

ChartMaker[®] Clinical

***Please note that the ChartMaker Medical Suite can no longer be installed on computers using the Windows XP or Windows 2003 Server operating system. Since Microsoft has discontinued support for Windows XP in April 2014, and Windows 2003 Server in July 2015, we can no longer guarantee the stability of computers using this operating system, and recommend that you upgrade the operating system on any computers currently using Windows XP or Windows 2003 Server.

Added Features

- **The Audit Trail** – The method of pagination has been redesigned in the **Audit Trail** to increase performance and enhance the user experience. To initiate an audit trail query you need to click the **Refresh** button. This is typically performed after the applicable **Filter** data has been configured. Likewise, a new progress bar has been added to indicate the record progress of the audit query, and a **Cancel** button has been added to terminate a long running query. See Figure 1.

Event	Group	Audit Date	Operator	Old Value	New Value	Failed	Metadata	Application	IP Address
Login Successful	User	8/7/2015 9:12:47 AM	jd			No	PID=4120, Session ID=2, Wf...	Clinical	192.168.100.96
Logout		8/6/2015 4:57:00 PM	jd			No		Clinical	192.168.100.96
Logout		8/6/2015 4:57:00 PM	jd			No		Clinical	192.168.100.96
Login Successful	User	8/6/2015 2:07:06 PM	jd			No	PID=3460, Session ID=2, Wf...	Clinical	192.168.100.96
Logout		8/4/2015 3:48:16 PM	jd			No		Clinical	192.168.100.96
Logout		8/4/2015 3:48:16 PM	jd			No		Clinical	192.168.100.96
Modified	Note	8/4/2015 3:48:08 PM	jd			No	Account ID=10009, Note ID...	Clinical	192.168.100.96
Viewed	Chart	8/4/2015 10:11:39 AM	jd			No	Account ID=10009	Clinical	192.168.100.96
Query		8/4/2015 10:11:30 AM	JD			No		Clinical	192.168.100.96
Login Successful	User	8/4/2015 10:10:34 AM	jd			No	PID=2116, Session ID=2, Wf...	Clinical	192.168.100.96
Logout		7/27/2015 5:01:54 PM	jd			No		Clinical	192.168.100.96
Logout		7/27/2015 5:01:54 PM	jd			No		Clinical	192.168.100.96
Login Successful	User	7/27/2015 3:42:47 PM	jd			No	PID=3248, Session ID=2, Wf...	Clinical	192.168.100.96
Logout		7/24/2015 3:51:45 PM	jd			No		Clinical	192.168.100.96
Logout		7/24/2015 3:51:45 PM	jd			No		Clinical	192.168.100.96
Login Successful	User	7/24/2015 2:30:51 PM	jd			No	PID=4344, Session ID=2, Wf...	Clinical	192.168.100.96
Login Failure		7/24/2015 2:30:45 PM	jd			Yes		Clinical	192.168.100.96
Login Successful	User	7/24/2015 2:28:51 PM	jd			No	PID=4448, Session ID=2, Wf...	Clinical	192.168.100.96
Logout		6/16/2015 6:47:14 AM	jd			No		Clinical	192.168.100.96
Logout		6/16/2015 6:47:14 AM	jd			No		Clinical	192.168.100.96
Login Successful	User	6/15/2015 10:11:52 AM	jd			No	PID=3636, Session ID=2, Wf...	Clinical	192.168.100.96
Logout		6/11/2015 4:01:37 PM	jd			No		Practice Manager	192.168.100.96
Logout		6/11/2015 4:01:37 PM	jd			No		Practice Manager	192.168.100.96
Login Successful	User	6/11/2015 2:05:01 PM	jd			No	PID=2424, Session ID=2, Wf...	Practice Manager	192.168.100.96
Logout		6/8/2015 1:32:15 PM	jd			No		Clinical	192.168.100.96

Filters:

Audit Date From: 1/ 1/2015 Through: 8/ 7/2015 Operator: Failed:

Metadata: Search Type: Value: Application: Event: Functional Area:

Buttons: Verify Audit Trail Refresh Save to File Close

Figure 1 — Audit Trail

In addition, the system will not allow you to filter an audit query for greater than a 12 month period, or use less than three characters in the **Value** field when utilizing the **Contains** or **Starts With** search type when configuring **Metadata**. A warning icon will blink next to each of the applicable fields when they contain improper data. If you mouse over the warning icon, a message will appear outlining the warning. See Figure 2.

Filters:

Audit Date From: 7/ 1/2014 Through: 8/10/2015 Operator: Failed:

Metadata: Search Type: Value: Application: Event: Functional Area:

Approval Number Contains 12

Please limit your date range to a twelve month period.

When using the "Contains" or "Starts With" operation you must enter three or more characters in the Value Field

Buttons: Verify Audit Trail Refresh Save to File Close

Figure 2 — Audit Trail – Filter Warnings

Added Features (continued)

- **Facesheet– Lab Procedures** – The layout for printing **Lab Orders** has been updated to make more efficient use of space and thereby fit up to eight lab orders on a single sheet to prevent confusion and loss of multiple pages. Likewise, the footer of the **Lab Order** has been updated with the page number as well as the total number of pages (i.e., Page 1 of 3) to easily keep track of multi-page lab orders.
- **Meaningful Use Stage 2 2014 – Quality Measures** – All of **Clinical Quality Measures (CQMs)** in the **Meaningful Use Dashboard (Stage 2 2014)** have been updated to the 2014 version.
- **Medication – FDB Database** – The system has been updated to easily and efficiently rollback to the current medication data whenever there is a failure when downloading and importing a FDB medication database upgrade, thereby preventing partial or incomplete updates and other issues.
- **The Note Tab – Diagnosis** – The **Diagnosis** dialog has been updated with two new options located at the bottom left of the checklist: a **Show SNOMED** option, and a **Search by SNOMED** option. See Figure 3. These options will default depending how they were configured in the **Show Codes** preference for the user.

When the **Show SNOMED** option is checked any SNOMED codes attached to a selected diagnosis code (**Encounter** and **Chart Diagnoses**) will appear below that diagnosis. When the **Search by SNOMED** option is checked, when you click the **Search/Add Diagnosis** button, the **Diagnosis Search** dialog will default to the **SNOMED** tab.

