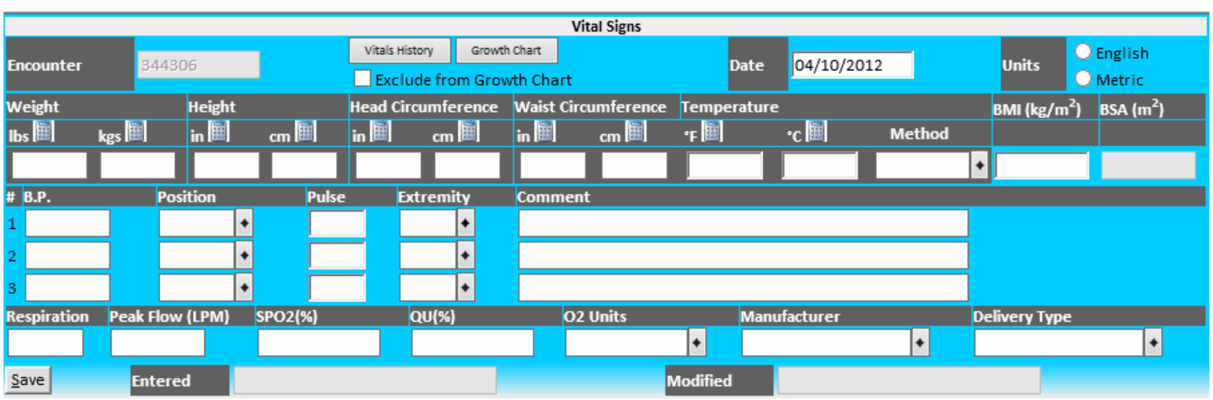
Here you may enter a patient's Social History. This information will display whenever a patients chart is pulled up.



Race, Language. and Ethnicity will also be added to the Objects.Trackable Data

7.6 Vital Signs

Here is where you will enter the vital signs for the patient for the encounter. This form will only display both as part of an encounter and as history.
When the Encounter and Date fields are shown in red it will part of history, when they are white it is part of an encounter.



You may review a patients weight or height history by clicking on "Weight" or "Height". Clicking on the History button will display a complete history of vital information.

The Graphs button will allow you to view growth data for patients plotted against the CDC growth charts.

Data entered on this form will also be added to the Trackable Data file.

7.6.1 Vitals History

The vitals history form will display all historical vitals history data from both encounters and those entered as historical data.
You may hover and click to select a historical entry to edit on the Vitals form. If you select a historical record that was part of an Encounter you will not be able to edit it unless it is the current Encounter.

Vitals History -- Webpage Dialog

Encounter	date	height_in	weight_lbs	temp_F	method	respiration	bsa	bmi	bp_1
20110421	04/21/2011	72	198.42	98.6	Forehead		2.15	26.91	120/80
20100825	04/21/2011	71	205	98.6			2.18	28.59	126/86
20110404	04/04/2011	71	200	98.6			2.15	27.89	130/80
328337	08/25/2010	71	205	98.6			2.18	28.59	126/86

7.6.2 Weight History

History -- Webpage Dialog

date	weight_lbs	weight_kgs	bmi	bsa
04/03/2008	200	90.45	27.98	2.11
06/19/2008	197	89.01	27.98	2.11
11/25/2008	200	90.72	28.7	2.14
06/19/2008	193	87.54	27.69	2.1
11/21/2008	195	88.45	27.98	2.11
12/01/2008	185	83.91	26.54	2.05

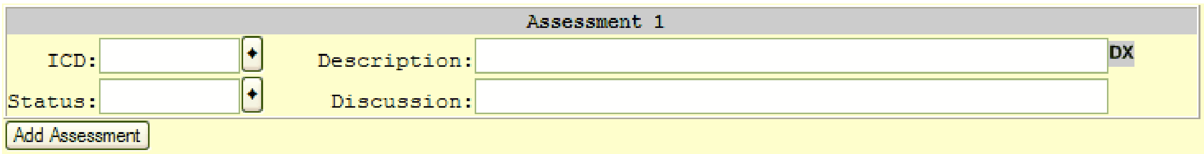
7.6.3 Height History

History -- Webpage Dialog

date	height_in	height_cm	bmi	bsa
04/03/2008	70	177.8	27.98	2.11
06/19/2008	70	177.8	27.98	2.11
11/25/2008	70	177.8	28.7	2.14
06/19/2008	70	177.8	27.69	2.1
11/21/2008	70	177.8	27.98	2.11
12/01/2008	70	177.8	26.54	2.05

7.7 Assessment

Here is where you will assess the patient for the encounter and determine the diagnosis for the encounter.



You may select the ICD either by entering in the code in the ICD field, typing the description in the Description field or selecting a diagnosis by clicking on the <> button next to the ICD field to select using the Diagnosis selector.

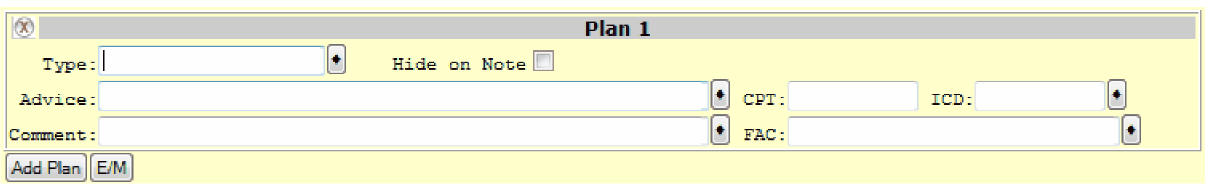
You may also determine a status or enter discussion information for each diagnosis.

The "DX" button will allow you to add or edit the diagnosis in the patient problem list.

This information will be automatically put on the charge slip.

7.8 Plan

Here you may create the plan for the patients encounter.



First select a type. This will determine the the list that will display for the Advice. If the advice is a procedure the CPT code will be copied into the CPT field. You may then associated it with ICDs created on the Assessment form. If the procedure is to be performed off-site then you may select a facility in the FAC field.

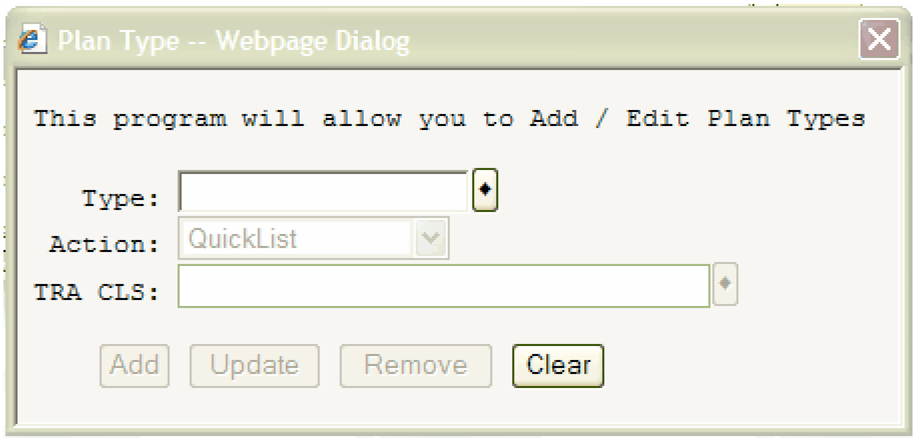
Procedures with a CPT code will copy into the charge slip when created.

The Remove (X) will allow you to remove a plan.

When you have completed you may use the E/M button to have the system find the appropriate Evaluation and Management Code.

7.8.1 Plan Types

When looking at the Plan Types List the Add / Edit button will allow you to create additional types to use in your plan. Clicking on this button will display the Plan type form.



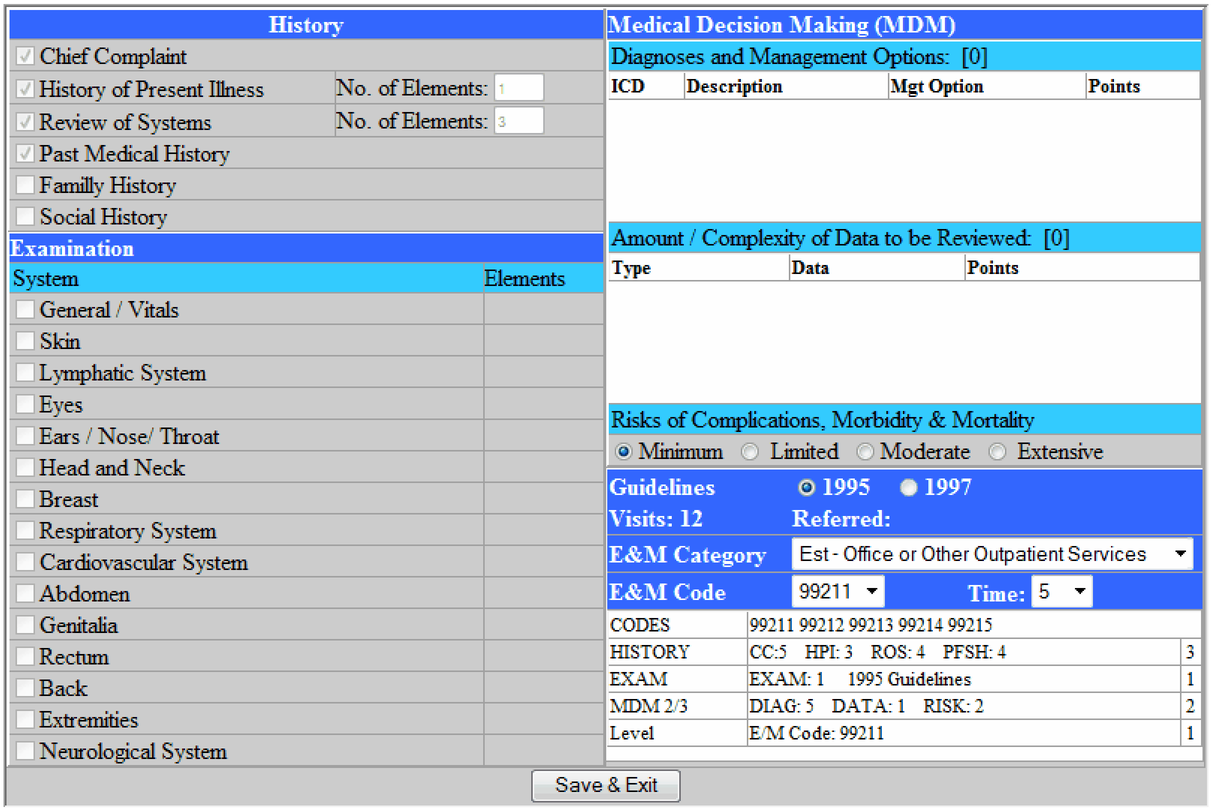
Here you may enter a type and then determine an action to take place for that type.

Valid actions are as follows:

QuickList - This will display a quicklist by the type name when selected.
Referring Physician - This will display the PARADIGM referring provider list to you choose from
Transaction - This will display PARADIGM transaction codes. You may narrow the selection criteria by providing a comma separated list of PARADIGM CLS codes in the TRA CLS field.
Medication - This will open the patients medication list in a window to allow you to either enter a new prescription or medication, or change an existing.
E-medication - When using E-medication you will first need to select the medication from the medication list, and then perform the operation required in Relay-Health.
Followup - This allow you to create a followup or recall for the patient by displaying the form in a separate window.
Order - Used for creating an order for the patient.

7.8.2 Evaluation and Management

The Evaluation and Management dialog will evaluate the data collected for the current encounter and recommend the proper Evaluation and Management code level. The form will display similar to the following:



E/M Coding is based on evaluation of three main components of the encounter: Histories, Exam, and Medical Decision making. Each component has its own evaluations process.

The Histories section is broken down into Chief Complaint, History of Present Illness, Review of Systems, and (Past, Family, and Social) Histories. Elements of each are compared to a requirements table for the E&M Category defined to determine the E&M Level. The minimum level is what will be used.

The Exam is evaluated differently depending upon if you use 1995 or 1997 guidelines. 1995 looks only at the number of systems evaluated while 1997 looks at specific findings within the systems. Specialist are more likely to use 1997 guidelines.

The Medical Decision Making (MDM) is based on three elements: Diagnosis and Management, Complexity, and Risk. The first two are based on collected data from the Assessment and Plan data. The Risk is up to the judgment of the provider. The top 2 out these 3 elements are utilize.

The least of the 3 components (Histories, Exam, MDM) is then used to determine the E&M level, and thus the code to use.

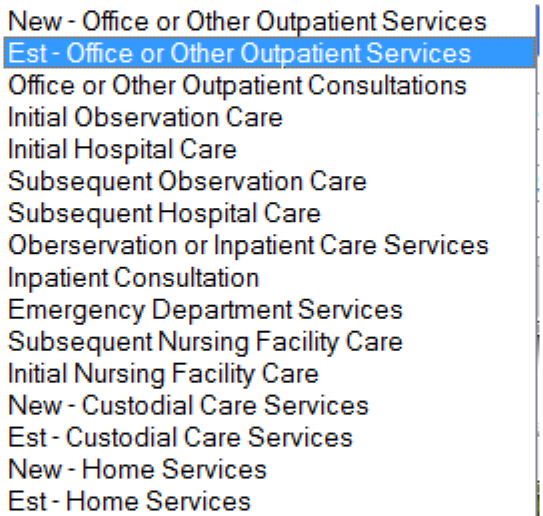
7.8.2.1 Form Breakdown

The E/M form has four sections: History, Examination, MDM, Calculations.

The History shows the history elements present. The Examination shows the Examination systems and elements, The MDM shows the Diagnosis and management options, and amount and complexity of data reviewed. It also allows the provider to select a level of Risk of Complications, Morbidity & Mortality.

The Calculation section is where the you may select the method of coding, and category to use. By default 1995 is the default guideline. The program will look to see if the patient has had any visits with the same provider or a provider in the practice with the same specialty to determine if it is a new patient or established patient. It will then default the E&M Category to either New or Established patient, and perform the appropriate calculations.

If it this is a consultation or category of service you may select from the drop down list.



7.8.2.2 Changing the code

It is possible to change the the code from the calculated code. This can be accomplished in 3 different ways: Change Risk, Change the actual code, or Change the Time.

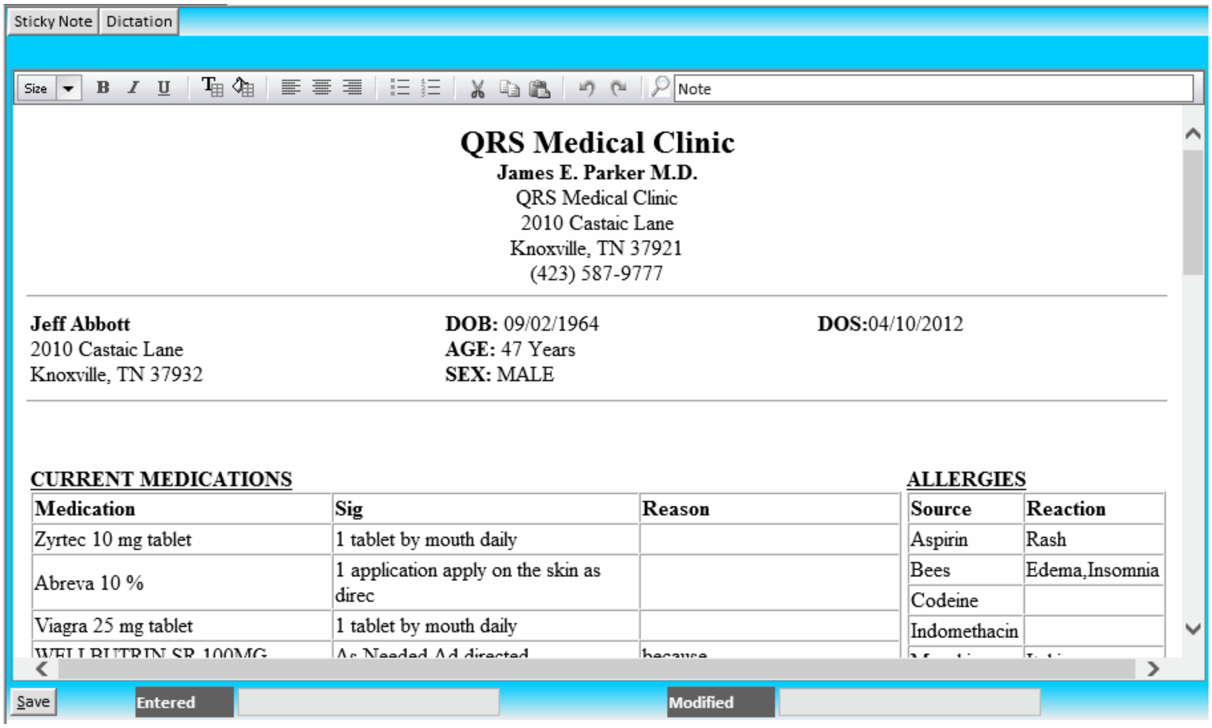
Changing the Risk may change the calculated code if the limiting factor in calculating the code is either the Diagnosis and Management options or the Amount and complexity of data. Since the MDM is the top 2 out of 3 of these elements it could move the code up to a higher level.

You may actually change the E&M code using the drop down box. It will display appropriate codes for the category selected. When you change a code here you will be prompted for the reason.

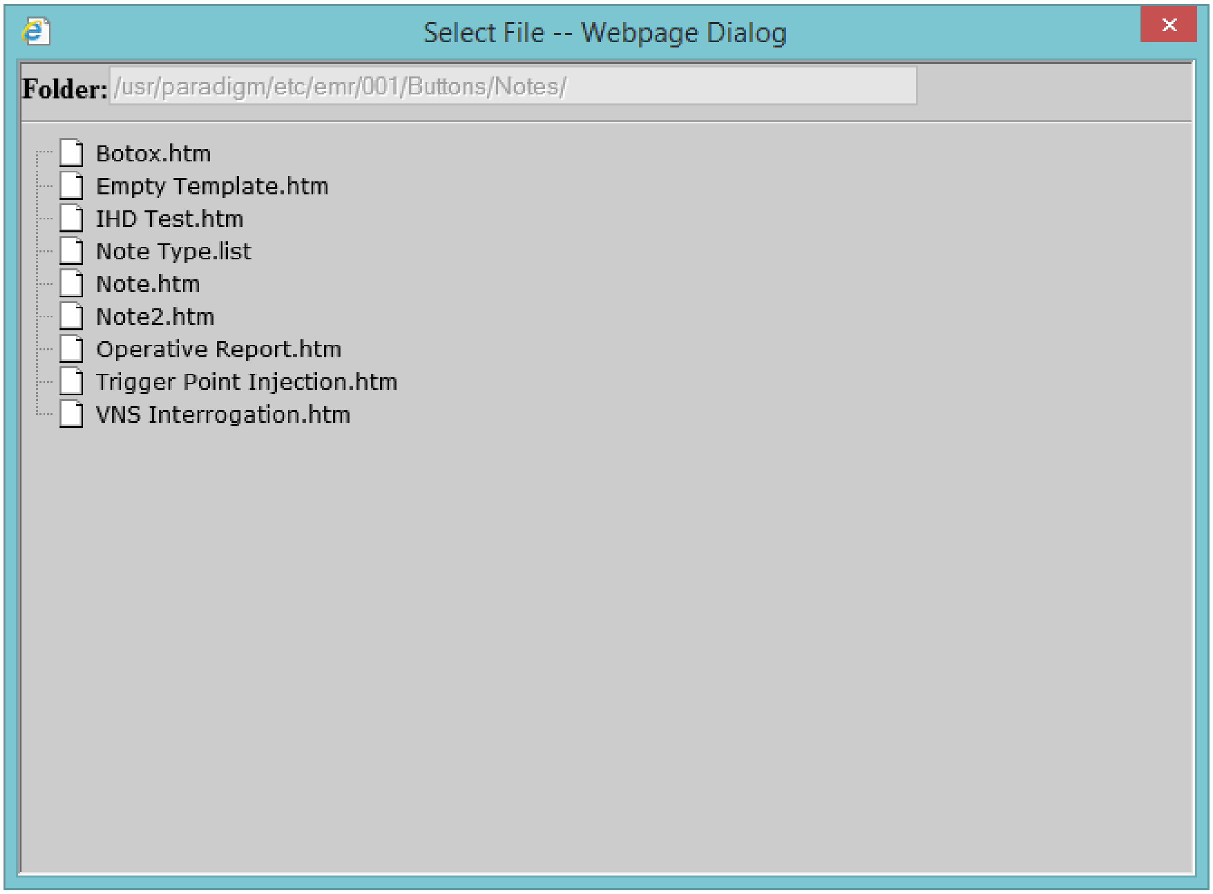
By changing the time you will also change the code. This is used if time is a factor in the services performed. This should be used if more than 50% of the time defined was used in counseling the patient.

7.9 The Note

The Create Note button will display the note editor for the encounter.



A default note will be displayed as configured for the the provider. You may select another note template by clicking in the file name area near the top center of the form. This will display the file selector.



Click on the note template you want to use to load it into the note editor.

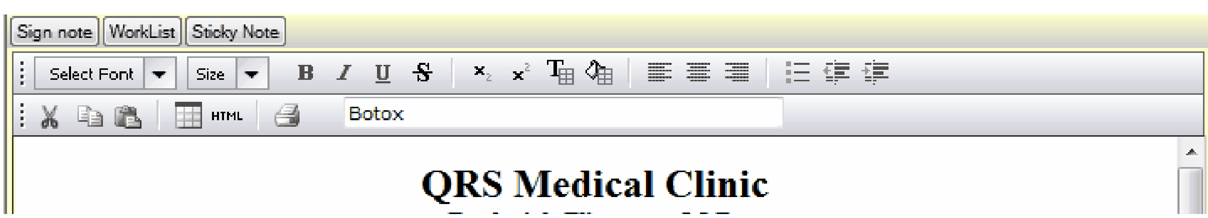
Note templates can be completely customized to fit different documentation needs. The note document is known as an Interactive HTML Document (IHD) and allows for both free form entry and the use of "widgets" that allow access to other data, list, and functions with the EHR system.

After you have finished editing the note you may save it.

The note will be saved with a button name of the name of the document you selected. A new "Create Note" button will be presented after that button. You may create and save multiple notes for an encounter.

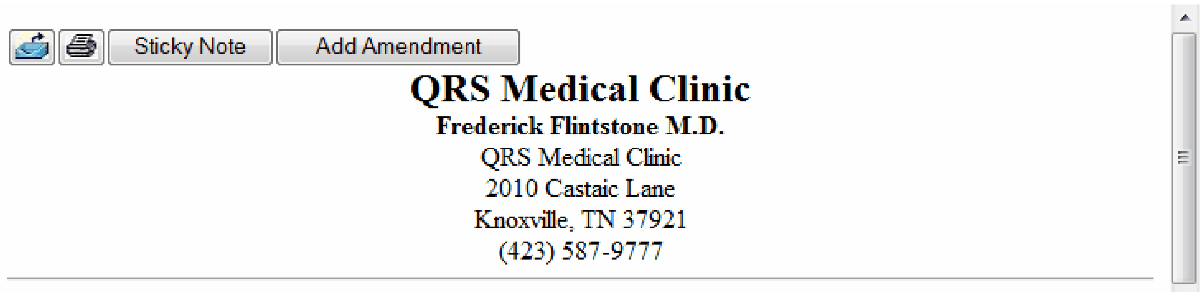
7.9.1 Signing the note

After the note has been saved you will notice a "sign note" button at the top of the form.



Clicking on the button will sign the note as well as sign the encounter documents used to create this note.

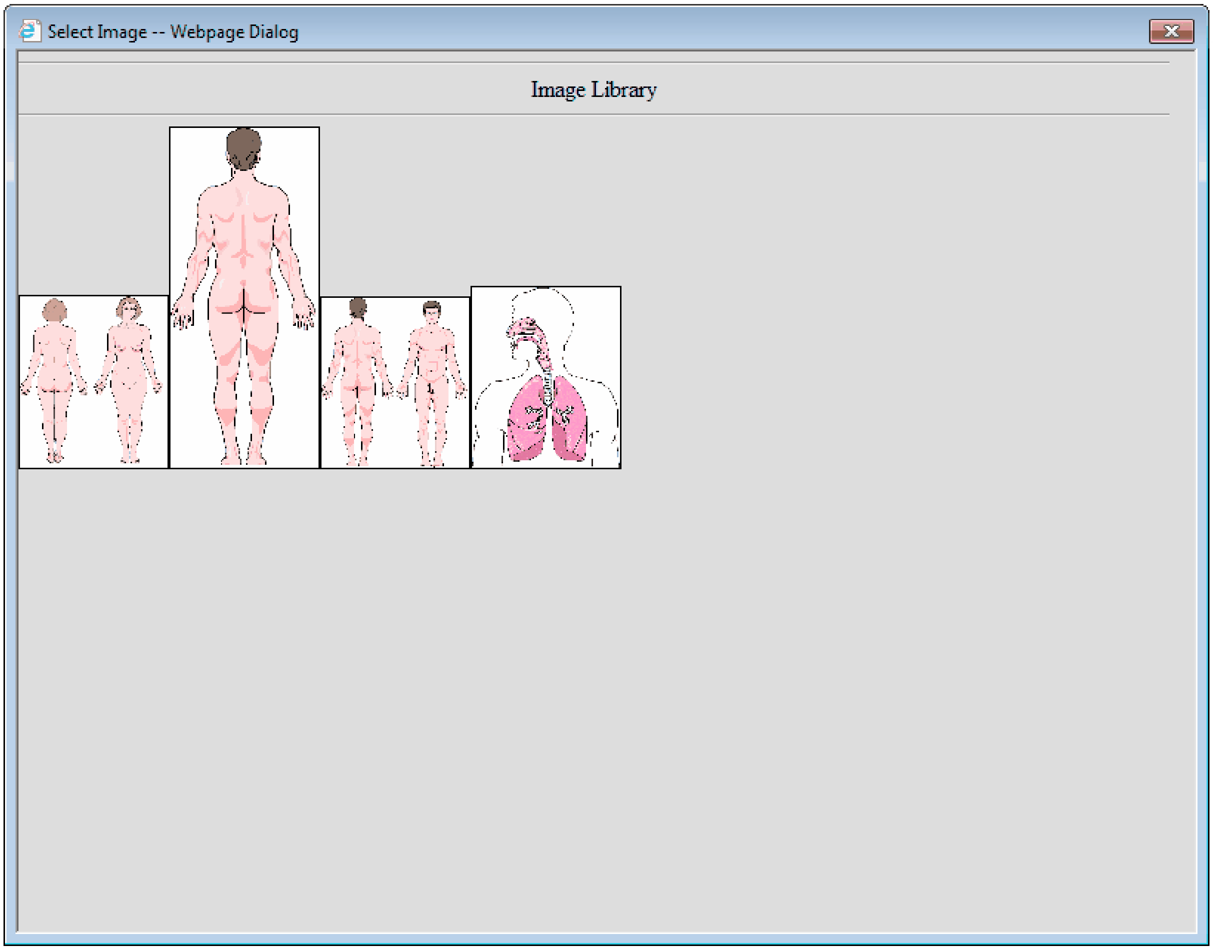
Once a note has been signed it will no longer be allowed to be edited, and display similar to the following:



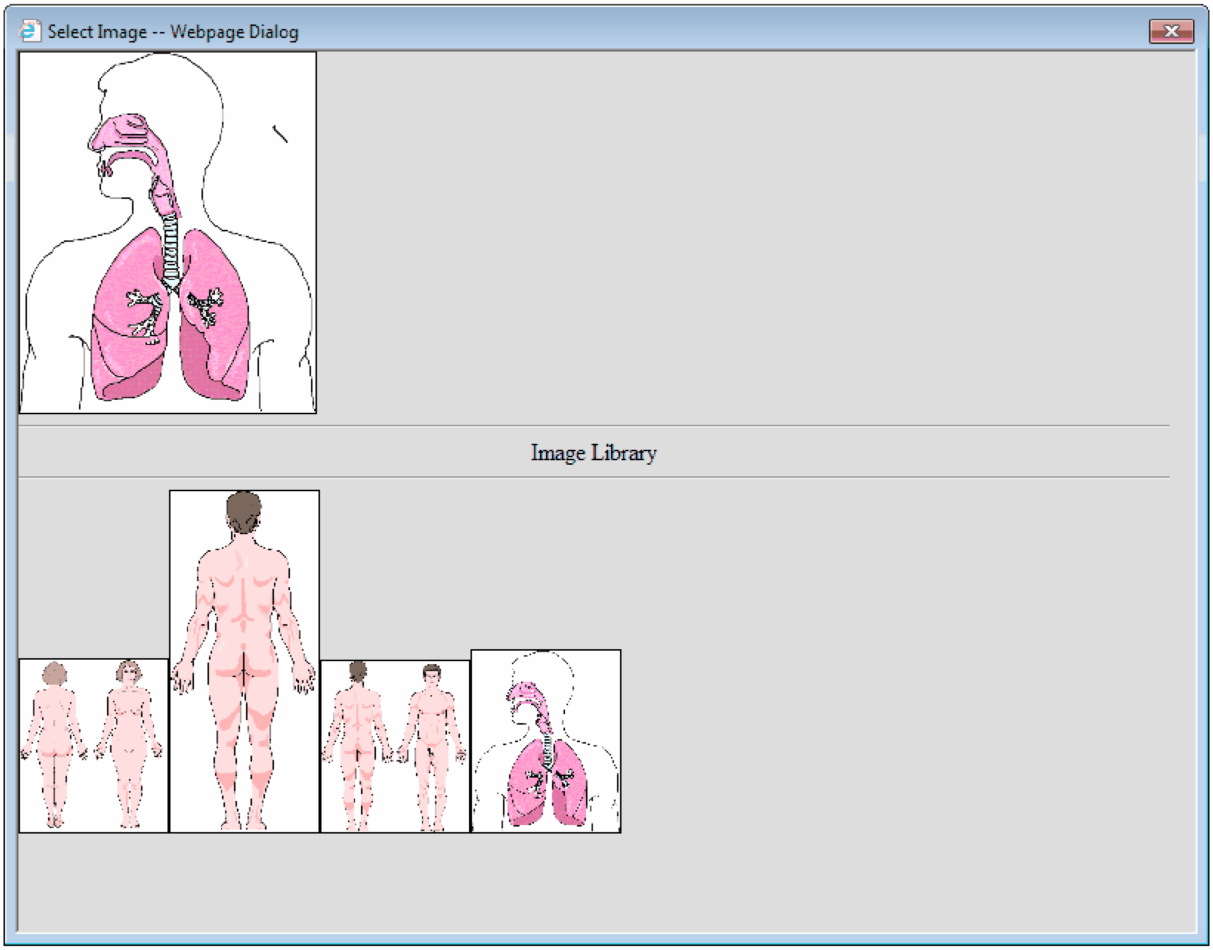
Your options available after a note has been signed are, send to outbox, print, add/edit sticky note, or add an amendment.
If for from reason a modification has to be made to the original document, the signature will need to be retracted by the original signer.
If Encounter data must also be modified the encounter data signature will also need to be retracted.

7.10 Images

The Images button allows you to access your library of images with one button, instead of having a separate button for each image you way want to use. Clicking this button will first display your image library.



You may select the image you want to edit and use in your note. That will bring the image up in your image editor. When you have made your changes and saved the image, it will be displayed. Clicking the Image button again will first display the images you have saved for the note with the library following.



Clicking on the image you previously created at the top will allow you to edit it again. Clicking on the images in the library will allow you create additional images.

Part 8

Administration

8 Administration

The purpose of this document is for the setup and administration of the PARADIGM EHR Electronic Chart / Medical Record product. This document will cover the basics of setting up users, security, data bases, setting up PC's and browsers, as well as creating templates.

All of these things are necessary for the proper use of the PARADIGM EHR system.

PARADIGM EHR has a system administration account. "secadmin" This account have the ability to access all administrative abilities including adding new users to the system and setting the system security profile.

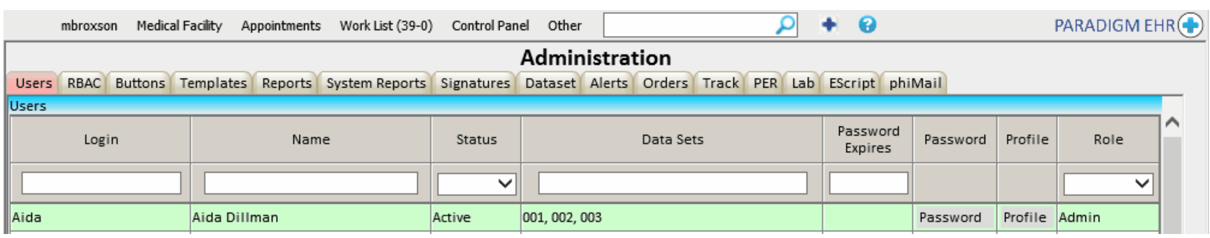
Additional users may be established for each data set that have the ability to perform administrative duties related to a data set, such as setting up Role Based Access Control for the data set, updating user profiles, setting up buttons, templates, signatures, and data set defaults. These data set administrators do not have the rights to add users or change the system security profile.

After logging into PARADIGM EHR as the "security administrator" and selecting a data set you will be taken directly to the Administrative area of PARADIGM EHR. Here you may establish users, set up system security defaults, and view audits.
You may also access administrative information for the data set you selected: Role Based Access Control (RBAC), Buttons, Templates, Signatures, Dataset and WorkList.

The "security administrator" has access only to the administrative functions and can not access any clinical information. You may notice that the all buttons on the control panel are disabled, with the exception of being able to select a data set, or the user button itself.

The "security administrator" account also has an automatic logout timer set to 5 minutes of inactivity. If the security administrator logs in and does not perform any task on the screen for 5 minutes they will automatically be logged out.

The "security administrator" may only be logged in once. Any subsequent logins will be terminated until the first session is terminated.

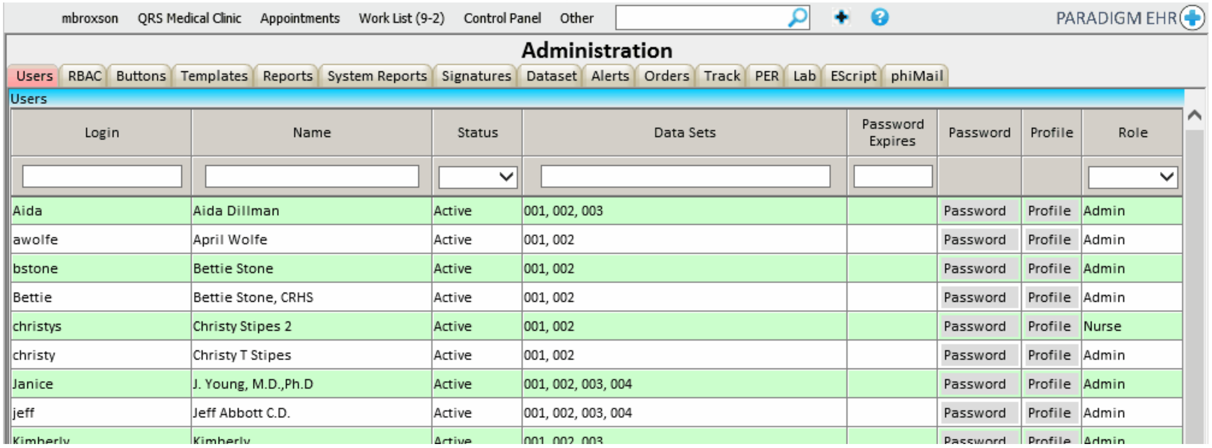


From here you may click on the tab to go into the desired section.

EScript and phiMail are both only editable by QRS.

8.1 Users

By clicking the Users tab you will see a list of the systems users when logged on as the "security administrator".



From here the "security administrator" may Add or create users accounts, modify the accounts, set/reset passwords for the account, create / modify profiles for the account, view / kill sessions for an account, kill off a user.

Notes for user with Admin ability.

Users with admin ability may access this area as well, but with restrictions.

