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CCCQE™ Version 8.3 Users Manual

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Introduction: Documenting the Patient Visit

One of the most challenging aspects of implementing an Electronic Medical Record (EMR) for most providers is learning how to document the patient visit. All of the advantages of an EMR quickly get lost in the mind of the provider if they cannot quickly and efficiently document their notes. Many are used to dictating their visits while others have become comfortable using handwritten notes with or without the aid of form templates. Making the successful transition requires a basic understanding of the power of the EMR, coupled with the necessary tools (CCCQE™) and training.

We recommend that any user of the EMR interested in understanding the basics and advanced principles or EMR refer to “Electronic Medical Records: Optimizing Use in the Medical Practice” for detailed overviews of the following topics:

SOAP Note in the EMR
Free Text vs. Structured Text
QuickText
Text Components
Form Components
Dictation Placeholders
Basic Voice Recognition
Integrated Voice Recognition

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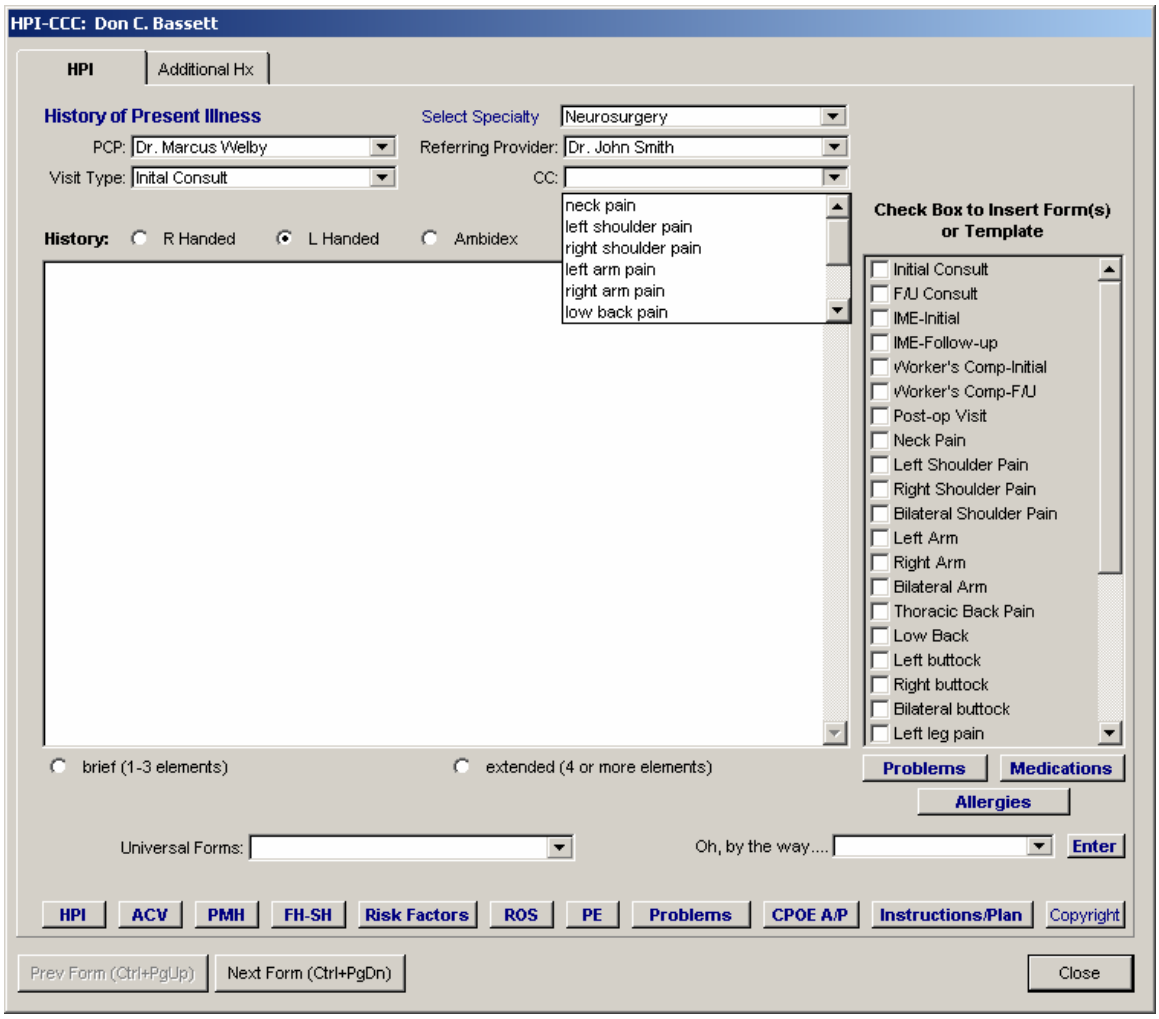
Core Forms: In physical training for many sports, strength training focusing on the "core" has become recognized as a key to the success of many an athlete. In much the same way, we believe that providing a good core set of clinical documentation forms and the skills to master their purpose, navigation, and use and will lead to a successful EMR implementation.

HPI-CCC



1. The support staff enters the PCP, Referring Provider, Visit Type, and Chief Complaint information; (this information can also automatically populate if entered in registration or through patient-entered data interface (PatientLink™, Kryptiq®).
2. Handedness field appears for Neurology, Neurosurgery, and Orthopedics, and will automatically pull into templates and be added into database for future visits or reporting.
3. The Responsible Provider's specialty (of the update) automatically populates field and pulls in specialty-specific forms/templates in the Form(s)/Template(s) list box.
4. The Form(s)/Template(s) list box can be customized to load encounter forms or insert custom text templates.