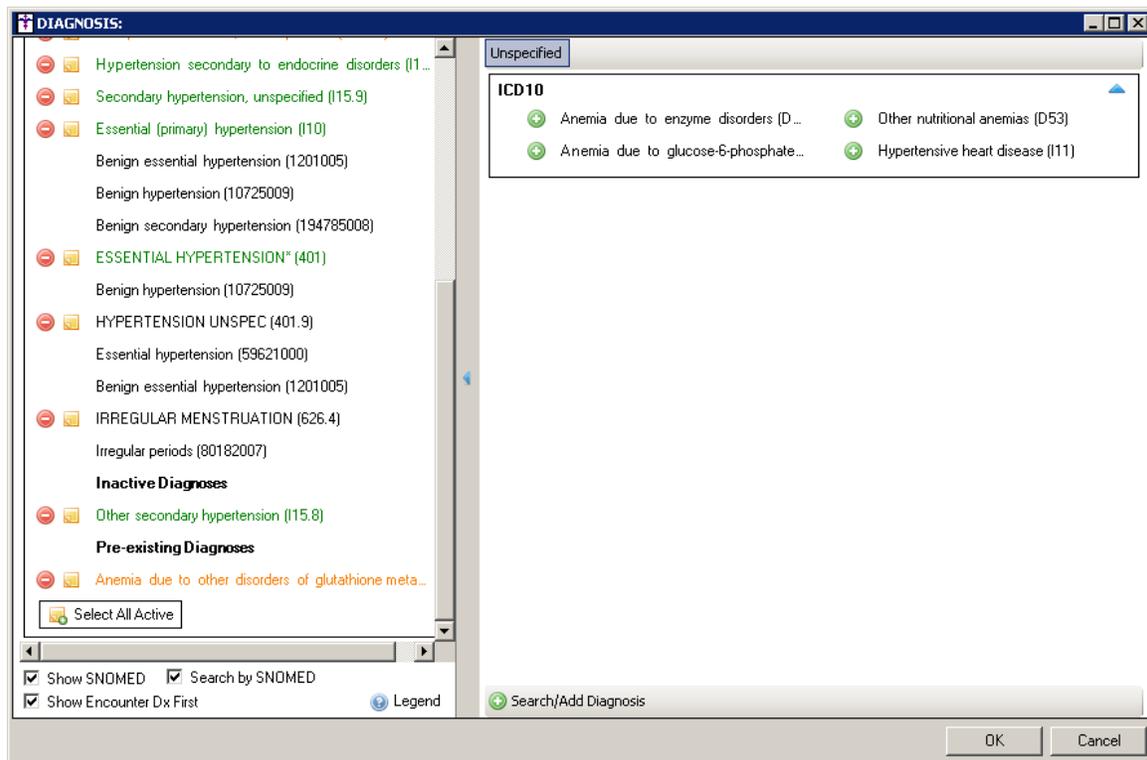


Figure 3 – Note – Diagnosis

- **The Note Tab – Diagnosis Search** – The **Diagnosis Search** dialog has been updated with a **SNOMED** tab that allows you to search for a diagnosis by a SNOMED code, and the system will map the selected SNOMED code to applicable ICD-10 codes. See Figure 4. The **SNOMED** tab contains three panes. The left pane will display any SNOMED codes that match the description entered above. Once a SNOMED code is selected, the middle column will display any matching ICD-10 codes and any rules and advice concerning those ICD-10 codes. There are three possibilities for matching the SNOMED code to ICD-10 codes in the middle column: a one to one match, a one to many match, and no matches. The right pane will display the ICD-10 code tree, and if an ICD-10 code is selected in the middle column, that diagnosis code will be selected in the tree. Do note, you have the ability to override this selection and select a different ICD-10 code to match to the selected SNOMED code.

Added Features (continued)

The Note Tab – Diagnosis Search (continued)

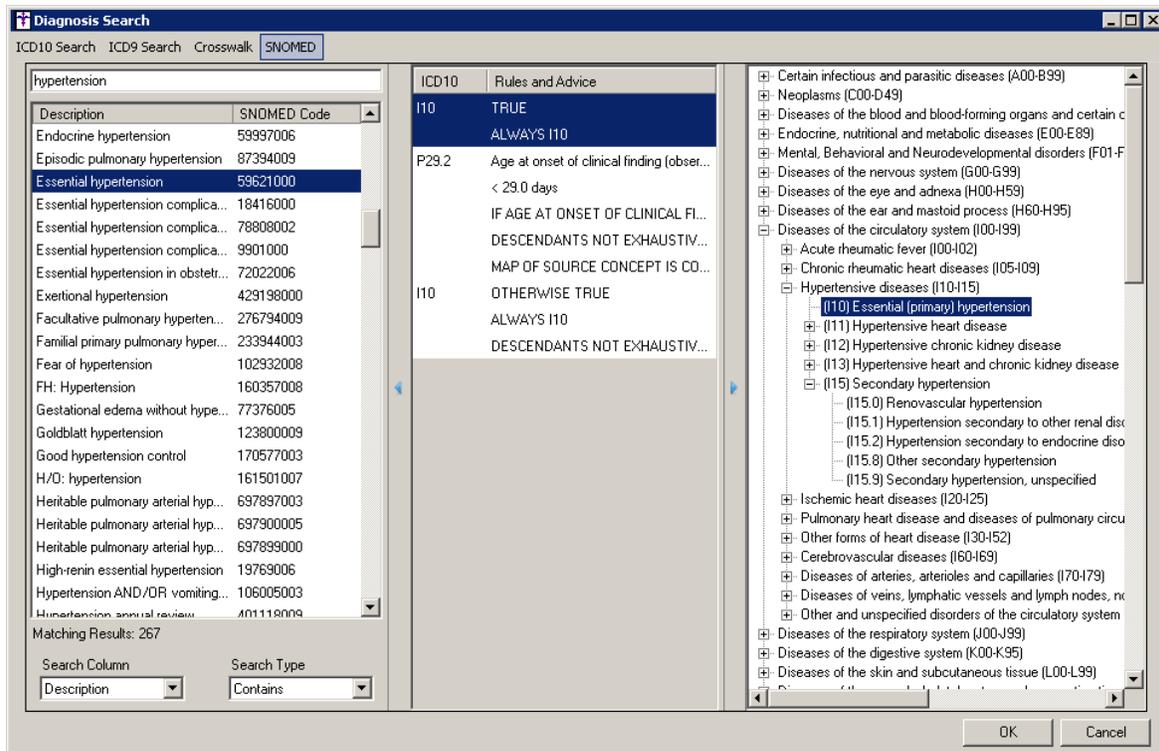


Figure 4 – Note – Diagnosis Search

Once the applicable ICD-10 code is selected in the right pane, you can click the **OK** button, and the **Add to Problem List** dialog will appear with the selected diagnosis in the **Diagnosis** field, while the matching SNOMED code will appear in the **SNOMED Selection** section. See Figure 5. Do note, SNOMED codes returned from a **Diagnosis Search** will be appended to the end of a **One-to-One NLM mapping** or any **User Defined SNOMED** list.

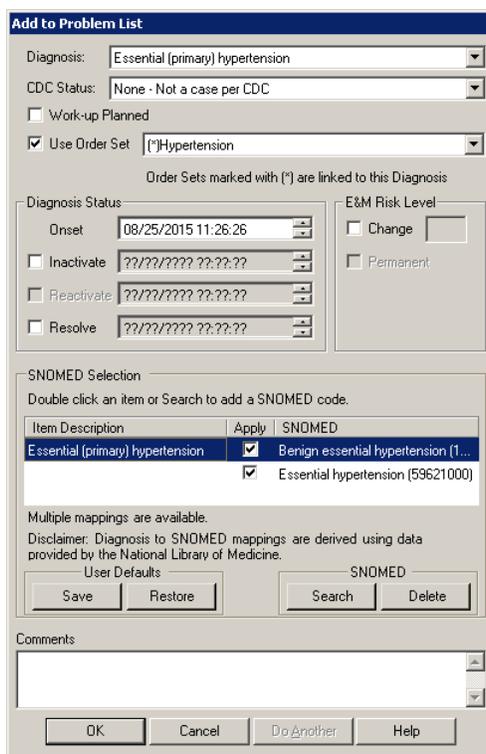


Figure 5 – Note – Diagnosis – Add to Problem List

Added Features (continued)

- **The Note Tab – Procedure** – The **Procedure** checklist has been redesigned to provide a sleeker look and more efficient user interface that contains previous functionality with added features. See Figure 6. Legacy checklists will be converted upon viewing them and their configuration will be maintained (title, columns, etc.). Likewise, the right-pane will contain an unspecified group and only the procedure type groups that appear in the checklist prior to conversion. The unspecified tab will have all procedures in the order they appeared prior to the conversion. All other groups will contain only the appropriate procedures copied into them.



Figure 6 – Note – Procedure Checklist

Within the note you have the ability to open the checklist or add procedures directly. When you click the **Search/Add Procedures** button, the **Conditions Search** dialog will open allowing you to perform a search using a specific **Condition Type** if needed. See Figure 7. Once the applicable procedure is selected, click the **OK** button and the **Order Procedure** dialog will appear allowing you to configure the details for the procedure as in previous versions.

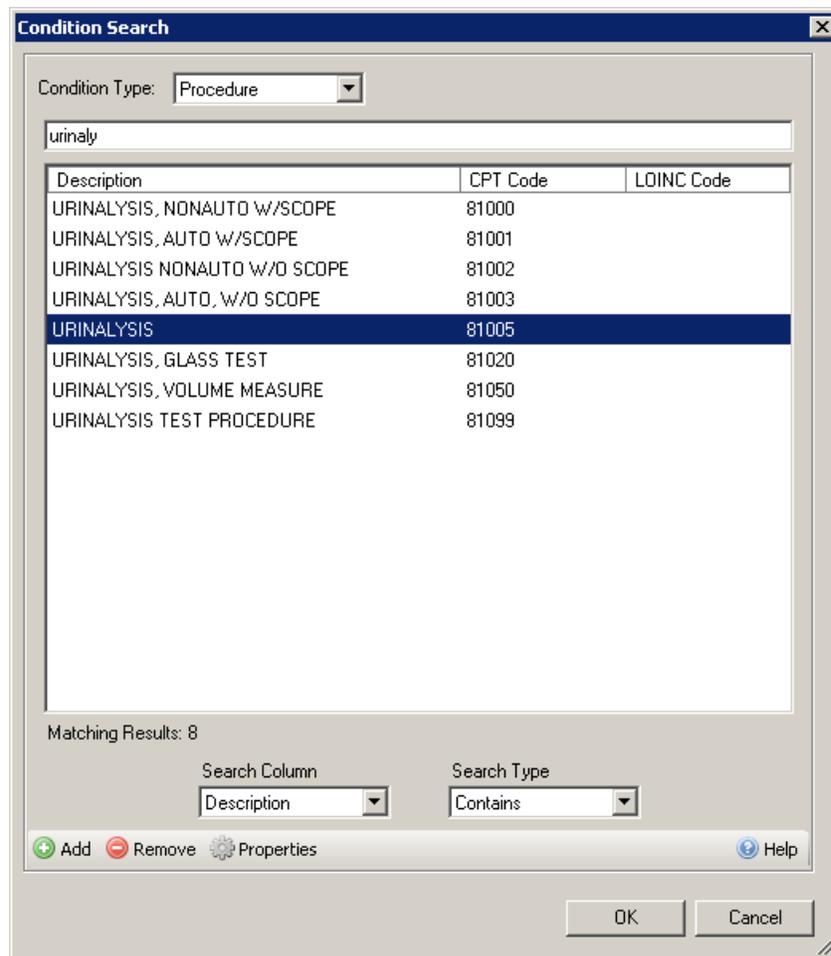


Figure 7 – Note – Condition Search

Added Features (continued)