- Will only see users for the data set they have admin rights to.
- Can not manage a users sessions
- Can not kill a user.
- Can not Add new users
- Can not Update existing users

Admin users can:

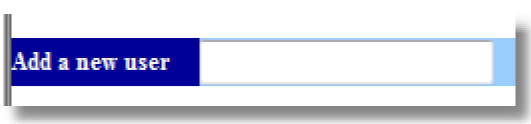
- Update a users password
- Create or change a users profile

8.1.1 Add a User

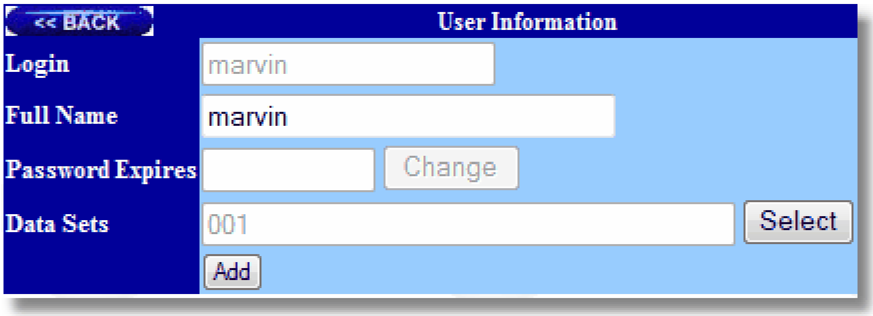
Only the system administrator "secadmin" can add a new user to the system.

⚠ Once a user is created it can't be removed from the system. It can be retired so it no longer has access but the user record will remain.

To add a “a new user” enter the name of the new user in the “Add a new user” field and press Tab.



By entering a users name in the “Add a new user” field of the user list, the “User Information” form will display with the login field entered for the user as well as default values for other fields.

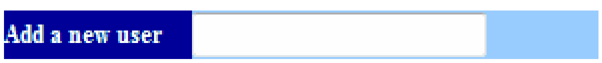


Enter the users "Full Name".

You can not add a password at this time because the user does not exists yet. The user will be created with no password.

By default the Data Sets will default to current data set. If the user will have use of more than one data set, use the Select Button to select the data sets the user will have access to.

Click the “Add” button to add the user to PARADIGM EHR. The screen will return to the user list and display the new user at the bottom.



At this point you will want to set the users password, and create a default profile for the user.

8.1.2 Updating a User

To update a user, first, select a user from the “Users” list by clicking the User button. This will display the user form, populated with the user information defined. Make any changes and then click on the “Update” button.

8.1.3 Retire a User

Follow the instructions for Updating a User but click the “Retire” button instead of the “Update” button. When a user is retired, you will see RETIRED in the status column of the Users list. To take an account out of retirement, simply create a new password for the account.

8.1.4 Passwords

A User must have both a login and password established to use PARADIGM EHR. Accounts with "NO PASSWORD" in the status can not log in. Once a user has a valid password their status will be listed as "Active". It is up to the "security administrator" to establish the initial password for an account, and provide that password to the user.

Clicking on the Password button on the Users list will display the Change Password form.

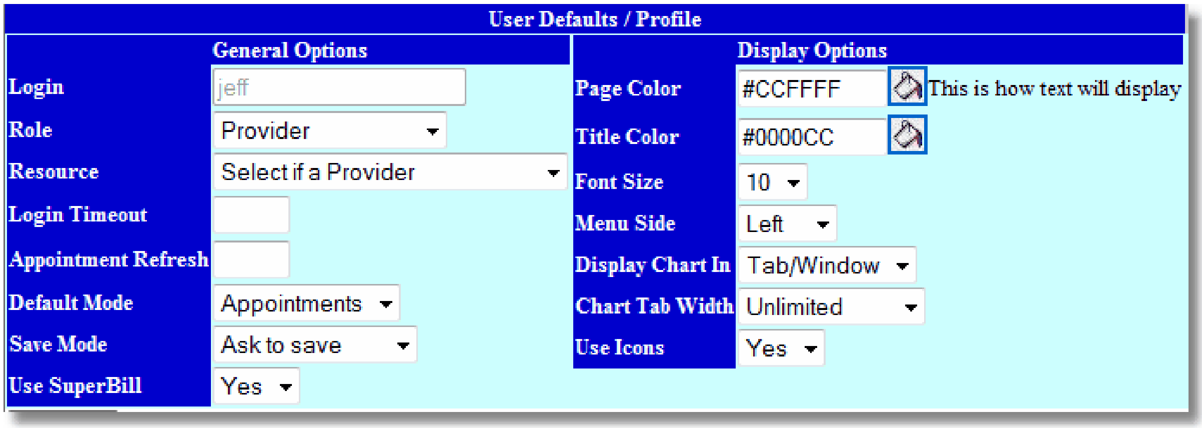
Here you may enter the password for the user. Enter the password again in the Confirm field and press the button next to Submit.

By default the password will be set to expire the first time the user logs in. This will require to change the password you establish to be modified immediately. You may click on the Expires field to use the date selector to change this date.

Password security controls are in place for minimum password length, and password strength if established in the system security profile.

8.1.5 Profiles

Now you may establish a user profile for the user and the data set. By clicking the Profile button you may create / modify the users profile for the current data set. Users may have different profiles for each data set they have access to.



8.1.5.1 Profile Information

The User Defaults / Profile form contains the following fields.

General Options

Login
This is the User login name.

Role
This defines the users role as defined in the Role Based Access Control (RBAC). It determines what features and functions the user has access to.

Resource
If the user is a service provider, select from the resources for the user. The resource will determine what resource code, and associated physician code will be used when a provider enters charges on the Charge Slip form. If the user is not a service provider leave this field empty.

Login Timeout
Enter the number of minutes that a user may go without activity before they will automatically be logged out. Leave blank for indefinite. If the security profile has an Inactivity timeout established, the control panel will use the lesser of the two values.

Appointment Refresh
Enter the number of seconds to elapses before the Schedule or Work list will automatically refresh. Leave blank for indefinite.

Default Mode
Enter the user's default work mode. This defines what work mode the user is put in after they log in and select a data set. This can be either "Appointments" or "WorkList"

Save Mode
This option will determine the save mode for PARADIGM EHR Data Documents. The available selections are:

- Manual - In this mode you must manually save each form before selecting another object or the data will be lost.
- Ask to save - In this mode, if you change data on a form and then select another object without first saving you will be prompted to save the data. If you select "OK" the data will be saved and the new object will be displayed. If you select "Cancel" the data will not be saved.
- Automatic save -In this mode, if you change data on a form and select another object without first saving, the software will automatically save the form and then display the new object.

⚠ Administration Mode will always be manual save.

⚠ The Note on an Encounter will always be manual save.

User SuperBill
If the user has access to enter charges using the Charge Slip, this will determine if the Super Bill will automatically display. Some users may prefer not to use the super bill but just use the standard diagnosis and charge entry.

Display Options

Page Color
This field allows you to select the background color for the major part of the screen for the user. You may use the Color Selector to select the color code. The color selected here should be a light color because any text displayed where this color is used will be show as black.

Title Color
This field allows you to select the background color for any title areas to display on the page for the user. You may use the Color Selector to select the color code. The color selected here should be a dark color because any text displayed in titles will show as be white.

Font Size
Here you may select the font size the user wants to use. Font sizes range from 6 to 16 points. The smaller the font the more information you will be able to display on the screen without having to scroll the page content.

Menu Side
This defines what side of the screen the file list menu will display when PARADIGM EHR displays a patient's chart. This can be especially helpful when using tablet PC's to avoid having to reach over to select a file.

Display Chart In
There are two options here:
1. Frame - Display in the Frame under the toolbar. With this method you will only be able to work with one chart at a time.
2. Tab / Window - This method will open another tab or window (depends on browser configuration) and display the chart. With this method you may have multiple charts open at the same time.

⚠ When in Inbox Mode the display will revert to Frame Mode.

Chart Tab Width
This option will allow you to set the maximum width of tab names in characters. If you have a lot of tabs with long names, using this feature may provide you with a cleaner display.

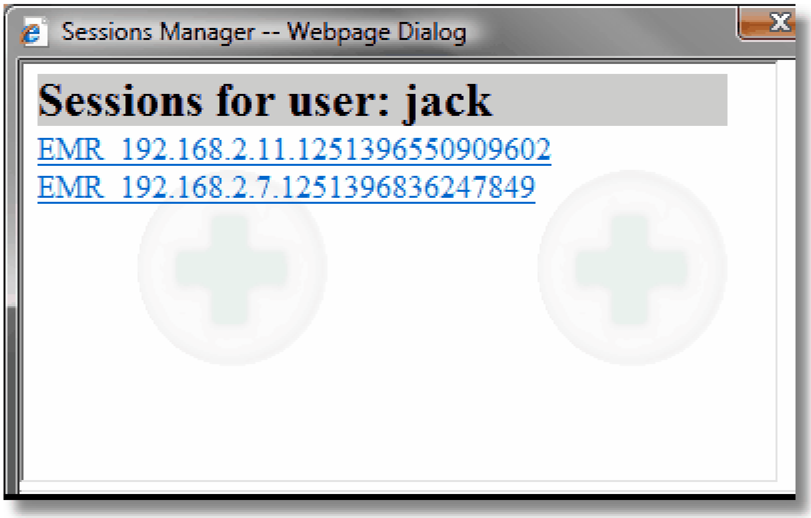
Use Icons
This tells the software to use icons defined in the button setup for Encounter buttons instead of just the defined text. It is also used by some forms such as Review of Systems and Exam. These forms will display either Icons or Text Headings based on this preference.

8.1.5.1.1 Color Selector

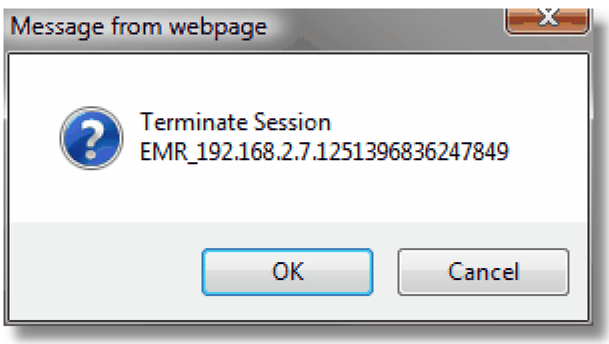
The color select appears as a paint bucket icon on the Color and Title Color fields. It will display a grid of colors from you to choose from. Hover over the color you want and click and the color will be loaded into the corresponding field.

8.1.6 Sessions

Sessions represent each time a user logs into PARADIGM EHR. Each session is assigned a unique identifier, and operations for each session are completely separate even though the user is the same. Clicking on the Sessions button for a uerr will display the Sessions Manager for that user.



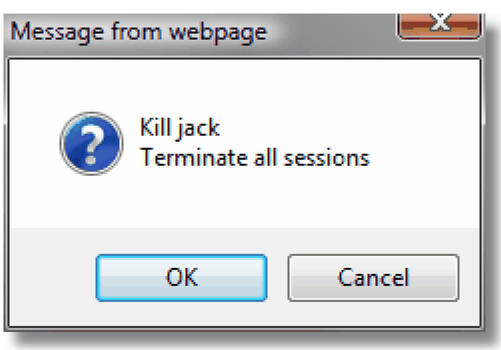
Clicking on the "Sessions for user:" area will refresh the session list.
Beneath that you will see a list of all of the users sessions. By clicking on a session you will be prompted.



Clicking OK will terminate that session. If the use attempts to perform any other task on that session it will log them out. If they are idle it will terminate the session within a minute.

8.1.7 Kill

Kill will terminate all sessions for a user. Clicking the Kill button will prompt:



8.2 Break Glass Procedure

Break glass (which draws its name from breaking the glass to pull a fire alarm) refers to a quick means for a person who does not have access privileges to certain information to gain access when necessary. Systems containing primary source data (information) for treatment, must develop, document, implement and test *break glass* procedures that would be used in the event of an emergency requiring access to an electronic health record. These systems must have a clearly stated and widely understood procedure for allowing access via alternate and/or manual methods.

The system administrator should document any actual emergency access for later audit & review. Typically, a special audit trail is created to monitor such access. Standard access controls should be established with sufficient rules to minimize the number of times break-the-glass needs to occur.

Break-glass is based upon pre-staged “emergency” user accounts, managed in a way that can make them available with reasonable administrative overhead. This solution can be used with a broad range of existing systems and architectures that require operators to login, such as with username and password, before access is granted. The break-glass intended to specifically cover emergency cases and should not be used as a replacement for a helpdesk.

User authentication system is a typical mechanism used to control and monitor access to sensitive data. It is designed to preserve security by restricting access. In clinical care, a delay in access is likely to disrupt patient care that may cause patient discomfort, injury or worse. For this reason HIPAA requires covered entities to have mechanisms in place that assure patient care is not impaired by problems with the user identification and authentication.

8.2.1 Scope

An emergency access solution should be used only when normal processes are insufficient (e.g. the helpdesk or system administrator is unavailable). Examples of situations when ‘break glass’ emergency access might be necessary:

- Account problems:
    - Forgotten Username/Password (e.g. after extended absence or vacation)
    - Locked Password (e.g. mis-typed too many times)
    - No User Account (e.g. a clinician from another organization or a new clinician is assisting a facility during an emergency)
- Authentication problems:
    - Central Authentication System failure (e.g. a CAS server is down)
    - Smart Card or biometrics reader failure (e.g. reader or biometric is damaged) NOTE: In cases where the authentication system fails, there should be an alternate authentication mechanism such as username/password.

- Authorization problems:
    - An emergency medical situation thrusts an individual into a role where s/he lacks sufficient access rights (e.g. an administrative assistant is entering orders during an emergency)

8.2.2 Break Glass solution

The break-glass solution is based on pre-staged emergency user accounts, managed and distributed in a way that can make them quickly available without unreasonable administrative delay. This solution should be simple, effective, and reliable.

8.2.2.1 Pre-staging Accounts

Emergency Accounts should be created in advance to allow careful thought to go into the access controls and audit trails associated with them. The following factors should be considered:

- Username should be obvious and meaningful, such as breakglass01, so the account name would be inappropriate under normal operations and would stand out in audit trails.
- Strong passwords should implemented, but is important, that they not be so difficult that in an emergency, the user would have trouble entering it.
- Account Permissions should be set to *minimum necessary privilege*.Limit emergency access to the minimum data and functionality needed to perform the task. This could potentially include view-only capability, prohibiting access from outside the local console or network, limiting to data acquisition only, or prohibiting access to previously acquired data, but due to the difficulty of anticipating emergency needs, you may choose to allow full access to emergency accounts.
- Auditing should be enabled if available, to log details of the account usage and details of the work carried out while using the account. Some systems may recognize emergency accounts and raise the system auditing level or increase audit logging of only the emergency accounts. NOTE: Ensure that the individuals who create the accounts are not the ones reviewing the audit trails since this can be a source of abuse.
  The ‘break glass’ accounts and distribution procedures should be documented and tested as part of implementation.

8.2.2.2 Distributing Accounts

Pre-staged accounts need to be carefully managed to provide timely access when needed. Break-glass requires that the emergency-account details be made available in an appropriate and reasonable manner. These details may be provided on media such as a printed page, a magnetic-stripe card, a smart card or a token. Some distribution possibilities for break-glass emergency accounts include the following:

- Kept behind glass in a cabinet, where access to the accounts requires literally breaking the glass (similar to a fire extinguisher or alarm), providing an obvious indication that the accounts have been accessed and a deterrent to casual use;

- Maintained within sealed envelopes, where a broken seal would be an obvious indication that the accounts have been accessed;
- Locked in a desk drawer that only specific people can access;
- Sealed and taped to the side of a monitor in a clinical area – visible to many so it will be obvious when it is missing or damaged, or
- For cases where more than one person is needed to declare an emergency, locked in a safe or cabinet where one person knows the combination or has the cabinet key and a different person has the key to the room.

A best-practice would place the pre-staged emergency accounts into the responsible care of an individual. This Emergency Account Manager would be someone readily available during operating hours and one who understands the sensitivity and priority of the emergency accounts (e.g. a business manager, nurse or security officer). The distribution procedure would include a sign-out method requiring that an acceptable form of identification be provided. This identity would be recorded before the accounts are made available. Following such a procedure assures that activities performed using the emergency account may eventually be associated with an authorized individual, creates accountability and can assure non-repudiation.

8.2.2.3 Monitoring Use of Accounts

The use of emergency accounts needs to be carefully monitored. The audit mechanisms should be used and a procedure defined to examine the security audit trails on a regular basis to identify any use of the emergency accounts. In addition, systems can alert the security administrator in the event an emergency account is activated. These enhanced capabilities are highly desirable, but they are not required for the break-glass mechanism to work. If the system or application software cannot provide an audit trail that shows simple account activity like login attempts, then the use of break-glass needs to be carefully considered before implementing. Break-glass may still remain a valid system, but it will require the use of a manual (e.g. paper-ink) log.

Documentation should describe the intended use of such accounts and the consequences of their inappropriate use. Details should be clearly documented and then communicated to the relevant workforce. It should be clear that all use of emergency accounts is closely monitored. A periodic review and retraining of staff should be done to make sure the break-glass procedure continues to be relevant.

Each use of an emergency account should be reviewed. The use of an emergency account may be valid, or it might indicate a malicious act. Unacceptable use needs to be recorded and acted upon. Frequent use may indicate problems with the normal user authentication mechanism. This regular monitoring of pre-staged emergency accounts should also include exercising some of them to ensure that they do work, and that their use can be detected. This is similar to testing fire alarms, to be sure that they will work in a real emergency.

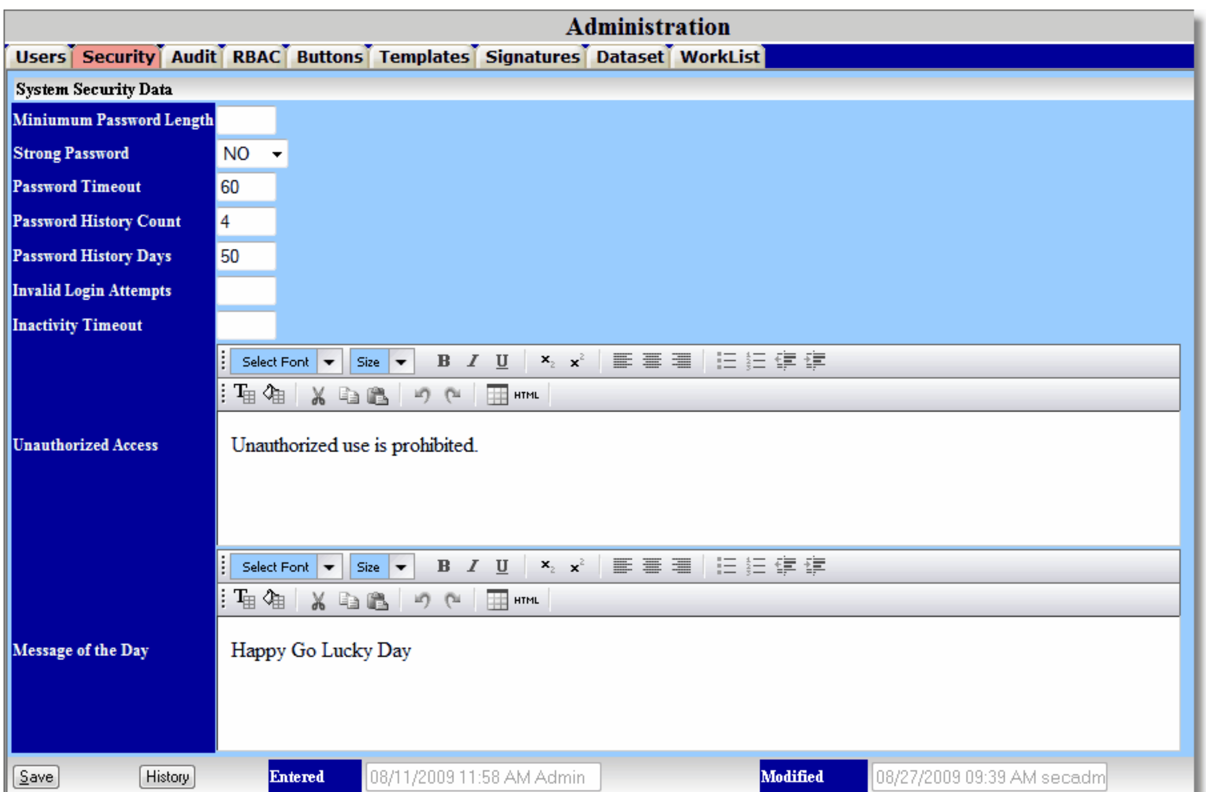
8.2.2.4 Cleaning Up After Account Usage

A procedure should be established to clean up after an emergency account has been used. Consider addressing the following:

- Disable or delete the emergency account(s) that were used to prevent re-use now that the password is known. Some systems may be capable of automatically deactivating emergency accounts after first use or passage of a selectable period such as 8 hours or 1 day. Avoid disabling the account during the period of emergency use.
- Reconcile the data acquired and audit trails to reflect the proper operator’s name.
- Make entries in disclosures if appropriate.
- Review activities performed including data acquired/accessed
- Determine if the emergency account procedure and operation worked effectively and adjust if necessary

8.3 Security

The Security Tab allows the "security administrator" to establish a global security policy for entire system. The System Security Data form will appear as follows:



8.3.1 Security Form Fields

Minimum Password Length
Here you may enter the minimum number of characters a password must be.

Strong Password
If YES, strong passwords are enforced. This means the password must have at least one number in it.

Password Timeout
Enter the number of days a password may be used before it will automatically expire.

Password History Count
This defines the number of new passwords that must be entered before a password can be used again for a user. It works in conjunction with Password History Days.

Password History Days
This defines the number of days that must elapse before a password can be used again for a user. It works in conjunction with Password History Count.

Invalid Login Attempts
This defines the number of invalid login attempts for a user before the account is locked.

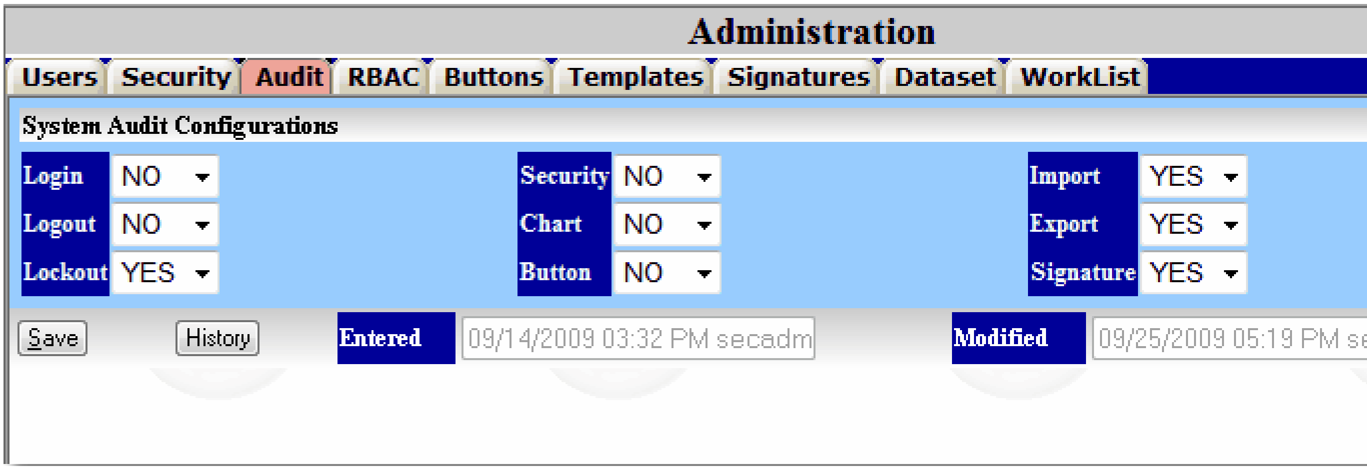
Inactivity Timeout
This defines the amount of time a session may remain idle before it will automatically log off. The user will see a count down on the toolbar. If this is empty no timeout is enforced. The user has the ability to set a personal timeout in the user profile. The lesser of the two values will be used. The security administrator has a default of five minutes.

Unauthorized Access
This is the message presented on the login screen for unauthorized access to the system.

Message of the Day
This is the message presented on the login screen for a message of the day. This is helpful to notify users of upcoming events such as system updates.

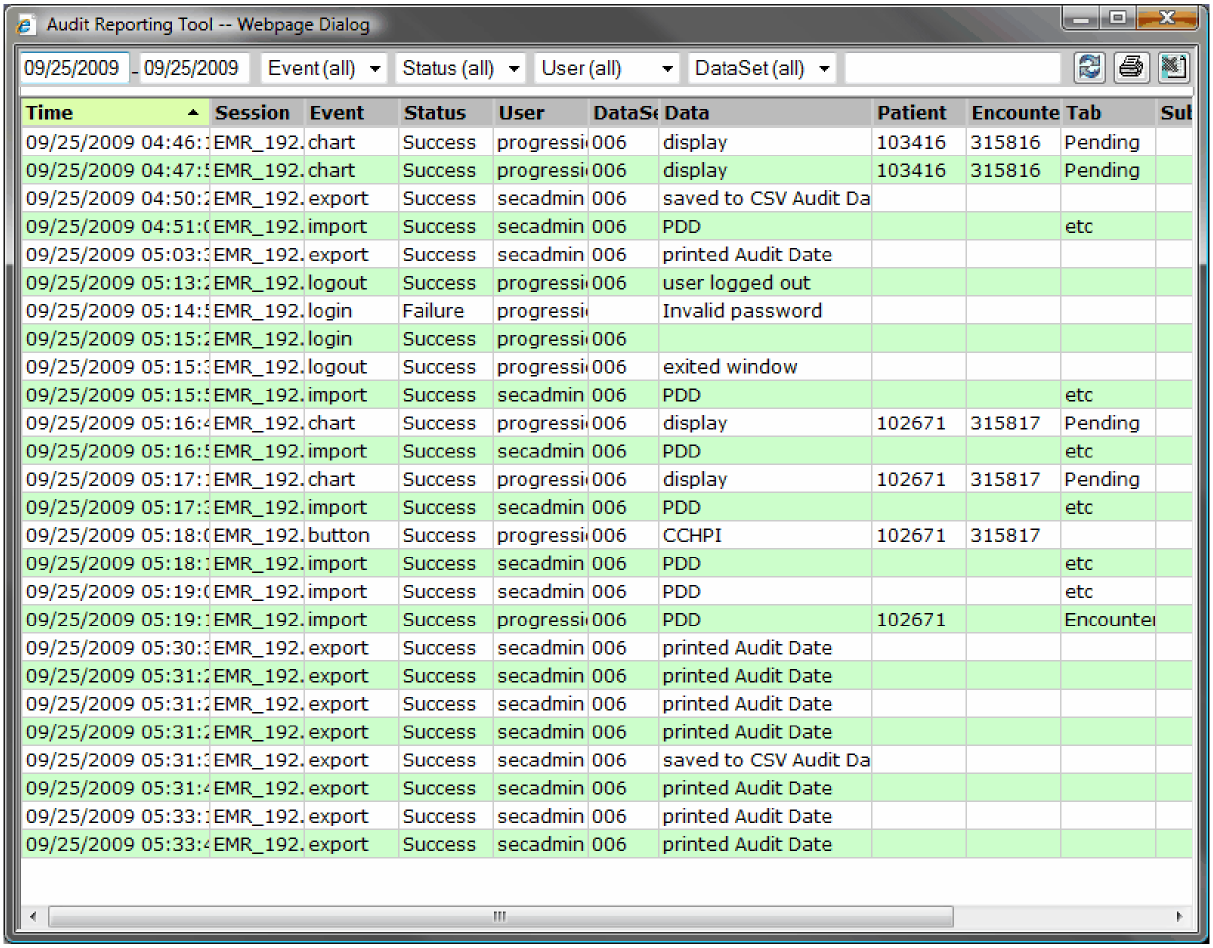
8.4 Audit

The Audit tab allows the security administrator into the System Audit configuration. Here Audit events may be configured. Enter YES to turn audit events on, and a NO to turn them off.



8.4.1 Audit Reporting Tool

By hovering over the "System Audit Configurations" toolbar it will change to say "Click to View Audit Data".
Clicking on it will display the Audit reporting tool.



Time	Session	Event	Status	User	DataSe	Data	Patient	Encounte	Tab	Sul
09/25/2009 04:46:1	EMR_192.	chart	Success	progressi	006	display	103416	315816	Pending	
09/25/2009 04:47:5	EMR_192.	chart	Success	progressi	006	display	103416	315816	Pending	
09/25/2009 04:50:2	EMR_192.	export	Success	secadmin	006	saved to CSV Audit Da				
09/25/2009 04:51:0	EMR_192.	import	Success	secadmin	006	PDD			etc	
09/25/2009 05:03:3	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:13:2	EMR_192.	logout	Success	progressi	006	user logged out				
09/25/2009 05:14:5	EMR_192.	login	Failure	progressi		Invalid password				
09/25/2009 05:15:2	EMR_192.	login	Success	progressi	006					
09/25/2009 05:15:3	EMR_192.	logout	Success	progressi	006	exited window				
09/25/2009 05:15:5	EMR_192.	import	Success	secadmin	006	PDD			etc	
09/25/2009 05:16:4	EMR_192.	chart	Success	progressi	006	display	102671	315817	Pending	
09/25/2009 05:16:5	EMR_192.	import	Success	secadmin	006	PDD			etc	
09/25/2009 05:17:1	EMR_192.	chart	Success	progressi	006	display	102671	315817	Pending	
09/25/2009 05:17:3	EMR_192.	import	Success	secadmin	006	PDD			etc	
09/25/2009 05:18:0	EMR_192.	button	Success	progressi	006	CCHPI	102671	315817		
09/25/2009 05:18:1	EMR_192.	import	Success	secadmin	006	PDD			etc	
09/25/2009 05:19:0	EMR_192.	import	Success	secadmin	006	PDD			etc	
09/25/2009 05:19:1	EMR_192.	import	Success	progressi	006	PDD	102671		Encounte	
09/25/2009 05:30:3	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:31:2	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:31:2	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:31:2	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:31:3	EMR_192.	export	Success	secadmin	006	saved to CSV Audit Da				
09/25/2009 05:31:4	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:33:1	EMR_192.	export	Success	secadmin	006	printed Audit Date				
09/25/2009 05:33:4	EMR_192.	export	Success	secadmin	006	printed Audit Date				

This tool will allow the security administrator to review the audit files. You may select data to display by date range, event, status, user, data set, and a search. After completing your search request click the Refresh button to display the results.

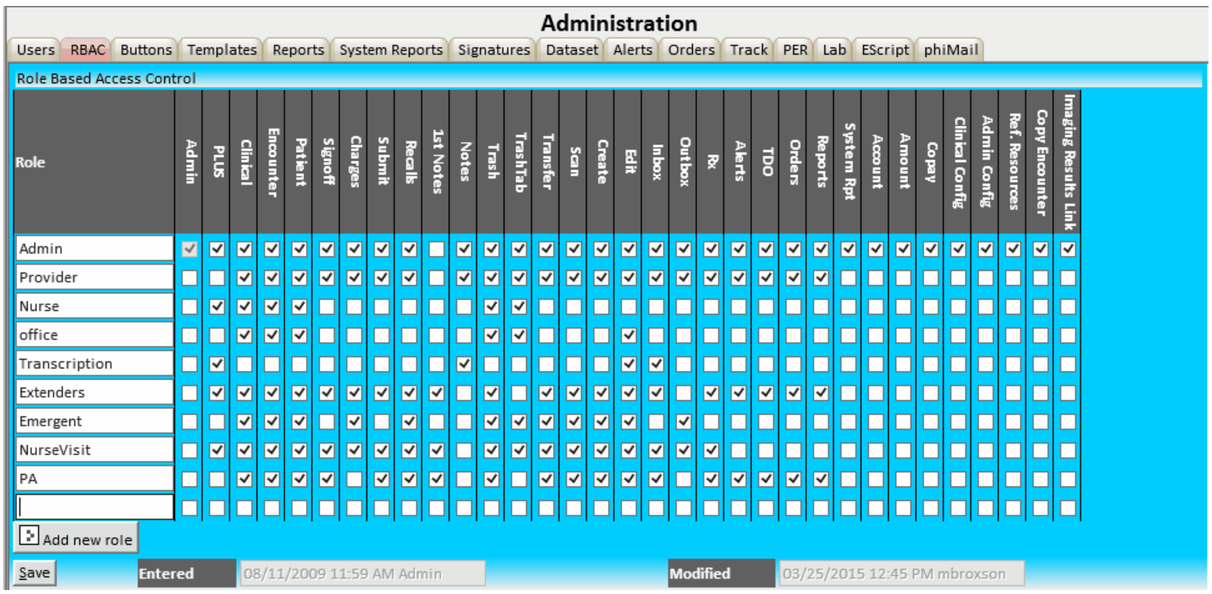
The Print Button will allow you to print your results.

The Excel button will save your results to an CSV file on your desktop and allow you to edit it if you have a file association for that file.

⚠ Only 500 records will display when viewing or printing audit information. Saving to CSV will save all records for a search.

8.5 Role Based Access Control

Before setting up users you should first set up Role Based Access Control. RBAC establish the security rights that a user will have. Each user must be assigned an RBAC or role in their profile before they may enter a data set. The group of “Admin” is predefined and allows access to administrative options of the system. All other RBAC groups are user defined as well as what rights that group has. Am RBAC group can have as few as one member or as many members as you want.



8.5.1 RBAC form fields

Role

Here you may enter the name of the role/group you want to define. The name should be descriptive as to the task that the user(s) will perform in the practice.

Admin

This allows user access into the administrative area. Administrators will have access to all administrative functions that are relevant to a data set. System wide administrative features will be locked.

PLUS

Gives the user access to PLUS and PARADIGM Plus button on the toolbar.

Clinical

This must be checked to allow users access into a patients chart. All subsequent rights are within the chart and will not apply unless this right is given.

Encounter

If checked this will allow any user in the defined group access to the encounter specific data (buttons) on an encounter. These are the buttons defined as Encounter Unique in the data set configuration.

Patient
If checked this will allow any user in the defined group to have access to patient specific data (buttons) on an encounter.

Signoff
This will allow the user to signoff on an encounter. This right is usually only granted to service providers. The user must also have a valid signature file to sign off on the encounter data.

Charges
This will allow the user access to enter charge information on the electronic charge slip. This right is usually only granted to service providers.

Submit
This will allow the user access to submit the charges entered on the electronic charge slip. This right is usually only granted to service providers.

Recalls
This will allow the user access to the Recall button on the encounter data. The user may then add recalls, follow-ups, or immediate appointments.

1st Notes
This will allow the user access to the Notes button on the encounter data. They will have the ability to edit, save, and sign off notes. The user must have a valid signature file to sign off notes. They will then be prompted via a work list item for a counter signature, and they must create the work list item.

Notes
This will allow the user access to the Notes button on the encounter data. They will have the ability to edit, save, and sign off notes. The user must have a valid signature file to sign off notes. This user may countersign notes created by users with 1st_Notes privileges.

Trash
This will allow the user to move items into the Trash.

TrashTab
This will display the trashcan icon for the user, and give the user access to the trash can to move files back into charts.

Transfer
This will allow a user to transfer files into a chart tab if transfer option is defined for the tab in the data set configuration.

Scan
This will allow a user to scan documents into a chart tab if the scan option is defined for the tab in the data set configuration.

Create
This will allow a user to create a new document from a template into a chart tab if the create option is defined for the tab in the data set configuration.

Edit
This option will allow a user to edit (change) a document in a tab assuming all other security rights have been met.

Inbox
This option will allow the user to access the inbox button to view and move documents from the inbox into a patient's chart.

Rx
This option will allow a user to signoff on a prescription. This right is usually only granted to service providers. A user must also have a valid signature file.

Alerts
Gives user access to the Alerts button on the patient chart.

TDO
Gives the user access to the Track (Trackable Data Objects) button in the patient chart**.**

Orders
Give the user access to the Orders button in the patient chart.

Reports
Give the user access to the Reports button in the patient chart.

System Rpt
Give user access to System Reports on User button.