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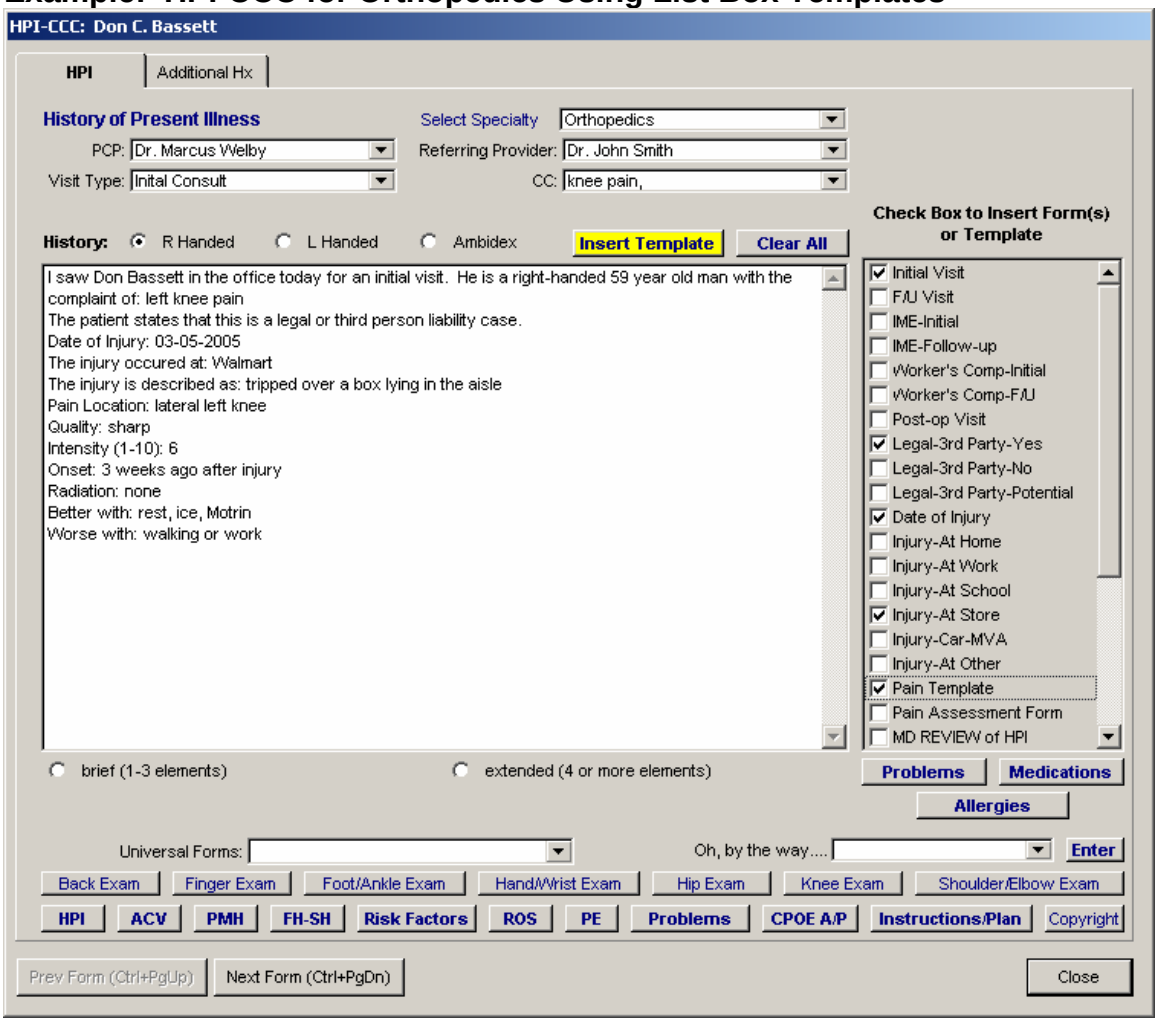
5. To integrate with the E&M Advisor, the provider must check either the brief (1-3 elements) or extended (4 or more elements) radio button.
6. Text can be entered into the multi-line edit field using QuickText, typing, inserting text templates, or using voice recognition.
7. Alternatively, the HPI-CCC form can be closed and a Dictation Placeholder can be inserted into the update and later imported using a transcription service.
8. Navigation Buttons at the bottom of the form allow quick navigation between the Core Forms. NOTE: All CCC forms are best viewed using display settings of 1024 X 768.

Example: HPI-CCC for Orthopedics Using List Box Templates



1. The support staff checks the items in the Form(s)/Template(s) list box based on responses entered by the patient in the questionnaire then clicks the “Insert Template” action button (which has turned yellow) and completes the data entry.
2. This information may also be entered using patient-entered data interface (PatientLink™, Kryptiq®)
3. Samples of Specialty-Specific Patient Questionnaires can be found in the Appendix.

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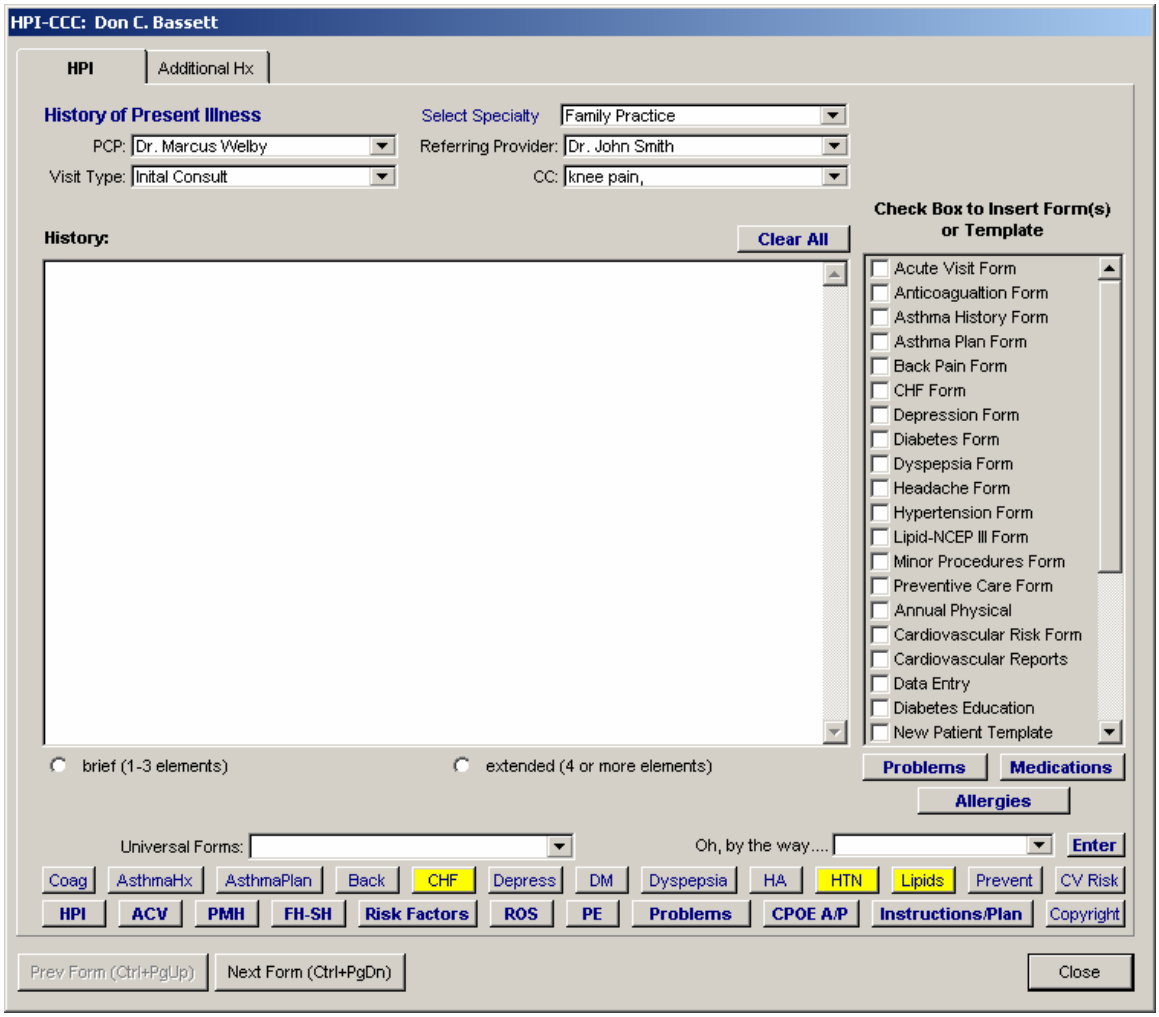
Example: HPI-CCC for Family Practice or Internal Medicine



1. The Form(s)/Template(s) list box can be customized to load encounter forms or insert custom text templates. In this example, the CCCQE™ Disease Management Forms appear in the list boxes, but any forms or Text Templates may be listed.
2. To integrate with the E&M Advisor, the provider must check either the brief (1-3 elements) or extended (4 or more elements) radio button.
3. Text can be entered into the multi-line edit field using QuickText, typing, inserting text templates, or using voice recognition.
4. Navigation Buttons at bottom of form allow quick navigation between the Core Forms.
   NOTE: All CCC forms are best viewed using display settings of 1024 X 768
5. For certain specialties, specialty-specific navigation buttons appear at the bottom of the form.
6. If a patient has a problem on their active Problem List that may be documented using one of the CCCQE™ Disease Management forms, the action button for the corresponding form will be highlighted in yellow as a visual cue. NOTE: These action buttons only LOAD the corresponding forms. They are not a Load and Go To function, based on workflow considerations.