The Note Tab – Procedure (continued)

When you click the **Open Procedure Checklist** button, the procedure checklist dialog is opened within the note and you will see two panes: the right being the template set up in the template editor, and the left pane representing any procedures ordered or performed within the note. See Figure 8. The right pane may contain procedure groups represented by tabs at the top of the dialog (**Unspecified, Labs, Tests, Images, Immunizations, Surgery, and Injections**).

To add a procedure to the patient's chart you can click the **plus** button next to any item in the right pane, or click the **Search/Add Procedures** button at the bottom to access the **Conditions Search** dialog to search for an applicable procedure code. Once selected, the **Order Procedure** dialog will appear and information can be configured as in previous versions. However, data selected in this way does not go into the patient's chart until the **OK** button is selected, thereby allowing you to cancel all actions if needed.

In addition, procedure codes in the left-hand pane will appear green if they are linked to an Order Set, as in previous versions.

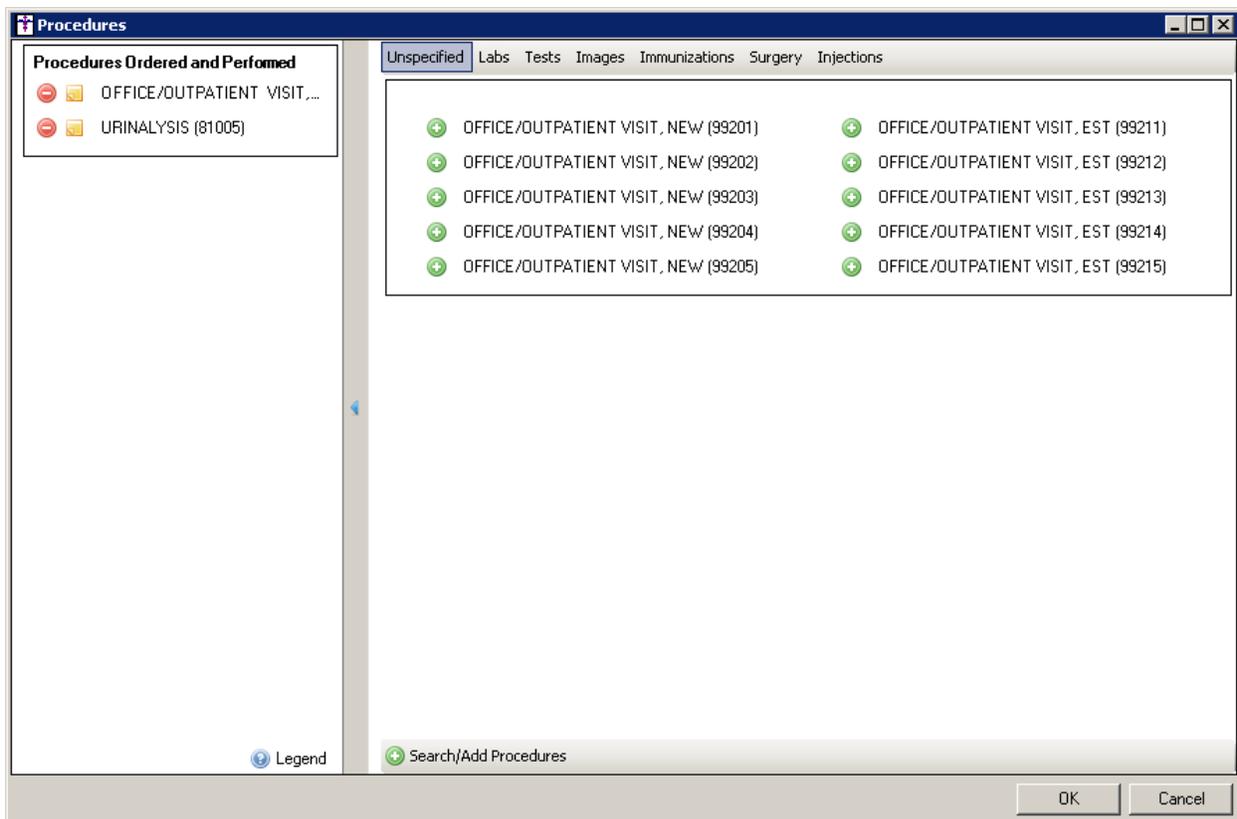


Figure 8 – Note – Procedures

Added Features (continued)

- **The Note Tab – Signature** – The system has been updated allowing you to add provider, patient, and/or other types of user signatures to the note wherever a signature widget has been added to the template. See Figure 9. There is no limit to the amount of signature widgets that can be added to a note. Signatures can be added via the **Signature** dialog for tablets and touchscreen computers via a stylus or a finger (see Figure 10) by clicking the **Add signature** button; or via a Topaz Signature Pad by clicking the **Add signature using Topaz** button.

When adding a signature the signee will have the ability to preview as well as to clear, or undo, inadequate signatures. Once the signature is deemed adequate it will be saved in the note along with a date and time stamp. If the note has not been signed, a user is able to resign the signature, or a signature can also be removed entirely from the note by clicking the **Delete Signature** button.

In addition, you have the ability to access the Signature Settings dialog via the **Settings** button. See Figure 11. When in this dialog, you have the ability to change the Printing and Signing, and the Signature Capture options for this specific signature widget. The default settings for this widget are configured in the Template Editor, but can be overridden in the note.



Figure 9 – Note – Signature Widget



Figure 10 – Note – Signature



Figure 11 – Note – Signature Settings

- **Order Sets – Procedures** – The program has been updated so that whenever an image, lab, or test procedure order is attached to an Order Set, and that Order Set is activated, the procedure will appear in the first procedure checklist for that procedure type based on the configuration of the **Mark Checklist As** option in the **Procedure Checklist Properties** dialog. For example, a lab ordered via an Order Set is added to the first procedure checklist in the note that has been marked as **Labs** in Procedure Checklist Properties dialog in the Template Editor. If there are multiple procedure checklists in a note that are configured to be the same type, the ordered item will added to the first checklist in the note that has that type. If no procedure checklist has been specified, the lab, test, or imaging procedure order will be added to the first **non-Medical History** procedure checklist in the note.

Added Features (continued)

- **Preferences – General** – The **General** tab in the **Preferences** dialog has been updated with a new **Defaults for Notes** section that allows you to configure an active Practice and/or Provider to default when creating or building new notes for patients. See Figure 12. Do note, the system will only default the selected practice if the patient is part of that practice. If the patient is part of another active practice, but is not part of the selected default practice, the system will default to the patient's active practice. If **Practice** field is left blank in this section, then the patient's first active practice will default. The **Provider** field has been renamed from the **Provider for Notes** field in previous versions and moved to the **Defaults for Notes** section. This field maintains the same functionality as in previous versions.
- **Preferences – Show Codes** – The **Show Codes** tab in the **Preferences** dialog has been updated with a new **Diagnosis Checklist** section that allows you to configure how the SNOMED options will default in the Diagnosis Checklist upon opening. See Figure 13. This preference is user-based and will default based on the user configuring these options.

When the **Show SNOMED** option is checked, this option will be checked in the lower left of the **Diagnosis Checklist** when it is opened, and any SNOMED codes attached to a diagnosis code will appear below the diagnosis. When the **Search by SNOMED** option is checked, this option will be checked in the lower left of the **Diagnosis Checklist** when it is opened. These default options can be overridden within the **Diagnosis Checklist**. If the **Search by SNOMED** option is checked in the **Diagnosis Checklist**, when you click the **Search/Add Diagnosis** button, the **Diagnosis Search** dialog will default to the **SNOMED** tab.