Account
Give user access to account button in chart.

Amount
Access to charge amounts and patient balance in chart.

Copay
Access to enter a copay on check-in.

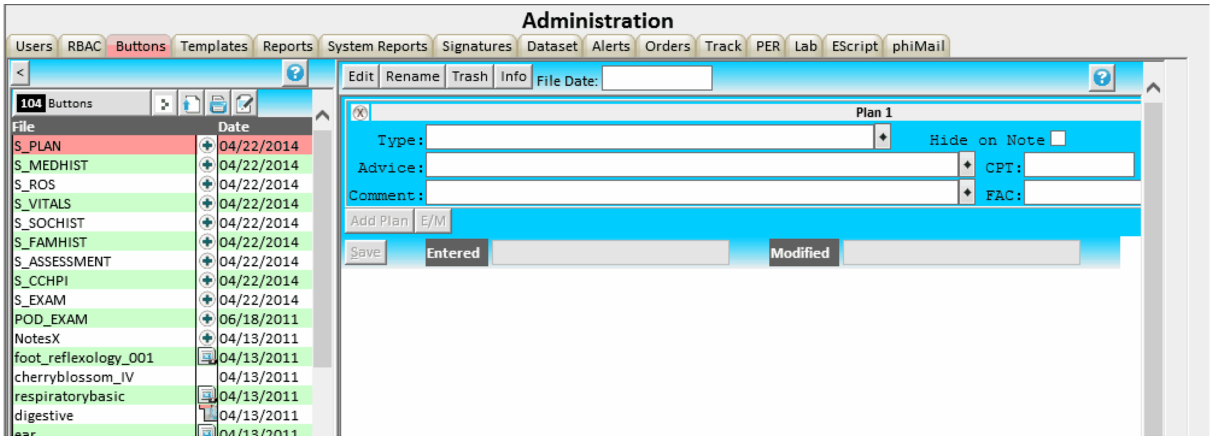
Clinical Config
Access to Clinical Configurations in the Configurations section under Other Options in the Toolbar.

Admin Config
Access to Administration Configurations in the Configurations section under Other Options in the Toolbar.

Ref. Resources
Allows access to the Reference Materials in the Alerts.

8.6 Buttons Files

Button Files are the templates used for capturing encounter data. These are the templates that will be setup in the dataset configuration Encounter Buttons area.



From here you may transfer
, or scan
new documents in to be used as buttons. You may also copy a template
from the template library. There are a couple of special things that you will have to account for.

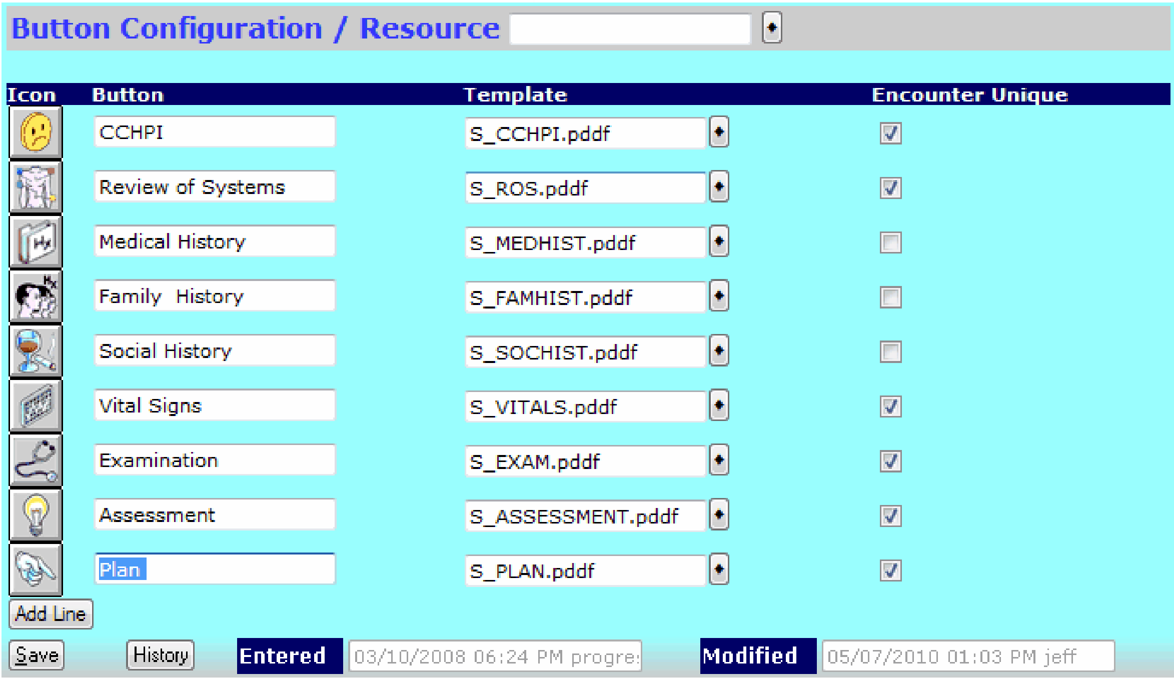
- Gender Specific Buttons
- The Notes Generator

Once you have a file in the Button manager you may click on the file once to view the file, or twice to edit the file.

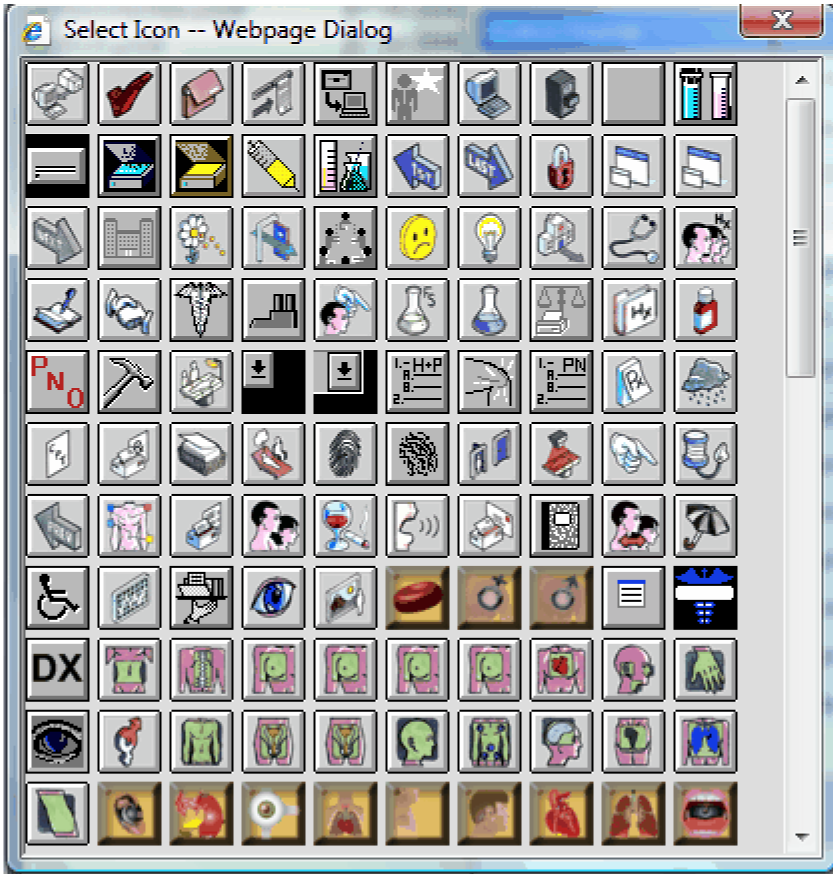
For information on PARADIGM EHR internal documents (pddf) see Programming.

8.6.1 Edit Button List

Now that you have all the buttons in the buttons area you may use the Edit Buttons List button to edit the button list that will display to the user.



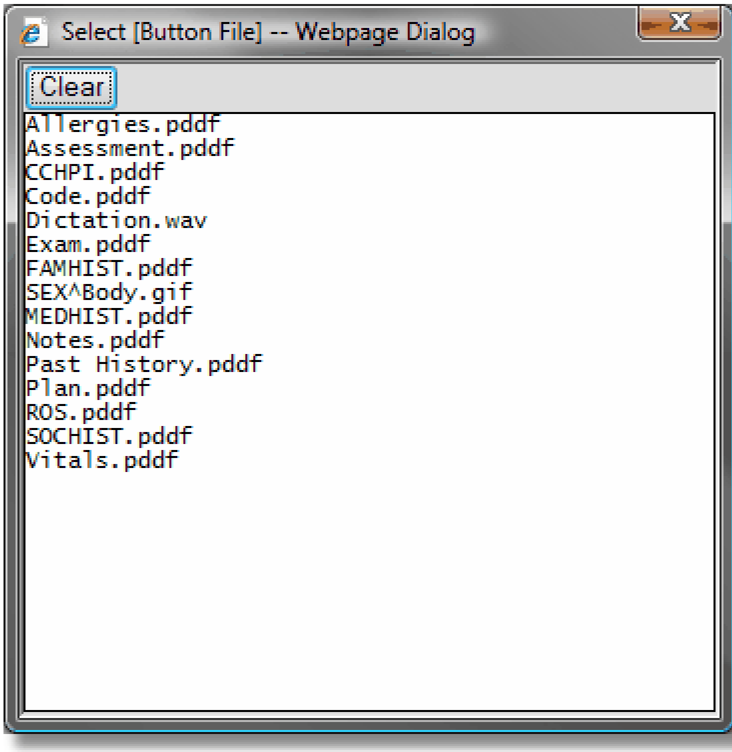
Icon
Clicking in this button to display the icon selector. Simply click on the icon you want to use and the field will be populated.



If you exit and do not select an icon you will get the blank icon.

Button
Here you enter the name of the button as you want it to appear on the screen or title help if the user is displaying icons.

Template
This field will allow you to select the template stored in the button area to associate with the button. If the button is gender dependent, the name will display as "SEX^file.ext"
You may not edit this field but must select by clicking the selector button next to the field. That will display the list of templates for you to choose from.



Encounter Unique

Check this box if you want this button to be unique to each encounter. This means a blank or new value will be created with each template. If the button is not encounter unique then the current value of the document will show and be copied to the encounter for historical purposes once the encounter is signed off.

For example: Allergies are an ongoing state, so it would not seem sensible for a button that stores allergy data to be encounter unique. But, the chief complaint is different each time a patient comes in, so it would be encounter unique.

8.6.2 Gender Specific

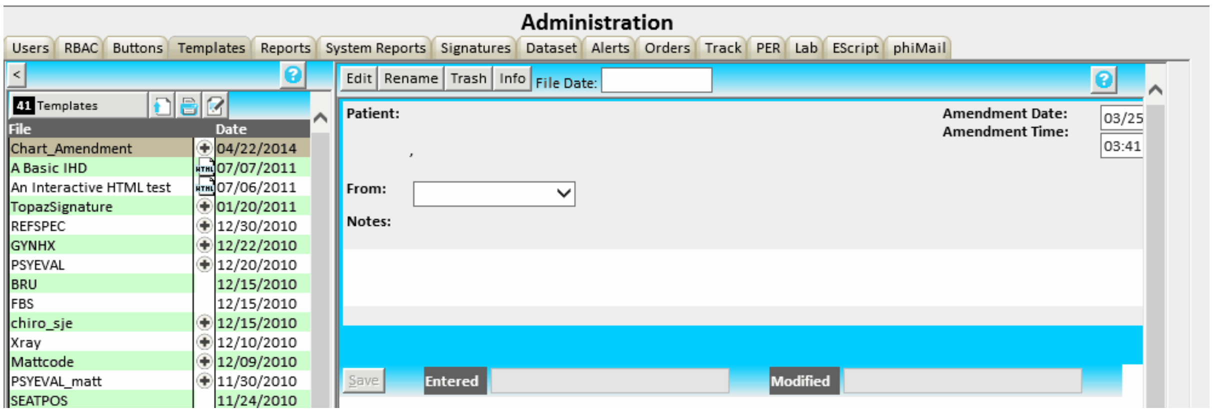
It is possible to set up buttons that are gender specific. This meansMeaning that only one button will appear to the user but a different template will be selected by PARADIGM EHR based on the Ggender of the Ppatient. When this is done you will have to create a minimum of two items in the buttons area. One for Male and one for Female, you may also create an Unknown type. These button files will have the exact same name but be prefixed with “M^”, “F^”, or “U^”.

8.6.3 Notes Generator

The “Notes.pddf” template is a special template that will be used by the Notes button. It is special in that it will collects data from the encounter that was created using all of the other buttons and produces a written note that can be edited and saved. This template must exist for the PARADIGM EHR to create a written completed notes.

8.7 Template Files

Template files are the templates a user may select from when using the “create document from a template” button in a chart.



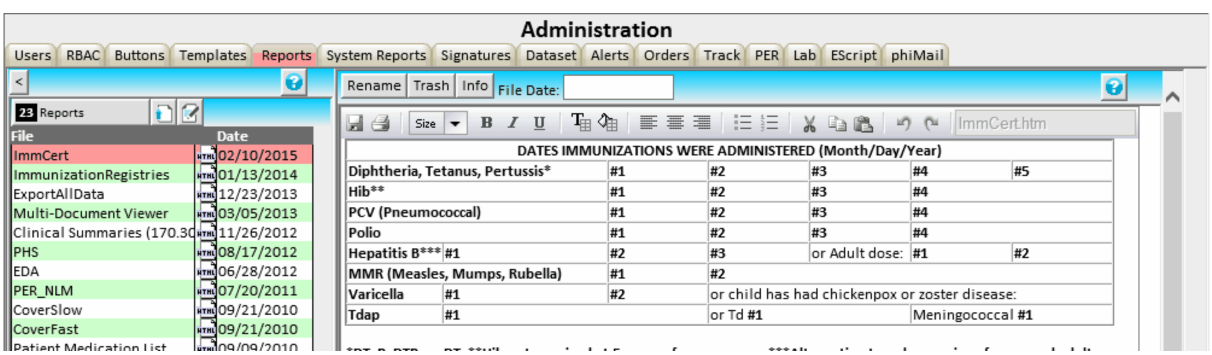
From here you may transfer , or scan new documents in to be used as buttons. You may also copy a template from the template library.

Once you have a file in the Template manager you may click on the file once to view the file, or twice to edit the file.

For information on PARADIGM EHR internal documents (pddf) see Programming.

8.8 Report Files

Reports are programs that gather and present information stored in the PARADIGM EHR EMR files as well as PARADIGM database. The reports listed here will be presented to a user when they click the Reports Button on the patient header chart.



From here you may transfer , documents in to be used as reports from your computer. You may also copy a reports from the reports library.

Report files should always end in ".htm" and be created as HTML / JavaScript programs. Any other file extensions are ignored by the report list program.

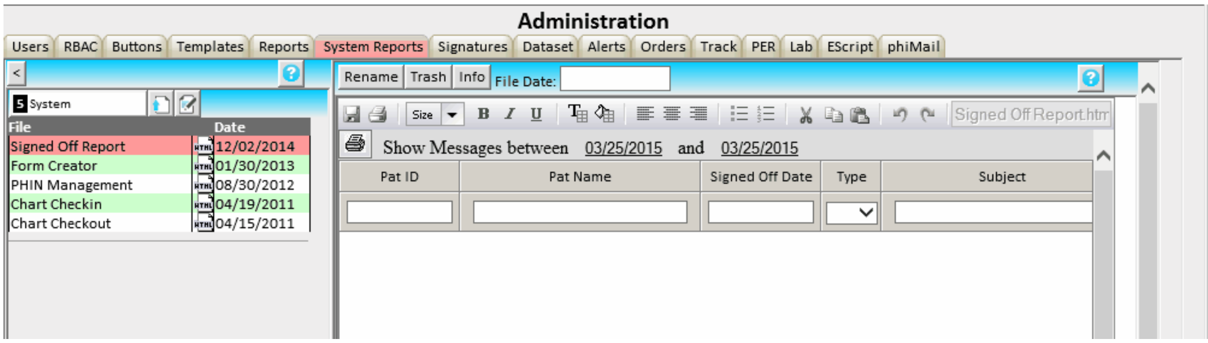
Once you have a file in the report manager you may click on the file once to view the file, or twice to edit the file.

Make sure your local machine is set to pull up ".htm" files in an editor when executed.

see Programming.

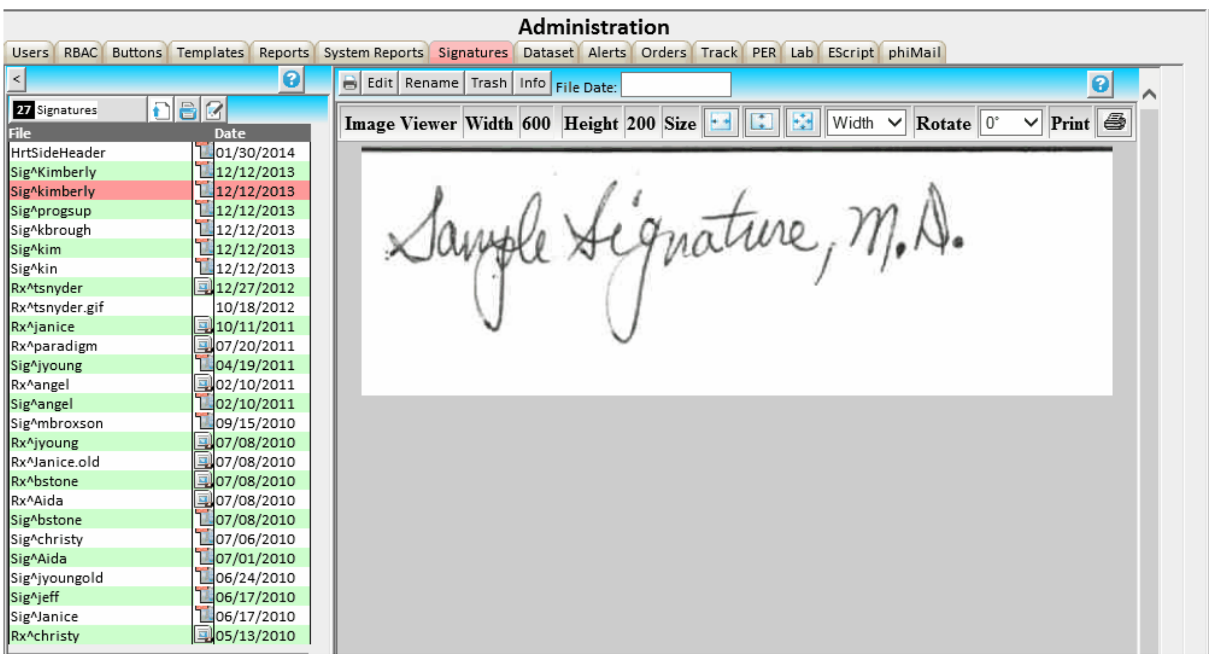
8.9 System Reports

This is the same as Reports, but the reports put here are system reports and not passed a patients account number. They may be accessed from the User button on the Toolbar under System Reports.



8.10 Signature Files

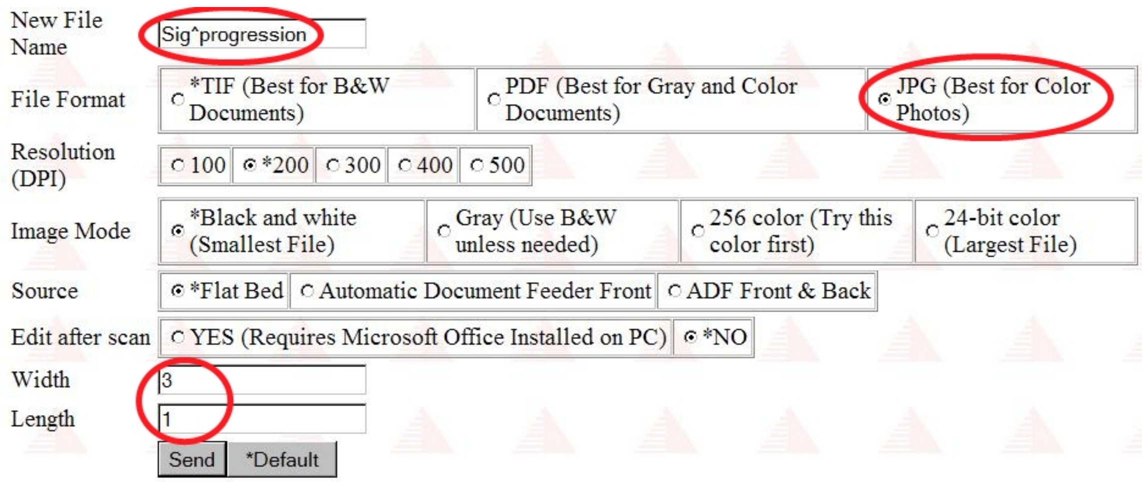
Signatures files are where PARADIGM EHR stores the signatures and prescription pads that are used for signing off documents electronically and printing prescriptions. You may also store logos or other image files you may want to use (maybe as part of your notes).



Once you have a file in the Signature manager you may click on the file once to view the file, or twice to edit the file.

8.10.1 Sig

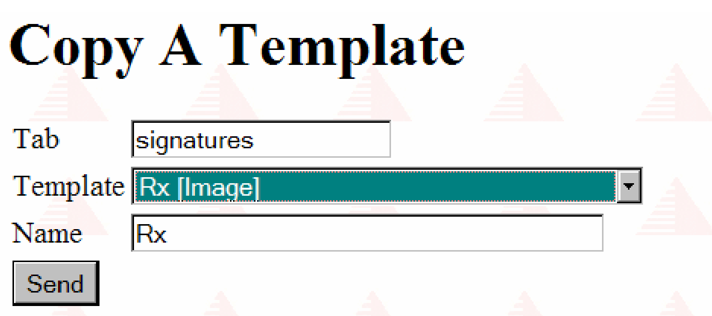
The Sig (signature) files must contain a jpeg (.jpg file) of a signature for a user. The easiest method for obtaining a signature is to have the user sign the upper left hand corner of a sheet of white paper. Then use the scan button to scan that in as a JPEGpeg image.



When scanning, be sure to name the file Sig^username, scan the file as a JPG, and only scan the small area at the top of the paper you had the user sign.

8.10.2 Rx

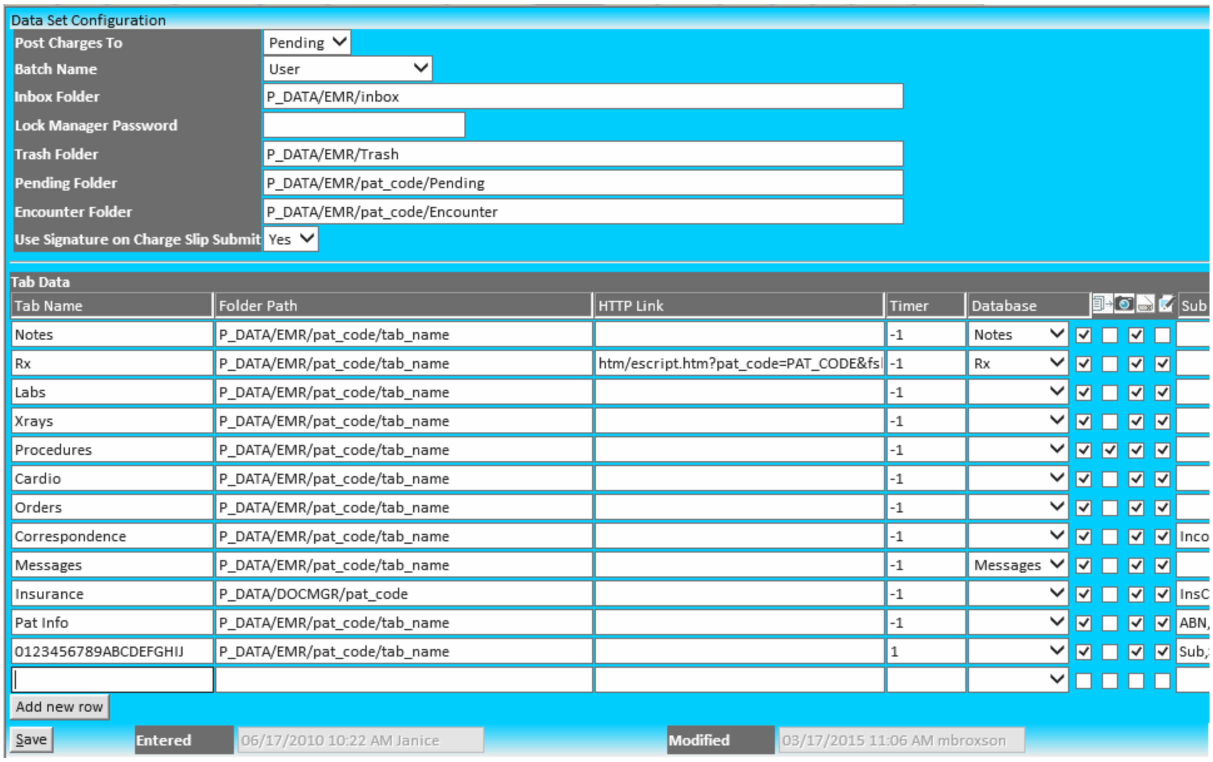
Rx files are the prescription pads that will be used by a user. These files are also specially named as RX^username. They must be GIF files and be 800 X 600 pixels in size. The prescription printing program will overlay the prescription data on this image to produce the printed prescription so it is important to have things in the correct area.



A default Rx pad can be found in the library of templates and you may use the copy a template button to copy it into the signatures area. Name it with the “users” name, (Rx^jack) and then edit the file to add the users signature. You will also want to add the proper practice name, address, and (logo)license and/or DEA number if needed etc.. A logo can also be added if desired.

8.11 Dataset

The dataset configuration form is where you will define how the patient chart will display as well as where the data will be stored and what data will be stored with each encounter. The Data Set configuration form will appears as follows:


Data Set Configuration

Post Charges To	Pending
Batch Name	User
Inbox Folder	P_DATA/EMR/inbox
Lock Manager Password	
Trash Folder	P_DATA/EMR/Trash
Pending Folder	P_DATA/EMR/pat_code/Pending
Encounter Folder	P_DATA/EMR/pat_code/Encounter
Use Signature on Charge Slip Submit	Yes

Tab Data

Tab Name	Folder Path	HTTP Link	Timer	Database					Sub
Notes	P_DATA/EMR/pat_code/tab_name		-1	Notes	☑	☐	☑	☐	
Rx	P_DATA/EMR/pat_code/tab_name	htm/escript.htm?pat_code=PAT_CODE&fs	-1	Rx	☑	☐	☑	☑	
Labs	P_DATA/EMR/pat_code/tab_name		-1		☑	☐	☑	☑	
Xrays	P_DATA/EMR/pat_code/tab_name		-1		☑	☐	☑	☑	
Procedures	P_DATA/EMR/pat_code/tab_name		-1		☑	☑	☑	☑	
Cardio	P_DATA/EMR/pat_code/tab_name		-1		☑	☐	☑	☑	
Orders	P_DATA/EMR/pat_code/tab_name		-1		☑	☐	☑	☑	
Correspondence	P_DATA/EMR/pat_code/tab_name		-1		☑	☐	☑	☑	Inco
Messages	P_DATA/EMR/pat_code/tab_name		-1	Messages	☑	☐	☑	☑	
Insurance	P_DATA/DOCMGR/pat_code		-1		☑	☐	☑	☑	InsC
Pat Info	P_DATA/EMR/pat_code/tab_name		-1		☑	☐	☑	☑	ABN,
0123456789ABCDEFGHIJ	P_DATA/EMR/pat_code/tab_name		1		☑	☐	☑	☑	Sub,
					☐	☐	☐	☐	

Add new row

Save Entered 06/17/2010 10:22 AM Janice Modified 03/17/2015 11:06 AM mbroxson

8.11.1 Post Charges To

This is used to control how charges are posted to into the PARADIGM® system when an electronic charge slip is submitted. The following options are allowed:

8.11.1.1 Open

Charges are posted as open and will not be subject to review before being closed in the end of day process.

8.11.1.2 Pending

Charges will be posted to a special "Pending" batch. This batch allows you to review the open charges one visit at a time using the "Pending Batch" work list in PARADIGM®. Items in a pending batch will need to be accepted on a visit by visit basis before they can be closed in the end of day process.

8.11.1.3 Batch

This will post the charges into a regular batch. The batch will be assigned to the first 5 characters of the user entering the charges in the PARADIGM EHR system. And the batch name will be set by the "Batch Name" field. This method allows you to review all charges entered by a provider prior to closing them in an end of day process.

8.11.2 Batch Name

If the “Post Charges To” field is set to “Batch”, you may use this field to select how you want to name the batch. Your options are: User, Month Day (MMDD)

8.11.2.1 User

This will name the batch by the user name that submitted them in the PARADIGM EHR system. This is helpful if you want to keep each provider’s charges in separate batches.

8.11.2.2 Month Day (MMDD)

This will name the batch the Month and Day in MMDD format. This allows you to keep batches for each day.

8.11.3 Naming Folders

When naming folders, you may use the following shortcuts in the path name.

P_DATA

This is the complete path to the PARADIGM® data directory for the data set that you are defining. If used, this should always be used as the first thing defined in a folder path.

pat_code

This will be replaced by the patient’s account number in the path when the path is used for the purpose of storing or retrieving data for the patient. Tab folder names will typically have the “pat_code” some place in the path name.

tab_name

This can be used at the end of a tab folder name. When used it will name the folder the same name as the tab.

If you change the name of a tab after you have used it to store data, and the tab_name is in the folder name, you will no longer have access to the data you stored. You may change tab_name in the folder name to the previous tab name to retain the data. The data will not be removed, you will just not have access to it.

8.11.4 Inbox Folder

This field is used to define the absolutes path for the Inbox on the PARADIGM EHR server. The inbox is the area where information is exchanged between PARADIGM EHR and your network. Users can save areas to the inbox and then file them immediately in a patients chart. The inbox may also be used by Faxing programs as a place to store incoming faxes, or for interface programs that receive files that are not patient specific.

For security reasons, you may want to set up a separate inbox for each data set if you have multiple data sets. You may also use SMB security to limit authorization to those inboxes if sharing on the network.

8.11.5 Lock Manager Password

Enter a password for the lock manager to prohibit user access to the lock manager.

8.11.6 Trash Folder

This folder is where items that have been moved to "Trash" will be placed. This may be a folder shared between all accounts, or by using "pat_code" in the path, you may have a separate trash folder for each patient.

P_DATA/EMR/Trash
P_DATA/EMR/pat_code/Trash

8.11.7 Pending Folder

This folder is where all pending items for a patient will be stored. This folder must have the "pat_code" in the folder name.

P_DATA/EMR/pat_code/Pending

8.11.8 Encounter Folder

This folder defines where all encounter data will be stored for a patient. This folder must have the "pat_code" in the folder name. The Encounter number (slip number) will be added to the end of this folder name to get the actual folder.

P_DATA/EMR/pat_code/Encounter

8.11.9 Tabs

Tabs are the areas of a chart where documents will be stored. These are specific to the practice and the type of information that they want to store. They are synonymous to the tabs in a physical chart, but electronically we have a few other additional options available to us that you can't do aren't available with a physical chart, such as: shared tabs, automatic filing tabs, and tab security.

8.11.9.1 Tab Name

Here you should enter the name of the tab as you want it to appear on your screen. Here are some sample tab names:

Notes, Lab, Rx, and Pathology

8.11.9.2 Folder Path

Enter the name of the folder that will store the data. See folder naming conventions above. If a folder does not have the "pat_code" in its name, it will be a shared folder between all patients.

8.11.9.3 Hypertext Link

Here you may enter a link to another web page. When a user is in this tab of a patient's chart the link icon will display, allowing that user to link to that Site. You may also store you own html pages in the signature files to reference here.

8.11.9.4 Timeout

This is used for security on the files stored in the tab. It defines how many minutes a file will remain unlocked when first filed into a tab. Unlocked files have the ability to can be moved to other tabs or (trash) if security allows. Enter "0" if you want to lock the file immediately, or enter a "-1" if you never want to lock the file.

8.11.9.5 Database

This defines what database of documents will automatically be filed in this tab. The options are:

Notes
These are the notes generated using the Notes button. When the notes are signed off, they will display under the notes tab.

Rx
This is for applies to prescriptions and medications that have been entered into a patient's chart. Once a medication or prescription is entered it will be automatically field filed in the Rx data base tab.

Messages
This Tab will be used to store Messages when they are filed from the patients Pending tab.

8.11.9.6 Upload

If checked this tab will have the ability for give users the ability to upload (transfer) in files directly into the chart and tab.

8.11.9.7 Photo

If checked this tab will have the ability for give users the ability to take photographs directly into the chart and tab.

8.11.9.8 Scan

 If checked this tab will have the ability for give users the ability to scan documents directly into the chart and tab.

8.11.9.9 Document

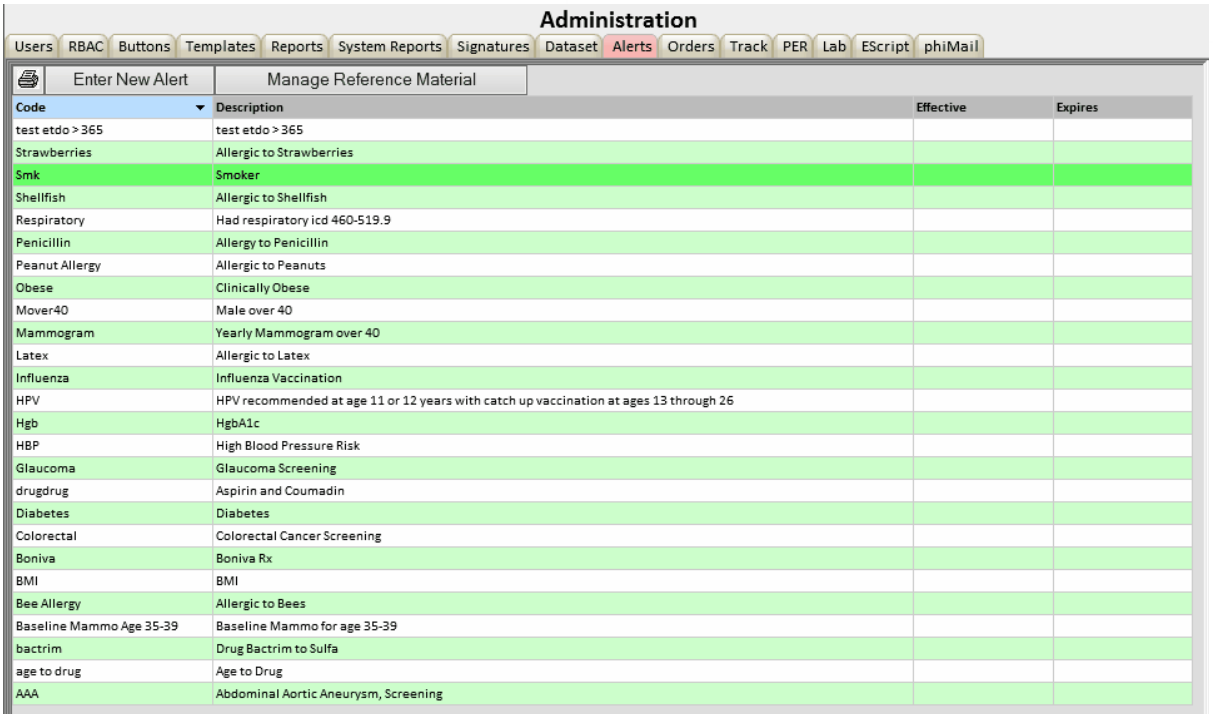
 If checked users will have the ability to create new documents directly in the patient’s chart tab.

8.11.9.10 Sub Folders

Here you may enter a comma "," separated list of sub-folders to place in the tab.   Do not enter any spaces or slashes "/" in the folder names, or after the commas.

8.12 Alerts

Here is where you will create Alert trigger definitions. These are examined each time a user enters a chart. The program will examine check each definition to see if the patient does not already have an alert created. If that is the case it will look at the search information defined, If all of the criteria is met the alert will be added to the patients alerts.