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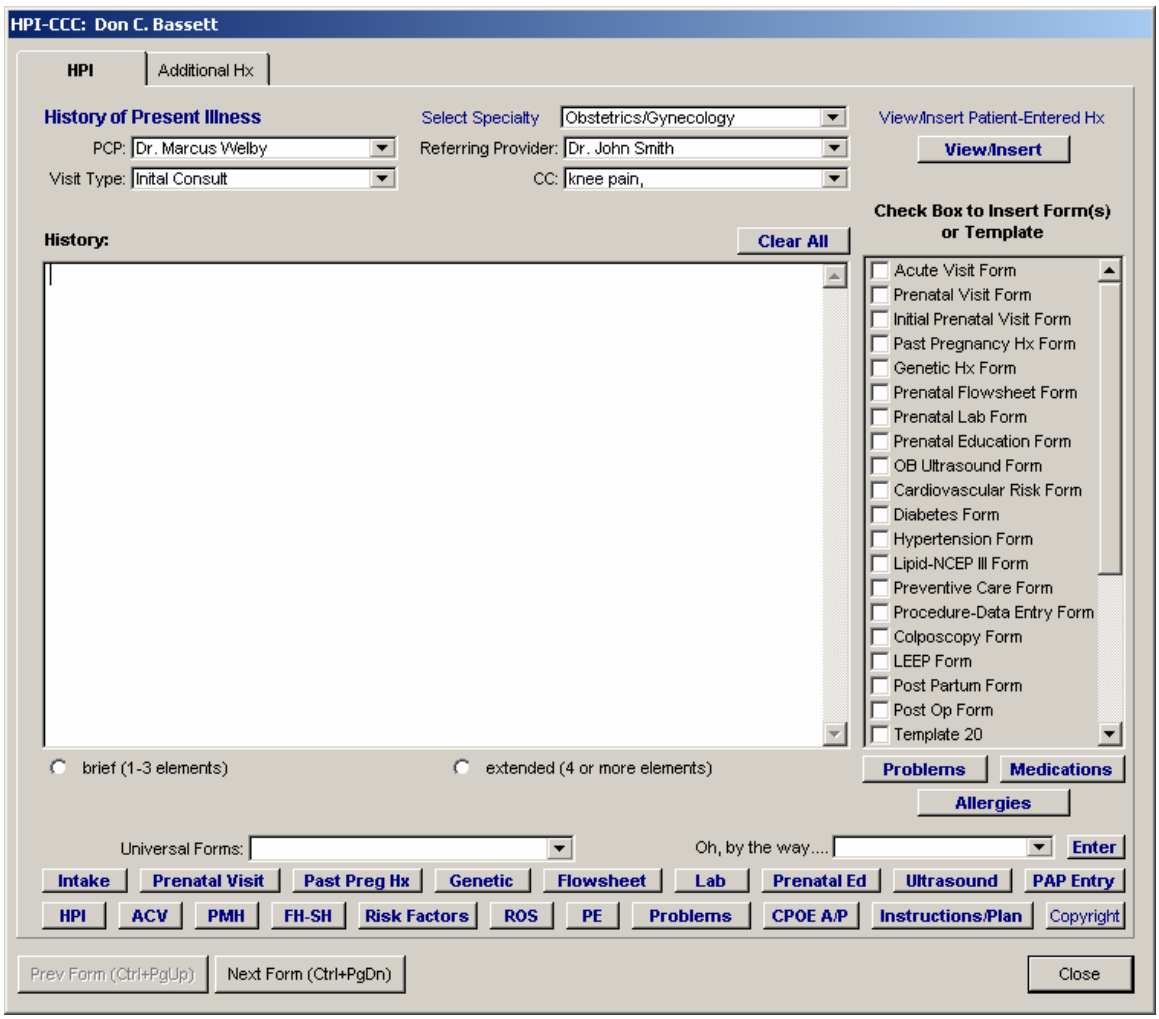
Example: HPI-CCC for OB-Gyn



1. The Form(s)/Template(s) list box can be customized to load encounter forms or insert custom text templates. In this example, the CCCQE™ OB-Prenatal and Disease Management Forms appear in the Form(s)/Template(s) list box, but any forms or Text Templates may be listed.
2. To integrate with the E&M Advisor, the provider must check either the brief (1-3 elements) or extended (4 or more elements) radio button.
3. Text can be entered into the multi-line edit field using QuickText, typing, inserting text templates, or using voice recognition.
4. Navigation buttons at the bottom of the forms allow quick navigation between the Core Forms. NOTE: All CCC forms are best viewed using display settings of 1024 X 768.
5. For certain specialties, specialty-specific navigation buttons appear at the bottom. NOTE: Except for the Disease Management action buttons that appear for Family Practice or Internal Medicine, these action buttons will LOAD and GO TO the corresponding forms.

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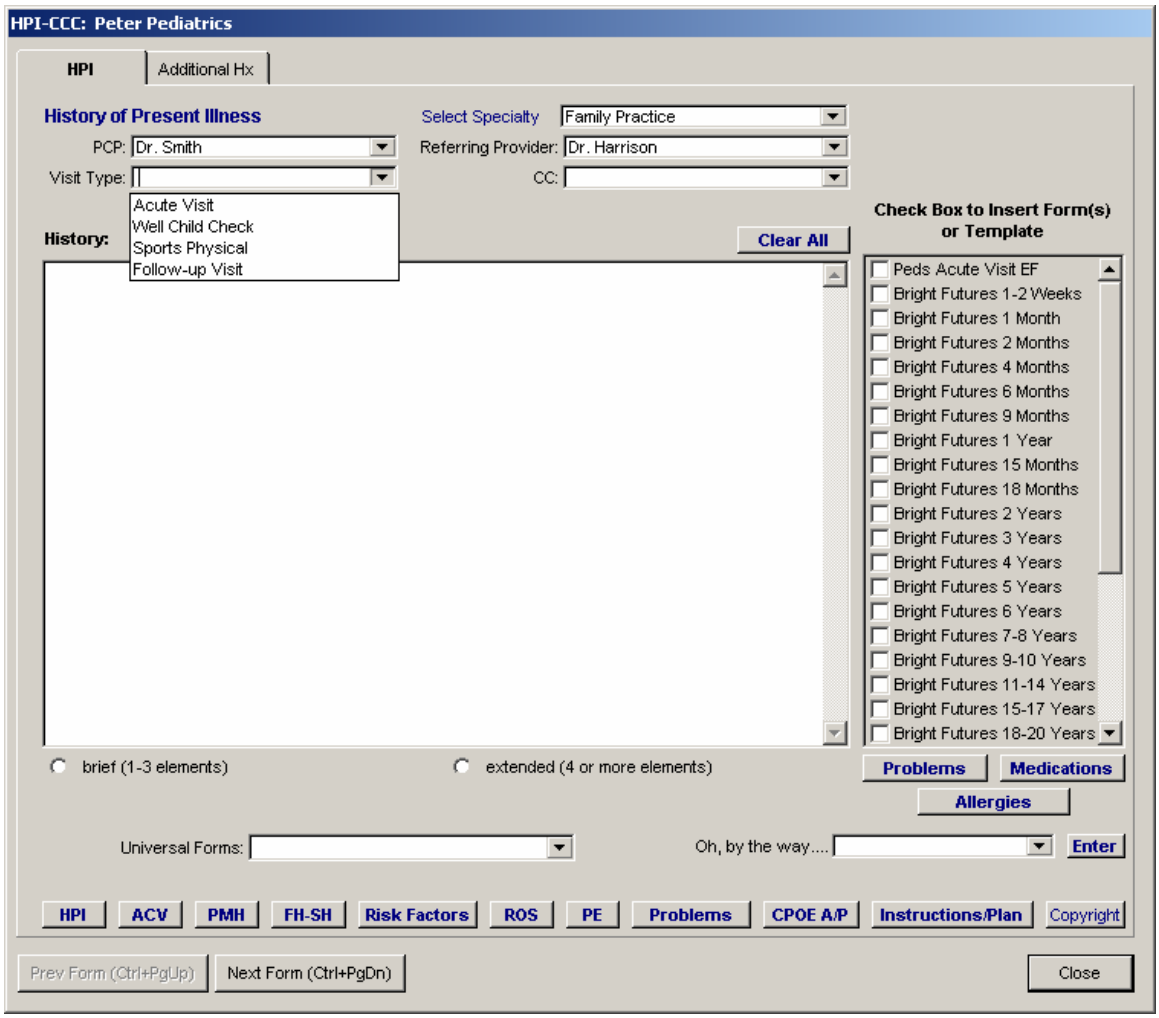
Example: HPI-CCC for Pediatrics