Likewise, when the **Search by SNOMED** option is checked in the **Show Codes** tab, whenever you access the **Diagnosis Search** dialog via **System Tables > Diagnosis Search**, or via the **Template Editor** by clicking the **Search/Add Diagnosis** button in the **Diagnosis** dialog when adding or editing the diagnosis checklist for a template, the **Diagnosis Search** dialog will default to the **SNOMED** tab.

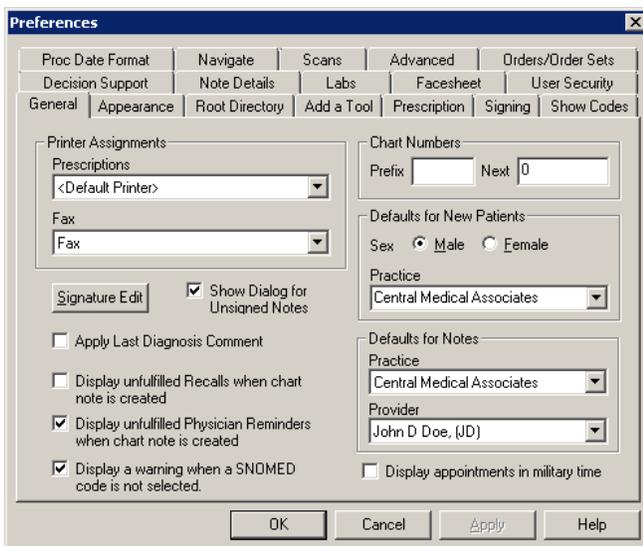


Figure 12 — Preferences – General

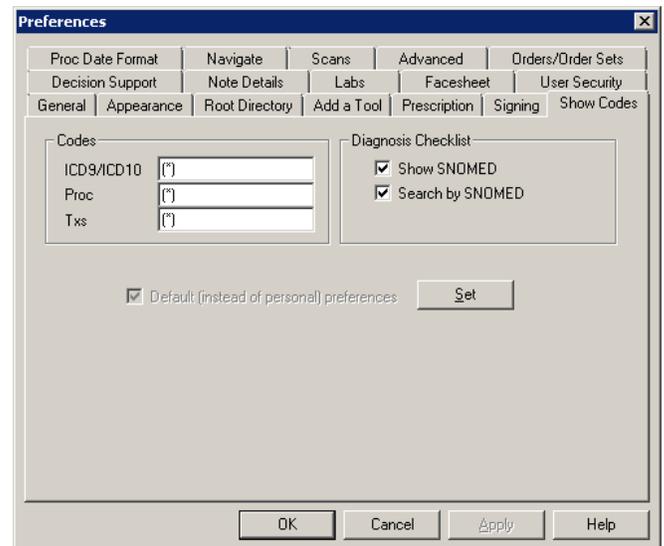


Figure 13 — Preferences – Show Codes

Added Features (continued)

- System Tables – Diagnosis Search** – The **Diagnosis Search** dialog has been updated with a **SNOMED** tab that allows you to search for a diagnosis by a SNOMED code, and the system will map the selected SNOMED code to applicable ICD-10 codes. See Figure 14. The **SNOMED** tab contains three panes. The left pane will display any SNOMED codes that match the description entered above. Once a SNOMED code is selected, the middle column will display any matching ICD-10 codes and any rules and advice concerning those ICD-10 codes. There are three possibilities for matching the SNOMED code to ICD-10 codes in the middle column: a one to one match, a one to many match, and no matches. The right pane will display the ICD-10 code tree, and if an ICD-10 code is selected in the middle column, that diagnosis code will be selected in the tree.

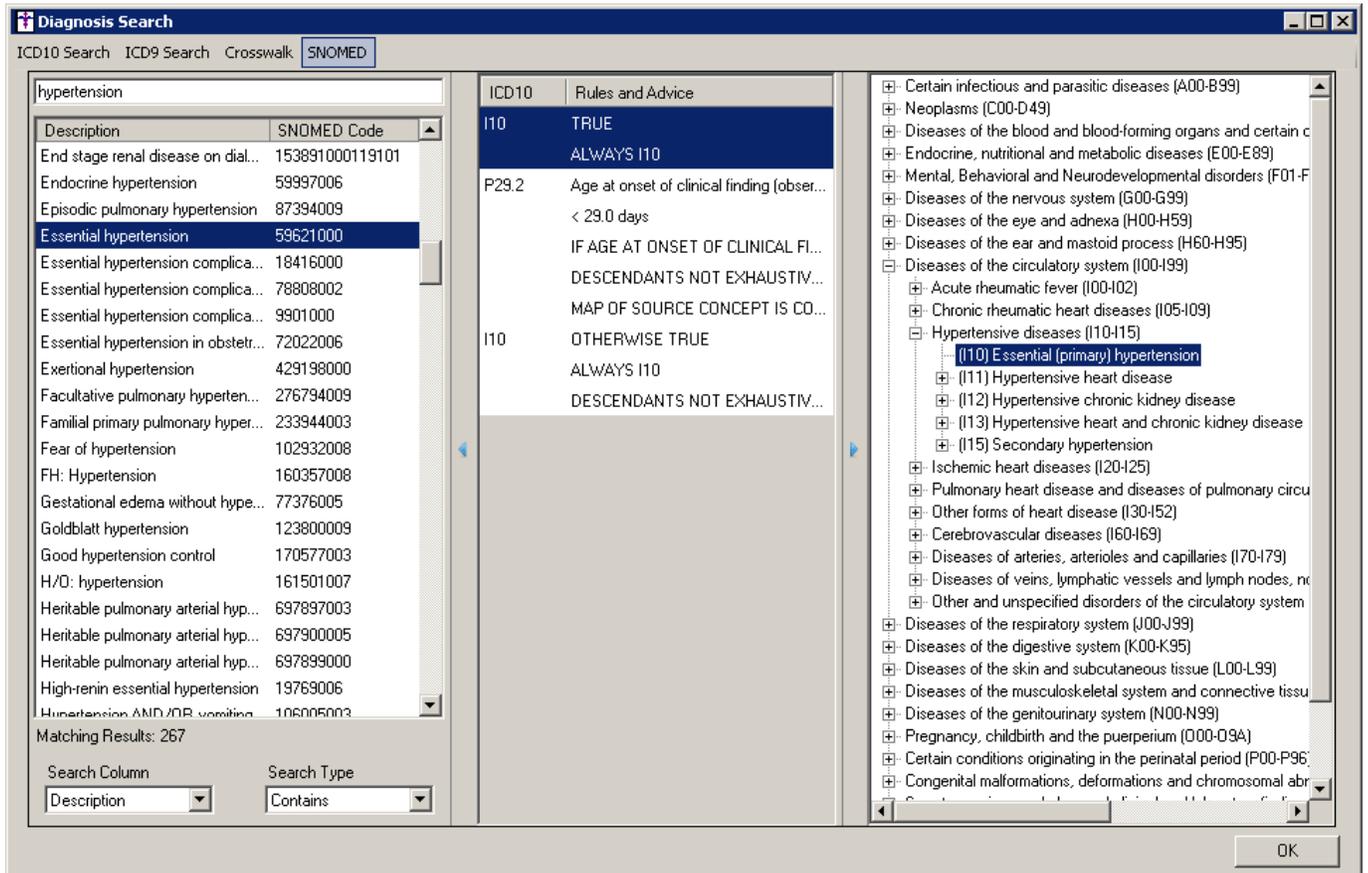


Figure 14 – Diagnosis Search

Added Features (continued)

- Template Editing – Diagnosis – Diagnosis Search** – The **Diagnosis Search** dialog has been updated with a **SNOMED** tab that allows you to search for a diagnosis by a SNOMED code, and the system will map the selected SNOMED code to applicable ICD-10 codes. See Figure 15. The **SNOMED** tab contains three panes. The left pane will display any SNOMED codes that match the description entered above. Once a SNOMED code is selected, the middle column will display any matching ICD-10 codes and any rules and advice concerning those ICD-10 codes. There are three possibilities for matching the SNOMED code to ICD-10 codes in the middle column: a one to one match, a one to many match, and no matches. The right pane will display the ICD-10 code tree, and if an ICD-10 code is selected in the middle column, that diagnosis code will be selected in the tree. Do note, you have the ability to override this selection and select a different ICD-10 code to add to the diagnosis checklist.