Administration

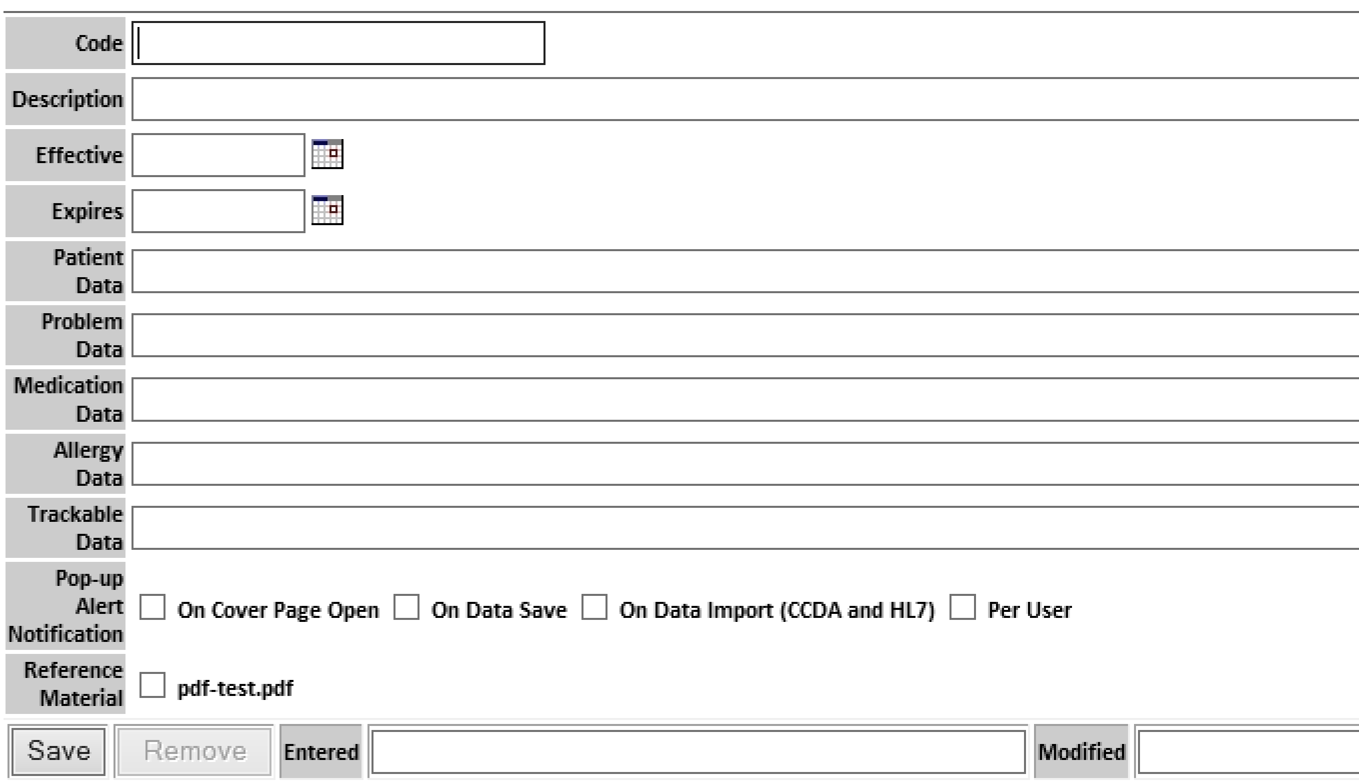
Users | RBAC | Buttons | Templates | Reports | System Reports | Signatures | Dataset | Alerts | Orders | Track | PER | Lab | EScript | phiMail

Enter New Alert | Manage Reference Material

Code	Description	Effective	Expires
test etdo > 365	test etdo > 365		
Strawberries	Allergic to Strawberries		
Smk	Smoker		
Shellfish	Allergic to Shellfish		
Respiratory	Had respiratory icd 460-519.9		
Penicillin	Allergy to Penicillin		
Peanut Allergy	Allergic to Peanuts		
Obese	Clinically Obese		
Mover40	Male over 40		
Mammogram	Yearly Mammogram over 40		
Latex	Allergic to Latex		
Influenza	Influenza Vaccination		
HPV	HPV recommended at age 11 or 12 years with catch up vaccination at ages 13 through 26		
Hgb	HgbA1c		
HBP	High Blood Pressure Risk		
Glaucoma	Glaucoma Screening		
drugdrug	Aspirin and Coumadin		
Diabetes	Diabetes		
Colorectal	Colorectal Cancer Screening		
Boniva	Boniva Rx		
BMI	BMI		
Bee Allergy	Allergic to Bees		
Baseline Mammo Age 35-39	Baseline Mammo for age 35-39		
bactrim	Drug Bactrim to Sulfa		
age to drug	Age to Drug		
AAA	Abdominal Aortic Aneurysm, Screening		

8.12.1 Create an Alert Definition

By pressing the "Enter New Alert / Reminder" button the Alert Trigger form will display.



You must first give the trigger a unique code. The code can be descriptive.

Give a description. This is the Description of the alert the user will see.

If the Alert is for a given time frame enter the Effective and/or Expires dates.

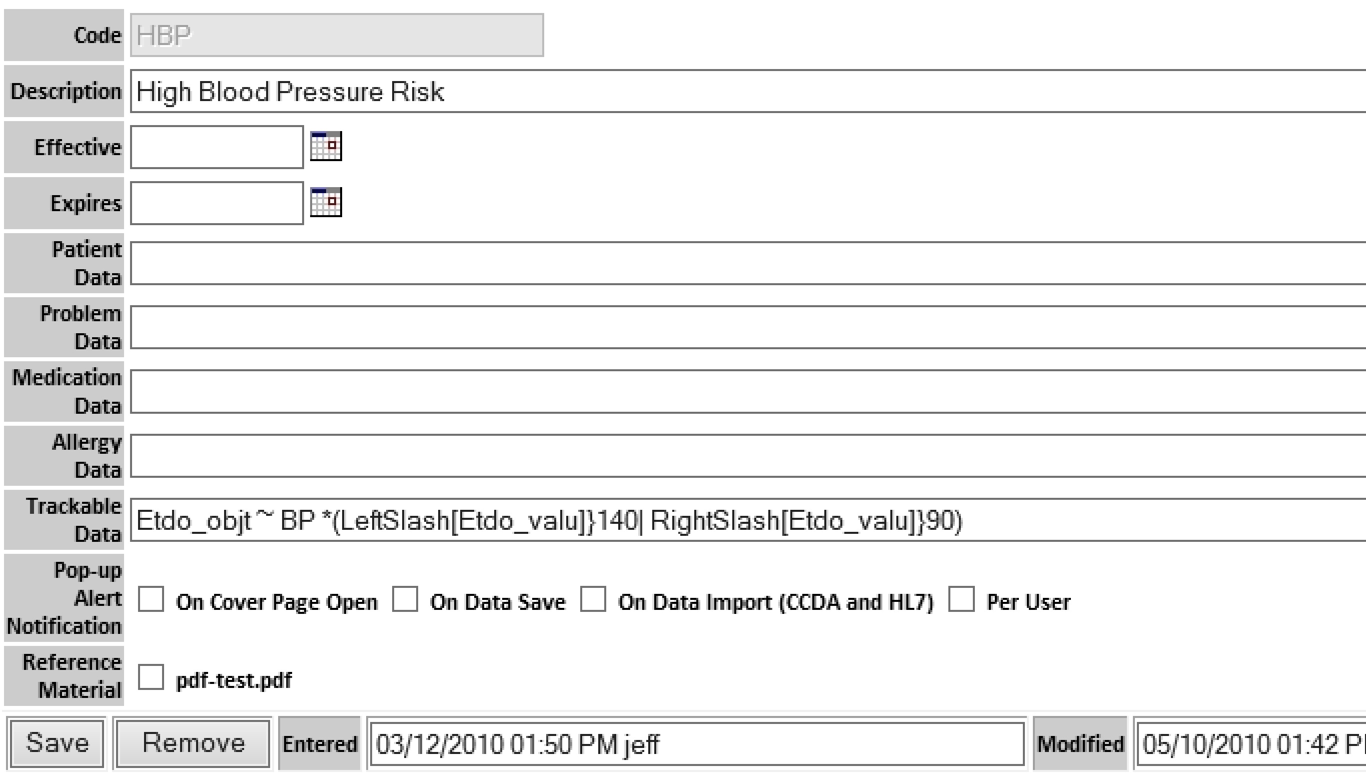
You may then create logical selection criteria from: Patient Data, Problem Data, Medication Data, Allergy Data, and Trackable Object Data.
The sentence builder allows access to all relevant data fields and logical operators that you will need for each area.

If a data area is left empty it will evaluate to TRUE, otherwise the logic string you enter must evaluate to TRUE for the alert to be assigned to a patient. If Logic strings are created for multiple data areas they must all evaluate to TRUE for the alert to be added to the patient alert data.

The Pop-up Alert Notification allows for configuration of when alerts will pop up for users.

Reference Material list all available Reference Material that has been configured in the EHR. Anything that you select here will show up on the Alert information dialog inside the patient's chart.

Here is an Example of a completed alert definition.



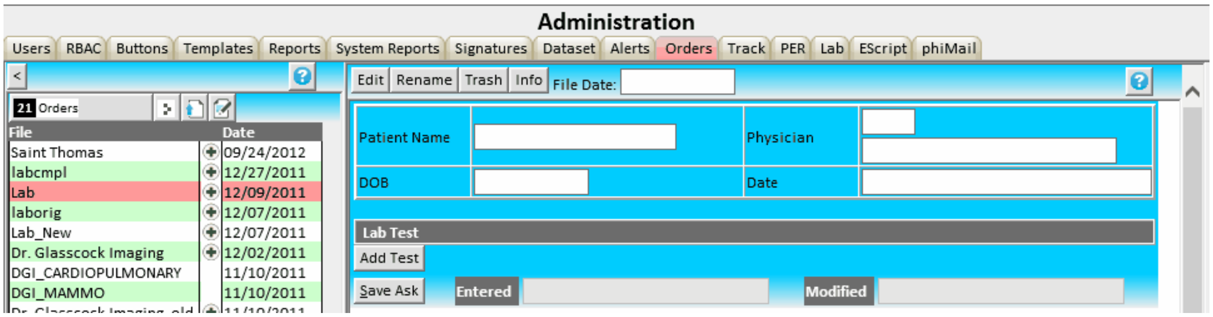
Code	HBP
Description	High Blood Pressure Risk
Effective	
Expires	
Patient Data	
Problem Data	
Medication Data	
Allergy Data	
Trackable Data	Etdo_objt ~ BP *(LeftSlash[Etdo_valu]}140| RightSlash[Etdo_valu]}90)
Pop-up Alert Notification	On Cover Page Open; On Data Save; On Data Import (CCDA and HL7); Per User
Reference Material	pdf-test.pdf

Save | Remove | Entered 03/12/2010 01:50 PM jeff | Modified 05/10/2010 01:42 PI

8.13 Orders

Orders can be based off of the standard Medical Order Form or custom PDDF forms. When an order is created it is stored in a special area in the patient chart and attached to a work list item that is used to track the order. This is where you will place any order (PDDF) form that you want to use with the database. You can also customize the Medical Order

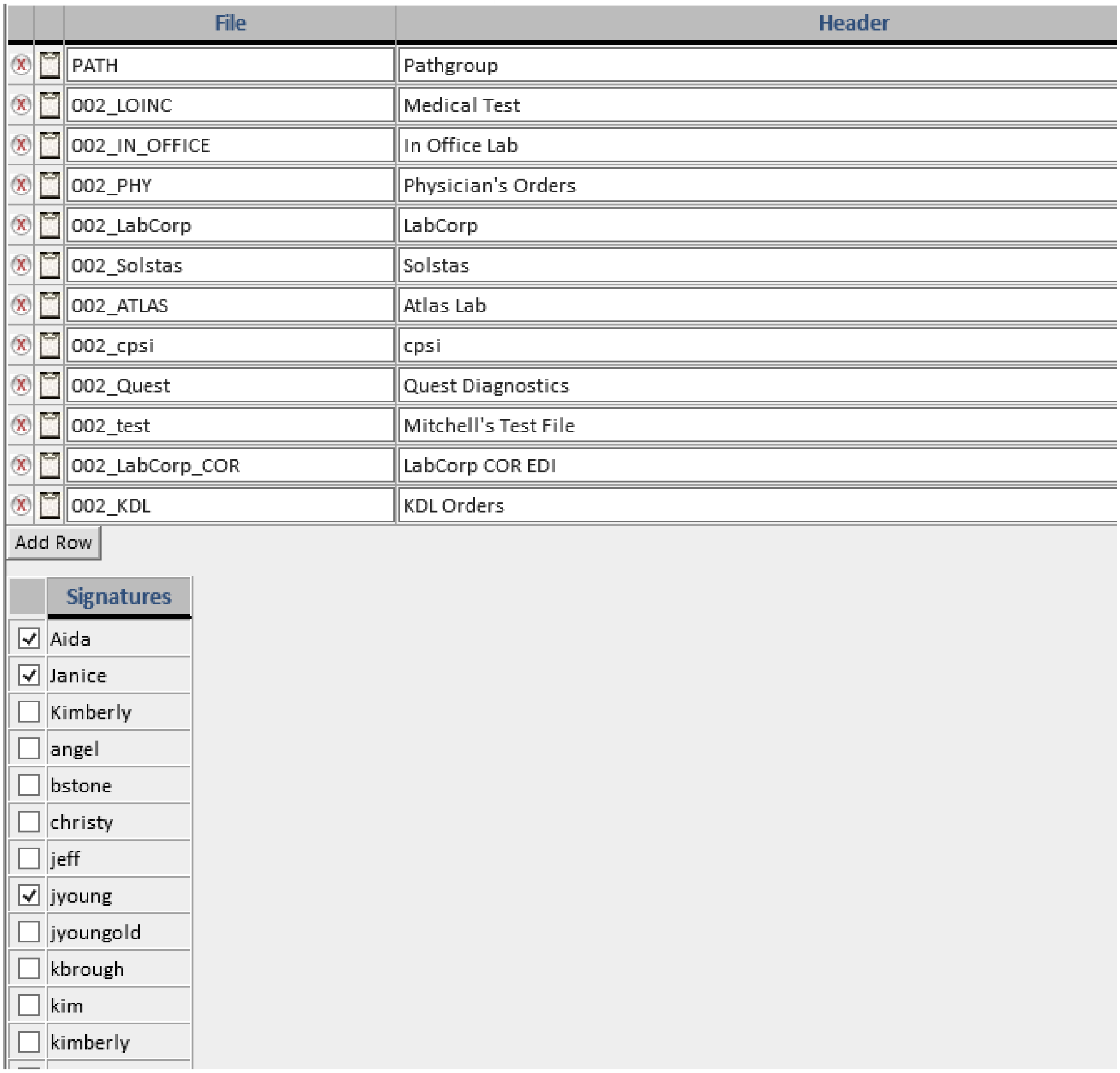
Form using the configuration button.



8.13.1 Medical Order Configuration

The first page of the Medical Order Configuration sets up what order groups defined for the data set as well as what staff signatures are available for the orders.

To add an order group, click on the Add Row button and define a File name and a Header for that group. The file name is recommended to be in the format {data set number}_{name} to ensure that files are not modified across data sets. If you would like to share an order group across multiple data sets, enter the same file name in all data set order configuration pages. The file name does not support the use of spaces in the name and the form automatically strips the spaces as soon as you save the changes. The Header for the order group can be any description that you would like to use. This description is what the Worklist item will use to track the order. To change the items inside of the order group, click on the Order icon.



File	Header
PATH	Pathgroup
002_LOINC	Medical Test
002_IN_OFFICE	In Office Lab
002_PHY	Physician's Orders
002_LabCorp	LabCorp
002_Solstas	Solstas
002_ATLAS	Atlas Lab
002_cpsi	cpsi
002_Quest	Quest Diagnostics
002_test	Mitchell's Test File
002_LabCorp_COR	LabCorp COR EDI
002_KDL	KDL Orders

Add Row

	Signatures
☑	Aida
☑	Janice
☐	Kimberly
☐	angel
☐	bstone
☐	christy
☐	jeff
☑	jyoung
☐	jyoungold
☐	kbrough
☐	kim
☐	kimberly

8.13.2 Order Items

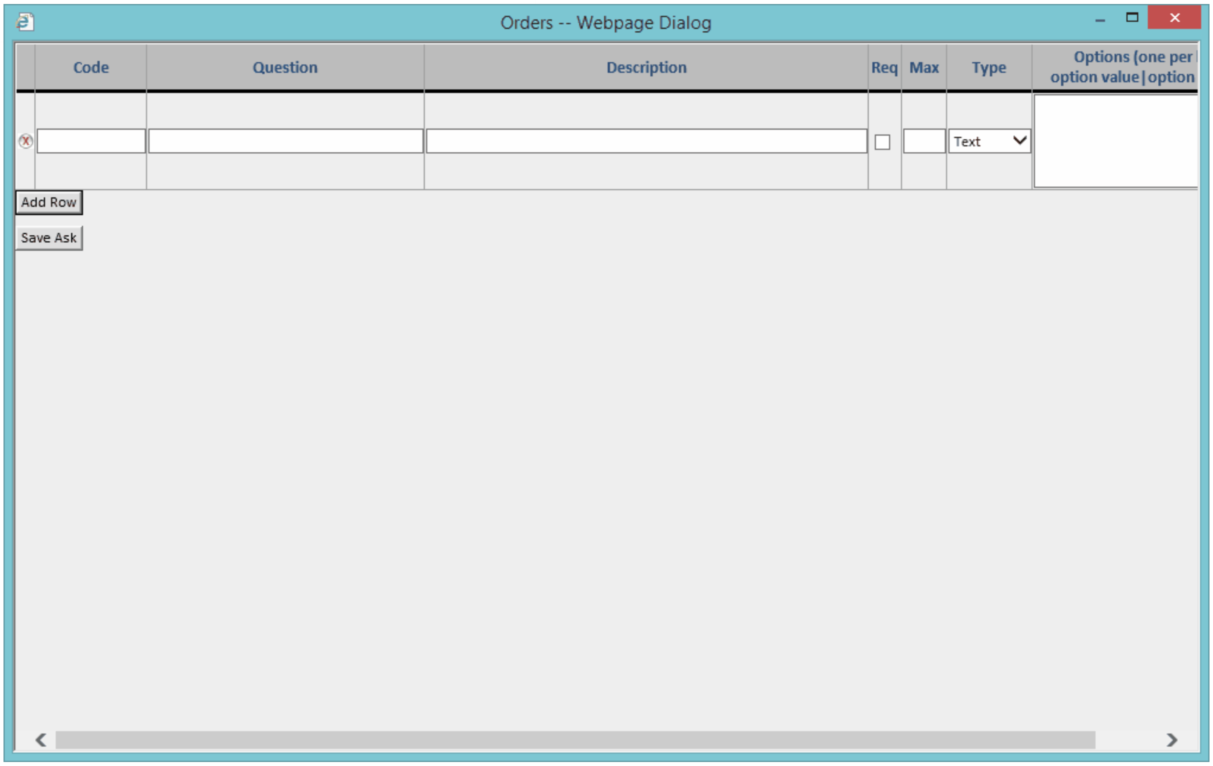
After clicking on the order icon, the order groups will be replaced with the order items for the selected group. The order items consist of a code and a description for each item. The code is only required when you are planning on setting up Ask at Order Entry questions for that order item. To set up the Ask at Order Entry questions, click on the Order icon.

		Order Code Only required if using AOE.	Order Description
		17HPS	17-Hydroxypregnenolone
		17K24	17-Ketosteroids, Urine, 24 Hour
		17KRU	17-Ketosteroids, Urine, Random
		17OHP	17-OH Progesterone
		5AMAC	5-Aminolevulinic Acid, Urine, 24 Hour
		HOIA	5-Hydroxyindoleacetic Acid, Urine, 24 Hour
		5HAUR	5-Hydroxyindoleacetic Acid, Urine, Random
		ABORH	ABO/ RH
		ABO	ABO
		ACANST	ACANTHAMOEBA STAIN
		ACP	ACID PHOSPHATASE
		ARBA	AChR Binding Auto AB
		ACHRB	AChR Blocking AAB
		AMOAB	AChR Modulating ABs
		VAFB	AFB Culture and Stain
		AVP	AFFIRM VPIII Vaginitis Panel
		ALT	ALT (SGPT)
		ANAX5	ANA Screen with reflex to ANA5

8.13.3 Ask at Order Entry Questions (AOE)

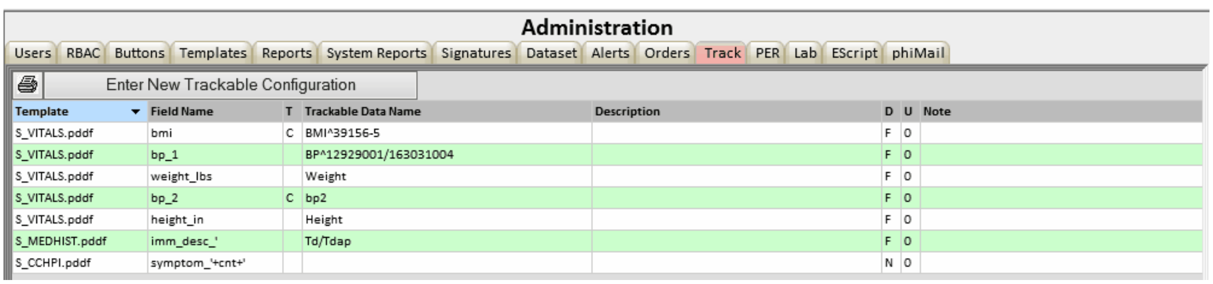
The Ask at Order Entry opens in a Modal Dialog for you to set up the questions that are associated with that order item. The AOE fields are as follows:

- Code (required): AOE code associated with that question.
- Question (required): The question to ask.
- Description: The on-hover tooltip to display.
- Req: If checked then the question is marked as required at the time of the order.
- Max: The maximum length of the value.
- Type: Text, Number, or Date.
- Options: Available answers for that question. The answers are in the format Display|Value. If you do not have a lab orders interface then the Display and Value will be the same and you can enter the Display only.



8.14 Track

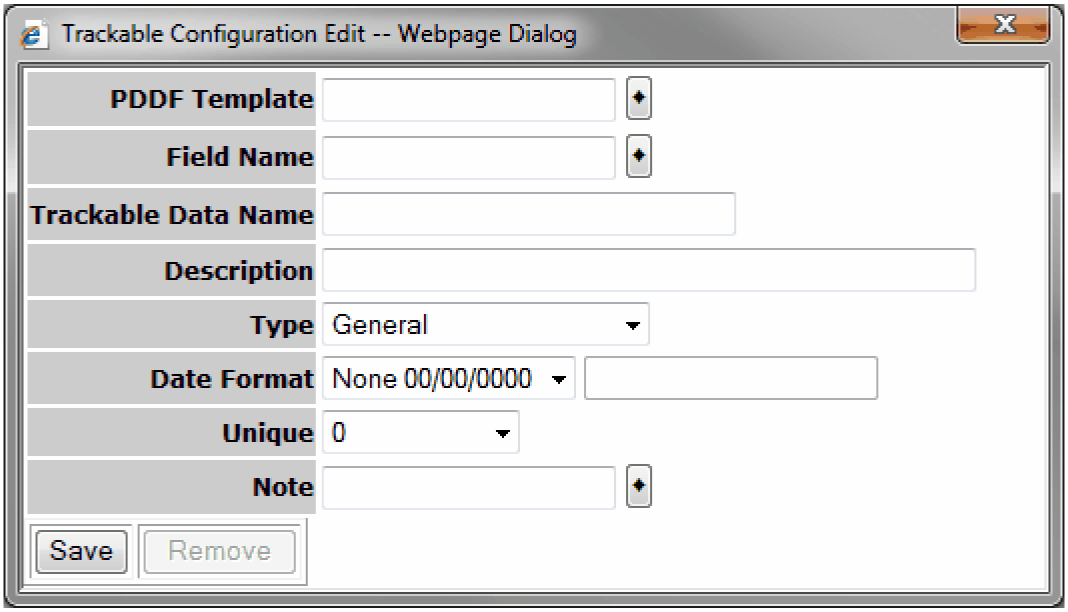
This Tab allows you to create configuration entries for information you would like to track in the trackable data. You may select from fields of any PDDF forms to automatically add that data to the trackable data when the user saves a form.



Template	Field Name	T	Trackable Data Name	Description	D	U	Note
S_VITALS.pddf	bmi	C	BMI^39156-5		F	0	
S_VITALS.pddf	bp_1		BP^12929001/163031004		F	0	
S_VITALS.pddf	weight_lbs		Weight		F	0	
S_VITALS.pddf	bp_2	C	bp2		F	0	
S_VITALS.pddf	height_in		Height		F	0	
S_MEDHIST.pddf	imm_desc_'		Td/Tdap		F	0	
S_CCHPI.pddf	symptom_'+cnt+'				N	0	

8.14.1 New Trackable Configuration

By Pressing the "Enter New Trackable Configuration" button the following form will appear:



Here you must select a PDDF Template and Field from that Template to create an object to track.

The PDDF Template field button will list all of your templates and buttons that are PDDF forms.

Once a form is selected the Field Name button will list all the fields in that form. NOTE: Forms with javascript creation of HTML will not work here.

In the Object Name Enter the what you want to call the Object. This should be a unique identifier. SNOMED Codes should be used when available.

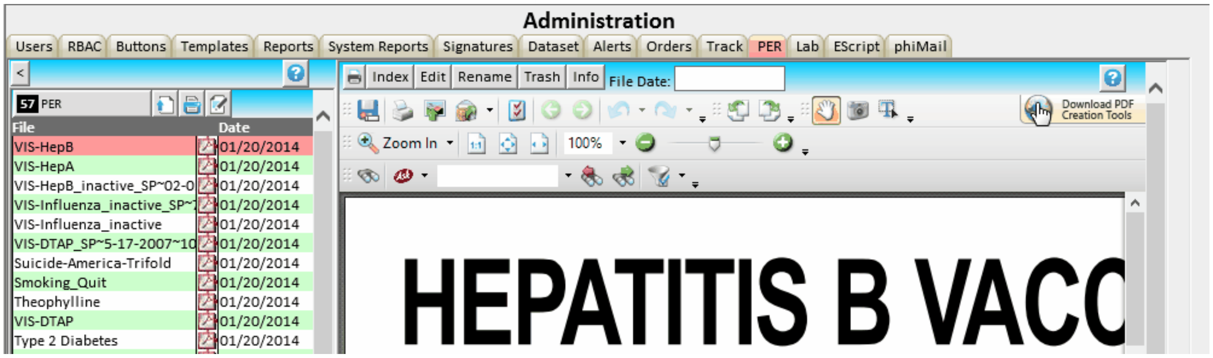
The Date Format allows you to select from None, System Date, or Field. If Field is selected you will be given a list of fields within the defined form to select from.

The trackable data objects created have a primary key based on the patient, object name, date, and a unique value. If you need to keep multiple pieces of information for the same patient, object name, and date then the unique value must vary.   This can be done by using a different number for different fields or by selecting Current Time.

The Note will store in the note of the trackable data object. Here you may also select from a list of fields on the form or just free form enter a value.

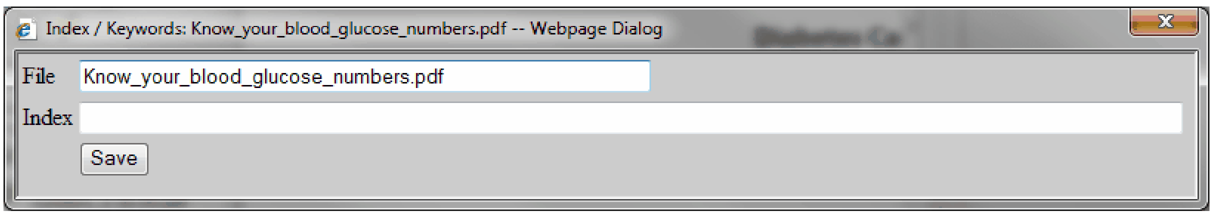
8.15 PER (Patient Education Resources)

Here you may place all of your Patient Education Resource (PER) files. These are information sheets that may be given to a patient. The PER system will automatically select appropriate PER files for a patient based on Medications, Problems, and Results.



8.15.1 Indexing a PER

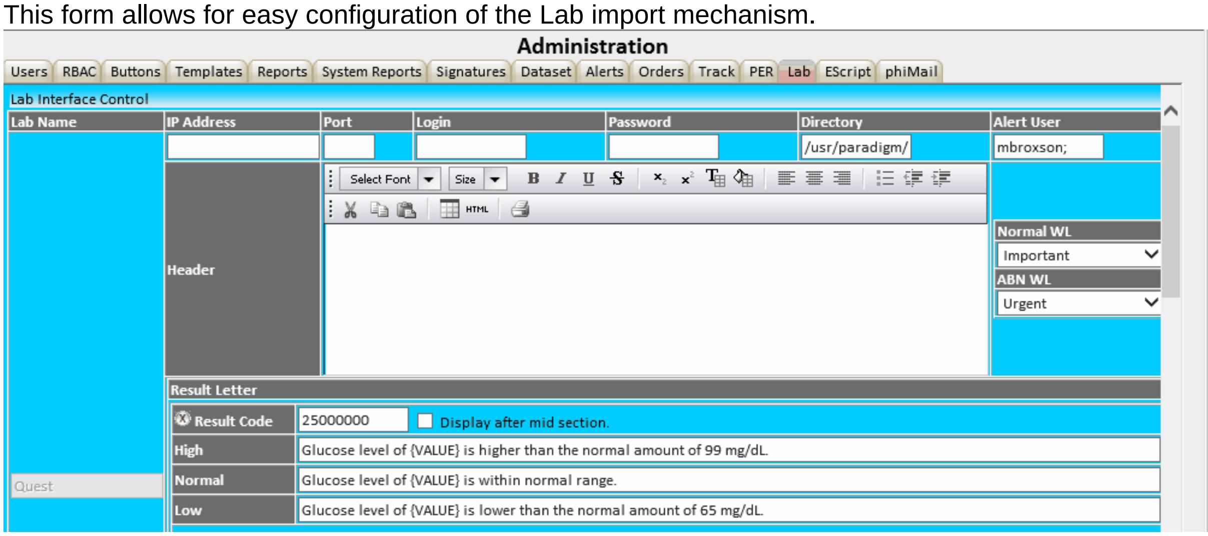
On the Document Header of a PER file is the "Index" button. Pressing this button will display the following form.



Here you may enter in keywords that are used to identify the drugs, problems or results that should include this file. Enter any keywords and press the Save button. If no keywords (index) are saved it will only match based on the file name.

8.16 LAB

This form allows for easy configuration of the Lab import mechanism.



Part 9

Programming

9 Programming

PARADIGM EHR supports two internal files types.

The PARADIGM EHR Data Document (PDD) is used to collect data in a structured form. This data can also be extracted using the programming tools provided. This serves as the basis for collecting information on a patient encounter that is used to generate a summary note of that patients visit.

The second supported internal file type is "html" or "text". These files will automatically display in an HTML / text editor and are used for creating documents similar to what you would create with a word processor. A Hypertext Application (HTA) program can be used to gather information from the database to create a base document that you may then edit and save. This is helpful for things such as letters to patients, or referring providers or even to generate custom encounter notes.

9.1 PARADIGM Data Documents (PDD)

PARADIGM EHR utilizes a document format known as a “PARADIGM data document” to store text / html data in a patient’s chart. These PDDF files are snippets of HTML and JavaScript that the PARADIGM EHR application can interpret. When a user saves one of these forms down, PARADIGM EHR will save only the data, and when a user looks at the data in the “PDD” file created, it will bind the data and the form “PDDF” back together for the user to view.

The purpose of using this technique is to impose a common programming interface or API in PARADIGM EHR to create a consistent user interface experience. By utilizing HTML and JavaScript a programmer has a very complete set of display and control languages available to them. HTML and JavaScript are very well documented and there are many programmers that are familiar with these languages. Style sheets may also be used in the programming of PDDF documents but it is not recommended because the default PARADIGM EHR style sheet will be imposed on any documents. and by By using the PARADIGM EHR style sheet the user will see a consistent interface.

As stated, PDDF documents are snippets of HTML and JavaScript code. The concept is to be able to create a single form that stores data. Therefore there are many things that have been pre-programmed to allow you to easily and quickly create a form.

9.1.1 PDD Form Wrapper

PDDF documents are encased in a form wrapper. This form wrapper defines the HTML form as well as some JavaScript widgets that are used for form validation, dynamic displays and calendars, etc... Some fields are also predefined. Here Below we will discuss these wrapper elements.

Every PDDF form will have the same form name “pdd_data”. Therefore when referencing the document using JavaScript you may refer to it as “pdd_data”.

i.e. If you want to reference a field named “weight”, and get the value of that field it would be:

```
pdd_data.elements[‘weight’].value
```

Also see Get Object and Get Object Value.

Any other attribute could be addressed in the same way.

9.1.2 HTML Extentions

This section describes extensions to HTML that you may utilize in your PARADIGM EHR Data Documents.

9.1.2.1 The REPEAT Element

This is an additional HTML element that instructs the program to repeat a section of data. This is useful when creating forms that need repeating data elements. Example of this are the Group Maintenance, Data Set Configuration, and Transaction WorkList of the administration setup options.

By using the <REPEAT> </REPEAT> around a section of code, the program will change the name of each field, adding an extension to it that is the line number. Take for example the following code:

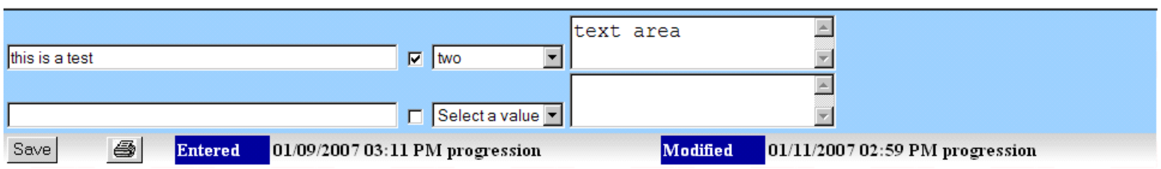
```
<input type="text" size=50 name="tf_">
<input type="checkbox" name="cb_">
<SELECT name="sb_">
  <OPTION value="">Select a value</OPTION>
  <OPTION value="1">one</OPTION>
  <OPTION value="2">two</OPTION>
  <OPTION value="3">three</OPTION>
</SELECT>
<textarea name="ta_" ></textarea>
```

It will produce output such as:

When the user saves the form it will return and display the data as normal. But if you wanted the user to continue adding additional data of the same fields, over and over you can use this element. Simply change your code to the following.

```
<REPEAT>
<input type="text" size=50 name="tf">
<input type="checkbox" name="cb_">
<SELECT name="sb_">
  <OPTION value="">Select a value</OPTION>
  <OPTION value="1">one</OPTION>
  <OPTION value="2">two</OPTION>
  <OPTION value="3">three</OPTION>
</SELECT>
<textarea name="ta_" ></textarea>
</REPEAT>
```

After the user saves the form, it will be displayed as follows:



The new form shows the original data and provides a new area for the user to enter data. If data is entered in any of the fields of the “row” it will be saved.

Make sure you do not predefine the value of any field because it will add a new row each time a user saves the form.

Do not make any of the fields required using [CSV](#) widget. This will cause the user to have to enter data in a new row even if they only need to change existing data. If you need to use CSV to require a field do this using javascript by setting the id attribute based on a condition.

9.1.2.1.1 START Attribute

The REPEAT element will actually change the NAME attribute of each field defined in the repeat area. A sequence number will be added to the name given starting with the number one “1”. You may change the default behavior of this by including the START attribute in your <REPEAT> element as in
<REPEAT START=5>.

This tells the program to start the sequence at the number five “5”. Using this method you could predefine up to 4 rows of data and then have the computer generate them from row five on.

9.1.2.1.2 Integration with makeRepeat widget

The makeRepeat widget discussed below improves the <REPEAT> element by allowing a user to add new rows of data without having to save the form each time. This may be beneficial in some circumstances.