1. The Form(s)/Template(s) list box can be customized to load encounter forms or insert custom text templates. In this example, the CCCQE™ Peds Acute Visit and Age-specific Bright Futures Forms appear in the Form(s)/Template(s) list box, but any forms or Text Templates may be listed.
2. To integrate with the E&M Advisor, the provider must check either the brief (1-3 elements) or extended (4 or more elements) radio button.
3. Text can be entered into the multi-line edit field using QuickText, typing, inserting text templates, or using voice recognition.
4. NOTE: For Family Practice, if the patient is less than 18 years old (or the cut-off age set by that site), the customization from the CCCQE-User-Edit-HPI-Peds will appear.

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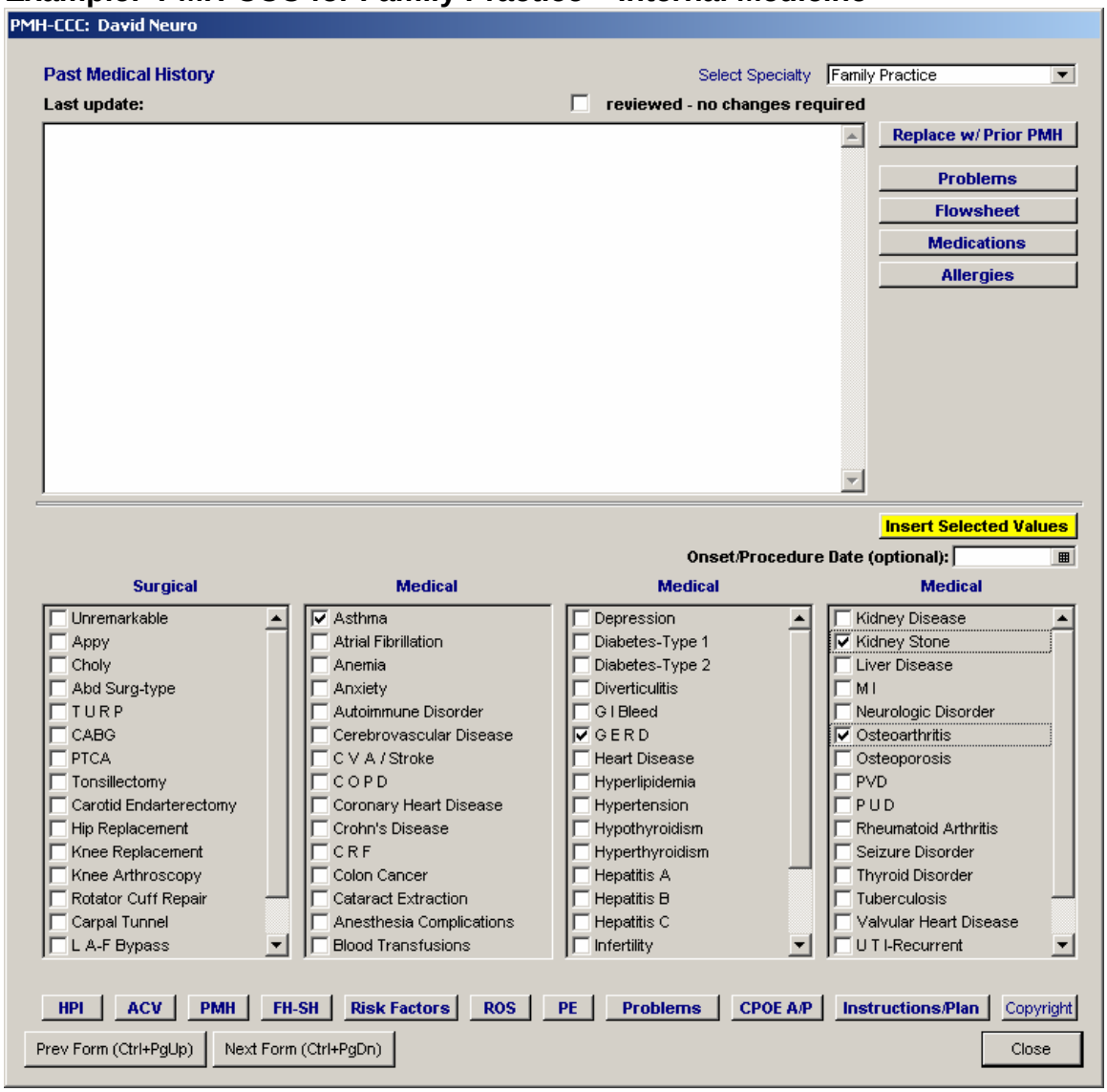
PMH-CCC or PMH-PSH-CCC:

The PMH-CCC and PMH-PSH-CCC forms are designed to allow for rapid point-and-click entry of the most common specialty-specific medical/surgical conditions. The list box items can be customized by specialty. In addition, the customization can also determine which conditions will automatically populate the active Problem List (or not) as well as whether an observation term is automatically populated and with what value. This decreases the time necessary to capture structured data which can be used for reporting or clinical decision support.