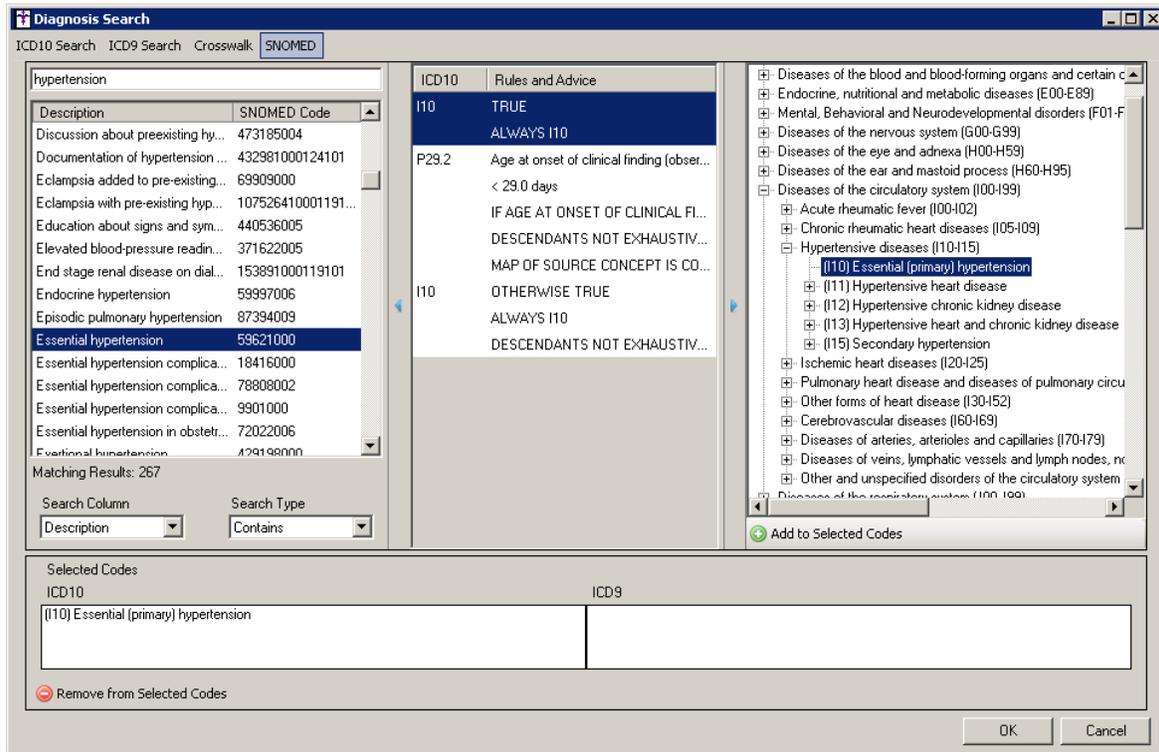


Figure 15 – Template Editor – Diagnosis Search

- Template Editing – Proc List** – The **Proc List** has been redesigned to provide a sleeker look and more efficient user interface that contains previous functionality with added features. See Figure 16.



Figure 16 – Template Editor – Proc List

Added Features (continued)

Template Editing – Proc List (continued)

Once the procedure checklist has been added to the template, you have the ability to open the checklist dialog or to open the properties of the checklist. When clicking the **Properties** button, the **Procedure Checklist Properties** dialog will appear, allowing you to configure the property settings for the procedure checklist. The properties function works in a similar manner as previous versions; however, it has been updated with a **Mark Checklist As** field that allows to tag the procedure checklist as intended for **Images, Labs, Medical History, or Tests**. You can multi-select any combination of **Images, Labs, and/or Tests** in this field if desired; however, **Medical History** can only be selected by itself. Likewise, obsolete items that are no longer needed in the dialog (Row and Height) have been removed. See Figure 17.

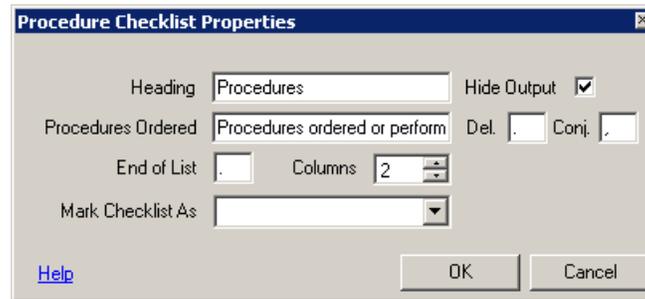


Figure 17 – Template Editor – Procedure Checklist Properties

When the checklist is opened in the **Template Editor**, you will see a number of procedure groups (tabs) across the top (**Unspecified, Labs, Tests, Images, Immunizations, Surgery, and Injections**) into which you can add procedures and labels with buttons at the bottom: **Search/Add Procedures** and **Add Label**. Likewise, you can add and modify the groups that appear at the top of the checklist by clicking the **Group Maintenance** button. See Figure 18.

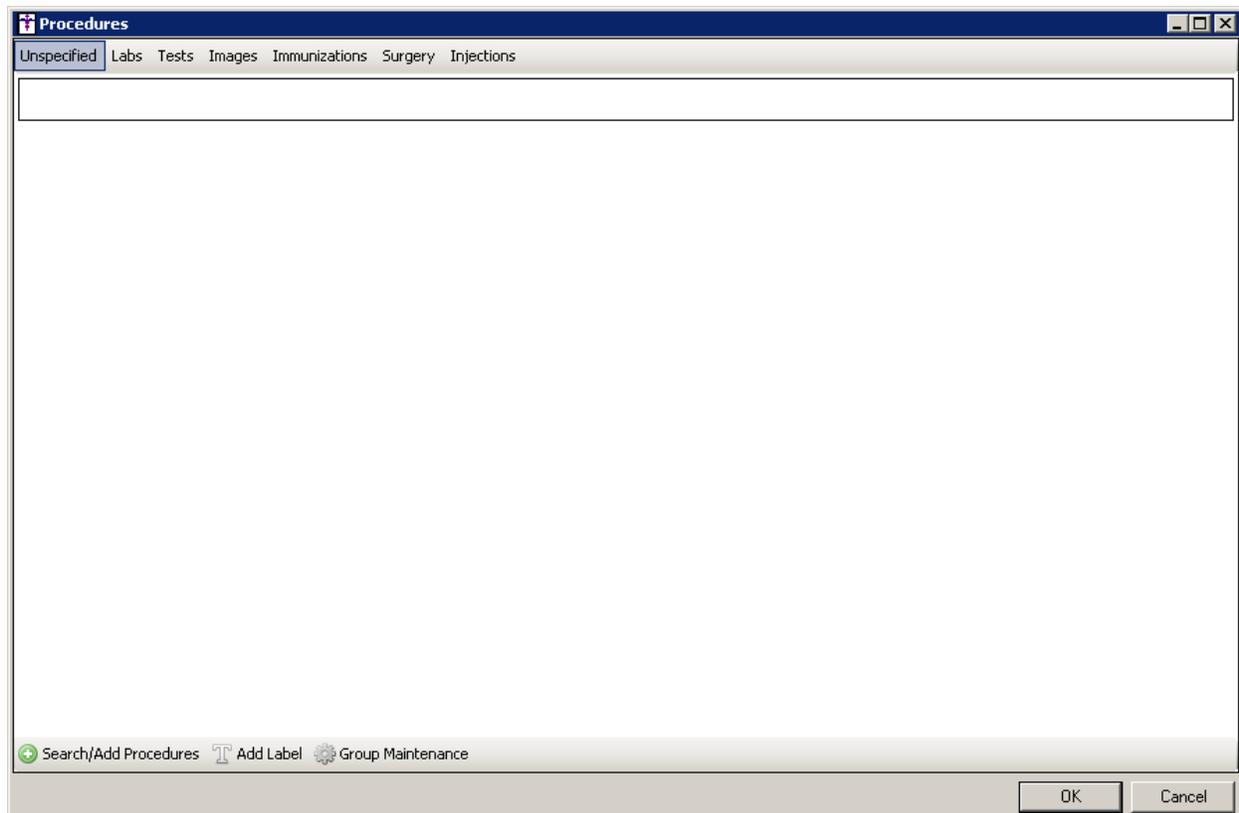


Figure 18 – Template Editor – Procedures

Added Features (continued)

Template Editing – Proc List (continued)

To add procedures to the checklist, click the specific group (tab) you want to add procedures to, then click the **Search/Add Procedure** button, and then the **Condition Search** dialog will appear. See Figure 19. The **Condition Search** dialog contains the same functionality as the **Procedure Search** dialog in previous versions, with the added functionality to search for procedures based on **Condition Type**, while also being able to select multiple procedures before exiting the search dialog. Procedures can be added by double-clicking the procedures; or, by highlighting the procedure, and then clicking the **Add to Selected Codes** button. Selected procedures will appear in the **Selected Codes** area at the bottom of the dialog. You can change the search parameters at any time to continue adding applicable procedures. Also you can remove any selected procedures by highlighting a selected procedure and clicking the **Remove from Selected Codes** button. When you click the **OK** button the select codes will be added to checklist in the active group.