9.1.2.2 The FUNCTION Element

The PDD also has some internal functions that you may use in your code. Internal functions can be accessed using the <FUNCTION name=”function_name”> context. This is an additional HTML tag that PDD supports.

The following details them:

UserOptions
Provides an options list of users defined for the data set.

GroupOptions
Provides an options list of groups defined for the data set.

ICDOptions
Provides an options list of ICD codes for the data set that are classified from the PARADIGM® ICD file.
It is preferred that you use the Quick Diagnosis widget.

CPTOptions
Provides an options list of CPT codes for the data set that are classified from the PARADIGM® TRA file.
It is preferred that you use the Quick PARADIGM File widget.

PHYOptions
Provides an options list of Physician from the PARADIGM® PHY file.
It is preferred that you use the Quick PARADIGM File widget.

LOCOptions
Provides an options list of Location from the PARADIGM® LOC file.
It is preferred that you use the Quick PARADIGM File widget.

RESOptions
Provides an options list of Resources from the PARADIGM® RES file.
It is preferred that you use the Quick PARADIGM File widget.

Medications
Function to list medications for a patient.

ProblemListText

Function to list problem list or diagnosis history for a patient in text format. This would be used in a <textarea>

ProblemListHtml

Function to list problem list or diagnosis history for a patient in HTML format.

9.1.2.3 System Values

These values are commonly used when programming and this eliminates you having to write code to get these.

System Variables

SYS_time
Is an object that points to the current system time. You may use the formatDate widget to extract date and time information from this object if you need somthing other then what is provided in SYS_DATE and SYS_TIME.

SYS_DATE
A String containing the system date in MM/dd/yyyy format

SYS_TIME
A String containing the system time in

SYS_fsl_code
Current fee slip (Encounter) code

SYS_pat_code
Current patient code

SYS_tab
Current Tab

SYS_subdir
Current sub directory in tab

SYS_button
Current Button if in Slip

SYS_template
Template requested. This differs from PDD_template. This will only have a value when creating a new file, because the template name (PDD_template) is stored in the data of the "ppd" file, and recalled when the data is edited.

SYS_file
Current file to be created or edited.

ACCOUNT Variables

ACCOUNT
This contains all values in the ACCOUNT cookie. You may use getValue to extract any data. The following variables have already been assigned for you .

AC_data
The data number 001, 002, 003 etc. Useful when storing QuickList Files

AC_head
The name of the Practice.

AC_user
The name of the user.

AC_role
The role the user is assigned in the RBAC.

AC_path
The Path of the PARADIGM data files.

Other Variables

PDD_template
The name of the template file

query_string
This contains the query string passed into the PDD form. You may use the getValue widget to extract data from this field.

PDD_DATA
This contains the data for all of the fields on the form. Forms that are completely script based (dynamic) as opposed to HTML will need to load the field values from the data contained in this variable.   See (ROS.pddf, Exam.pddf)

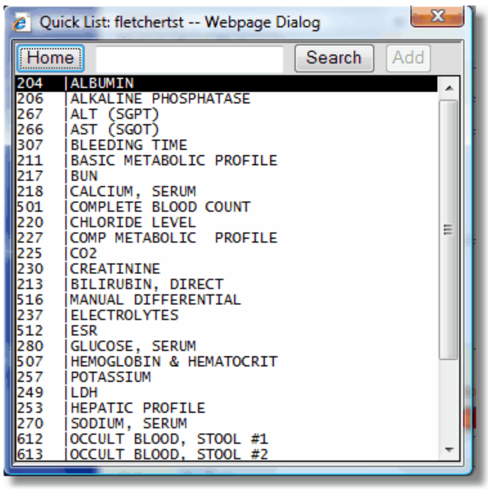
PDD_LOAD_COMPLETE
This value is set to "true" by default. It is used to tell the program if the form has completely loaded. Once the PDD form has loaded it will run either a routine to set default fields and the Save button, or print the form.   Because script based (dynamic) forms have to load create the HTML and load the data, these processes will have to be delayed until they are complete. So a monitor is run at the end of the to look at this variable, if it is set to true, the process will run if not it will check every half second until it is set to true. In these types of programs, the variable is set to false, until it has completed all of the work that it needs to do, then it should be set to true.

9.1.3 User Interface Widgets

These widgets are included on every PDD form. They allow you to quickly and easily program custom forms with a consistent user interface.

9.1.3.1 Quick List

The Quick List Widget allows you to easily create dynamic select list to include in your form. Instead of using the traditional HTML <SELECT> you may use an <INPUT> to store your data value and use the QuickList widget to populate the value.



QuickList provides several advantages over a traditional select:

- It is dynamic
- values can be stacked
- Items can be added to list by the user
- It is searchable
- Lists can be gobal (all data sets), by data set, by user

With the traditional select list, you must statically define, or use a predefined function to populate this options. The drawback to this is that all of this data has to be included on the HTML form. This slows down the HTML form, especially on forms that may include long list, such as diagnosis or procedure list. Multiples of these type of select list will just exasperate the problem. Because the QuickList is dynamic it does not gather the data to display until it is requested by the user.

One neat thing about the QuickList is that return values can be stacked or appended to each other within the same field. With a simple javascript routine you can have your user create comma or semicolon separated lists.

Quicklist allow you to control if the user can add to the list. This way the list is not limited to the original content.

Items in th QuickList are searchable by the users. This is helpful for long list.

You define the QuickList file name. This allows you to define if the list is global, by data set, by user, or any combination.

QuickList allow users to define the data dynamically.

QuickList support Fill in the Blank within the data.

QuickList does this by opening a modal dialog box to display the list. The user may then select from the list and that value is returned to program.

9.1.3.1.1 Using Quick List

Basic Syntax:

QuickList(file,add)

file
Name of file to store data. The root director for this file in "/usr/paradigm/emr/etc". If you want your

quicklist accessable by all data sets just provide a file name. You may want your file to be **data set specific** if so your file name should be derived as follows:

AC_data + '/your_unique_file_name';

If you want your data to be **user specific** for all data sets:

AC_user + '/your_unique_file_name';

If you want your data to be **user specific by data set**:

AC_data + '/' + AC_user + '/your_unique_file_name';

The file will automatically be store with a ".list" extention.

Caution should be take to assure the file name is unique and does not conflict with quicklist used by other forms. It is a good idea to name your file based on template and field name.
e.g. Allergies_reaction

add
This is a boolean value, if not defined it is assumed false. When set to false the "Add" button will be disabled, when set to true the "Add" button will be enabled. When Add is enabled, the user will also be able to remove items from the quick list. A (X) icon will be placed in front of each item, and if the user clicks on the button they will be prompted to remove the item.

Quick List on focus

The easiest way to use QuickList is as an onfocus. This will put the selected value directly in the field value. If the user exits the Modal Dialog box it will set the value to empty.

```
<input type="text" name="qlt" onfocus="this.value=QuickList(this.name, true);">
```

This method does not offer much flexibility or flare but serves a basic utilitarian purpose.

Quick List with a button

Another option is to place a button next to the input field to activate the QuickList function.

```
<input type="text" name="qlt" disabled title="quick list test" size=50>
<input type=button value="&#9830;" onclick="go('qlt').value=QuickList('qlt',true)">
```

This method allows you to also disable the text input field so a user has to choose from the quick list.

Stacking Values

Sometimes you may want a user to select multiple values and store them in a field. This can be done by adding a little javascript at in your PDDF. The following creates a comma separated list in the field.

```
<input type="text" name="qlt" title="quick list test" size=50>
<input type=button value="&#9830;" onclick="QLSpecial('qlt')">

<SCRIPT LANGUAGE="JavaScript">
function QLSpecial(id) {
        var qlret=QuickList(id, true);
        if (qlret != '') {
        go(id).value += qlret+', ';
```

```
        }
}
</script>
```

A little change to the QLSpeical function makes it keep opening the list until the user Exits. This can be helpful when selecting multiple items is the norm.

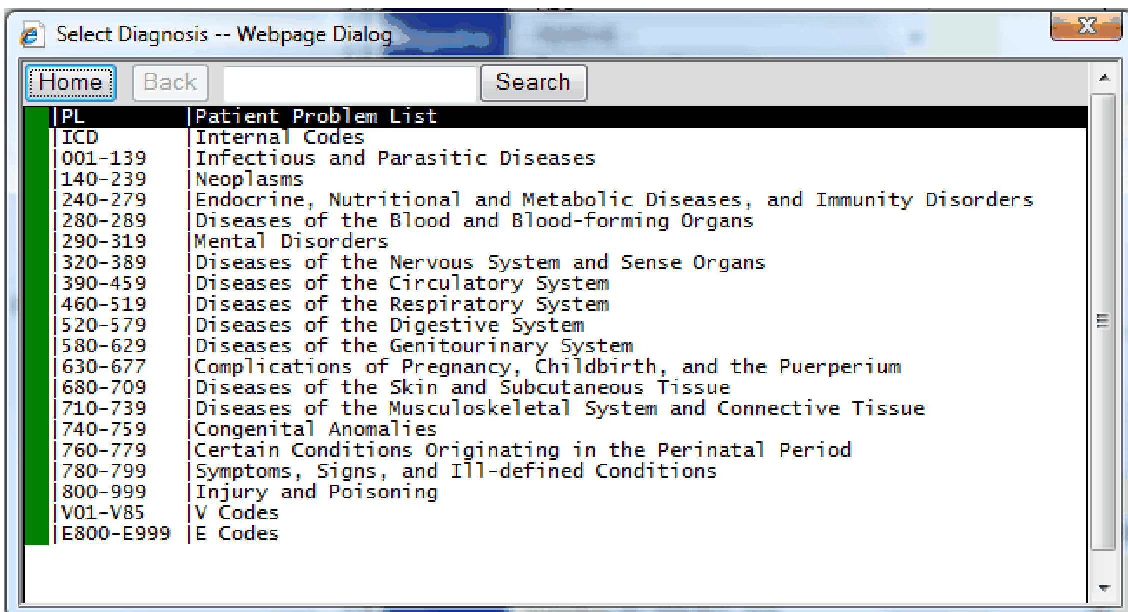
```
function QLSpecial(id) {
        qlret='';
        while ((qlret=QuickList(id,true)) != '') {
        go(id).value += qlret+', ';
        }
}
```

By adding a couple more lines of code you can add a little flare to the form. Have the field display in red and return to white when finished.

```
function QLSpecial(id) {
        go(id).style.background = 'red';
        qlret='';
        while ((qlret=QuickList(id,true)) != '') {
        go(id).value += qlret+', ';
        }
    go(id).style.background = 'white';
}
```

9.1.3.2 DiagSelect

Diagnosis Select is a widget to use when you need the user to select a diagnosis on a form. This Widget give access to the full set of Patient Problems, Internal ICD Codes, and the Entire ICD9 Book.



The User has the ability to either search or drill down to find the proper code.

9.1.3.2.1 Using Diag Select

Basic Syntax:

```
DiagSelect()
```

Diag Select on focus

The easiest way to use DiagSelect is as an onfocus. This will put the selected value directly in the field value. If the user exits the Modal Dialog box it will set the value to empty.

```
<input type="text" name="dst" size=50 onclick="this.value=DiagSelect();">
```

However you may want to put only the icd code

```
<input type="text" name="dst" size=7 onclick="this.value=DiagSelect().subfld(0);">
```

or description in the field

```
<input type="text" name="dst"size=50 onclick="this.value=DiagSelect().subfld(1);">
```

This method does not offer much flexibility or flare but serves a basic utilitarian purpose.

Dialog Select with a button

Another option is to place a button next to the input field to activate the DiagSelect function.

```
<input type="text" name="dst" title="test" size=50 disabled>
<input type=button value="&#9830;" onclick="go('dst').value=DiagSelect()">
```

This method allows you to also disable the text input field so a user has to choose from the quick list.

Don't Blank out field on exit but leave as it

Use the following technique if you do not want to blank out the field but leave as it.

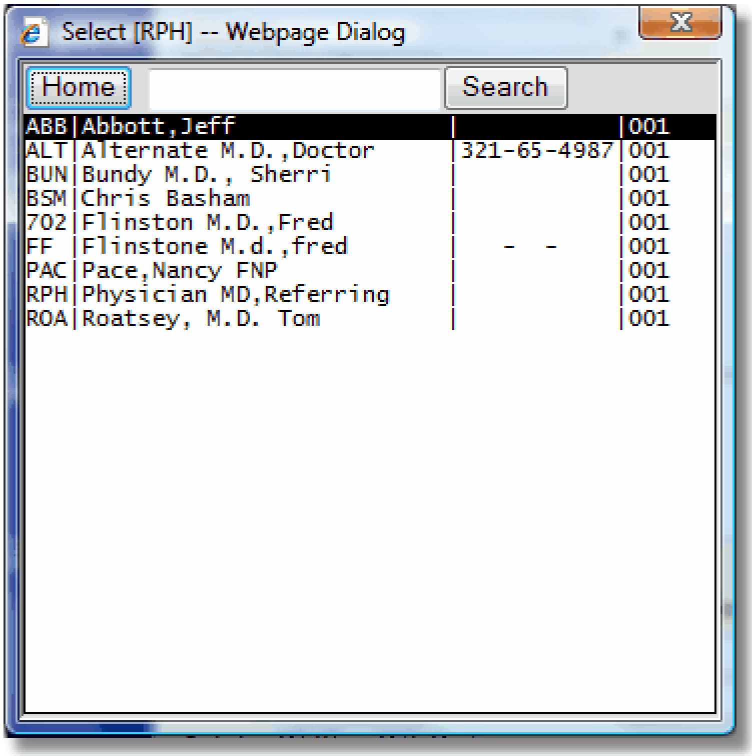
```
onclick="go('dst').value=(rv=DiagSelect())==''?gov('dst'):rv"
```

You can also create a separate javascript function to call to perform flare or other functions.

9.1.3.3 PARADIGM Select

PARADIGM Select is a widget that creates a Modal Dialog box for the user to select data from a PARADIGM data file. With this widget you can define the file to browse data, the index to sort on, the data to display, data to select, and an option width over 350 pixels.

The user has the ability to search the list generated or exit



9.1.3.3.1 Using PSelect

Basic Syntax:

```
PSelect(file, index, output, selexp, width)
```

file
The PARADIGM file to select from:
e.g. PHY, RPH, LOC, PAT, CLS

index
Index field from file to sort list order. If left blank the file will read in the order the data appears in the file.
e.g. rph_name, phy_code, cls_desc

output
The fields from the file to display in order separated by pipes. If left blank all fields defined for the file will print.
e.g. 'rph_code|rph_name|rph_ssnf|rph_pscd'

selexp
Select expression to select only records that match the expression. The expressions consist of field or static values being compared by a relational operator. You may combine expressions with Logical operators and set precedence with "()".

- '(': Precedence Begin
- ')': Precedence End
- '*': Logical AND
- '|': Logical OR
- '=': Relational Equal
- '!': Relational NOT Equal

- '>': Relational Greater than
- '<': Relational Less Than
- '}': Relational Greater than or equal
- '{': Relational Less than or equal

e.g. 'rph_pcsd=0001' would get only referring physician that are General Practce

width
This will allow you to set the default width of the Modal Dialog box to more then 350 pixels.

PSelect on focus

The easiest way to use PSelect is as an onfocus. This will put the selected value directly in the field value. If the user exits the Modal Dialog box it will set the value to empty.

```
<input type="text" name="dst" size=50 onclick="this.value=PSelect('RPH', 'rph_name', 'rph_code|rph_name');"
```

You man want to use the subfld method to pick the data you want loaded into the field.

```
<input type="text" name="dst" size=7 onclick="this.value=PSelect('RPH', 'rph_name', 'rph_code|rph_name').su
```

This method does not offer much flexibility or flare but serves a basic utilitarian purpose.

Dialog Select with a button

Another option is to place a button next to the input field to activate the PSelect function.

```
<input type="text" name="dst" title="test" size=50 disabled>
<input type=button value="&#9830;" onclick="go('dst').value=PSelect('RPH', 'rph_name', 'rph_code|rph_name')
```

This method allows you to also disable the text input field so a user has to choose from the quick list.

Don't Blank out field on exit but leave as it

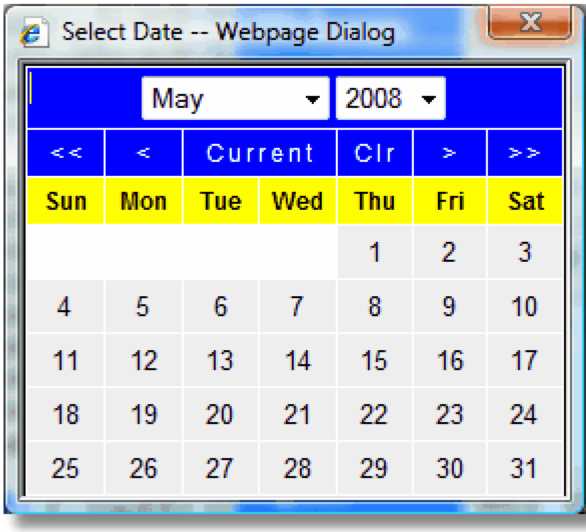
Use the following technique if you do not want to blank out the field but leave as it.

```
onclick="go('dst').value=(rv=PSelect('RPH', 'rph_name', 'rph_code|rph_name'))==''?gov('dst'):rv"
```

You can also create a separate javascript function to call to perform flare or other functions.

9.1.3.4 Date Select

The Date Select Widget gives you a popup calendar that can be used for selecting dates. Is is similar to the Calendar widget but it presents the calendar in a modal dialog box so all input is stop until the box is closed. Because the calendar is in a separate window that displays on top, you will not run into the dynamic form problems that the Calendar Widget can present.



9.1.3.4.1 Using DateSelect

Basic Syntax:

```
DateSelect(value)
```

value
This is the value that will be returned if the user Exits the modal dialog box. Typically it will contain the value of the field you want to use.

DateSelect on focus

The easiest way to use Date Select is as an onfocus. This will put the selected value directly in the field value. If the user exits the Modal Dialog box it will set the value to empty.

```
<input type="text" id="dselect" name="dselect"  size=10 onfocus="this.
value=DateSelect('')" >
```

This will put the current value back in the field.

```
<input type="text" id="dselect" name="dselect"  size=10 onfocus="this.
value=DateSelect(this.value)" >
```

This method does not offer much flexibility or flare but serves a basic utilitarian purpose.

Date Select with a button

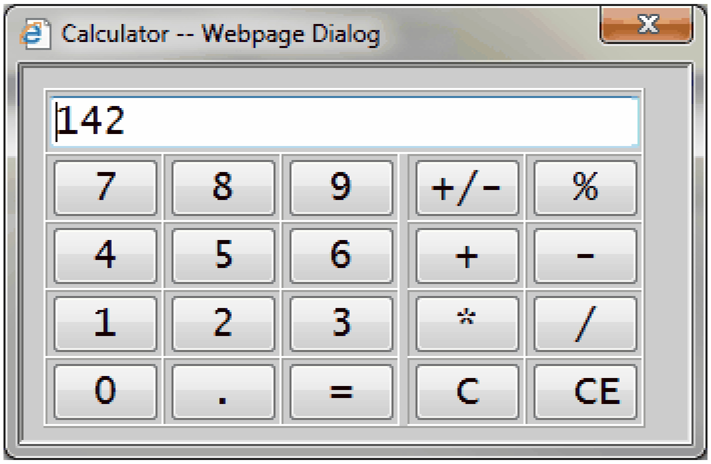
Another option is to place a button (image) next to the input field to activate the DateSelect function.

```
<input type="text" id="dselect" name="dselect"  size=10>
<img border=0 src="image/calendar.jpg" onclick="go('dselect').value=DateSelect(gov('dselect'))"
```

This method allows you to also disable the text input field so a user has to choose from the quick list.

9.1.3.5 Calculator

The Calculator widget give you a popup calculator that can be attached to to a field for numeric input an calculations.



9.1.3.5.1 Using Calculator

<u>Basic Syntax:</u>

```
ret=calculator(value);
```

value
value will be passed and displayed in the calculator.

ret
"ret" is the value that will be returned when the user Exits the modal dialog box. You may use this value to put in a field.

<u>calculator on focus</u>
The easiest way to use calculator is as an onfocus.

```
<input type="text" id="calc" name="calc"  size=10 onfocus="this.value=calculator
('')" >
```

This will put the pass the value in the field to the calculator.

```
<input type="text" id="calc" name="calc"  size=10 onfocus="this.value=calculator
(this.value)" >
```

<u>calculator with a button</u>
Another option is to place a button (image) next to the input field to activate the DateSelect function.

```
<input type="text" id="calc" name="calc"  size=10>
<img src="image/calculator.png"  onclick="go('calc').value=calculator(gov('calc'))">
```

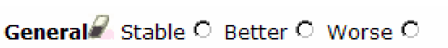
9.1.3.6 Clear Radio Buttons

Another useful widget that is included with in the data entry form is the clearButtons() function. Many times on data entry forms you may use HTML radio buttons to allow a user to select between several different options. One of the problems with the radio is that once you select one button of a group there is no way to unselect the button. You can only select other buttons in the group. It is possible to add an additional button to your group that basically says select none of the other, but that looks bad it is visually displeasing and takes up a lot of screen space.

This is where the clearButtons() function comes in handy. This function will allow you to clear all of the buttons so that none are selected. It is recommended that you implement it with the eraser image. This provides a consistent look for this technique.

```
<b>General</b><img onclick="clearButtons('general')" src="image/erase.gif">
   Stable<input type=radio name="general" value="s">
   Better<input type=radio name="general" value="b">
   Worse<input type=radio name="general"  value="w">
```

The code above will display the following:



If the user needs to clear any of the buttons they simply click on the eraser. The function only takes one parameter and that is the name of the group of radio buttons to clear.

9.1.3.7 Calendar

WARNING - Do not use this Widget for new forms. Use the Date Select Widget.

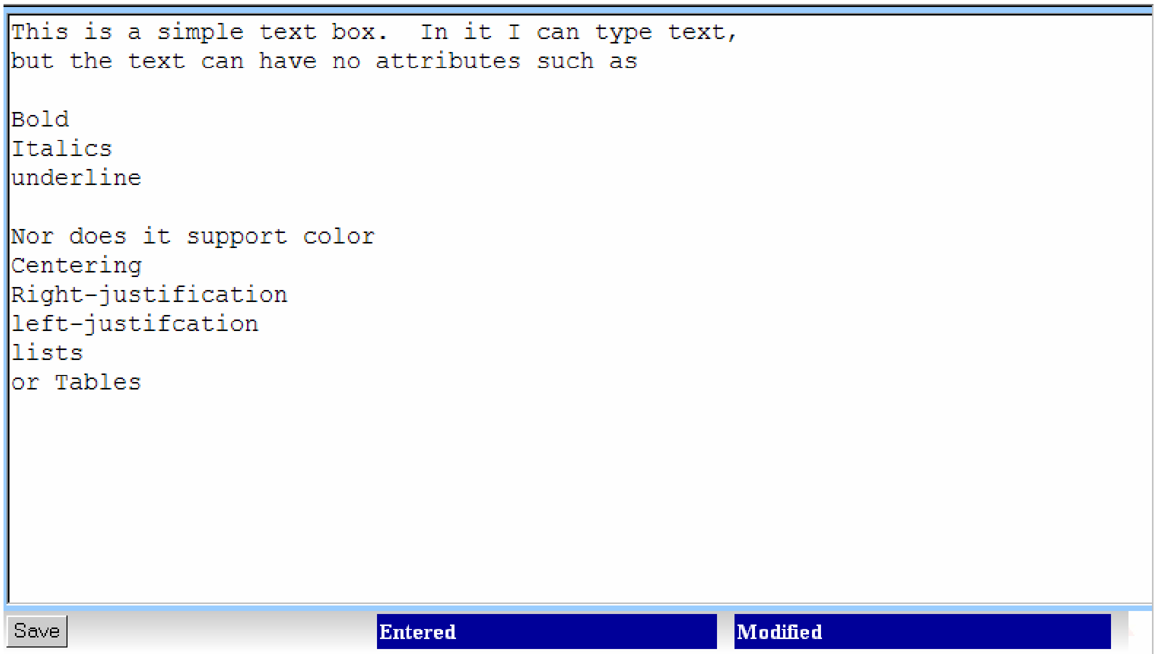
Any old forms that use this widget will automatically be redirected to the Date Select Widget. If your old forms experience problems, rework them to use Date Select.

9.1.3.8 WYSIWYG Editor

This widget allows you to add a nice WYSIWYG (What You See Is What You Get) editor to template with HTML textareas with just a few additional lines of javascript. This editor will allow the user to do the following:

- Format text to be bold, italicized, or underlined.
- Change the face, size, style and color.
- Left, centers, or right-justify paragraphs.
- Make bulleted or numbered lists.
- Indent or un-indent paragraphs.
- Insert hyperlinks, images, and tables.
- View the HTML source code of what you're editing.

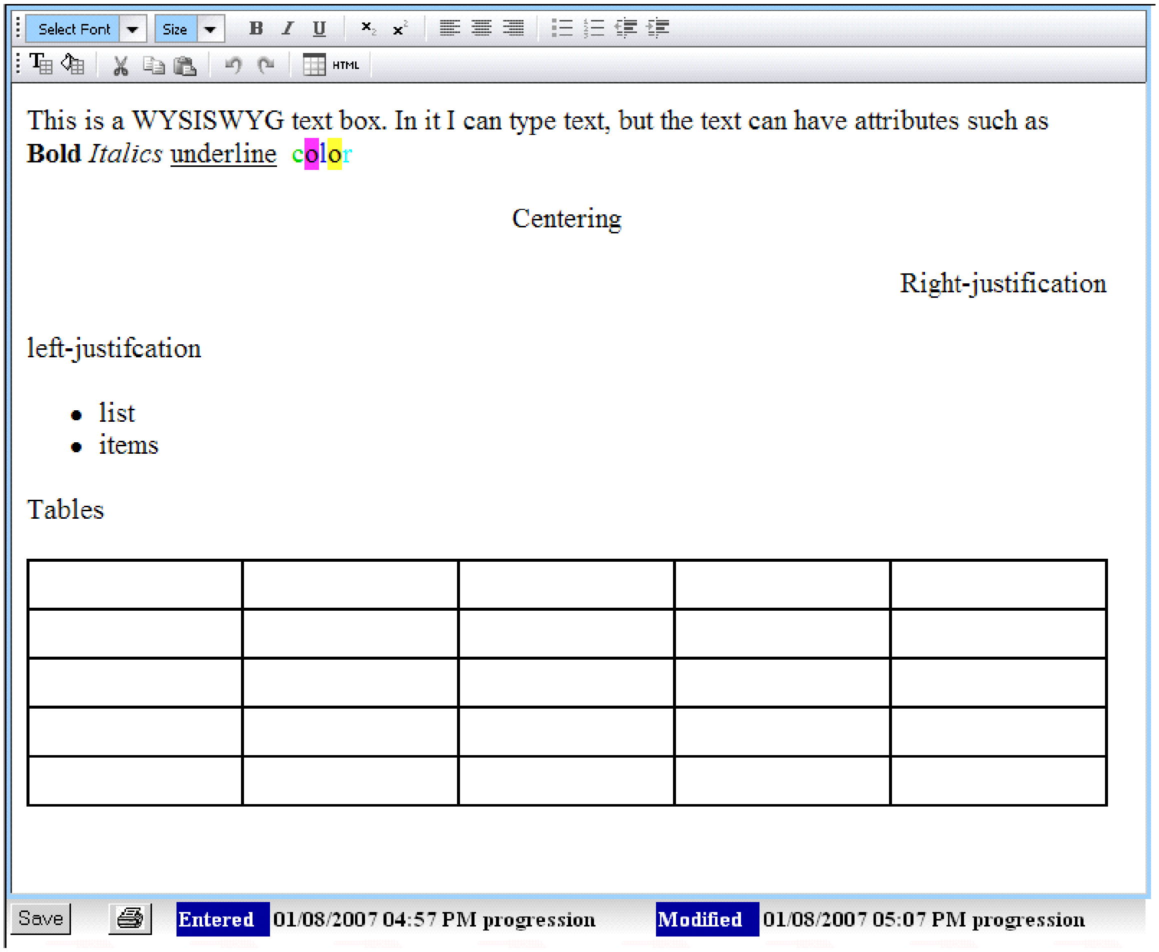
This will allow you to turn the following form



Using this code

```
<textarea id="note" rows=20 cols=80 name="WordPad"></textarea>
```

Into



Just by change the code to this:

```
<textarea id="note" rows=20 cols=80 name="WordPad"></textarea>

<script  language="JavaScript">
  wysiwygWidth = document.body.clientWidth -20;
  wysiwygHeight = document.body.clientHeight -120;
  generate_wysiwyg('WordPad');
</script>
```

The gerneate_wysisyg function will make the textarea a wysiwyg editor. The lines above are just to set the Width and Height.

9.1.3.9 makeRepeat

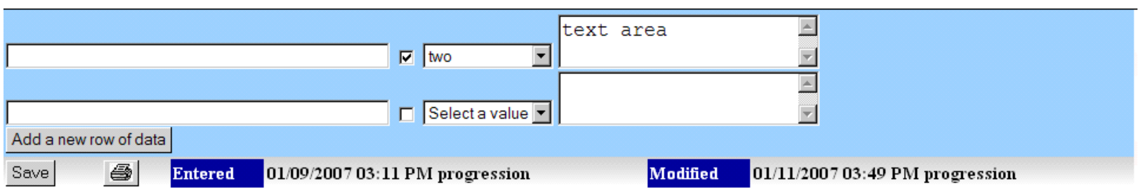
The makeRepeat widget enhances the REPEAT element by providing a button that allows the user to dynamically add new repeat areas without having to save the data each time. In some circumstances this can greatly enhance the user's productivity because they are not required to wait for each save to occur. The following code shows the modifications made to the HTML with <REPEAT> to implement this widget.

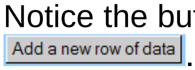
```
<REPEAT>
<div id=rp>
<input type="text" size=50 name="tx_">
<input type="checkbox" name="cb_">
<SELECT name="sb_">
  <OPTION value="">Select a value</OPTION>
  <OPTION value="1">one</OPTION>
  <OPTION value="2">two</OPTION>
  <OPTION value="3">three</OPTION>
</SELECT>
<textarea cols=20 name="ta_" ></textarea>
</div>
</REPEAT>
<script language="JavaScript">
makeRepeat('rp', 'Add a new row of data');
</script>
```

The first thing we did was create a <DIV> around the HTML in the REPEAT element. This defines for the widget the area that will need to be repeated. After the REPEAT we run a javascript command to make the are repeat.

makeRepeat('id of div', 'what you want the button to say');

The result will appear as follows:



Notice the button added after the last row of data 

. When the user depresses this button a new row will open up without having to first save the data. The cursor will be placed on the first field of the row of data for the user to start entering.

9.1.3.9.1 Field element naming

⚠ Fields use with the makeRepeat widget should always have a name that ends with an underscore '_'. This is used as part of the widget to renumber them.

9.1.3.9.2 Table Problems

⚠ Many times when creating rows of columns of data you would use <TABLE> elements to put the data in columns. The proper way to perform this would be as follows:

```
<TABLE border=1>
<REPEAT>
<div id=rp>
<TR>
<TD><input type="text" size=50 name="tx_">
<TD><input type="checkbox" name="cb_">
<TD><SELECT name="sb_">
  <OPTION value="">Select a value</OPTION>
```

```
  <OPTION value="1">one</OPTION>
  <OPTION value="2">two</OPTION>
  <OPTION value="3">three</OPTION>
</SELECT>
<TD><textarea cols=20 name="ta_" ></textarea>
</TR>
</div>
</REPEAT>
<script language="JavaScript">
makeRepeat('rp', 'Add a new row of data');
</script>
</TABLE>
```

Unfortunately this will render the widget useless. The table element will encompass the widget and not allow it to work. This is true for any elements that work this way, such as <UL> or <OL>. You may encompass the entire <REPEAT> element along with the widget call within a cell of a table if needed. There are two ways you can address this problem. The first is to create a separate table for the header and a separate table contained completely within the <REPEAT> element and <DIV>. Use the style attribute of each <TD> section along with the width attribute and a length value with an absolute unit.

```
<TD style=”width:25mm”>
```

The following are the absolute length units:

Absolute length units	
in	Inches (1 inch = 2.54 centimeters).
cm	Centimeters.
mm	Millimeters.
pt	Points (1 point = 1/72 inches).
pc	Picas (1 pica = 12 points).

Another method to address this problem is the RepeatHeader Widget described below. You may need to experiment with what works best on your form.

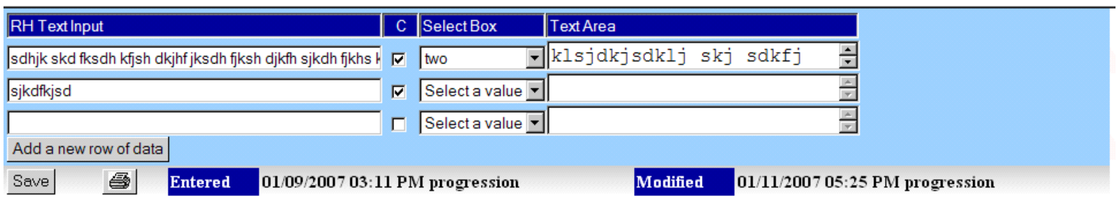
9.1.3.9.3 RepeatHeader Widget

The RepeatHeader widget helps you create nice looking columns of data fields in rows. It is scripted before the <REPEAT> element like the following:

```
<script language="JavaScript">
RepeatHeader('RH Text Input', 50);
RepeatHeader('   C', 1);
RepeatHeader('Select Box', 14);
RepeatHeader('Text Area', 41);
</script>
<REPEAT>
<div id=rp>
<input type="text" size=50 name="tx_" >
<input type="checkbox" name="cb_"> 
<SELECT name="sb_">
  <OPTION value="">Select a value</OPTION>
  <OPTION value="1">one</OPTION>
  <OPTION value="2">two</OPTION>
  <OPTION value="3">three</OPTION>
```

```
</SELECT><textarea cols=25 rows=1 name="ta_" ></textarea>
</div>
</REPEAT>
<script language="JavaScript">
makeRepeat('rp', 'Add a new row of data');
</script>
```

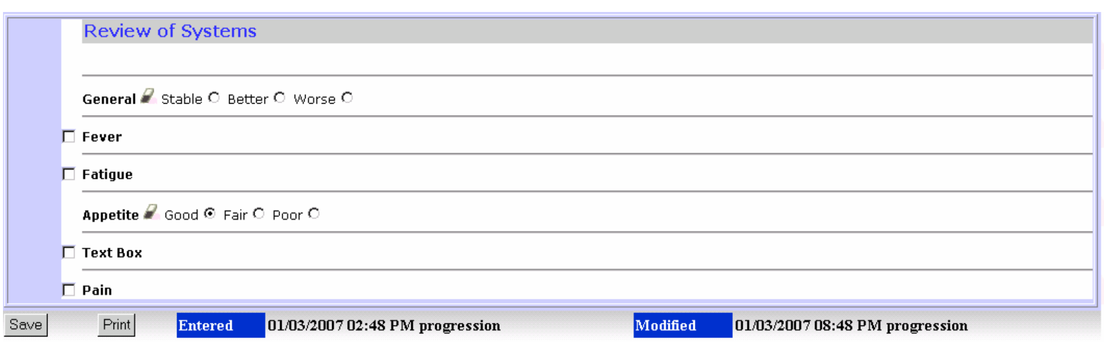
RepeatHeader('Title', size)
You will need to play with the size and insert spaces " " to get everything to line the way you want it to but overall it provides an easy way to make the data tabular.