Example: PMH-CCC for Family Practice – Internal Medicine



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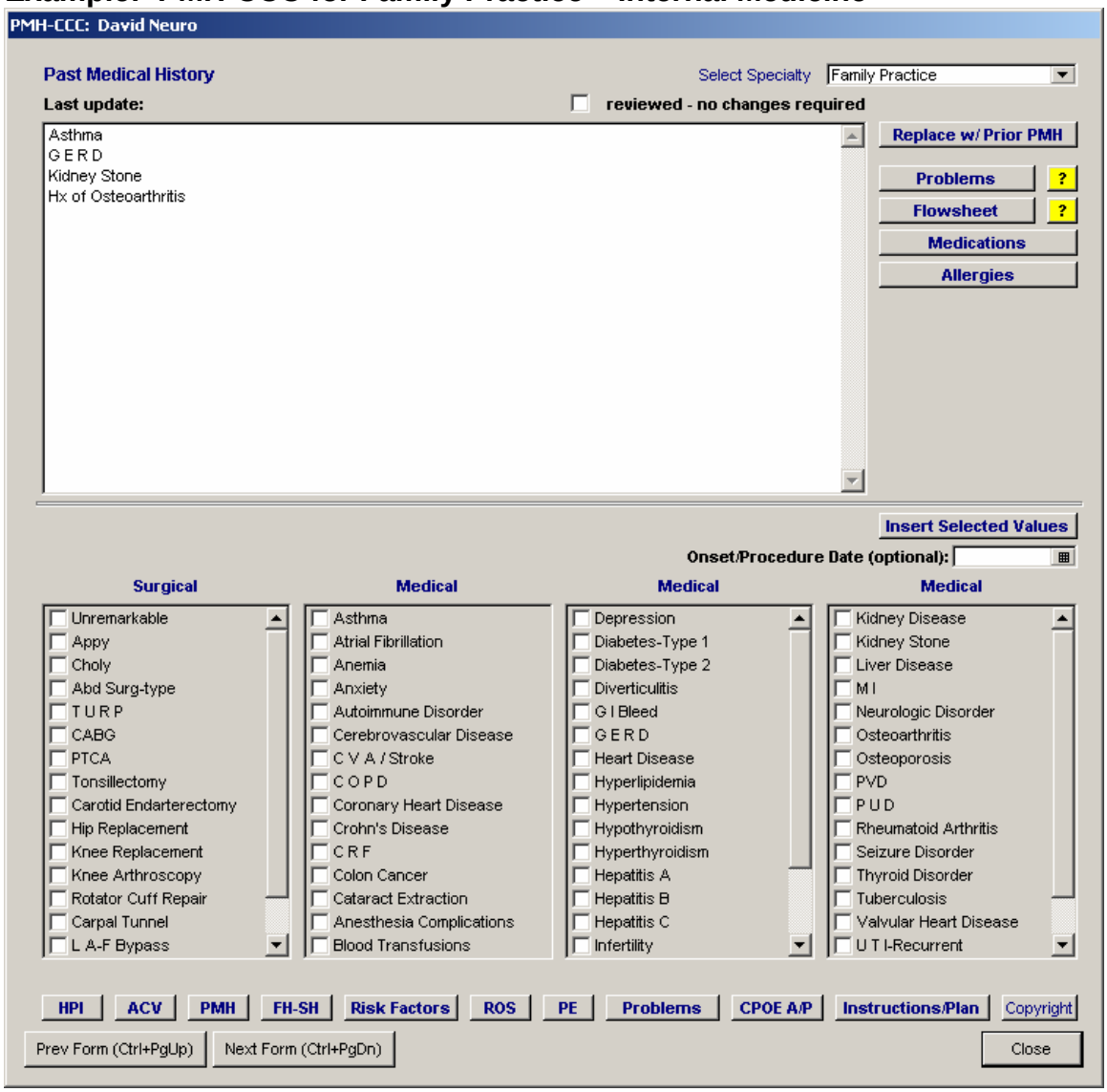
Example: PMH-CCC for Family Practice – Internal Medicine



1. The support staff or the provider check corresponding problems in the list boxes then clicks the yellow “Insert Selected Values” action button. NOTE: Values will not appear in text or push to problem list until the action button is clicked. This allows for corrections to be made prior to committing.
2. The list box headings and list box values are customizable.
3. The items that push to the problem list or flowsheet as structured obs terms are also customizable.
4. The Onset/Procedure Date (optional) may be entered in the Date field.
5. Corresponding problems in list boxes push to the multi-line edit field (Past Medical History) as well as to the problem list and flowsheet.
6. The provider can also enter clinical information using QuickText, typing, inserting text templates, or using voice recognition for any items not listed (or if additional information is desired). NOTE: any information entered using these methods will only populate the PAST MED HX or PAST SURG HX; the information will not populate specific obs terms and will not add problems to the patient’s problem list.

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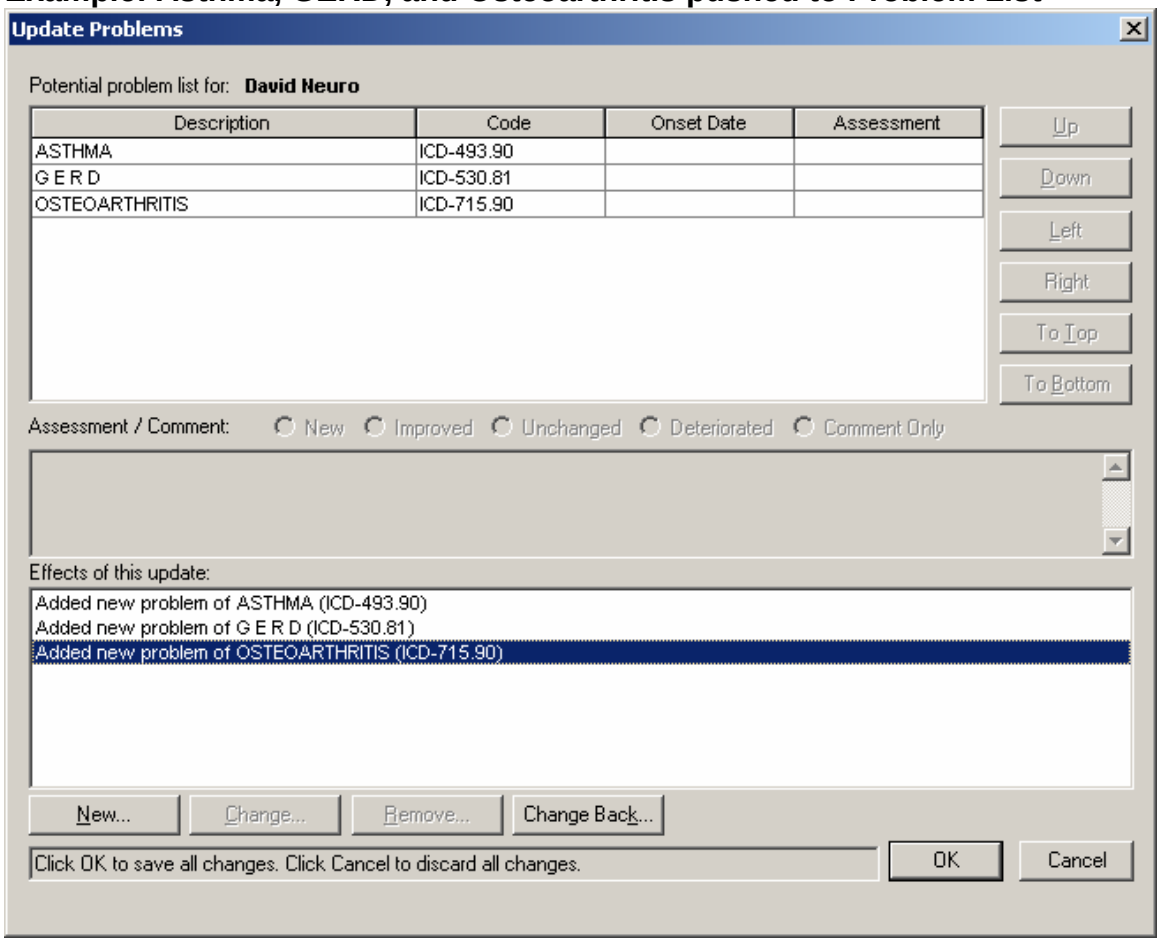
7. The first 15 items in each of the list boxes can be visualized; additional items (beyond 15 per list box) require scrolling – the bar on the right side of the list box is a visual cue that additional items are in the list box.
8. In the example above, Asthma, GERD, and Osteoarthritis pushed to problem list, but all four problems Asthma, GERD, Kidney Stone, and Osteoarthritis push to corresponding obs terms (Flowsheet)-see examples below.
9. Clicking the yellow ? button next to the problem or flowsheet action buttons explains to/reminds the provider that removing a problem from the multi-line edit field (the Past Medical History or Past Surgical History) does not automatically remove it from the problem list or flowsheet. To do so, you must go to the problem list or flowsheet, highlight the problem, then click "Remove" or "Change Back".

Example: Asthma, GERD, and Osteoarthritis pushed to Problem List



NOTE: Highlight item then click "Change Back" to remove if entered in error.