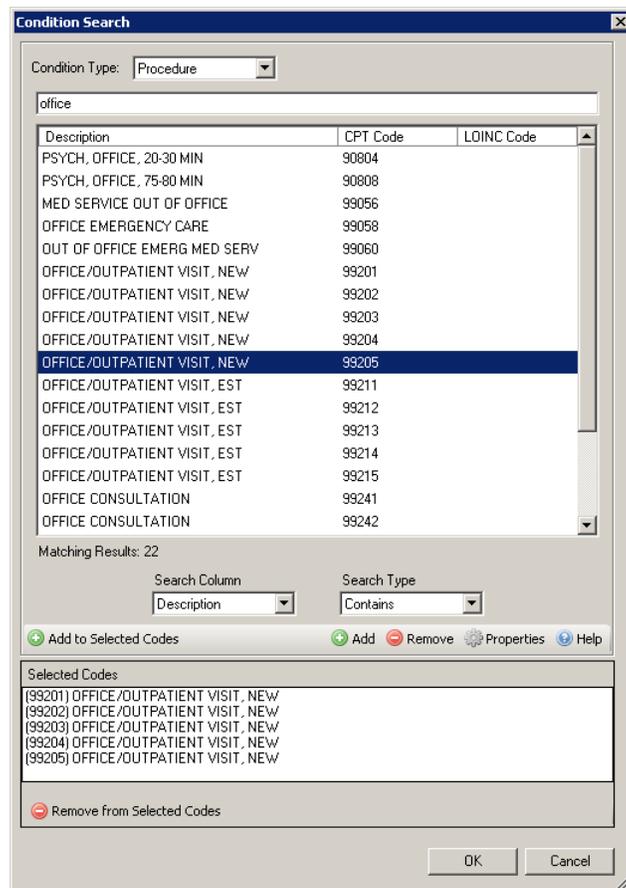


Figure 19 – Template Editor – Condition Search

Added Features (continued)

Template Editing – Proc List (continued)

If you click the **Add Labels** button, an **Add Label** dialog will open where you can enter the **Label Text**. Once in place, you can drag and drop procedures and labels to reorder them. When dragging a procedure to an empty space, the space will be replaced with the procedure. When dragging a procedure over another procedure, the dragged procedure will take the new spot and all other procedures in the same column will be pushed down one row. Likewise, you can copy or move a procedure to a different group, sort the procedure to a certain point, and remove a procedure by right-clicking the applicable procedure and selecting the desired option. When the **Remove** option is used on a blank space, any items underneath it in the same column will be moved up one row. See Figure 20.

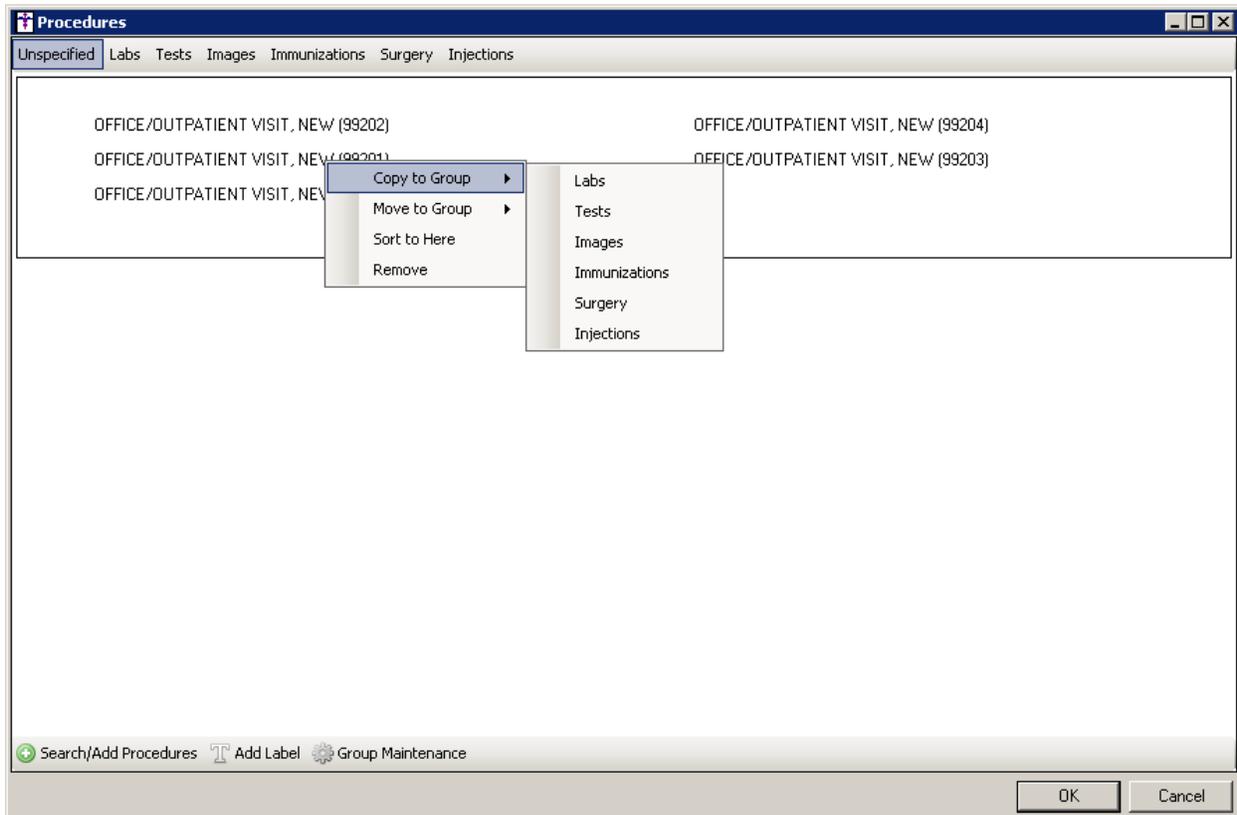


Figure 20 – Template Editor – Procedures

Added Features (continued)

Template Editing – Proc List (continued)

You can also create and maintain procedure groups using the **Group Maintenance** button. This opens a **Group Maintenance** dialog where you can add new groups, rename existing groups by replacing the text, reorder, and/or delete groups. See Figure 21. Once saved, the procedure checklist will show the groups at the top labeled based on the text entered and in the order chosen. When clicked, the screen will change to show the procedures selected for that particular group. The **Search/Add Procedures** and **Add Label** buttons insert into the currently selected group only.

Do note, that when the templates are converted during the upgrade, the template will contain groups for **Unspecified** and only the procedure types that appear in the template prior to conversion. The **Unspecified** tab will have all procedures in the order they appeared prior to the conversion. All other groups will contain only the appropriate procedures copied into them.

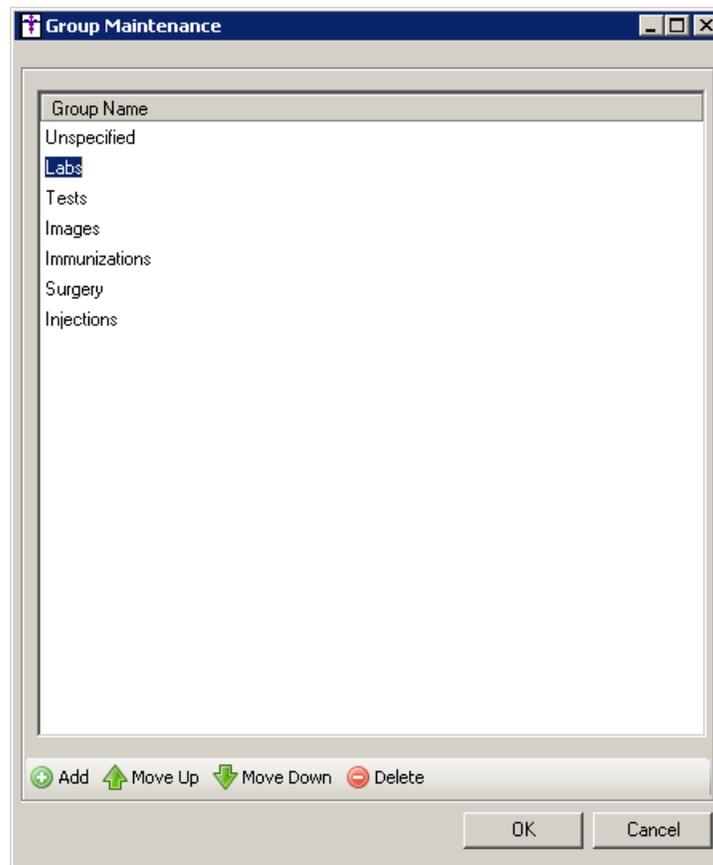


Figure 21 – Group Maintenance

Added Features (continued)

- **Template Editing – Signature** – The **Template Editor** has been updated with the ability to add a **Signature** widget to a template that allows providers, patients, and other users to add a signature in a chart note. See Figure 22. Multiple widgets can be added throughout the template as needed, and you have the ability to distinguish these widgets (i.e., patient versus provider) by entering a unique description label for each signature widget.