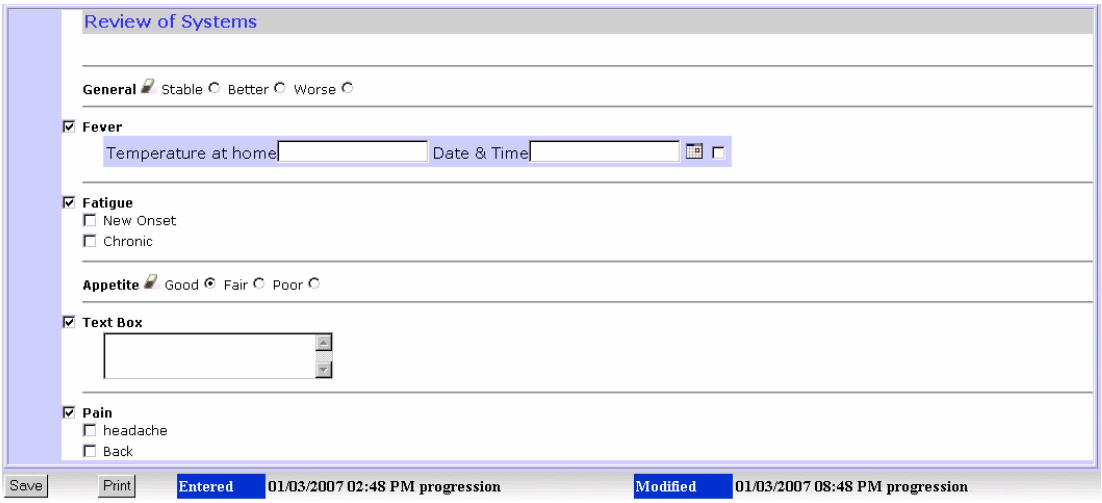
The RepeatHdr widget works well if your data lines are comprised mainly of text fields or select boxes. Checkboxs can cause skewing problems thought. If your table is comprised mainly of check boxes you can try using two tables. One for the header and one within the DIV of the REPEAT elements. Use the width attribute of the TD element to set the width of each column. You will need to test with different font sizes for skewing problems. The general rule of thumb is to set the width of the column wide enough to support the largest font you expect to use.

9.1.3.10 Data Tree Dynamic Display (DTDD)

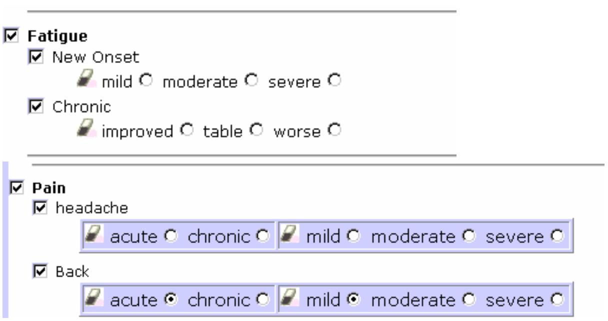
The Data Tree Dynamic Display Widget widget allows you to create expanding and contracting data entry forms. One problem we all face in creating forms is the amount of screen space, as well as logical flow of data. Using DTDD it is easy to create forms that follow an outline and expand and contract as needed.



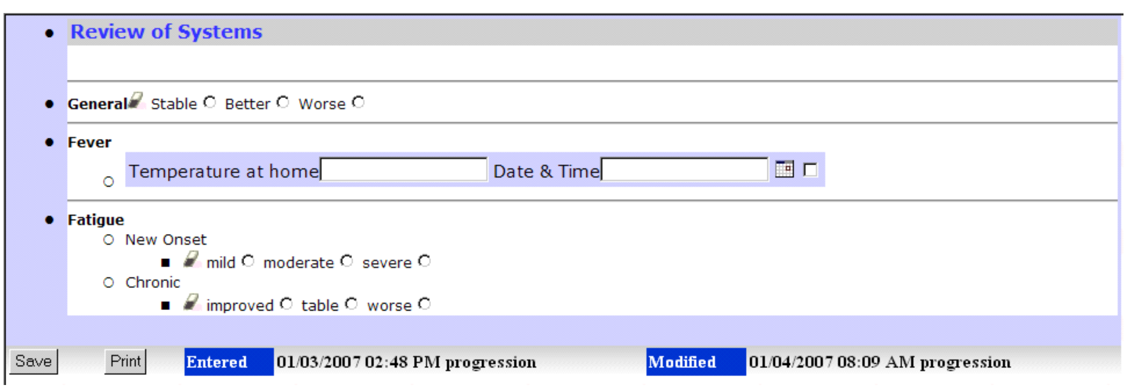
Above is a simple form that contains several areas, - General, Fever, Fatigue, Appetite, Text Box, and Pain. At first glance it appears there are only a couple of check boxes and radio buttons on the form. That is because the form is dynamic. By clicking on the header information for the check boxes an area it will expand that area for further display.



Additional expansion is allowed as well as in Fatigue and Pain areas.



This expansion and contraction of a form is easily controlled using an unordered list and the DTDD widget. Create an unordered list, and in the list items put your data entry elements. Here is a simple Unordered List.



The HTML Code for the above example follows.

```
<ul>
```

```
<li><H1>Review of Systems</H1></li>
<hr>
<li><b>General</b><img onclick="clearButtons('general')" src="image/erase.gif">
   Stable<input type=radio name="general" value="s">
   Better<input type=radio name="general" value="b">
   Worse<input type=radio name="general"  value="w">
</li>
<hr>
<li><b>Fever</b>
   <ul>
   <li><TABLE><TR>
      <TD>Temperature at home<input type="text" name="tah" >
      <TD>Date & Time<input type="text" name="dat" id="dat_dat">
         <img  border="0" src="image/calendar.jpg" onClick="calendar(document.getElementById('dat'))">
      <TD><input type="checkbox" name="cb">
   </TR></TABLE></ul>
</li>
<hr>
<li><b><div onclick="clearButtons('fat')"> Fatigue</div></b>
   <ul >
   <li>New Onset</li>
      <ul >
            <li><img onclick="clearButtons('fat')" src="image/erase.gif">
                        mild<input type=radio name="fat" value="fa1">
                        moderate<input type=radio name="fat" value="fa2">
                        severe<input type=radio name="fat"  value="fa3">
      </ul>
   <li>Chronic</li>
      <ul >
            <li><img onclick="clearButtons('fat')" src="image/erase.gif">
                        improved<input type=radio name="fat" value="fa4">
                        table<input type=radio name="fat" value="fa5">
                        worse<input type=radio name="fat"  value="fa6">
      </ul>
   </ul>
</li>
</ul>
```

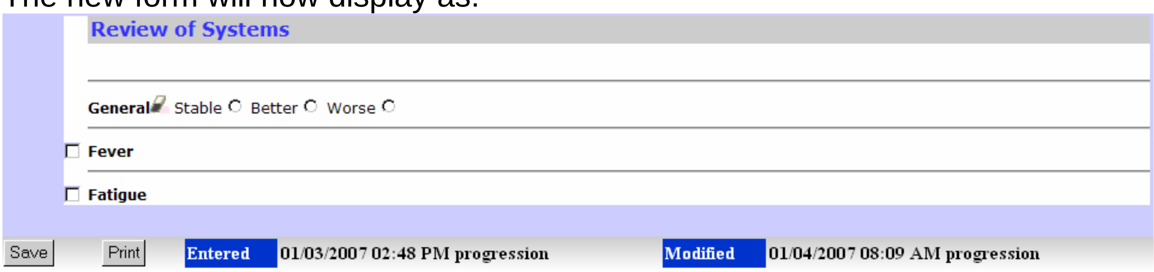
To turn this in to a data entry form with DTDD you only need to do the following. On the <ul> tag that defines the unordered list at the top, you must add an “id” tag and give it a class of “treeview”. The “id” tag allows us to address the “list”, the “treeview” class will allow it to use the correct CSS (cascading style sheet) so it displays properly. At the bottom of the code you will need to add a bit of JavaScript code to tell it to initialize the DTDD. The following Following is the revised code with the changes highlighted.

```
<ul id="data1" class="treeview">
<li><H1>Review of Systems</H1></li>
<hr>
<li><b>General</b><img onclick="clearButtons('general')" src="image/erase.gif">
   Stable<input type=radio name="general" value="s">
   Better<input type=radio name="general" value="b">
   Worse<input type=radio name="general"  value="w">
</li>
<hr>
<li><b>Fever</b>
   <ul>
   <li><TABLE><TR>
      <TD>Temperature at home<input type="text" name="tah" >
      <TD>Date & Time<input type="text" name="dat" id="dat_dat">
         <img  border="0" src="image/calendar.jpg" onClick="calendar(document.getElementById('dat'))">
      <TD><input type="checkbox" name="cb">
   </TR></TABLE></ul>
</li>
<hr>
```

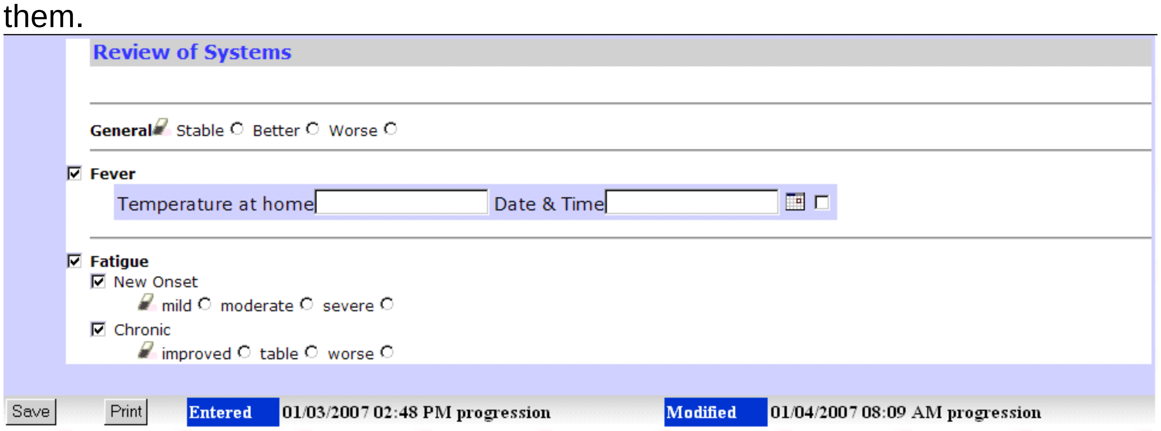
```
<li><b><div onclick="clearButtons('fat')"> Fatigue</div></b>
  <ul >
  <li>New Onset</li>
    <ul >
        <li><img onclick="clearButtons('fat')" src="image/erase.gif">
                mild<input type=radio name="fat" value="fa1">
                moderate<input type=radio name="fat" value="fa2">
                severe<input type=radio name="fat"  value="fa3">
    </ul>
  <li>Chronic</li>
    <ul >
        <li><img onclick="clearButtons('fat')" src="image/erase.gif">
                improved<input type=radio name="fat" value="fa4">
                table<input type=radio name="fat" value="fa5">
                worse<input type=radio name="fat"  value="fa6">
    </ul>
  </ul>
</li>
</ul>
<script type="text/javascript">
ddtreemenu.createTree("data1")
</script>
```

The JavaScript ddtreemenu.createTree("data1") tells the program to create the DTDD for the id of "data1". You may have as many data trees in your HTML as you want and have as many branches as nested lists can produce.

The new form will now display as:



Giving the user the ability to expand or contract areas with check boxes in front of them.



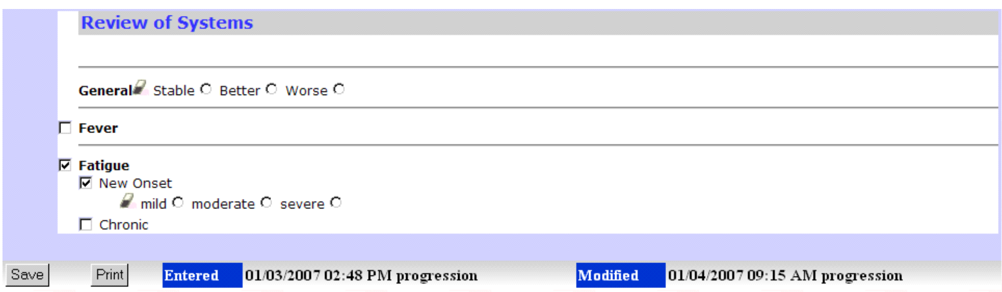
As you can see it is easy to change your data entry from form into a DTDD.

9.1.3.10.1 Opening Branches

Sometimes you may want your DTDD form to present itself with branches of the tree already opened and displaying other branches or leaves. This is can be accomplished by using the “branch” attribute in the <ul> segment for the branch that you want to open. By changing the <ul> to <ul branch=”open”> the form will automatically open the branch of the tree when the form is initially loaded. If you open a sub-branch in a tree, any parent branch will automatically be opened.

```
<li><b><div onclick="clearButtons('fat')"> Fatigue</div></b>
   <ul>
   <li>New Onset</li>
      <ul branch="open">
            <li><img onclick="clearButtons('fat')" src="image/erase.gif">
                        mild<input type=radio name="fat" value="fa1">
                        moderate<input type=radio name="fat" value="fa2">
                        severe<input type=radio name="fat"  value="fa3">
      </ul>
   <li>Chronic</li>
      <ul >
            <li><img onclick="clearButtons('fat')" src="image/erase.gif">
                        improved<input type=radio name="fat" value="fa4">
                        table<input type=radio name="fat" value="fa5">
                        worse<input type=radio name="fat"  value="fa6">
      </ul>
   </ul>
</li>
```

Will produce:



9.1.3.10.2 Contract or Expandexpand all branches.

You may also create elements to either contract or expand all branches of a single DTDD id with a single button. The following code gives an example using a button.

```
<button onclick="ddtreemenu.expandContract('data1', 'contract')">Contract</button>
<button onclick="ddtreemenu.expandContract('data1', 'expand')">expand</button>
```

You may use the following function to expand or contract all DTDD defined for a form:

```
<button onclick="datatree('contract')">Contract</button>
<button onclick="datatree('expand')">expand</button>
```

<u>A note about field validation (CSV) with DTDD</u>

When using CSV in a DTDD form the program will automatically expand all branches of the tree if an error is found to ensure the field in error can be seen.

9.1.3.11 Client side Validation (CSV)

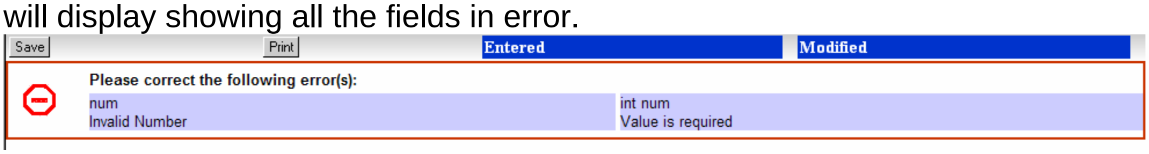
Why use client-side validation (CSV)?
Most web applications use server-side processing to validate HTML forms. This works but is very inefficient since the request must be sent over the wire, checked, and a response sent back to the user. Why not let the client machine do the mundane field validation and let the server handle business logic validation? This framework is written to satisfy this request and validate HTML forms for field types where it should be, on the client-side. It is written entirely in JavaScript.

Using CSV in your PDDF form
It is very easy to use CSV in your PDDF form. For any form object that you want to validate you simply create an ID attribute and use the following naming convention:

Note:
Character "**r**" before any of the below-mentioned notations makes the field required.

Field Type	Notation	Example Field ID
Number Field	int	int_DriverLicense
String Field	alp	alp_FristName
Alpha Numeric Field	aln	aln_Street
Zip Code Field	zip	zip_PostalZone
Date Field	dat	dat_DateOfBirth
Email Field	eml	eml_EmailAddress
SSN Field	ssn	ssn_SocialSecurityNumber
Money Field	mny	mny_RegistrationFee
Double Number Field	dbl	dbl_DoubleNumber
Phone number	phn	phn_phone

When a user attempts to save (submit) the data, any field that is not completed properly or is required and does not have any data in it, will display in error. Alsoddtionally, at the bottom of the form, after below the Save Button, an error box will display showing all the fields in error.



The user must correct the errors and Save (submit) the form again.

9.1.4 Pre-Defined Fields

Every PARADIGM EHR PDDF form will have the following pre-defined fields already in the form. You should not use these field names for any of your fields as it will cause problems when storing and retrieving PDD data.

form
This always has a value of “pdd”. It is a control field used by the application and is not stored in the data, it is used to direct the program to save the pdd data.

PDD_template
This stores the name of the PDD template used to create the data. This is stored with the data and when the data file is opened, it will looks at this value to determine what from form to retrieve and merge with the data to display for the user.

action
This is a control field and is used to direct the PARADIGM EHR program what to do after the PDD data is saved. This information is not stored in the PDD file.

subdir
This is a control field and is used to tell PARADIGM EHR what sub-directory of the tab to store the file in when saving the data. This information is not stored in the PDD file.

file
This is a control field and is used to tell PARADIGM EHR the name of the file to store the PDD data in. This information is not stored in the PDD file.

tab
This is a control field and is used to tell PARADIGM EHR what tab to store the data in. This information is not stored in the PDD file.

pat_code
This field will contain the patient code that the form was created under. This will be stored with the PDD file. (See PARADIGM® database access below)

PDD_entered
This field will contain the date, time and user information as an audit for when the PDD document was entered or created. This information will be stored with the PDD file.

PDD_modified
This field will contain the date, time and user information as an audit for when the PDD document was updated or last modified. This information will be stored with the PDD file.

QueryString

This field contains the query string of the url. It is passed on so the form may be redisplayed (Notes.pdd) during a submit action. This informatin is not stored in teh PDD file.

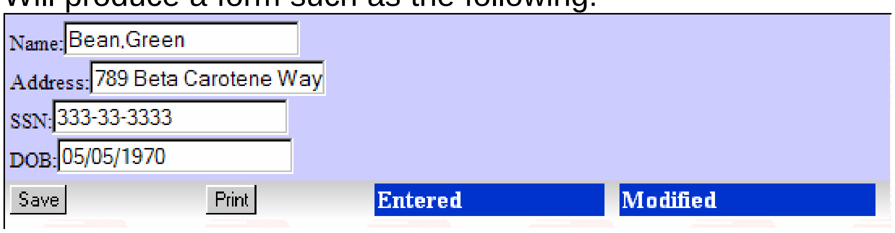
9.1.5 PARADIGM® Database Access

PARADIGM EHR is coupled with the PARADIGM® database and you are able to access any fields from the PARADIGM® database within your PDDF form. Fields may start from either the PARADIGM® PAT (patient) file or the FSL (fee slip/appointment) file. If the template you are creating is to be encounter based you may want to use the FSL file as the master, but otherwise it is suggested you start with the PAT file.

By naming labeling your field the name of the paradigm PARADIGM® database field the value for the field will automatically be populated when a user attempts to create a new PDD document using the template. i.e. The Template

```
Name:<input type="text" name="pat_name" ><br>
Address:<input type="text" name="pat_add1" ><br>
SSN:<input type="text" name="pat_ssnf" ><br>
DOB:<input type="text" name="pat_dobf" ><br>
```

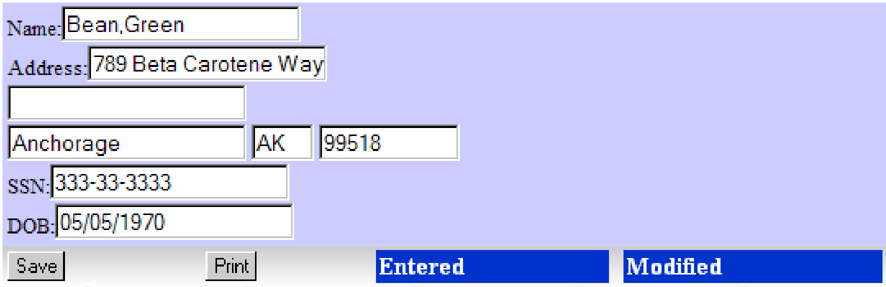
Will produce a form such as the following:



You may also perform joins to other PARADIGM® database elements other than those in your master file. i.e. You may want to get the patient’s full address information.

```
Name:<input type="text" name="pat_name" ><br>
Address:<input type="text" name="pat_add1" ><br>
<input type="text" name="pat_add2" ><br>
<input type="text" name="pat_zipc.zip_city" >
<input type="text" size=2 name="pat_zipc.zip_stat" >
<input type="text" size=10 name="pat_zipc" ><br>
SSN:<input type="text" name="pat_ssnf" ><br>
DOB:<input type="text" name="pat_dobf" ><br>
```

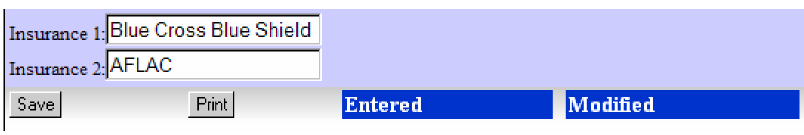
The field “pat_zipc” is the field from the primary and it joins to zip code file to the field “ zip_city”. The same with “pat_zipc.zip_stat”.



You can create very complex joins as well to get information such as the patient’s primary insurance and secondary insurance carrier names.

```
Insurance 1:<input type="text" name="pat_code#[1].pol_insc.ins_name" ><br>
Insurance 2:<input type="text" name="pat_code#[2].pol_insc.ins_name" ><br>
```

The # tells PARADIGM EHR to append to the field the string in the brackets []. So to get the primary policy you would use “pat_code#[1]“]”. The secondary would be “pat_code#[2]” and so on. Now that we have the key for the policy we just follow the relationships out
“pol_insc.ins_name”. We could even follow relationships off of the INS file from this point.



9.2 Hyptertext Application (HTA)

Hypertext Applications are programs written in HTML and Javascript that use the PARADIGM EHR API to create a "HTML" file saved in the patients chart. The "HTA" program will most likely take advantage Javascript wysiwyg library. To the user the application looks as thought they are just editing a "HTML" file, but in reality the HTA application will gather all needed data from the database and dynamically create an HTML document and display it in the editor. When the user saves the document it saves it as a "HTML" document.

9.3 Interactive HTML document (IHD)

Interactive HTML documents differ from Progression Data Documents (PDD) in that PDD's are used to collect formatted data of some sort where the IHD is more like a word processing document that allows for free form edit. But IHD's also allow you to add widgets that can be used to quickly fill in the blanks of the data, as well as collect data from the database as well as (PDD) forms.

9.3.1 Basic IHD template

At its core IHDs are HTML with javascript. Within the document you may access widgets that will allow the user to dynamically add text to the HTML document within the EHR HTML editor. There are a couple of things that must be put in the IHD template for it to be able to access the widgets.

The template must start with the following:

```
<HEAD>
<style type="text/css">
.widget { color:red }
</style>
</HEAD>
<BODY CONTENTEDITABLE>
```

It must contain a <HEAD> section with a css style sheet with one item defined. That item is widget. The widget class is used to show widget input areas in red on the document. Once a widget has been activated and text is placed in the document it will change the color of the text to black. Also once a document is signed off, any widgets that have not been activated will no longer display.

Also the <BODY> section must say CONTENTEDITABLE. This tells the HTMLEditor program to treat this document a little different. Without this the widgets will not work.

The following is a basic IDH template with access to many of the standard widgets.

```
<HEAD>
<style type="text/css">
.widget { color:red }
</style>
</HEAD>
<BODY CONTENTEDITABLE>
<B>A Basic Interactive HTML Document</B>
<P>
<B>Date:</B> <span class=widget onclick="parent.calendar(this)">Click here for date</span>
</P><P>
<B>Diagnosis:</B> <span class=widget onclick="parent.DIAG(this)">Click here for Diagnosis</span>
</P><P>
<B>QuickList:</B> <span class=widget onclick="parent.QL(this, 'Location', true)">QL Location</span>
</P><P>
<B>Sentence Builder:</B> <span class=widget onclick="parent.SB(this, 'Location', ', ', true)">SB Locat
</P><P>
<B>PER:</B> <span class=widget onclick="parent.PER(this)">information sheet</span>
</P><P>
<B>Injectables:</B> <span class=widget onclick="parent.MED(this)">Medication</span>
</P><P>
<B>Referrred By:</B> 
<span class=widget onclick="parent.PS(this, 'RPH', 'rph_name', 'rph_name', '', 500);">Referring Provider</s
</P><P>
<B>Calculator Value:</B> <span class=widget onclick="parent.CALC(this)"># goes here</span>
</P><P>
<B>Follow Up:</B> <span class=widget onclick="parent.FU(this)">Followup goes here</span>
</P><P>
<B>Order:</B> <span class=widget onclick="parent.ORD(this)">Order goes here</span>
</P><P>
<B>Template:</B> <span class=widget onclick="parent.Template(this)">Template goes here</span>
</P><P>
<B>Evaluation & Management:</B> <span class=widget onclick="parent.EvalMgt(this)">E&M goes here</span>
</BODY>
```

9.3.2 Standard Widgets

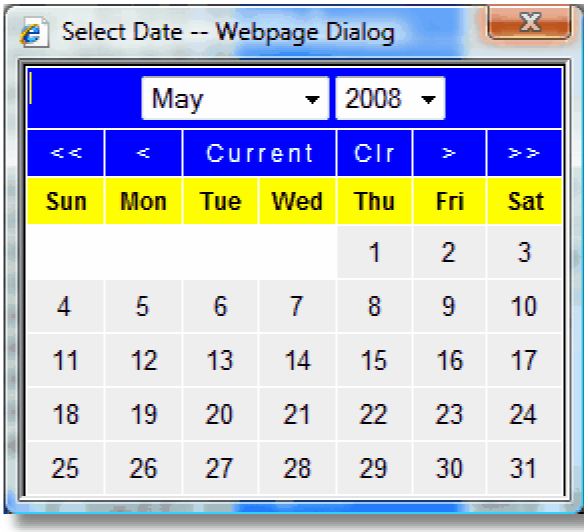
Please see the individual widget topics for available Standard IHD Widgets and how they are used.

9.3.2.1 calendar

The calendar widget is coded as follows:

```
<span class=widget onclick="parent.ihdCAL(this)">Click here for date</span>
```

It will activate the pop-up calendar.

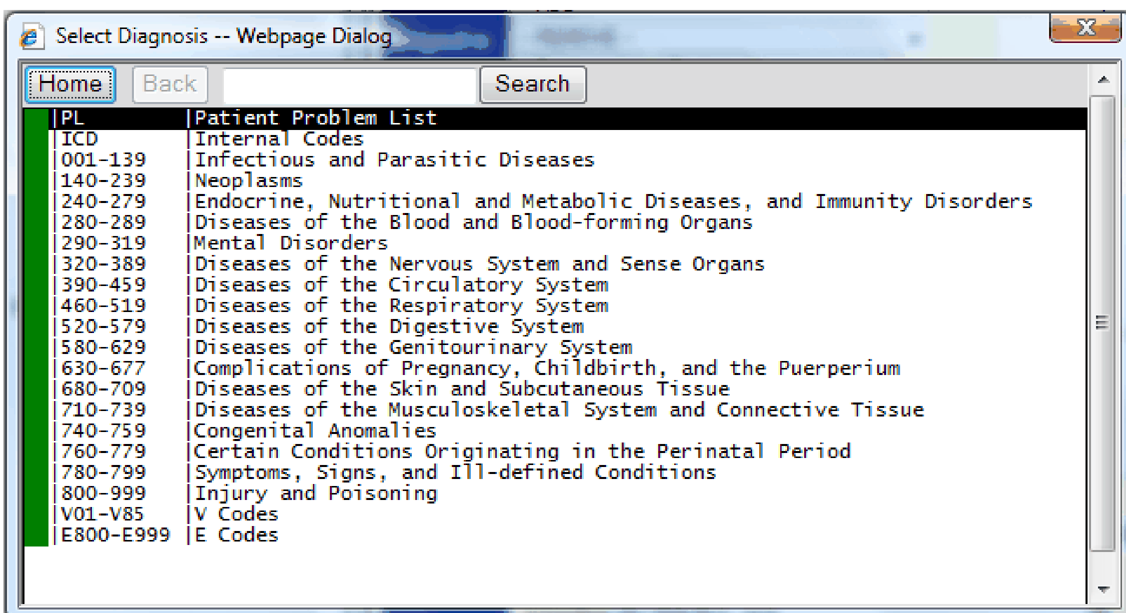


9.3.2.2 Diagnosis (DIAG)

The Diagnosis widget is coded as follows:

```
<span class=widget onclick="parent.ihdDIAG(this)">Click here for Diagnosis</span>
```

It will activate the diagnosis selector.



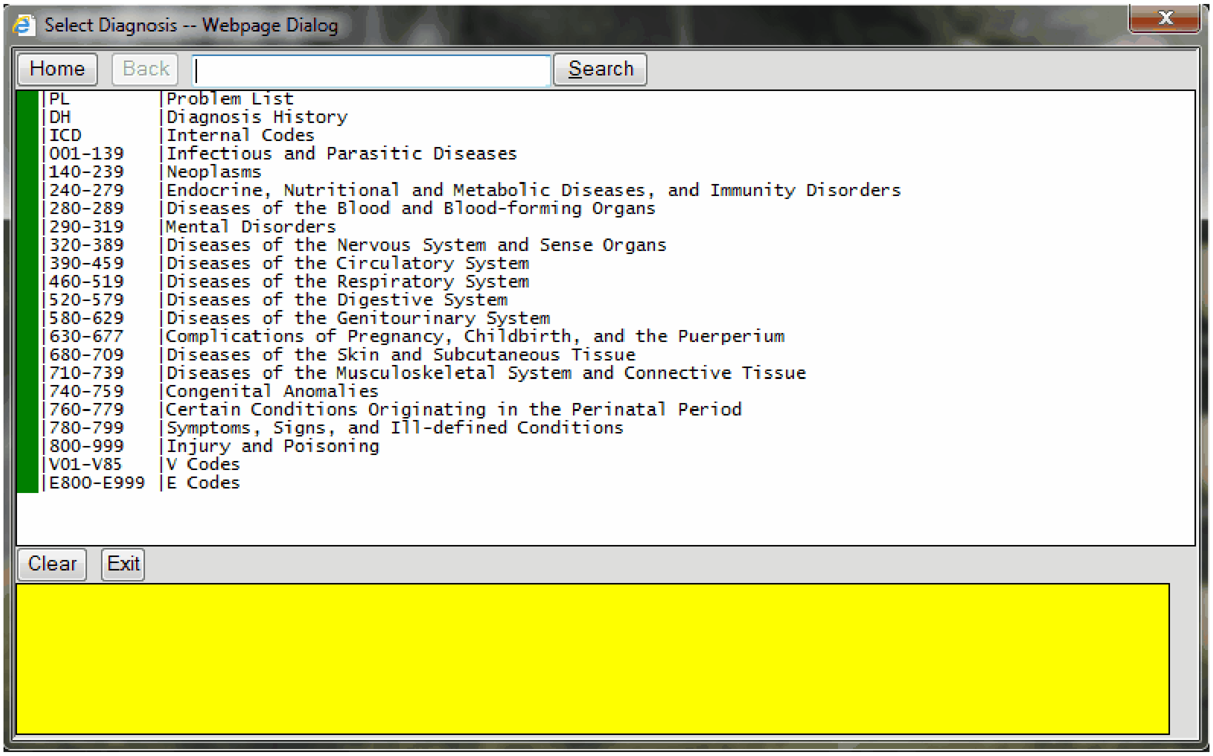
9.3.2.3 Diagnosis Sentence Builder (DIAGSB)

The Diagnosis Sentence Builder widget is coded as follows:

```
<span class=widget onclick="parent.ihdDIAGSB(this, '<br>')">Click here for Diagnosis SB</span>
```

The second parameter is used to pass a separator between each selection.

It will activate the diagnosis selector.



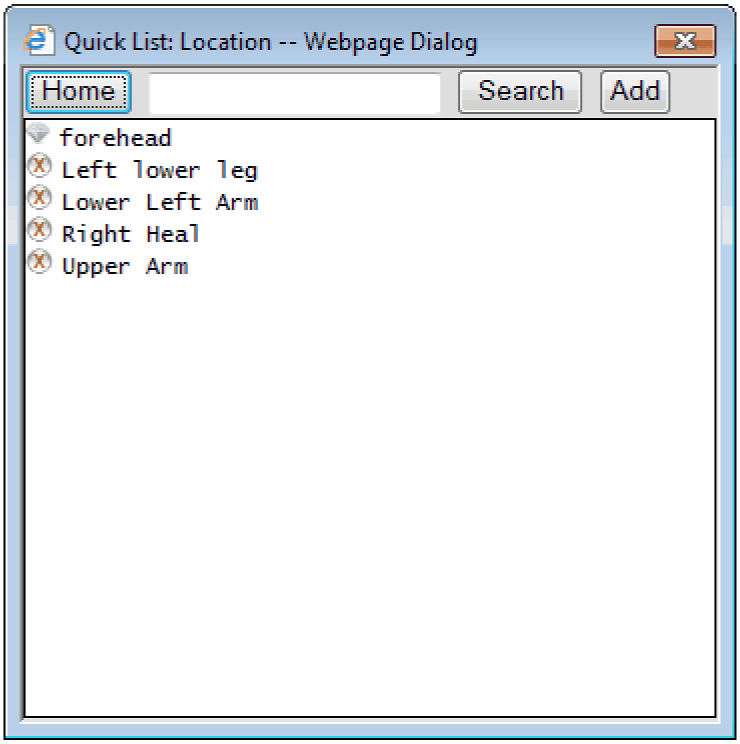
9.3.2.4 QuickList (QL)

The QuickList widget is coded as follows:

```
<span class=widget onclick="parent.ihdQL(this, 'Location', true)">QL Location</span>
```

QL takes three parameters. The first is the span object. Second is the name of the quicklist file, and last is set to true if the user should have the ability to add new information to the file.

It will activate the QuickList program.



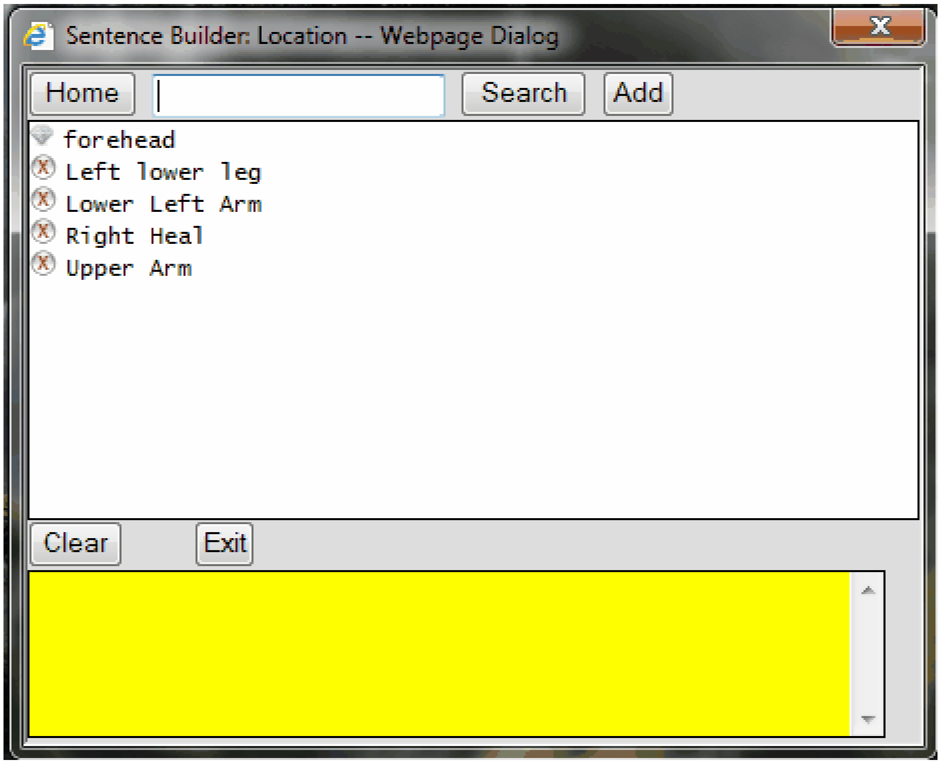
9.3.2.5 Sentence Builder (SB)

The Sentence Builder widget is coded as follows:

```
<span class=widget onclick="parent.ihdSB(this, 'Location', ', ', true)">SB Location</span>
```

QL takes four parameters. The first is the span object. Second is the name of the Sentence Builder file, the third is the separator, and last is set to true if the user should have the ability to add new information to the file.