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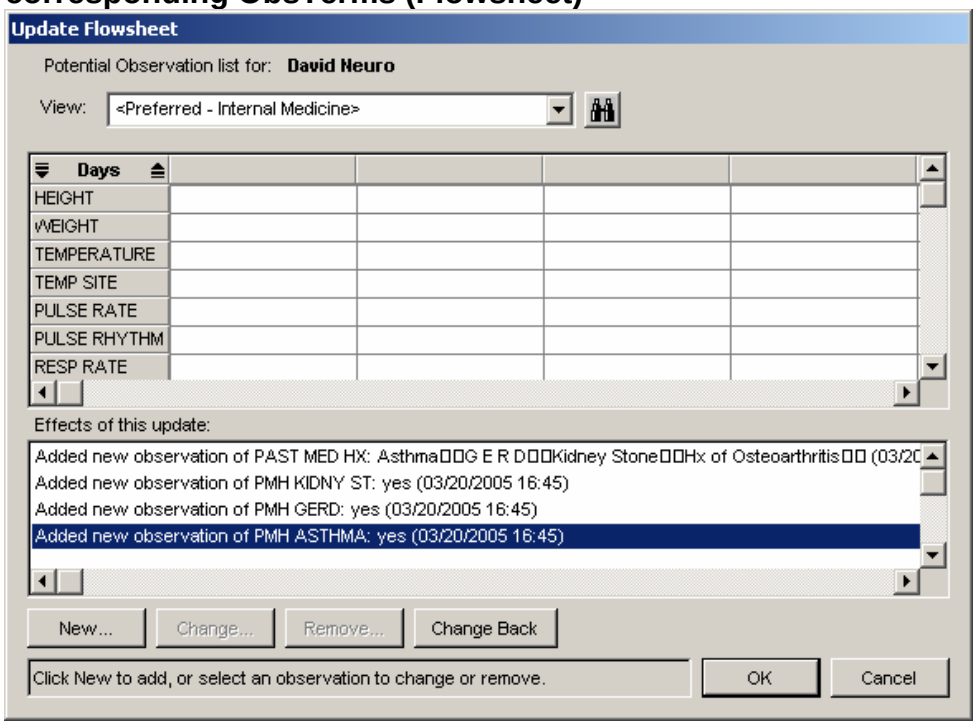
Example: Asthma, GERD, Kidney Stone, and Osteoarthritis push to corresponding ObsTerms (Flowsheet)



NOTE: Highlight item then click “Change Back” to remove if entered in error.

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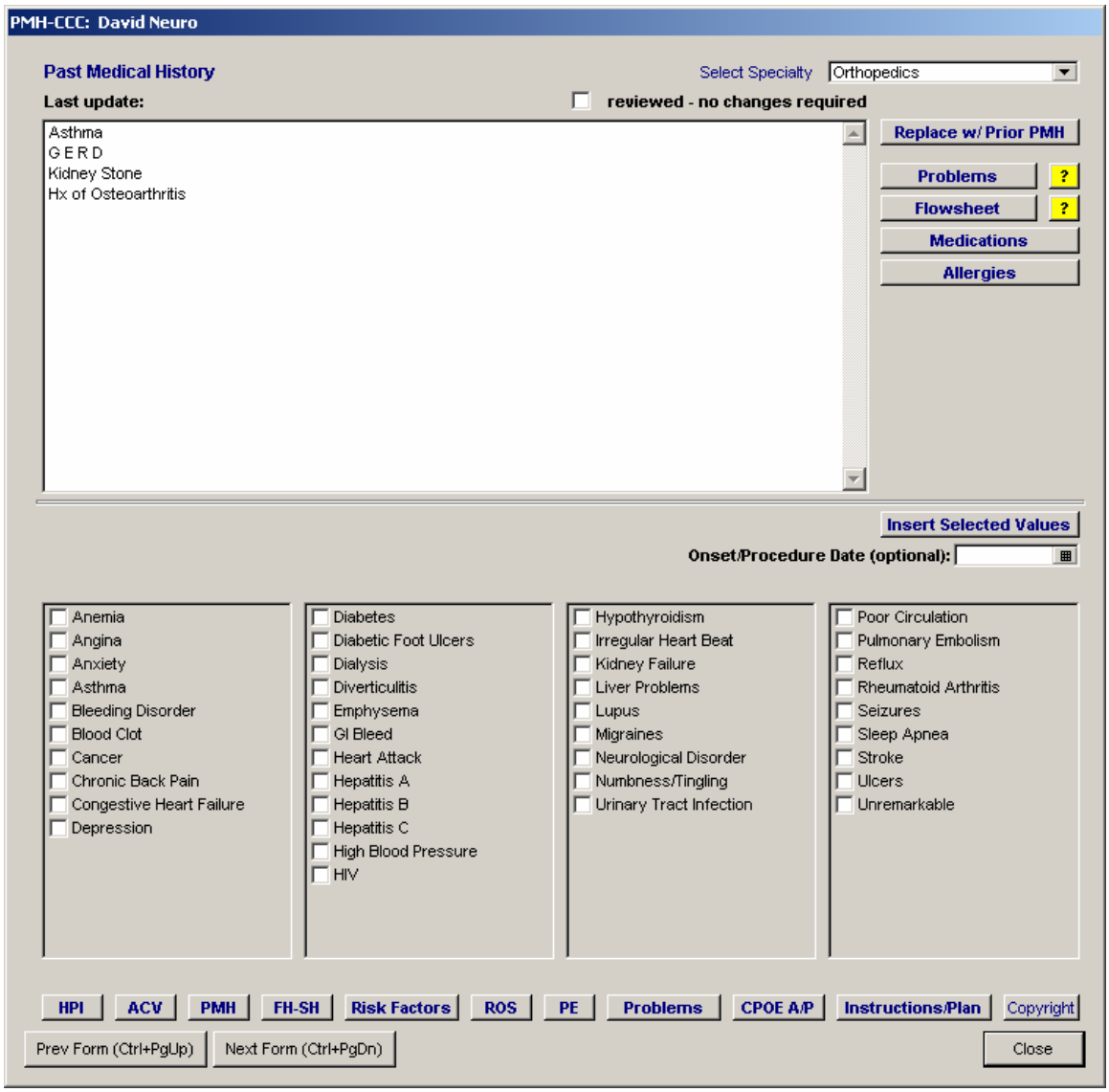
Example: PMH-CCC for Orthopedics-List Box Customization



1. NOTE: This site chose not to have any headings and to limit the number of items in the list boxes.
2. The list box values may be manually checked by support staff using information entered in Patient History questionnaires or automatically entered through a patient-entered data interface (PatientLink™, Kryptiq®).

See samples of Patient History Questionnaires and PatientLink interface in the Appendix.