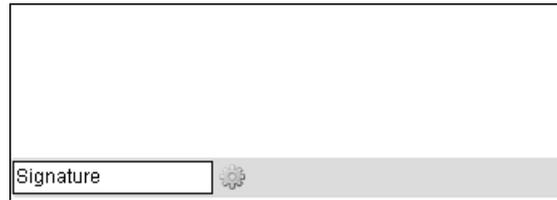


Figure 22 – Template Editor – Signature Widget

You also have the ability to access the **Signature Setting** dialog via the **Settings** button. See Figure 23. When in this dialog, you have the ability to configure the default **Printing and Signing**, and the **Signature Capture** options for this specific signature widget. These settings can be overridden for each individual widget in the chart note.

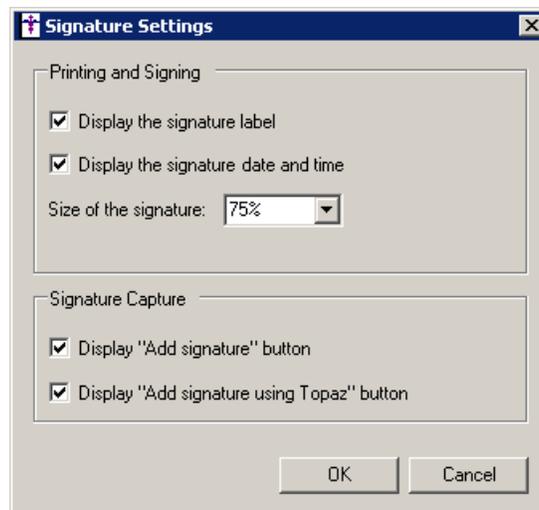


Figure 23 – Template Editor – Signature Settings

Addendum

SureScripts® E-Prescribing Best Practice Guidelines

Category II—Prescription Data Elements Requiring Extra Care and Attention When Input.

- (1) Guidelines that apply to name, strength, dosage form, and quantity of drug prescribed as well as the directions for use (the "Sig")
- Drug names should be spelled out in full, avoiding the use of abbreviations.
 - While it might be possible to make the case that abbreviations save time in the world of paper prescriptions, no such time savings accrue in the electronic world in which the prescriber simply picks a medication from a drug database.
 - Abbreviations can lead to a misinterpretation of the prescriber's intent, which can result in medication errors.
 - Examples:
 - Use "Hydrochlorothiazide 50 mg" instead of "HCTZ 50 mg."
 - Use "Zidovudine 300 mg" instead of "AZT 300 mg."
 - Drug descriptions should include complete name, strength, strength units and dosage form information (if applicable) in the same exact order, and all should appear in one drug description field.
 - Not doing so causes problems in pharmacies due to missing data components.
 - It is preferred that either the generic or the brand name be used in the drug description, but not both. Using both unnecessarily complicates the information in the drug description field.
 - Examples:
 - Use "Doxycycline Monohydrate 50 mg oral capsule" instead of "Doxycycline caps."
 - Use "Ciprofloxacin 500 mg tablet" instead of "Ciprofloxacin tablet 500 mg."
 - Use "Atorvastatin calcium 20 mg tablet" or "Lipitor 20 mg tablet" instead of "Lipitor (Atorvastatin calcium) 20 mg tablet."
 - Drug descriptions for generic products should use the naming conventions found in the Food and Drug Administration's "Orange Book: Approved Drug Products with Therapeutic Equivalence Evaluations."
 - This helps pharmacists to accurately choose the product to be dispensed when brand names are not used.
 - Examples:
 - Use "Glipizide 10mg tablets, extended release" instead of "Glipizide TAB OSM 24 10mg."
 - Drug strength information should be consistent across all fields in which it appears.
 - The strength in the drug description should match that in the drug strength field.
 - Drug strength units in the drug description should match those in the drug strength units field. Drug strength units should not be sent in the drug strength field.
 - Example of improper use: The drug description is "Amoxicillin 500 mg oral capsule" and the drug strength field contains the value of "250."
 - Dosage form codes should match the forms sent in drug description fields.
 - Example of improper use: The drug description is Amoxicillin 500 mg capsule and the dosage form code field contains "10," which is the NCPDP code that stands for tablet.
 - All orders should be written using metric measurements of weight (e.g., mg, gm and kg) and volume (e.g., ml).
 - The apothecary and avoirdupois systems of weights and volumes are no longer considered appropriate in the world of pharmaceuticals.
 - Example: Use "Aspirin 81 mg" instead of "Aspirin 1 ¼ grains."
 - A zero should be used before a decimal (use 0.X mg instead of .X mg), but not after (use X mg instead of X.0 mg).
 - Trailing zeros are particularly dangerous in that they can lead to ten-fold overdoses. Thus, trailing zeros should never be used.
 - Examples:
 - Use "Digoxin 0.25 mg" instead of "Digoxin .25 mg."
 - Use "Haloperidol 5 mg" instead of "Haloperidol 5.0 mg."
 - Arabic (decimal) numerals are preferable to Roman numerals, and in some instances it is preferable for numbers to be spelled out.
 - Example: Use "Aspirin 325 mg" instead of "Aspirin V grains."
 - Other specific abbreviation issues:
 - The term "microgram" can be abbreviated as "mcg," but it should not be abbreviated as "ug," which can easily be mistaken for the abbreviation for "mg," standing for "milligram."
 - The word "unit" should be spelled out and never abbreviated as "U" or "u."
 - "M" should not be used as an abbreviation for thousands (e.g., 5 M units), as it has been mistaken as meaning one million.
 - Do not use commas when expressing thousands as they might be misinterpreted as periods.

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category II—Prescription Data Elements Requiring Extra Care and Attention When Input. (Continued)

(2) Issues related specifically to the Sig field or directions for use.

- The directions for use should not be split between the Sig and Notes fields.
 - Depending upon the design of the pharmacy system and/or the effectiveness of the training of pharmacy personnel, splitting directions between the Sig and Notes fields can result in part of the directions being missed, thereby preventing complete directions from being conveyed to patients. Patients may experience significant negative therapeutic outcomes when this occurs.
 - Examples of improper use:
 - Sig field—"Take one tablet daily," Notes field—"Take only on Monday, Wednesday and Friday." NOTE: This is an actual example from a warfarin e-prescription, which if not taken according to the complete directions, could possibly result in serious patient harm.
 - Sig field—"Dissolve one tablet under the tongue every 10 minutes for chest pain," Notes field—"Call physician immediately if relief is not obtained after three doses."
 - Sig field—"Apply and rub well into affected area twice a day," Notes field—"Discontinue use and call physician if rash worsens."
 - Sig field—"One drop to eye having surgery three times daily," Notes field—"Start two days prior to surgery."
- Information in the Sig field should not conflict with information in the Notes field.
 - Conflicting information in these fields usually requires pharmacists to contact prescribers to ascertain their actual intent with respect to the directions, which compromises the efficiencies related to e-prescribing.
 - Inconsistent information in the Sig versus the Notes fields can result in incorrect directions being conveyed to patients.
 - Example of improper use: Sig field—"1 cap orally 3 times a day", Notes field—"One capsule by mouth daily."
- Care must be taken so that Sigs are not truncated because important information can be lost.
 - Example of improper use: "Take 1 tablet once a month in the am 1 hr before eating or drinking, with 1 C water. Remain upright x 1 hour and nothing by mouth, then resu"
- Sig information should be clinically correct.
 - Example: Use "Amoxicillin 500 mg Oral Capsules"—Sig "One capsule three times a day" instead of "500 caps 3 times a day."
- Directions for use should be spelled out clearly in proper English.
 - Since the pharmacist must interpret—and nearly always writes—the label in English, the use of abbreviations (particularly Latin) or symbols is unnecessary and discouraged because it can lead to medication errors.
 - Example: Use "Take 1 tablet by mouth twice a day" instead of "1 T PO BID."
- Information in the Sig field should be limited to the Sig.
 - Quantity to be dispensed should not be placed in the Sig field.
 - Example: Use "One capsule by mouth three times daily" instead of "One capsule by mouth three times daily – Disp # 30."
 - Duration of therapy should not be placed in the Sig field.
 - Example: Use "One capsule by mouth four times daily" instead of "One four times daily – Disp 10 day supply."
 - Drug description should not be placed in Sig field.
 - Example: Use "One capsule by mouth at bedtime" instead of "One by mouth at bedtime– Paxil CR 20 mg."
 - Example of improper use:
 - "One drop to eye having surgery three times daily. Start two days prior to surgery. May substitute Acular LS, Xibrom, or Voltaren if less expensive." (i.e., the indication of alternative approved drugs "May substitute Acular LS, Xibrom, or Voltaren if less expensive" should be placed in the Notes field.)
- Sigs should be complete, properly formatted, and not repeated.
 - Sig should be complete.
 - Example: Use "Apply topically to forearm three times a day" instead of "Topical each day."
 - Sig should be properly formatted.
 - Example: Use "Take one capsule three times a day" instead of "1 3 times a day."
 - Sig should not be repeated.
 - Example: Use "Take one capsule daily" instead of "1 PO QD – Take one tablet every day."
- The inclusion of the intended use or the indication for the medication in the directions for use is helpful to patients, pharmacists and other prescribers, and is strongly encouraged.
 - Intended use can help patients to organize and better understand their medications and why they are taking them.
 - Including the indication in the Sig field can help prevent dispensing errors, and it provides pharmacists with a foundation for patient counseling and medication therapy management.
 - Other prescribers may find the indication helpful when a patient brings their medication bottles with them to office visits.
 - Example: "Take according to instructions in dosepack for poison ivy rash."