It will activate the Sentence Builder program.



9.3.2.6 Make Quick List (MkQL)

The Make Quick List function can be used to pre-program quicklist and sentence builders that are used in a form. It is generally called either onload or as before a quicklist or sentence builder. It will look to see if the quicklist exists and if it does not it will create the list with the values supplied.

```
<HTML>
<HEAD>
<script>

// This function is called on load and will create the Quick List used by the program if it does not exist
function MakeSample() {
        parent.ihdMkQL('IHDSample', '*Non removable Item|This item can be removed|Third Item');
}

</script>

<style type="text/css">
.widget { color:red }
</style>

</HEAD>
<BODY CONTENTEDITABLE onload='MakeSample()'>

<B>QuickList:</B><span class=widget onclick="parent.ihdQL(this, 'IHDSample', true)">QL Sample</span>

</BODY>
</HTML>
```

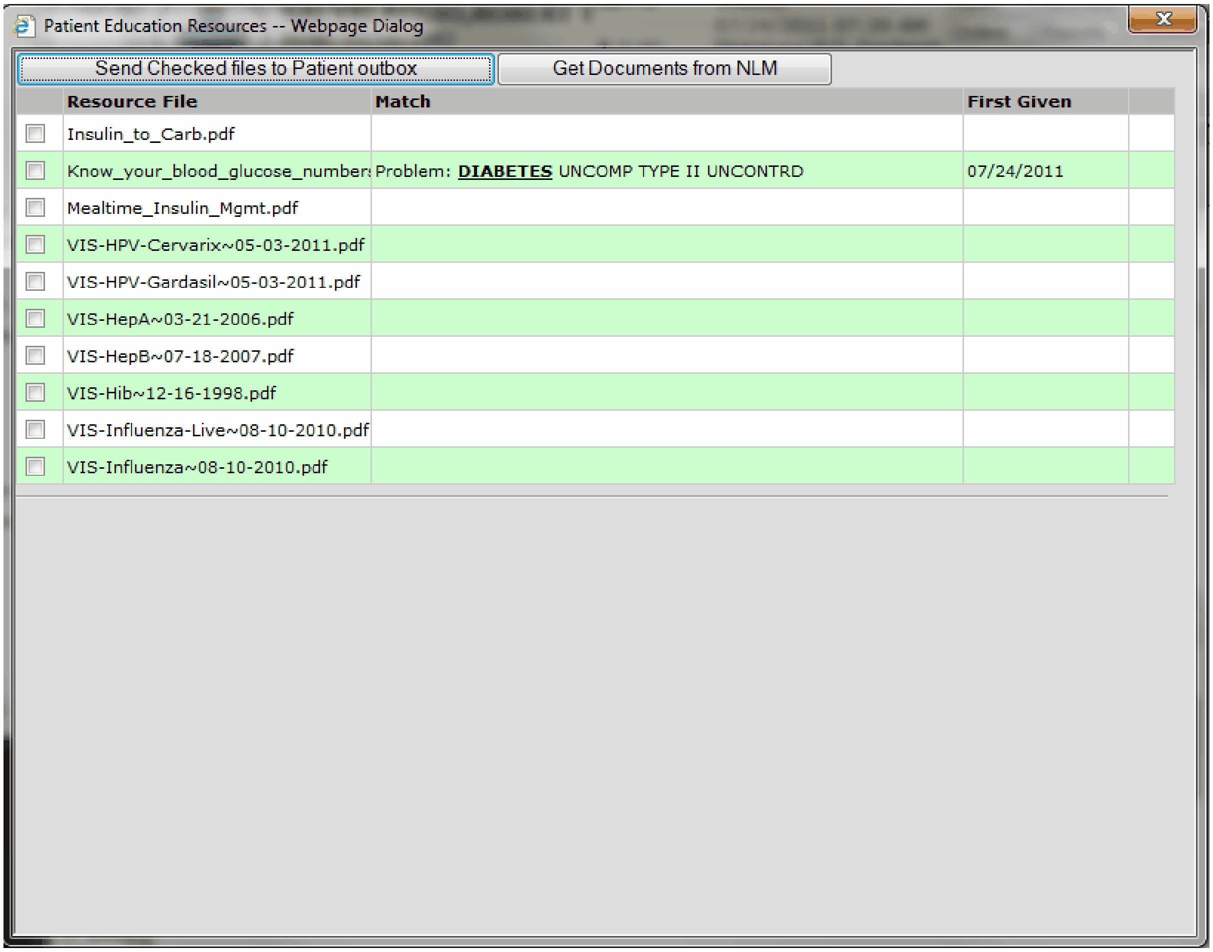
It is to be used in the script area and take two parameters.
The first is the name of the quicklist file.
The second is a pipe separated list of the values to be added to the default quicklist.

9.3.2.7 Patient Education Resource (PER)

The PER widget is coded as follows:

```
<span class=widget onclick="parent.ihdPER(this)">information sheet</span>
```

The PER widget will display the PER selector.



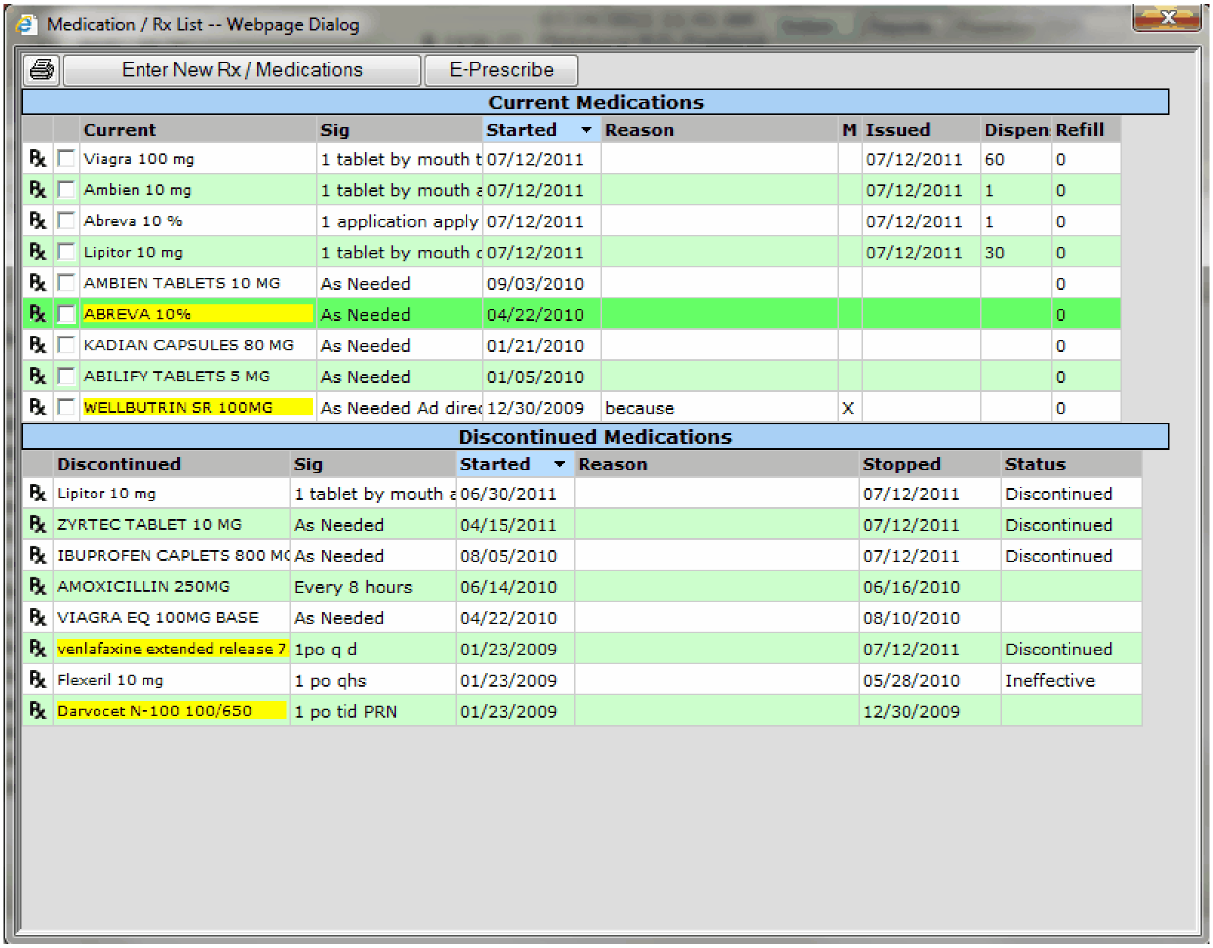
Items checked and sent to the outbox, or sent through the NLM will be added to the list. It will return a pipe separated list of the files sent.

9.3.2.8 Medications (MED)

The MED widget is coded as follows:

```
<span class=widget onclick="parent.ihdMED(this)">Medication Checked</span>
```

The MED widget will display the Medication List.



Medication / Rx List -- Webpage Dialog

Enter New Rx / Medications | E-Prescribe

Current Medications

Current	Sig	Started	Reason	M	Issued	Dispen	Refill
Viagra 100 mg	1 tablet by mouth t	07/12/2011			07/12/2011	60	0
Ambien 10 mg	1 tablet by mouth a	07/12/2011			07/12/2011	1	0
Abreva 10 %	1 application apply	07/12/2011			07/12/2011	1	0
Lipitor 10 mg	1 tablet by mouth c	07/12/2011			07/12/2011	30	0
AMBIEN TABLETS 10 MG	As Needed	09/03/2010					0
ABREVA 10%	As Needed	04/22/2010					0
KADIAN CAPSULES 80 MG	As Needed	01/21/2010					0
ABILIFY TABLETS 5 MG	As Needed	01/05/2010					0
WELLBUTRIN SR 100MG	As Needed Ad direc	12/30/2009	because	X			0

Discontinued Medications

Discontinued	Sig	Started	Reason	Stopped	Status
Lipitor 10 mg	1 tablet by mouth a	06/30/2011		07/12/2011	Discontinued
ZYRTEC TABLET 10 MG	As Needed	04/15/2011		07/12/2011	Discontinued
IBUPROFEN CAPLETS 800 MG	As Needed	08/05/2010		07/12/2011	Discontinued
AMOXICILLIN 250MG	Every 8 hours	06/14/2010		06/16/2010	
VIAGRA EQ 100MG BASE	As Needed	04/22/2010		08/10/2010	
venlafaxine extended release 7	1po q d	01/23/2009		07/12/2011	Discontinued
Flexeril 10 mg	1 po qhs	01/23/2009		05/28/2010	Ineffective
Darvocet N-100 100/650	1 po tid PRN	01/23/2009		12/30/2009	

A pipe separated list of the medication pointers will be returned for all checked medications when the user exits the list.

This information will need to be run through a formatter of some to work with it. The formatter will need to query each record and generate output to put in the documents. Below is a sample formatter for the Med.

```
// Lookup the medications
function formatMED(obj) {
        if (parent.VIEWONLY) { return }
        var data=obj.innerText;
        if (data == 'medications') {
                return;
        }
        meds=data.split('|');
        out='';
        for (x=0; x<(meds.length); x++) {
                if (out != '') {
                   out+=', ';
                }
                // Lookup the medication
                var url='form=dbQuery&file=ERXD&Erxd_patc='+parent.QS_pat_code+'&Erxd_uniq='+meds[x];
                ERXD=emr_GET(url);
                out += gFV(ERXD, 'Erxd_drug', '\t');
        }
        obj.innerHTML = out;
        return;
```

```
}
```

9.3.2.9 PARADIGM Select (PS)

The PARADIGM select widget is coded as follows:

```
<span class=widget onclick="parent.ihdPS(this, 'RPH', 'rph_name', 'rph_name', '', 500);">Referring Provider
```

QL takes up to six parameters.

1. Widget object.

2. file
The PARADIGM file to select from:
e.g. PHY, RPH, LOC, PAT, CLS

3. index
Index field from file to sort list order. If left blank the file will read in the order the data appears in the file.
e.g. rph_name, phy_code, cls_desc

4. output
The fields from the file to display in order separated by pipes. If left blank all fields defined for the file will print.
e.g. 'rph_code|rph_name|rph_ssnf|rph_pscd'

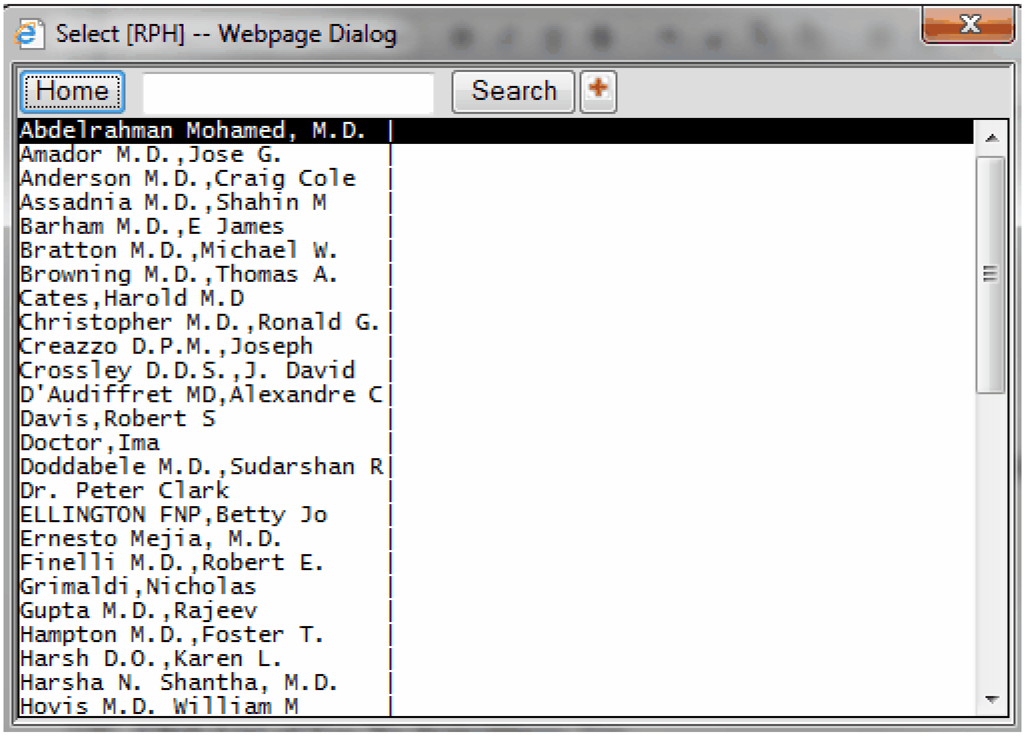
5. selexp
Select expression to select only records that match the expression. The expressions consist of field or static values being compared by a relational operator. You may combine expressions with Logical operators and set precedence with "()".

- '(': Precedence Begin
- ')': Precedence End
- '*': Logical AND
- '|': Logical OR
- '=': Relational Equal
- '!': Relational NOT Equal
- '>': Relational Greater than
- '<': Relational Less Than
- '}': Relational Greater than or equal
- '{': Relational Less than or equal

e.g. 'rph_pcsd=0001' would get only referring physician that are General Practce

6. width
This will allow you to set the default width of the Modal Dialog box to more then 350 pixels.

It will activate the PS Select program.

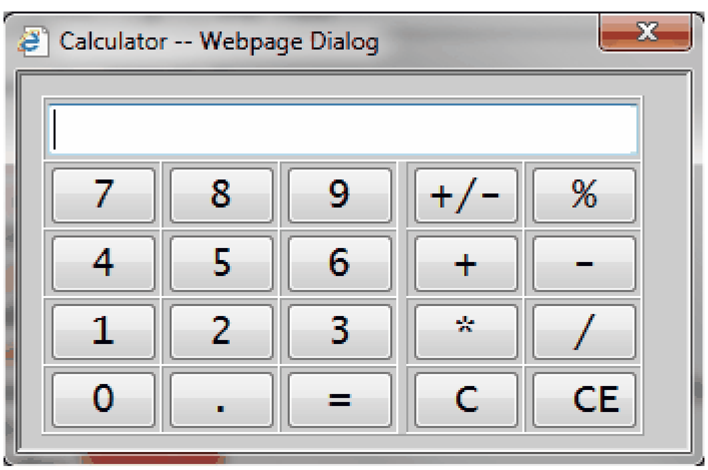


It will return a pipe separated string of all the fields in the select expression.

9.3.2.10 Calculator (CALC)

The Calculator widget can be used to display a pop up calculator. This is helpful for entering numeric values. It is coded as follows:

```
<span class=widget onclick="parent.ihdCALC(this)"># goes here</span>
```

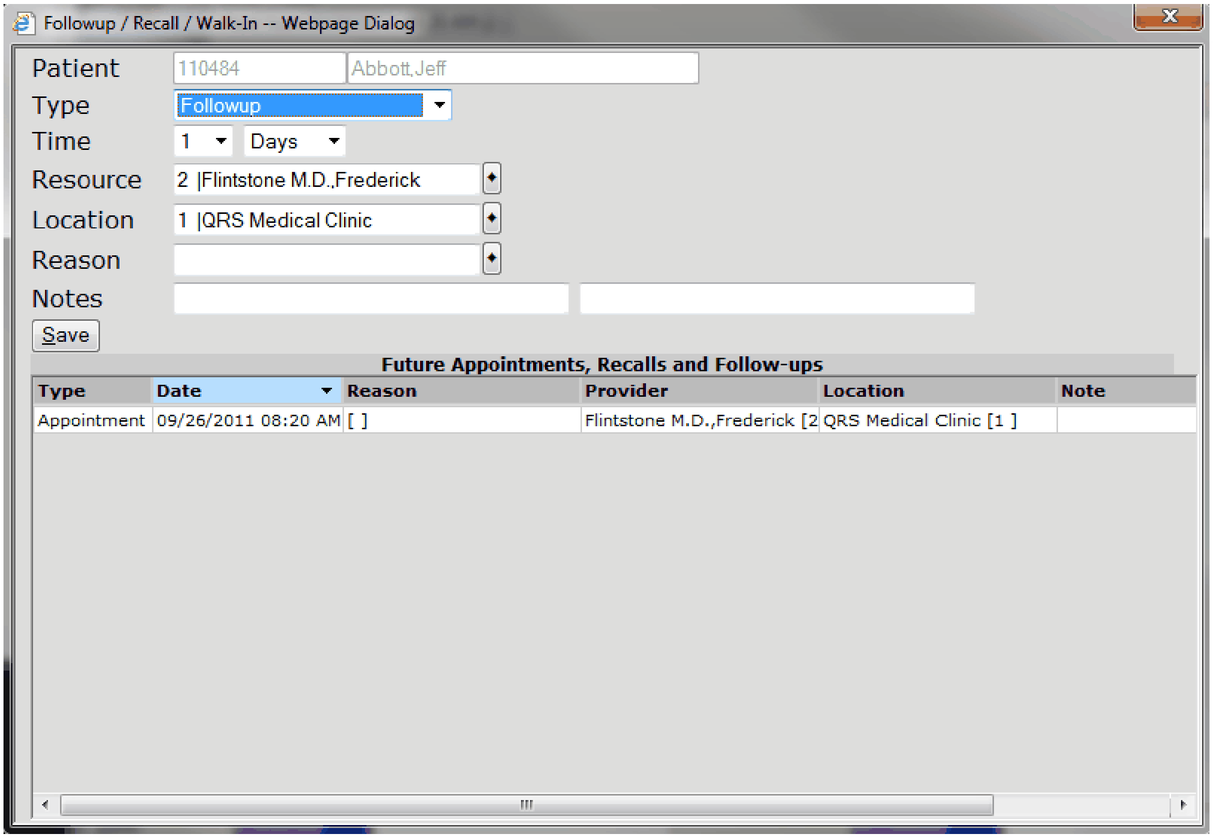


The value displayed here will be sent back to the widget when the user exits.

9.3.2.11 Follow Up (FU)

The Follow Up widget can be used to display the followup scheduler. It is coded as follows:

```
<span class=widget onclick="parent.ihdFU(this)">Followup goes here</span>
```

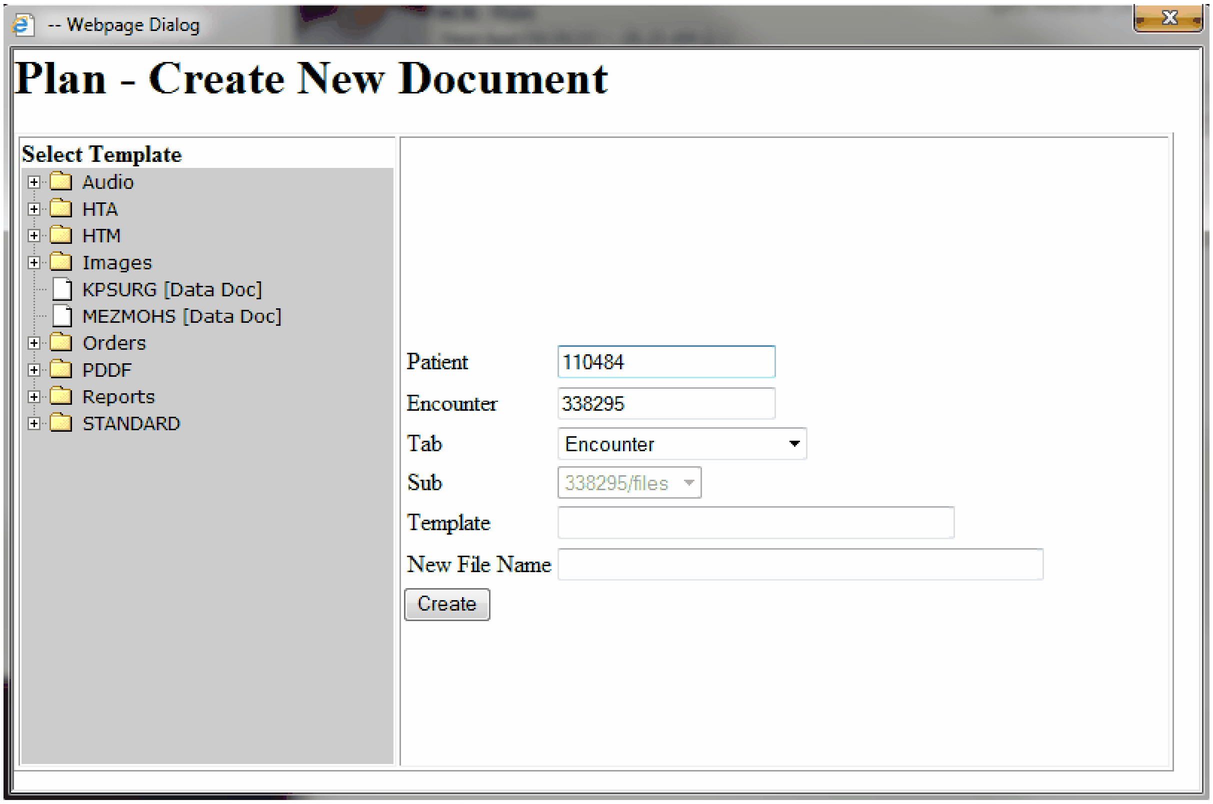


This will return the followup/recall information defined.

9.3.2.12 Template

The Template widget can be used to allow the user to select and save a template in any folder. It is coded as follows:

```
<span class=widget onclick="parent.ihdTPL(this)">Template goes here</span>
```

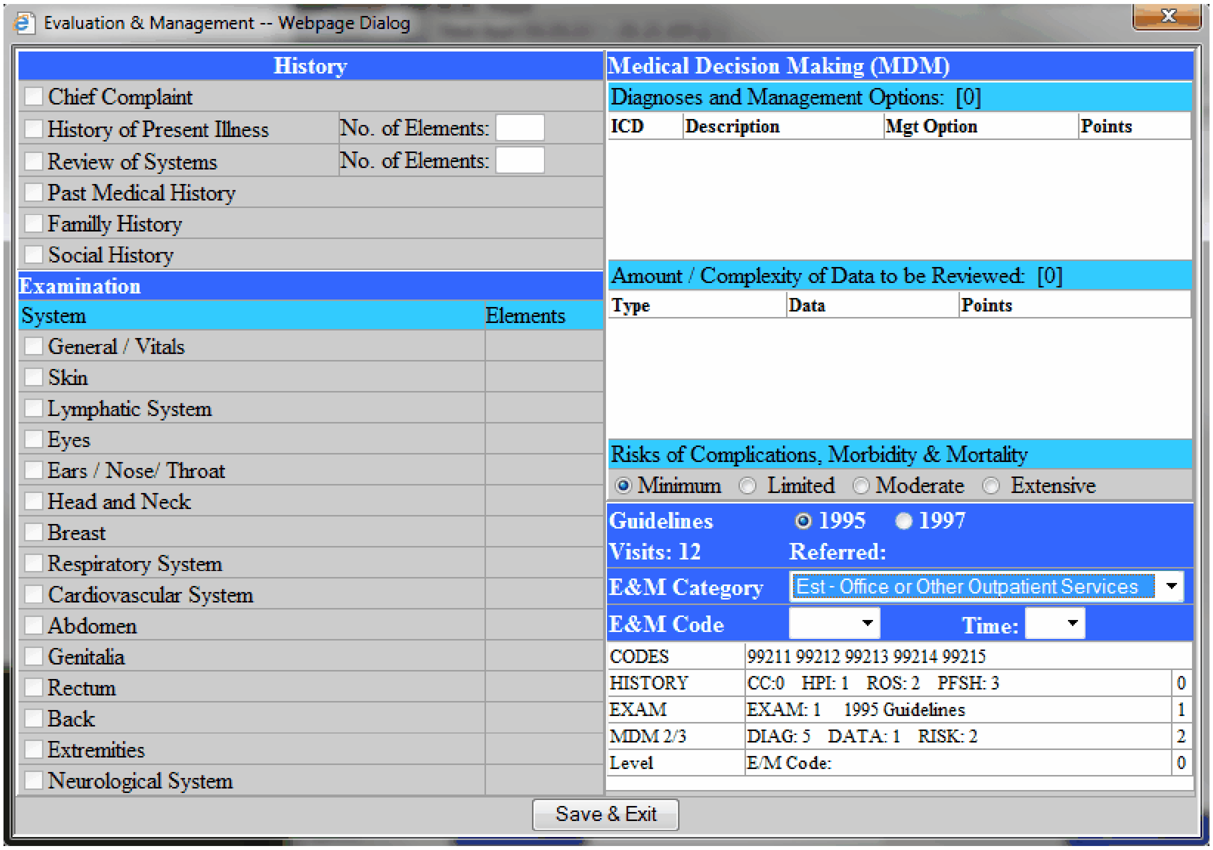


This will return the tab subtab and template file name saved.

9.3.2.13 Evaluation & Managment (EvalMgt)

The E/M widget can be used to allow the user to select to define the E/M code for the Encounter. It is coded as follows:

```
<span class=widget onclick="parent.ihdEM(this)">E&M goes here</span>
```

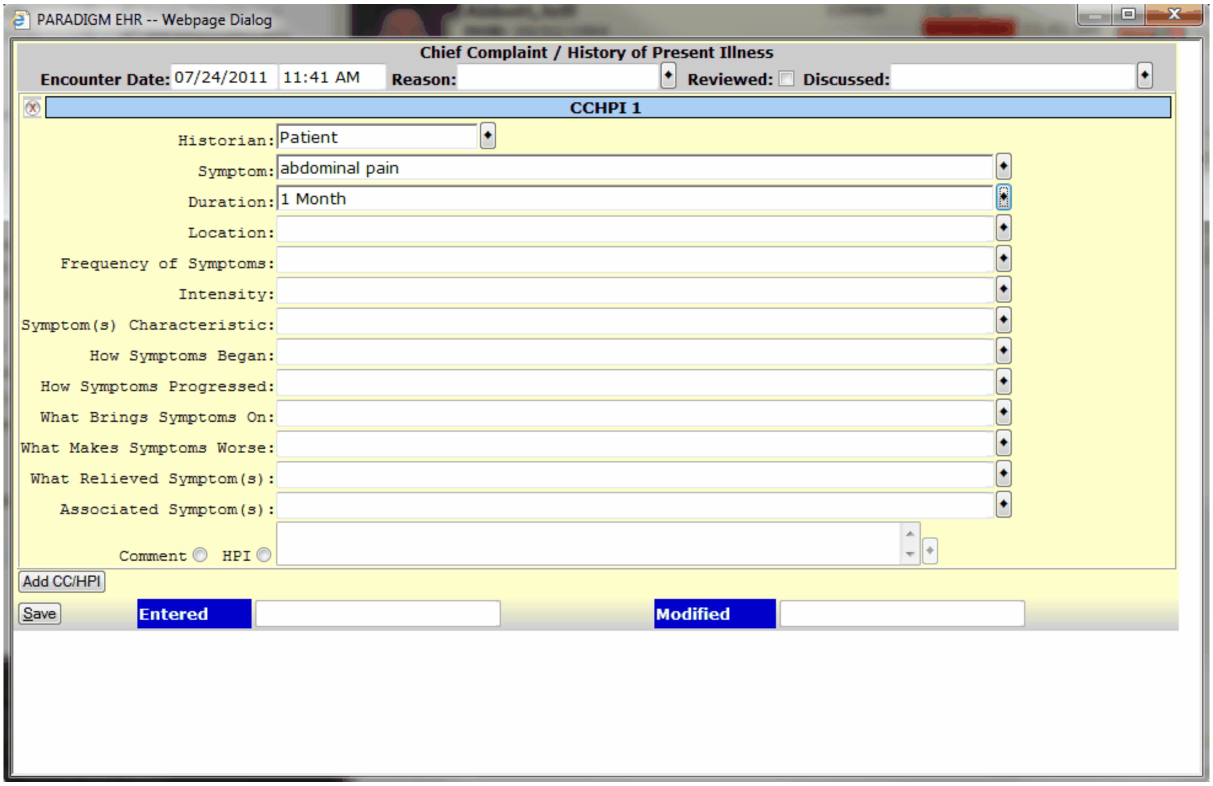


This will return the E&M code saved.

9.3.2.14 Progression Data Document (PDD)

This is a very powerful widget that will allows you to have the user enter and fill out any PDD that is defined in the Buttons area. It will display the PDD template in a button area and when the form is saved it will return the data saved with each field separated by a pipe. You may then format the data to display in the document as you wish. Basic coding of this is as follows:

```
<span class=widget onclick="parent.ihdPDD(this, 'S_CCHPI', true, true);">CCHPI</span>
```

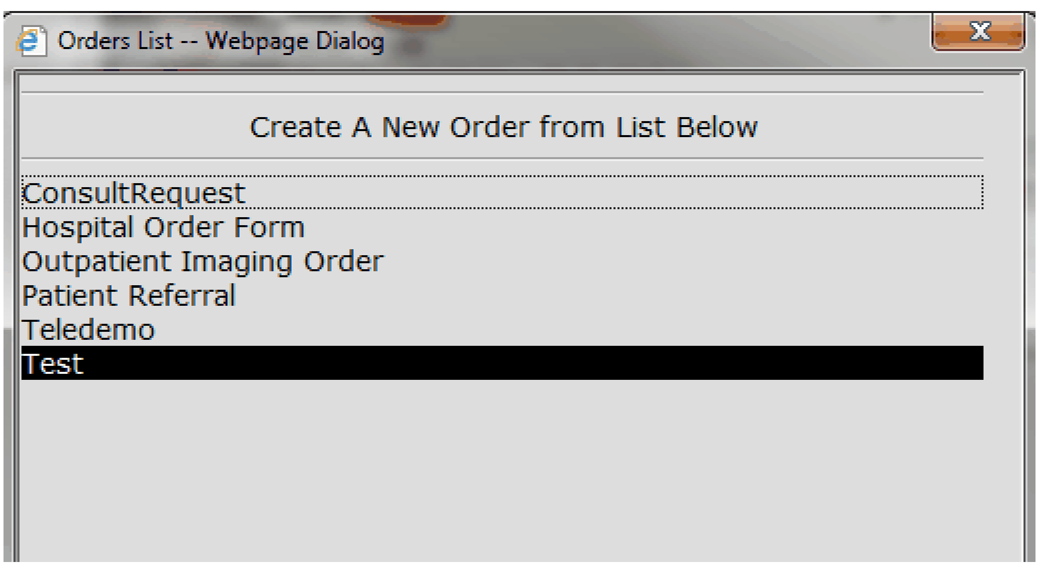


The data saved in the form will be returned to the span and will need to be formatted for final output.

9.3.2.15 Order (ORD)

The Order widget can be used to allow the user to select an order. It is coded as follows:

```
<span class=widget onclick="parent.ihdORD(this)">Order goes here</span>
```



This will return the order name selected after the order is saved.

9.3.2.16 Click List (CL)

The click list allows you to create a short defined list that a user only needs to click on to make it change. It is helpful for things such as "yes or no", "good or bad" or even a short list of values such as "10mg, 15mg, or 20mg". If a user needs a longer list or needs the ability to modify, or add values to the list you should use the Quick List widget. The Click list widget is code as follows:

Yes

9.3.3 Advanced Concepts

This section describes some advanced topics for Interactive HTML Documents.

9.3.3.1 Data Formatters

Data formatters are used to format the data for the output that will display in the actual document. Formatters are call as part of a widget in the HTML.

```
<span id=ASS class=widget
        title="Click to edit Assessment"
        onclick="if (parent.ihdPDD(this, 'S_ASSESSMENT', true, true)) { formatASS(this); }">Assessment</s
```

And they call javascript.

```
//  Assessment
function formatASS(obj) {
        if (parent.VIEWONLY) { return }
        var data=obj.innerText;
        var out = '';
        if (data == 'Assessment') {
                return;
        }
        out += '<b><u>ASSESSMENT</u></b><br>';
        var x=0;
        while (true) {
                x++;
                var rec = FV(data,'Recomendation_'+x);
                if(rec != ''){
                        out += x + '.   ' + rec;
                        var stat = FV(data,'Status_'+x);
                         if(stat != '') {
                            out += '  - Status: ' + stat;
                        }
                        out += '  ' + FV(data, 'discussion_'+x);
                        out += '<br>';
                } else {
                        out += '<br>';
                        obj.innerHTML = out;
                        return;
                }
        }
        obj.innerHTML = out;
        return;
}
```

For the most part the formatter is just using javascript to format the data the way you want it to display.

<u>Things you need to know about formatters</u>

formatters must have teh following at the start.

```
if (parent.VIEWONLY) { return }
```

This is to prevent the formatter from being activated after a document has been signed.

Also formatters usually have a default mode that needs to return back to the program under these default conditions. In the above example it is the following code.

```
var data=obj.innerText;
if (data == 'Assessment') {
        return;
}
```

It looks to see if the text in the object is the value defined by default.. If so it returns doing nothing.

9.3.3.2 Visual Effects

You may want a widget to be more apparent when a user hovers over it. This can easily be accomplished using the onmouseover and onmouseout events attached to the span.

```
<span id=VITALS class=widget
       title="Click to edit Vitals"
       onmouseover="this.style.backgroundColor='cyan'"
       onmouseout="this.style.backgroundColor='white'"
       onclick="if (parent.ihdPDD(this, 'S_VITALS', true, true)) { formatVITALS(this); }">Vitals</span>
```

The above code sets the background color to syan on the widget when the user hovers over the widget, and sets it back to white when the users moves the cursor away.

9.3.3.3 Database Loading

Many times you will need to load data when the document is loaded in. This should be done using the onload event in the BODY of the HTML.

```
<BODY CONTENTEDITABLE onload='getdata()'>
```

This will call your function to collect and possibly format any data you want displayed in the document.

9.3.3.4 Link to a Tab

The LINK_TAB features allows a note to be linked to a tab when a note is signed off. This only applies to note templates not normal templates. This is accomplished by putting a comment in the javascript area of the note template similar to the following.

```
//LINK_TAB=Xrays

or

//LINK_TAB=Procedures/EKG
```

When the note is signed it will create a link of the note in the Tab / subdir area defined in the note template. If the tab does not exist and alert will display. No alert will display for the subdir. If it does not exist, it will automatically create it, but if it is not defined in the data set administration the user will not have access to it. So it is important that tabs and sub directories are concurrent with what is defined for the data set.