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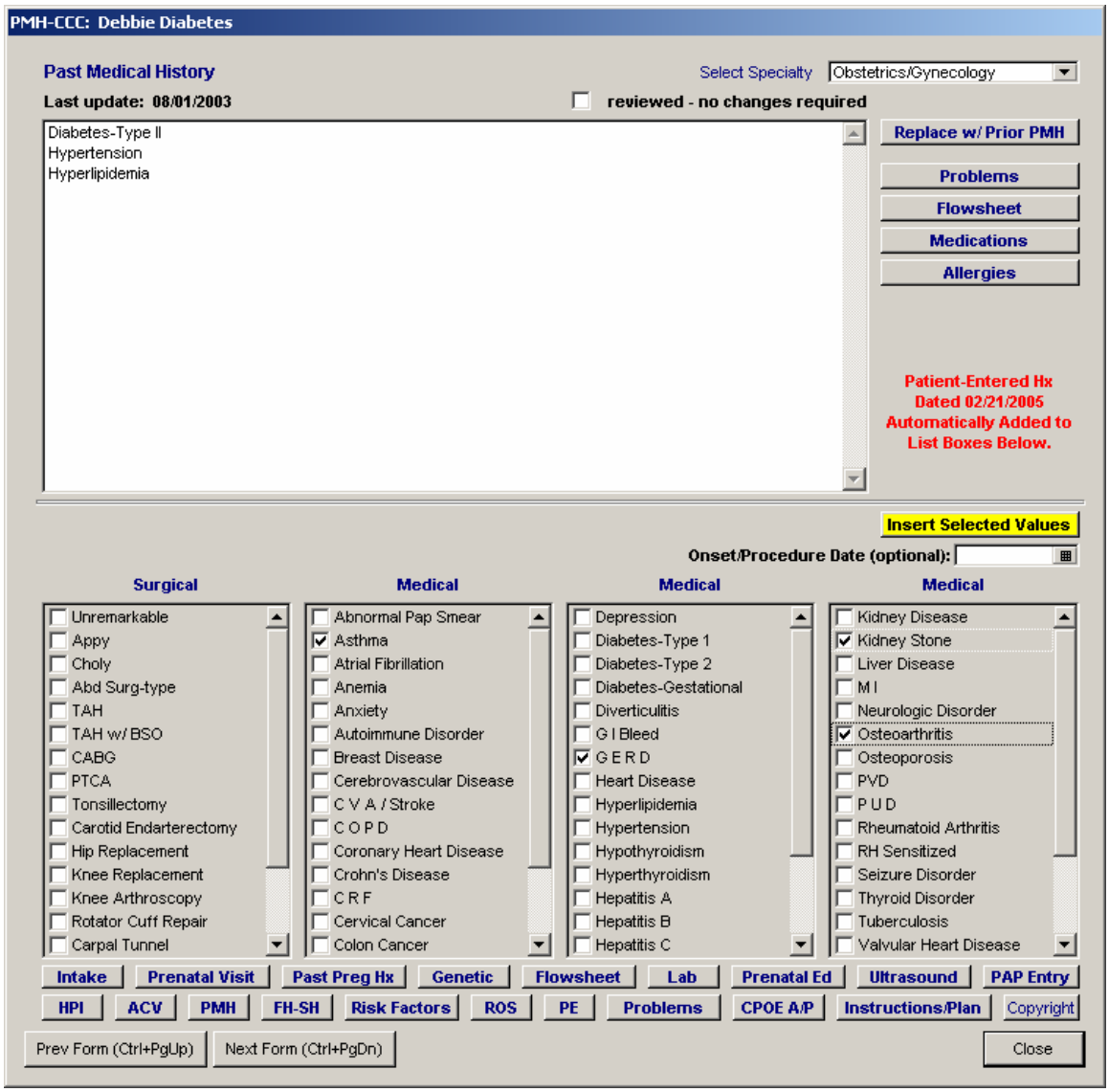
Example: PMH-CCC for OB-GYN Customization & Patient-Entered Data Prompt



1. NOTE the “Patient-Entered Hx dated 02/21/2005” Prompt in red and the list box items that are automatically checked using the PatientLink™ or Kryptiq® questionnaire interface.
2. After verifying the information with the patient, the provider clicks the yellow “Insert Selected Values” action button to commit the information. NOTE: Values will not appear in text or push to problem list until the action button is clicked. This allows for corrections to be made prior to committing.

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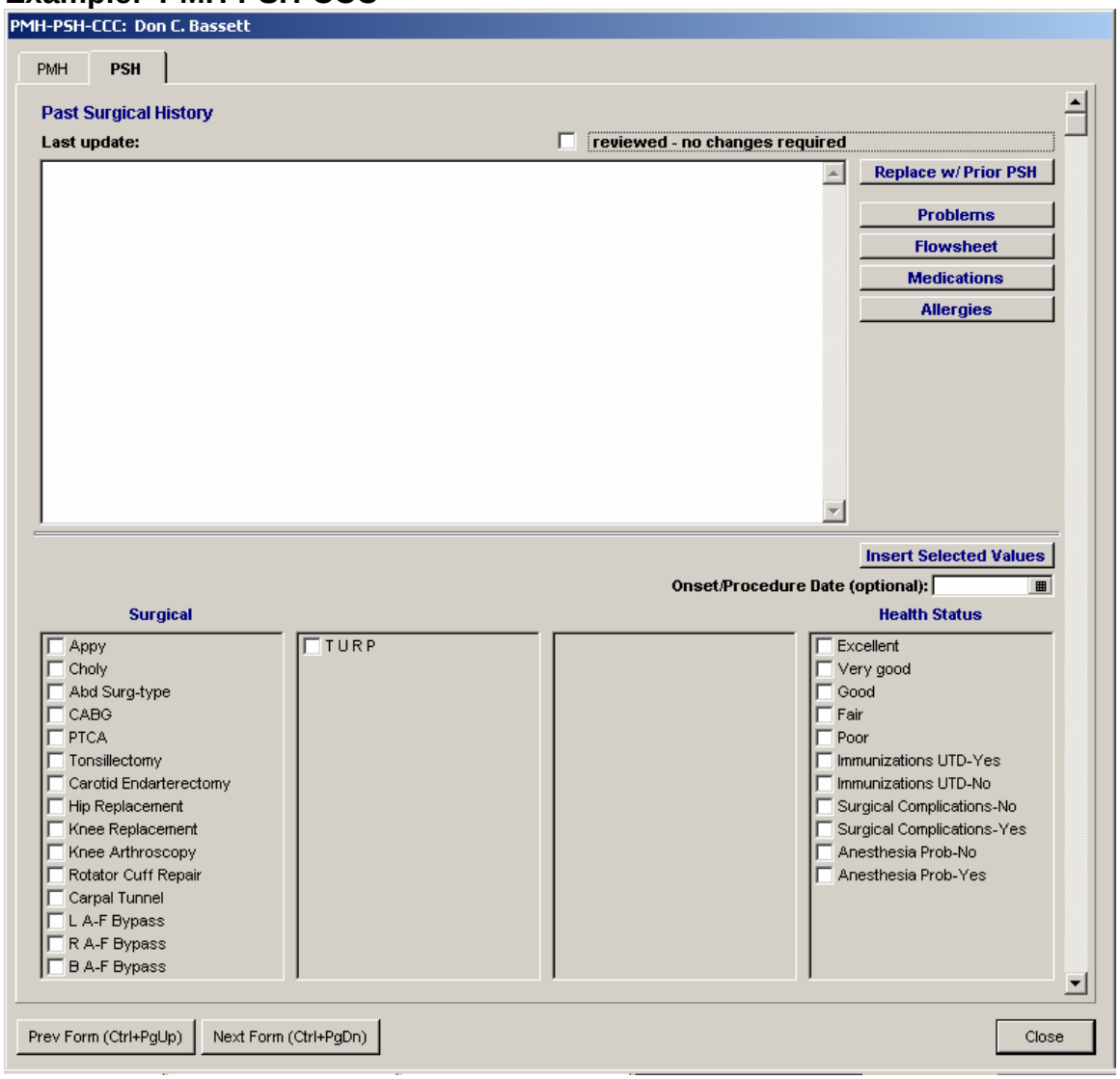
PMH-PSH CCC

Some sites prefer to enter all past medical problems into the obs term PAST MED HX while entering all past surgical problems into the obs term PAST SURG HX. For those sites, there is the PMH-PSH-CCC form which functions the same as the PMH-CCC form -- except that there is a second tab labeled PSH to enter the PSH.

Example: PMH-PSH-CCC



1. The data in the multi-line edit field pushes to the ObsTerm PAST SURG HX.
2. The headings and list box items can be customized the same way as the PMH-CCC form by editing the CCCQE-User-Edit-PSH.txt file.