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category II—Prescription Data Elements Requiring Extra Care and Attention When Input. (Continued)

- The instruction “take as directed” is rarely appropriate and should be avoided by prescribers.
 - Such an instruction assumes an understanding on the part of the patient that may not exist, and even if it does, will very likely be short lived.
 - Using the term “take as directed” provides little information upon which the pharmacist can base their counseling of the patient.

- (3) Proper use of the Notes field (referred to as “free text” in the NCPDP SCRIPT Standard).
 - Prescription information that has a designated, standardized data field should not be placed in the Notes field.
 - For example, neither the drug name, strength nor quantity should be placed in the Notes field because there are specific fields in the NCPDP SCRIPT Standard for these data elements. This is important because if this information isn’t placed in the fields in which pharmacy personnel are trained to look for it, it might be missed.
 - Reserve use of the Notes field for information related to, but not part of, the prescription.
 - For example, a comment such as: “Please have the patient call the office when they have finished taking this prescription” would be an appropriate use of the Notes field.
 - To reiterate, as mentioned above, the directions for use should not be split between the Sig and Notes fields nor should the information in the Sig field conflict with information in the Notes Field.
 - The former can lead to critical information being missed by pharmacy personnel and possibly not being transmitted to the patient, and the latter normally requires pharmacists to contact the prescriber to clarify their intent, thereby compromising the potential efficiencies of e-prescribing.

- (4) Refills authorized, if any
 - Although allowed both by convention and NCPDP SCRIPT, the indication of “PRN” (refill as needed) is not considered to be good practice and should be discouraged.
 - Example: Use “Refill 11 times” instead of “Refill PRN.”

- (5) Other items unique to electronic prescribing.
 - Representative NDC number requirements.
 - Representative NDC numbers, which contain 11 digits, must be correct, as incorrect representative NDC numbers may cause drug identification problems in the receiving pharmacies.
 - Representative NDC numbers must be current and included in e-prescription messages unless the items do not have assigned NDCs.
 - Quantity Qualifiers must be correctly associated with drug descriptions.
 - Correct mapping procedures are available in the Units of Measure table, which can be found in the NCPDP External Code List and the SureScripts Implementation Guides.
 - Where possible, quantities should reflect the actual metric quantity to be dispensed.
 - Example: Use “Amoxicillin 250mg/5ml, 150 ml” instead of “Amoxicillin 250mg/5ml, 1 bottle.”
 - The use of “ZZ”, “EA” and “00” should be limited to instances in which none of the available qualifiers in the Units of Measure table can be applied.
 - □ Examples of improper use: Drug description—Amoxicillin 500 mg Oral Capsule, Quantity 30 and Quantity Qualifier sent “ZZ”—mutually defined, “EA”—each or “00”—unspecified instead of “AV”—capsules.

Category III—Prescription Common Mistakes

Even though providers using the ChartMaker Medical Suite strive to be accurate in entering information for E-prescription, there are common mistakes made that can easily be corrected. Please read through the examples below in order to understand E-prescription best practices.

(1) Incorrect or incorrectly formatted SIG

This occurs when the appropriate dose is entered incorrectly. The following examples demonstrate typical errors:

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category III—Prescription Common Mistakes (continued)

Drug Description	SIG	Notes	Nomenclature Description	Comment
Combivent Respimat 20 mcg-100 mcg/actuation Aerosol Inhaler	Spray 1 aerosol with adapter (gram) puff(s) 4 times a day		Incorrect or incorrectly formatted SIG	"1 aerosol" is not an appropriate dose for Combivent
Advair HFA 115 mcg-21 mcg/actuation Aerosol Inhaler	Take 2 aerosol with adapter (gram) puff(s) twice a day		Incorrect or incorrectly formatted SIG	"2 aerosol" is not an appropriate dose for Advair HFA
ProAir HFA 90 mcg/actuation Aerosol Inhaler	Take 2 puffs puff(s) q 4-6 hrs prn cough or wheeze or before exercise		Incorrect or incorrectly formatted SIG	Part of the patient instructions are duplicated
Proctosol HC 2.5 % Rectal Cream	Apply 1 cream (gram) rectally 4 times a day		Incorrect or incorrectly formatted SIG	"1 cream" is not an appropriate dose for Proctosol
dicyclomine 10 mg capsule	Take 1 capsule (hard, soft, etc.) orally Three times a day	prn as directed	Incorrect or incorrectly formatted SIG	SIG should be free of all extraneous characters All patient instructions should be sent in their designated SIG field; No parts of the SIG should be in the Notes
Lotrel 5 mg-10 mg capsule	Take 1 capsule (hard, soft, etc.) orally Daily	Name Brand Medically Nec.	Incorrect or incorrectly formatted SIG; Conflicting or Supplementary Drug Substitution information in the Notes	SIG should be free of all extraneous characters All Drug Substitution information should be sent in its designated field; No parts of the Drug Substitution information should be in the Notes
Suprax 400 mg capsule	Take 1 capsule (hard, soft, etc.) orally qd		Incorrect or incorrectly formatted SIG; Incorrect, Missing or Incomplete Dosage Form sent in Drug Description	SIG should be free of all extraneous characters - Suprax 400mg is not available in capsule form; Appropriate dosage form: Oral Tablet

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category III—Prescription Common Mistakes (continued)

(2) Incomplete SIG

The following examples indicate incomplete SIG:

Drug Description	SIG	Comment
Suprep 17.5 gram-3.13 gram-1.6 gram Oral Solution	Take 1 solution, reconstituted, oral orally As Needed	SIG should include the dose, route and frequency of the prescribed medication
Coumadin 4 mg tablet	Take 2 tablet orally as directed	SIG should include the dose, route and frequency of the prescribed medication
Zithromax Z-Pak 250 mg tablet	Take 1 tablet orally As Directed	SIG should include the dose, route and frequency of the prescribed medication

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category III—Prescription Common Mistakes (continued)

(3) Conflicting or Supplementary SIG information included in the Notes

Drug Description	SIG	Notes	Comment
nystatin 100,000 unit/gram Topical Ointment	Apply 1 ointment (gram) topically Twice a day	FOR CORNER OF LIP	All patient instructions should be sent in their designated SIG field; No parts of the SIG should be in the Notes
metformin 500 mg tablet	Take 1 TABLET orally bid	*take 1 tablet daily for 1 month, then increase to 1 tablet twice a day	All patient instructions should be sent in their designated SIG field; No parts of the SIG should be in the Notes
Augmentin 875 mg-125 mg tablet	Take 1 tablet orally Every 12 hours	x 5 days	All patient instructions should be sent in their designated SIG field; No parts of the SIG should be in the Notes
Mobic 7.5 mg tablet	Take 1 tablet orally twice a day	as needed	All patient instructions should be sent in their designated SIG field; No parts of the SIG should be in the Notes

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