9.4 JavaScript Libraries

The following javascript libraries can be used by your HTA, and HTML programs to enhance the functionality and provide consistency within the PARADIGM EHR applications.

9.4.1 environment.js

The environment library is used to establish the PARADIGM EHR working environment. This library should be the first library called in any code needing to access account information. It also provides some useful functions that are used for working with objects, extracting field values from data streams, and accessing the emr.cgi

```
<script>
document.write('<script SRC="'+location.protocol+'//'+location.host+'/emr/js/environment.js"><\/script>');
</script>
```

The environment library will set variables based on the the users account and system values.

LIBRARY	Path where library resides. PARADIGM EHR can take advantage of using libraries of javascript, images, and htm programs loaded on the client machine. This greatly reduces network traffic, while enhancing performance. To dynamically load additional javascript libraries for the defined library path you may add this additional script in your HTML
	
	This is used on Windows PC's where libraries can be stored locally to improve performance.
	
	`<script>`
	`document.write('<script src="'+LIBRARY+'js/date.js"><\/script>');`
	`document.write('<script src="'+LIBRARY+'js/string.js"><\/script>');`
	`</script>`

ACCOUNT	Contains string of all account infromation
AC_user	User login
AC_name	User name as defined in user file
AC_sets	Data sets user has access to
AC_data	Current data set
AC_head	Header for data set
AC_role	Users role as defined in profile for current data set
AC_path	Path of PARADIGM database for data set
AC_mode	Users default mode as defined in profile
AC_time	
AC_reft	
AC_side	Side of screen for File list (Left, Right) as defined in profile
AC_disp	
AC_tabw	Width of tabs as defined in profile
AC_icon	Use Icons (YES) or left blank for text as defined in profile
AC_save	Save method. Auto, Manual, Ask
AC_seid	Session ID
AC_rbac	RBAC data
AC_plus	Access to PLUS
AC_cssf	
query_string	Query string as passed in

QS_pat_code	patient code
QS_fsl_code	Encounter Code
QS_tab	Tab
QS_subdir	Sub directory
QS_file	File
QS_button	Button

9.4.1.1 setCookie

Definition and Usage

The setCookie() function will allow you to save a cookie in the browsers cookie cache for later recall. The cookie is stored as a session cookie.

Syntax

setCookie(name, value);

Parameter	Description
name	Required. The name of the cookie
value	Required. The value of the cookie

Example

The following example creates a new cookie called "cur_patient" to the value in pat_code

```
setCookie('cur_patient', pat_code);
```

9.4.1.2 getCookie

Definition and Usage

The getCookie() function allows you to retrieve a value stored with setCookie.

Syntax

getCookie(name);

Parameter	Description
name	Required. The name of the cookie.

Example

The following will retrieve the value from the cookie "cur_patient" and place it in the variable "pat_code".

```
var pat_code = getCookie('cur_patient');
```

9.4.1.3 delCookie

Definition and Usage

The delCookie() function allows you to delete a cookie stored with setCookie().

Syntax

delCookie(name);

Parameter	Description
name	Required. The name of the cookie to delete the value

Example

The following will delete the "cur_patient" cookie.

```
delCookie('cur_patient');
```

9.4.1.4 go

Definition and Usage

The go() function will return the object for the id passed to it. It is basically shorthand for

```
document.getElementById('id');
```

Syntax

go(id)

Parameter	Description
id	Required. 'id' of the object to get

Example

The following will display the innerHTML of the <div> with the id of 'patient' in an alert box.

```
<div id=patient>John Smith</div>
<script>
alert(go('patient').innerHTML);
```

The following will set the innerHTML value of the <div> with an id of 'pateint' to 'Fred Jones';

```
<div id=patient></div>
<script>
go('patient').innerHTML = 'Fred Jones';
```

9.4.1.5 gov

Definition and Usage

The gov() function will return the value of the object for the id passed to it. It is basically shorthand for

```
document.getElementById('id').value
```

Syntax

go(id)

Parameter	Description

id	Required. 'id' of the object to get value from.

Example

The following will display the value of the <input> with the id of 'patient' in an alert box.

```
<input type=text id=patient value="John Smith">
<script>
alert(gov('patient'));
```

;

9.4.1.6 grbv

Definition and Usage

The grbv() (Get Radio Button Value) function will return the value of the radio button checked for the id passed to it.

Syntax

grbv(id)

Parameter	Description
id	Required. 'id' of the radio to get value from.

Example

The following will display the value of the <radio> with the id of 'eas' in an alert box. The Alert box should display "NO".

```
<input type="radio"  name="eas" value="YES">YES (Requires Editing Program on PC)
<input type="radio"  name="eas" value="NO" checked="checked">NO
<script>
alert(grbv('eas'));
```

9.4.1.7 srbv

Definition and Usage

The srbv() (Set Radio Button Value) function will allow you to check a radio button value.

Syntax

srbv(group, value)

Parameter	Description
group	Required. 'id' of the radio button group to set value
value	Value to check in group

Example

The following will display the value of the <radio> with the id of 'eas' in an alert box. The Alert box should display "NO".

```
<input type="radio"  name="eas" value="YES">YES (Requires Editing Program on PC)
<input type="radio"  name="eas" value="NO" checked="checked">NO
<script>
srbv('eas', YES);
```

9.4.1.8 getFieldValue

Definition and Usage

The getFieldValue() function allows you to easily extract values from (field=value) pairs in a data stream.

Syntax

getFieldValue(data, field, delimiter);

Parameter	Description
data	contains field=value pairs separated by delimiter
field	The name of the field you want to extract.
delimiter	The delimiter that seperates the field=value pairs.

Example

The value for pat_code will be extracted from the data and displayed in an alert box. The alert box will display 2345.

```
var data = "pat_code=2345&pat_name=Smith,John";
var pat_code = getFieldValue(data, 'pat_code', '&');
alert(pat_code);
```

Alias

gFV(data,field,delimiter);

getfld(data, field, delimiter); Legacy name.

getValue(data,field); "Delimiter is set to '&'"

gQS(field); Get query_string value

9.4.1.9 emr_GET

Definition and Usage

The emr_GET function will make an HTTP request call to the emr.cgi script for the form and options provided and return the result. It does this using the GET method. This method is best used for short urls. If you are sending a large url with lots of data, as in saving data you should use emr_POST. See emr.cgi API.

Syntax

emr_GET(url)

Parameter	Description
url	The url to be sent to emr.cgi

Example

This will use the dbQuery from the emr.cgi API to get the patient data and put it in the variable patData.

```
var url='form=dbQUERY&file=PAT&pat_code='+QS_pat_code;
var patData=emr_GET(url);
```

9.4.1.10 emr_POST

Definition and Usage

The emr_POST function will make an HTTP request call to the emr.cgi script for the form and options provided and return the result. It does this using the POST method. This method is best used for long urls. See emr.cgi API.

Syntax

emr_POST(url)

Parameter	Description
url	The url to be sent to emr.cgi

Example

This will use the dbQuery from the emr.cgi API to get the patient data and put it in the variable patData.

```
var url='form=dbQUERY&file=PAT&pat_code='+QS_pat_code;
var patData=emr_POST(url);
```

9.4.1.11 msieversion

Definition and Usage

The msieversion() method returns the version number of Microsoft Internet Explorer.

It is used when the code you are creating is Browser Specific.

Syntax

msieversion();

Parameter	Description
none	

Example

```
if (msieversion() > 6) {
        if (check_lib()) {
                LIBRARY=LOCAL_LIB;
        }
}
```

9.4.2 string.js

The following are widgets or javascript functions for the manipulation of strings.

You may include the string library in your "HTA" or "HTM" programs by putting in the following code in the head section of your program.

```
<head>
<script>
document.write('<script src="'+LIBRARY+'js/string.js"><\/script>');
</script>
</head>
```

9.4.2.1 stripTraillingSpaces

Definition and Usage

The stripTrailingSpaces() method widget will remove trailing spaces from the string

Syntax

var url = stripTrailingSpaces(gov('ID_name'));

Parameter	Description
value	String to remove trailing spaces from.

Example

```
if (stripTrailingSpaces(value) == '') {
    alert('the value is empty);
}
```

You may also use the String method of "stripTrailing()"

var url = gov('fld_name').stripTrailing();

9.4.2.2 stripLeadingSpaces

Definition and Usage

The stripLeadingSpaces() method will remove leading spaces from the value passed in.

Syntax

var url = stripLeadingSpaces(value);

Parameter	Description
value	String value to strip leading spaces from

Example

```
if (stripLeadingSpaces(value) == '') {
    alert('the value is empty);
}
```

You may also use the String method of "stripLeading()"

var url = gov('fld_name').stripLeading();

9.4.2.3 stripSpaces

Definition and Usage

The stripSpaces() method will remove leading and trailing spaces from a string.

Syntax

stripSpaces(value)

Parameter	Description
value	String value to strip leading and trailing spaces from

Example

```
if (stripSpaces(value) == '') {
   alert('value is empty');
}
```

You may also use the String method of "strip()"

var url = gov('fld_name').strip();

9.4.2.4 capitalize / uppercase / lowercase

Definition and Usage

The capitalize(), uppercase(), and lowercase() methods transform the string as described..

Syntax

string.capitalize()

Parameter	Description
none	

Example

These snippets allow you format text in an input field to capitalize the first letter of each word, all upper or all lowercase. Include any of the following in your <INPUT > or <TEXTAREA>.

```
style="text-transform: capitalize; onChange="this.value = this.value.capitalize();"
style="text-transform: uppercase; onChange="this.value = this.value.toUpperCase();"
style="text-transform: lowercase; onChange="this.value = this.value.toLowerCase();"
```

⚠ The data is not changed until the user actually leaves the field. The text-transform give the user the visual appearance but all information is read as it. On exiting the field the value is changed.

toUpperCase() and toLowerCase() are standard string methods, capitalize() is custom to PARADIGM EHR.

9.4.2.5 subfld

Definition and Usage

The subfld() method allows you to pick out a field of a string.

Syntax

string.subfld(field, delimiter)

Parameter	Description
field	The field number to return, starting at 0
delimiter	The field delimiter to separate into fields.

Example

```
var txt = "ABC|This is a test|123"
var ret = txt.subfld(1,'|');
```

will return "This is a test".

```
var ret = txt.subfld();
```

will return "ABC".

9.4.2.6 sprintf / printf

Definition and Usage

The sprintf(), printf() methods work like the same functions in the 'C' programming language. Allowing you to format strings using a format string followed by a list of variables to be formatted.

Syntax

sprintf(formatString, var1, var2, var3...);

Parameter	Description
formatString	The format string used to format the output It can optionally contain embedded format tags that are substituted by the values specified in subsequent argument(s) and formatted as requested. The number of arguments following the *format* parameters should at least be as much as the number of format tags. Where

specifier is the most significant one and defines the type and the interpretation of the value of the corresponding argument:

specifier	Output	Example
c	Character	a
d or i	Signed decimal integer	392
e	Scientific notation (mantise/exponent) using e character	3.9265e+2
E	Scientific notation (mantise/exponent) using E character	3.9265E+2
f	Decimal floating point	392.65
g	Use the shorter of %e or %f	392.65
G	Use the shorter of %E or %f	392.65
o	Signed octal	610
s	String of characters	sample
u	Unsigned decimal integer	7235
x	Unsigned hexadecimal integer	7fa
X	Unsigned hexadecimal integer (capital letters)	7FA
p	Pointer address	B800:0000
n	Nothing printed. The argument must be a pointer to a signed int, where the number of characters written so far is stored.	
%	A % followed by another % character will write % to stdout.	

The tag can also contain *flags*, *width*, *.precision* and *modifiers* sub-specifiers, which are optional and follow these specifications:

flags	description
-	Left-justify within the given field width; Right justification is the default (see *width* sub-specifier).

+	Forces to precede the result with a plus or minus sign (+ or -) even for positive numbers. By default, only negative numbers are preceded with a - sign.
(space)	If no sign is going to be written, a blank space is inserted before the value.
#	Used with o, x or X specifiers the value is preceeded with 0, 0x or 0X respectively for values different than zero. Used with e, E and f, it forces the written output to contain a decimal point even if no digits would follow. By default, if no digits follow, no decimal point is written. Used with g or G the result is the same as with e or E but trailing zeros are not removed.
0	Left-pads the number with zeroes (0) instead of spaces, where padding is specified (see *width* sub-specifier).

width	**description**
(number)	Minimum number of characters to be printed. If the value to be printed is shorter than this number, the result is padded with blank spaces. The value is not truncated even if the result is larger.
*	The *width* is not specified in the *format* string, but as an additional integer value argument preceding the argument that has to be formatted.

.precision	**description**
.number	For integer specifiers (d, i, o, u, x, X): *precision* specifies the minimum number of digits to be written. If the value to be written is shorter than this number, the result is padded with leading zeros. The value is not truncated even if the result is longer. A *precision* of 0 means that no character is written for the value 0. For e, E and f specifiers: this is the number of digits to be printed **after** the decimal point. For g and G specifiers: This is the maximum number of significant digits to be printed. For s: this is the maximum number of characters to be printed.

	By default all characters are printed until the ending null character is encountered. For c type: it has no effect. When no *precision* is specified, the default is 1. If the period is specified without an explicit value for *precision*, 0 is assumed.
.*	The *precision* is not specified in the *format* string, but as an additional integer value argument preceding the argument that has to be formatted.

length	**description**
h	The argument is interpreted as a short int or unsigned short int (only applies to integer specifiers: i, d, o, u, x and X).
l	The argument is interpreted as a long int or unsigned long int for integer specifiers (i, d, o, u, x and X), and as a wide character or wide character string for specifiers c and s.
L	The argument is interpreted as a long double (only applies to floating point specifiers: e, E, f, g and G).

var1, var2, ...	Variables used to complete format string.

Example

```
var out = sprintf ("Characters: %c %c \n", 'a', 65);
var out = sprintf ("Decimals: %d %ld\n", 1977, 650000L);
var out = sprintf ("Preceding with blanks: %10d \n", 1977);
var out = printf ("Preceding with zeros: %010d \n", 1977);
var out = printf ("Some different radixes: %d %x %o %#x %#o \n", 100, 100, 100, 100, 100);
var out = printf ("floats: %4.2f %+.0e %E \n", 3.1416, 3.1416, 3.1416);
var out = printf ("Width trick: %*d \n", 5, 10);
var out = printf ("%s \n", "A string");
```

The output of the above would be.
Characters: a A
Decimals: 1977 650000
Preceding with blanks: 1977

```
Preceding with zeros: 0000001977
Some different radixes: 100 64 144 0x64 0144
floats: 3.14 +3e+000 3.141600E+000
Width trick:    10
A string
```

9.4.3 date.js

You may include the date library in your "HTA" or "HTM" programs by putting in the following code in the head section of your program.

```
<head>
<script>
document.write('<script src="'+LIBRARY+'js/date.js"><\/script>');
</script>
</head>
```

9.4.3.1 formatDate

Definition and Usage

The formatDate() method returns the date as a string in the output format specified.

Syntax

formatDate(date, format)

<table>
<tr><th>Parameter</th><th>Description</th></tr>
<tr><td>date</td><td>The Date to format</td></tr>
<tr><td>format</td><td>The format string to use to format the date.
<table>
<tr><th>Field</th><th>Full Form</th><th>Short Form</th></tr>
<tr><td>Year</td><td>yyyy (4 digits)</td><td>yy (2 digits), y (2 or 4 digits)</td></tr>
<tr><td>Month</td><td>MMM (name or abbr.)
NNN (abbr.)</td><td>MM (2 digits), M (1 or 2 digits)</td></tr>
<tr><td>Day of Month</td><td>dd (2 digits)</td><td>d (1 or 2 digits)</td></tr>
<tr><td>Day of Week</td><td>EE (name)</td><td>E (abbr)</td></tr>
<tr><td>Hour (1-12)</td><td>hh (2 digits)</td><td>h (1 or 2 digits)</td></tr>
<tr><td>Hour (0-23)</td><td>HH (2 digits)</td><td>H (1 or 2 digits)</td></tr>
<tr><td>Hour (0-11)</td><td>KK (2 digits)</td><td>K (1 or 2 digits)</td></tr>
</table>
</td></tr>
</table>

	Hour (1-24)	kk (2 digits)	k (1 or 2 digits)
	Minute	mm (2 digits)	m (1 or 2 digits)
	Second	ss (2 digits)	s (1 or 2 digits)
	AM/PM	a	
	NOTE THE DIFFERENCE BETWEEN MM and mm! Month=MM, not mm!		

Example

```
var cur_date = formatDate(SYS_time, 'MM/dd/yyyy');

var cur_time = formatDate(SYS_time,"hh:mm a");
```

9.4.3.2 isDate

Definition and Usage

The isdate() method returns true if date string matches format of format string and is a valid date. Else returns false. It is recommended that you trim whitespace around the value before passing it to this function, as whitespace is NOT ignored!

Syntax

isDate(dateString, formatString)

Parameter	Description
dateString	A string representing the date
formatString	The format you expect to see the dateString in. Uses formatting as defined in formatDate.

Example

```
if (isDate(val, "MM/dd/yyyy")) {
    alert(val +' is in the correct format');
}
```

9.4.3.3 compareDates

Definition and Usage

The compareDates() method Compare two date strings to see which is greater.
Returns:

- 1 if date1 is greater than date2
- 0 if date2 is greater than date1 of if they are the same
- -1 if either of the dates is in an invalid format

Syntax

compareDates(date1,dateformat1,date2,dateformat2)

Parameter	Description
date1	String representing the first date
dateformat1	The format you expect to see the date1 in. Uses formatting as defined in formatDate.
date2	String representing the first date
dateformat2	The format you expect to see the date2 in. Uses formatting as defined in formatDate.

Example

```
var cdr = compareDates(date1,date1format,date2,date2format);

if (cdr == 1) {
   alert('date 1 is greater than date 2');
} else if { cdr == 0) {
   alert('date 1 and 2 are the same');
} else {
   alert('invalid format');
}
```

9.4.3.4 getDateFromFormat

Definition and Usage

The getDateFromFormat() method takes a date string and a format string. It matches If the date string matches the format string, it returns the getTime() of the date. If it does not match, it returns 0. Basically it creates a time object for you for the date passed in.

Syntax

getDateFromFormat(val,format)

Parameter	Description
val	The date in a string format
format	The format you expect to see the val in. Uses formatting as defined in formatDate.

Example

```
var X_time = getDateFromFormat( "09/02/1964", "MM/dd/cccc");
```

9.4.3.5 pat_age

Definition and Usage

The pat_age function will calculate the patients age based on industry standards guidelines.

If the age is less than 29 days it will be represented as days. If the age is greater than 28 and less than 122 days it will be represented in weeks. If the age is greater than 121 days and less than 730 days (2 years) it will be represented in months. If it is greater thean 729 days and less then 6574 days (18 years) it will be represented in Years and Months and if greater than 6573 days it will show only years.

Syntax

pat_age(BirthDate, Asof, format);

Parameter	Description
BirthDate	Patients date of birth as derived from pat_dobf in format MM/DD/CCYY
Asof	Date to used to calculate age. If left blank it will use the current system date.
format	Set to true to use long format. Short format is default. Short format uses Yr Mo, Long uses Years Months

Example

The following example sets the age variable based on the visit date in long format.

```
var age = pat_age(gov('pat_dobf'), gov('fsl_date'), true);
```

9.4.4 wysiwyg.js

You may include the wysiwyg library in your "HTA" or "HTM" programs by putting in the following code in the head section of your program.

```
<head>
<script>
document.write('<script src="'+LIBRARY+'js/openwysiwyg/wysiwyg.js"><\/script>');
</script>
</head>
```

This widget allows you to add a nice WYSIWYG (What You See Is What You Get) editor to template with HTML text areas with just a few additional lines of javascript. This editor will allow the user to do the following:

- Format text to be bold, italicized, or underlined.
- Change the face, size, style and color.
- Left, centers, or right-justify paragraphs.
- Make bulleted or numbered lists.
- Indent or un-indent paragraphs.
- Insert hyperlinks, images, and tables.
- View the HTML source code of what you're editing.

Just by change the code to this:

```
<textarea id="note" rows=20 cols=80 id=pad name="WordPad"></textarea>

<script language="JavaScript">
  var wysis='';
  wysiwygWidth = document.body.clientWidth -10;
  wysiwygHeight = document.body.clientHeight -60;
  generate_wysiwyg('WordPad', true);
</script>
```

The gerneate_wysiwyg function will make the textarea a wysiwyg editor. The lines above are just to set the Width and Height. The "true" in the generate_wysiwyg function tells it to include the save button and use the "saveit()" function that you must define in your program. If set to false you must create your own save button and associated function.

9.5 emr.cgi API

This section describes the application programming interface of the emr.cgi program. This program is used to access data from the PARADIGM and PARADIGM EHR databases. It is also used to render both text and html output. Calls are made to the url for the emr.cgi along with a query string that directs the emr.cgi program as to what actions to perform. A URL may look as follows:

http://machine/emr/emr.cgi?form=Search&file=pat&index=pat_name&output=pat_code|pat_name|pat_dobf

The Query string of the URL (the part after the ?) tells emr.cgi the action to take place. The first attribute of the query string is "form". This is the principle director for the emr.cgi program. Each "form" will be discussed below.

9.5.1 PARADIGM database functions

These calls allow access to the PARADIGM/PARADIGM EHR data base files.

9.5.1.1 dbAdd

The dbAdd form allows you to perform an add operations on the PARADIGM database.

Synopsis

```
var url = 'form=dbAdd'
      + '&file=CLS'
```

```
        + '&cls_code=XXX'
        + '&cls_desc=XXX Description 3'
        + '&cls_type=I';
    res=emr_POST(url);
    alert(res);
```

Description

file	Defines the PARADIGM file (must be upper case)
fields=value	PARADIGM data fields for file defined in MASTER with values.

This should be used as part of an emr_POST call to send the data.

If successful it will return "0"

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.2 dbUpdate

The dbUpdate form allows you to perform an Update operations on the PARADIGM database.

Synopsis

```
   var url = 'form=dbUpdate'
        + '&preload=YES'
        + '&file=CLS'
        + '&cls_desc=DESC test 3'
        + '&cls_code=XXA'
        + '&cls_type=C';
    res=emr_POST(url);
    alert(res);
```

Description

file	Defines the PARADIGM file (must be upper case)
fields= value	PARADIGM data fields for file defined in MASTER with values.
preload	If set to YES, preload will first copy the data from the original record, then over write any fields passed in. This allows you to do partial updates without having to first query, store and send all the other data in the file.

This should be used as part of an emrPOST call to send the data.

If successful it will return "0"

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.3 dbAddUpdate

The dbAddUpdate form allows you to perform an add / Update operations on the PARADIGM database. It will first attempt to Add the record to the data base. If the Add Fails with an Error 2 "Key value already exist in index", it will then update the record with the new values.

Synopsis

```
var url = 'form=dbAddUpdate'
        + '&preload=YES'
        + '&file=CLS'
        + '&cls_desc=DESC test 3'
        + '&cls_code=XXA'
        + '&cls_type=C';
 res=emr_POST(url);
 alert(res);
```

Description

file	Defines the PARADIGM file (must be upper case)
fields= value	PARADIGM data fields for file defined in MASTER with values.
preload	If set to YES preload will first copy the data from the original record, then over write any fields passed in. This allows you to do partial updates without having to first query, store and send all the other data in the file.

This should be used as part of an emr_POST call to send the data.

If successful it will return "0"

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.4 dbRemove

The dbRemove form allows you to perform a Remove operations on the PARADIGM database.

Synopsis

```
var url = 'form=dbRemove'
        + '&file=CLS'
        + '&cls_code=XXA';
 res=emr_GET(url);
 alert(res);
```

Description

file	Defines the PARADIGM file (must be upper case)

fields= value	PARADIGM data fields for file defined in MASTER with values. You only need to define the fields that make up the primary key for the file you want to remove the record from.

If successful it will return "0"

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.5 dbQuery

The dbQuery form allows you to query data from the PARADIGM database.

Synopsis

```
var url='form=dbQuery&file=PAT&pat_code='+pat_code;
var pat=emr_GET(url);
// Response starts with ERROR
if (pat.substring(0,5) == 'ERROR') {
        alert(pat);
} else {
        load_form(pat);
}
```

Description

file	Defines the PARADIGM file (must be upper case)
fields= value	PARADIGM data fields for file defined in MASTER with values. You only need to define the fields that make up the primary key for the file you want to query the record from.

If successful it will return all the data in field=value pairs delimited by tabs.

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.6 dbSet

The dbQuery form allows you to query data from the PARADIGM database in the form of a set or group based on an duplicate key index.

Synopsis

```
var Murl='form=dbSet&index=Eppl_code_idx&Eppl_patc='+pat_code;
var data=emr_GET(Murl);
if (data.substring(0,5) == 'ERROR') {
        alert(data);
} else {
        rec=data.split('\n');
        for (x=0; x<(rec.length-1); x++) {
                var _patc=gFV(rec[x], 'Eppl_patc', '\t');
                var _idnt=gFV(rec[x], 'Eppl_idnt', '\t');
                var _onst=gFV(rec[x], 'Eppl_onst', '\t');
                var _type=gFV(rec[x], 'Eppl_type', '\t');
                var _prob=gFV(rec[x], 'Eppl_prob', '\t');
```

```
                var _stat=gFV(rec[x], 'Eppl_stat', '\t');
                var _resl=gFV(rec[x], 'Eppl_resl', '\t');
                var _note=gFV(rec[x], 'Eppl_note', '\t');
        }
}
```

Description

index	Defines the PARADIGM index name
fields= value	PARADIGM data fields for file defined in with values. You only need to define the fields that make up the portion of the key you want to perform the set on.
join	Defaulted to YES, if you do not want the program to perform file joins, set to NO. This can speed up the gathering of data.
output	List of pipe "|" separated fields for the output. If left empty all fields from the file will be output. Can used to greatly improve performance by only returning values for requested fields.

If successful it will return all the data in field=value pairs delimited by tabs.

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.7 dbList

The dbList form allows you to query data all data from a PARADIGM database file in sequential order of entry in the data file (no index). This provides the fastest way to read an entire data file. It is useful when searching based on some string value.

Synopsis

```
var Murl='form=dbList&file=CLS';
var data=emr_GET(Murl);
if (data.substring(0,5) == 'ERROR') {
        alert(data);
} else {
        rec=data.split('\n');
        for (x=0; x<(rec.length-1); x++) {
                var _code=gFV(rec[x], 'cls_code', '\t');
                var _desc=gFV(rec[x], 'cls_desc', '\t');
        }
}
```

Description

file	Defines the PARADIGM file name

If successful it will return all the data in field=value pairs delimited by tabs.

If not successful it will return

ERROR: (errno) file: (file number) (file name) (description of error)

9.5.1.8 rtree

The rtree form allows you to pass an rtree report script along with parameters, generate and display that report. It can be used to gather data from the PARADIGM data files. For a full explanation of the rtree syntax see the PARADIGM Programmers reference.

Synopsis

```
// The report is stored in a continued string variable..  The slash at the end of each
// means a continuation of the line.  it is preceded by a new line in the text.
var RTREE = '\
START\n\
VIRTUAL\n\
   patc        STRING 12   param_1 = "" ? "*" : param_1\n\
SEARCH FILE "Etdo.dat" USING_KEY Etdo_code_idx [ patc patc ]\n\
FILE "pat.dat" JTN "Etdo.dat" BY_FIELD Etdo_patc USING_KEY pat_code_idx\n\
SELECT ALL\n\
DISPLAY\n\
  DEVICE         3\n\
  SCREEN_LINES   0\n\
IMAGE\n\
REPORT_HDR\n\
+param_1 is @XXXXXXXXXXXXXXXXXXXX<br>\n\
            param_1\n\
+<table width=100% border=1 cellspacing=0 cellpadding=1>\n\
BODY\n\
+<TR>\n\
+<TD>@XXXXXXXXXXX\n\
      Etdo_patc \n\
+<TD>@XXXXXXXXXXXXXXXXXXXXXXXXXX\n\
     pat_name\n\
+<TD>@XXXXXXXX \n\
      Etdo_date \n\
+<TD>@XXX \n\
      Etdo_uniq  \n\
+<TD>@XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX\n\
   Etdo_objt \n\
+<TD>@XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX\n\
  Etdo_valu\n\
+<TD>@XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX\n\
   Etdo_note\n\
+<\TR>\n\
REPORT_FTR\n\
+</TABLE>\n\
EXIT\n\
';

var  url='form=rtree&report='+encodeURIComponent(RTREE)+'&param_1='+pat_code+'&param_2=
var rtree=sjaxPOST(url);
go('rtreedata').innerHTML= rtree;
```

Description

report	Contains the rtree script
RPT_CODE	Sets the RPT_CODE variable in rtree (optional)
RPT_N	Sets the RPT_NAME variable in rtree (optional)

AME	
param _1 .. _80	Up to 80 parameters passed to report (optional)

This should be used as part of an sjaxPOST call to send the data.

9.5.1.9 Lookup

The Search form allows you to search the PARADIGM data base and return information from that database.

Synopsis

```
var url='?form=Lookup&field=pat_code&value='+patc+'&display=yes';
var pat=sjax(url);
pat_name=getfld(pat, 'pat_name', '\t');
pat_dobf=getfld(pat, 'pat_dobf', '\t');
pat_sexf=getfld(pat, 'pat_sexf', '\t');
```

Description

<table>
<tr><td>field</td><td colspan="2">Field to use for lookup. Must be an indexed field. It the index is a composite index, only one field needs to be defined from that index. Ie:

pol_code_idx consists of pol_patc and pol_numb. You may define your field as pol_patc, but for the value you need to put all the data to look up the record. So your value would consist of data for both pol_patc and pol_numb with the each field padded properly.

value=patc+numb
literal
value=12345 1
for the primary policy
value=12345 2
for secondary and so forth.</td></tr>
<tr><td>value</td><td colspan="2">Value to lookup</td></tr>
<tr><td>display</td><td colspan="2">If set to "yes" it will display all fields in the record. If not set a successful query will return "0", and an unsuccessful will return an CTREE error code. If set to yes the file information will display.</td></tr>
<tr><td rowspan="5">func</td><td>EQUAL</td><td>Default Value (Search for Equal for primary key)</td></tr>
<tr><td>GTEQ</td><td>Greater then or Equal (Use for Dup keys)</td></tr>
<tr><td>Next</td><td>Find the Next value based on the field value passed</td></tr>
<tr><td>Prev</td><td>Find the Previous value based on the field value passed</td></tr>
<tr><td>SET</td><td>Get the set of data for a duplicate key.</td></tr>
</table>

9.5.1.10 Search

The Search form allows you to search the PARADIGM data base and return information from that database.

Synopsis

?form=Search&file=PAT&index=pat_name&output=pat_code|pat_name|pat_dobf

Description

<table>
<tr><td>file</td><td>This defines the PARADIGM file you want to search. Ie. PAT, GUA, PHY...</td></tr>
<tr><td>output</td><td>Here you define the fields of the data file to output.
IE. pat_name|pat_code|pat_dobf
If this is not defined the entire file will be output.</td></tr>
<tr><td>index</td><td>Use this defined index to read the file.
If not defined the file will be read in record entry order.</td></tr>
<tr><td>select</td><td>Used to provide a select expression for the data.
IE. pat_zipc=37932

Relational Operators
<table>
<tr><td>=</td><td>Equal</td></tr>
<tr><td>!</td><td>NOT Equal</td></tr>
<tr><td>></td><td>Greater Then</td></tr>
<tr><td><</td><td>Less Then</td></tr>
<tr><td>}</td><td>Greater then or equal</td></tr>
<tr><td>{</td><td>Less then or equal</td></tr>
</table>

You may specify precedence using '()'

* is a logical AND   as in   pat_zipc=37932*pat_sexf=M
| is a logical OR   as in pat_zipc=37932|pat_zipc=37911</td></tr>
<tr><td>search</td><td>Search for match in the data. Unlike select that is based on logical operators on defined fields, this just looks at the data in the output stream for a match.

IE. search=37932 SMITH
would find all records that contained both the word SMITH and 37932.   SMITH could be part of the name, address, notes, etc.. same with 37932. But both would have to be matched for the record to display.</td></tr>
<tr><td>format</td><td>Determines the output format of the data returned

IE. format=DATATAB
<table>
<tr><td>LINK</td><td>This is the Default Value, provides data delimited by pipe '|' characters, wrapped in a tag that returns th content to a function name "rval" when clicked. This is used for PSelect Widget.

11111 |Smith,John
22222 |Jones,Tim

It also provides spacing so fields line up properly.</td></tr>
<tr><td>FLDVAL</td><td>Shows fields and values

pat_code=23   pat_name=Baker,Thelma L.
pat_code=24   pat_name=Bowman,Louise H.
pat_code=25   pat_name=Boyd,Larry Wayne

Each record is separated by a new line, each field separated by a tab.</td></tr>
<tr><td>DATATA</td><td>Shows only data values:</td></tr>
</table></td></tr>
</table>

	B	23 Baker,Thelma L. 24 Bowman,Louise H. 25 Boyd,Larry Wayne Each record is separated by a new line, each field separated by a tab.

9.5.2 quicklist

Search, remove add and update data to a quicklist.

Synopsis

form=quicklist&file=test&search=bean

Description

file	The name of the list file
add	Key to add or update
info	Additional data to add with key
data	Get all data from list with each record terminated by a newline. Does not work with search
remove	Key to remove
Search	Search data return in HTML format for selection (Used by QuickList.htm)
rem	If set to "no" it will not display the remove button in the HTML data.

9.5.3 system

The will allow you to execute system commands and have the response returned as text. It is helpful for getting information from system files to use.

Synopsis

form=system&cmd=cat /usr/paradigm/emr/etc/001/buttons.dat

Description

cmd	This is the command to execute
bgm	Run process in background and send output to the a file named in bgm (does not return any output)

9.6 Other Resources

9.6.1 Images

PARADIGM EHR includes a library of images that can be used within your custom PDD or HTA applications. These are found in the images folder on the server, or if you have downloaded the library to your PC under C:\QRS\EMR_LIB\image

Part 10

Electronic Signatures

10 Electronic Signatures

An **electronic signature** is any legally recognized electronic means that indicates that a person adopts the contents of an electronic message. The U.S. Code defines an **electronic signature** as "an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record."

PARADIGM EHR utilizes electronic signatures for the purpose of locking documents and verifying they have not changed. It does this with the use of a signature file. The signature file contains the who (user), what (file), when (time) and why (reason) a document was accepted or signed off on. Once a document is signed it can not be modified (Edited) within the PARADIGM EHR system unless the signature is retracted. If the file is modified in any way the signature will be rendered invalid. Also if any attempt is made to modify the Signature file the signature will be rendered invalid.

This prevents forged signatures from being applied to documents, as well as keeps documents from being changed after they have been signed.

NOTE

Some files types such as PDD and HL7 are used to create dynamically generated human readable images by the program. As new features are added to the program it may change the way the file is displayed. The signature applied to these file types validates that the data in the file has not changed even though the human readable output may differ.

10.1 Technical

Signature files used to store signature information utilize encryption to store the signature data. The signature file is stored in the patients Encounter tab at the root level. It has name that has an extension of ".SIG". The file name itself is a hash of the content file information. This in conjunction with the fact that the file "SIG" file is encrypted provides some security as to which file(s) the signature actually belongs to. Although if you can actually see the signature in the software you may be able to discern the "SIG" file by looking at the time and date stamp of the signature and comparing that to the time and date stamp of the "SIG" file at the operating system level.

However the "SIG" file is encrypted which would prevent it from being modified. If modified directly in it's encrypted form the resulting file when decrypted would have corruption and thus the PARADIGM EHR software will render it invalid. The Encryption itself is based upon a digital signature (hash) of file (s) that are signed. Thus if the file(s) is modified in any form the signature "SIG" file will not decrypt and be rendered invalid by PARADIGM EHR.

Just as real signatures can be forged, so can Electronic Signatures, but the above process even though documented makes it very difficult to accomplish without proprietary knowledge of encryption keys and methods used.

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