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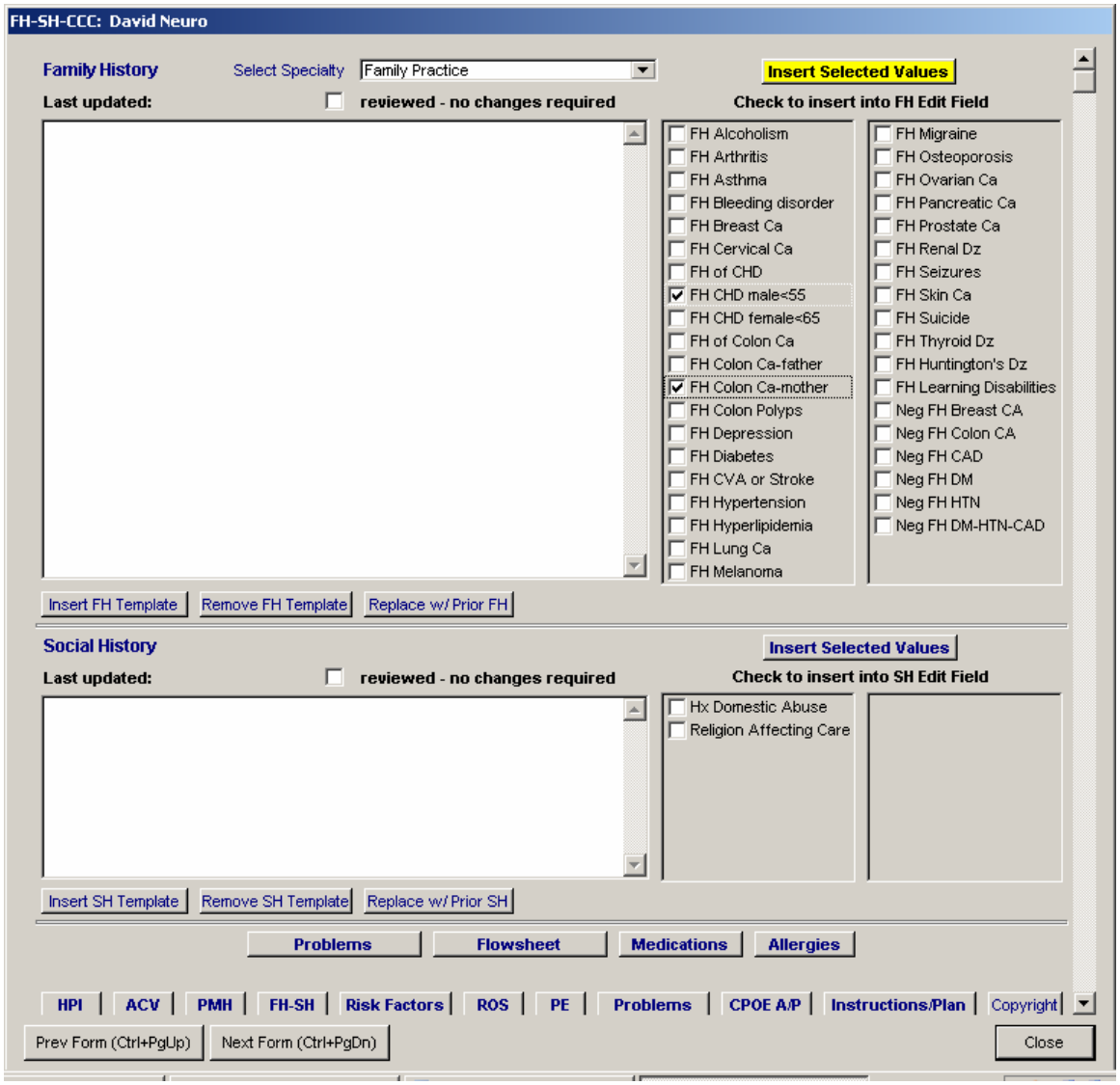
FH-SH-CCC

The FH-SH-CCC form is designed to allow for rapid point-and-click entry of the most common specialty-specific family history and social history conditions. The list box items can be customized by specialty. In addition, the customization can also determine which conditions will automatically populate the active Problem List (or not) as well as whether an observation term is automatically populated and with what value. This decreases the time necessary to capture structured data which can be used for reporting or clinical decision support.

Example: FH-SH for Family Practice – Internal Medicine



1. The support staff or the provider checks the corresponding problems in the list boxes then clicks the yellow “Insert Selected Values” action button. NOTE: Values will not appear in text or push to Problem List until action button is clicked. This allows for corrections to be made prior to committing.
2. The list box values are customizable.
3. The items that push to the problem list or flowsheet as structured obs terms are also customizable.

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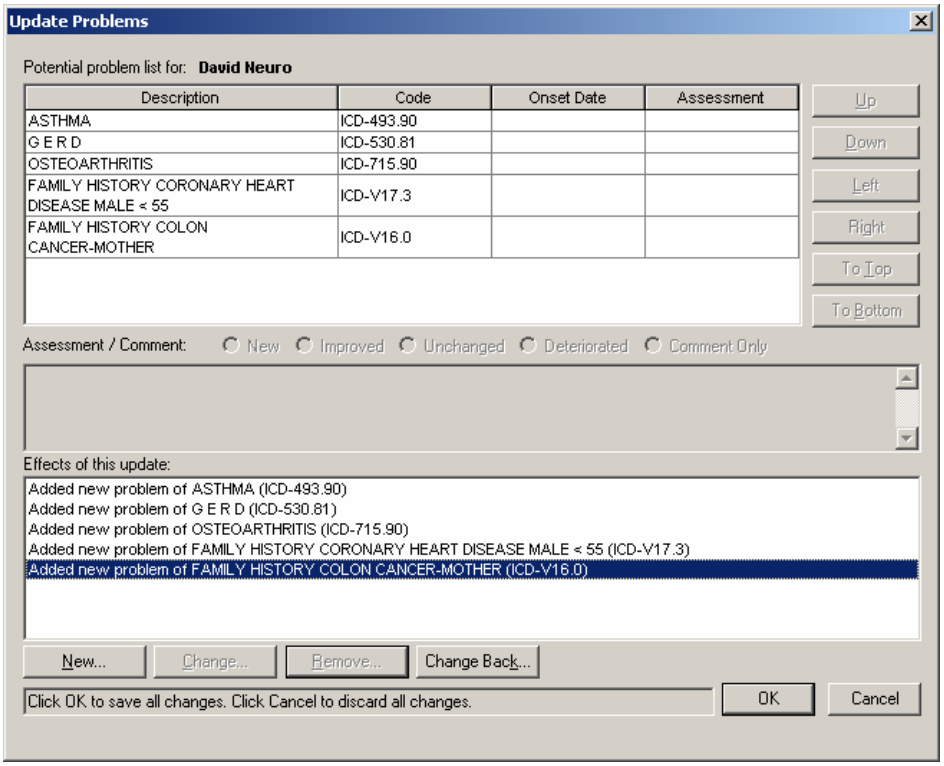
4. Corresponding problems in list boxes push to multi-line edit field (Family History or Social History) as well as to the problem list and flowsheet.
5. The provider can also enter clinical information using QuickText, typing, inserting text templates, or using voice recognition for any items not listed (or if additional information is desired). NOTE: any information entered using these methods will only populate the Family History (Family HX) or Social History (Social Hx) obs terms; the information will not populate specific obs terms and will not add problems to the patient's problem list.
6. In the example above, FH Coronary Heart Disease in a male before age 55 and FH Colon Cancer in mother pushed to the problem list and to the corresponding obs terms (flowsheet)-see examples below.
7. Clicking the yellow ? button next to the Problem or Flowsheet action buttons explains to/reminds the provider that removing a problem from the multi-line edit field (the Family History or Social History) does not automatically remove it from the problem list or flowsheet. To do so, you must go to the Problem List or Flowsheet, highlight the problem then click "Remove" or "Change Back".



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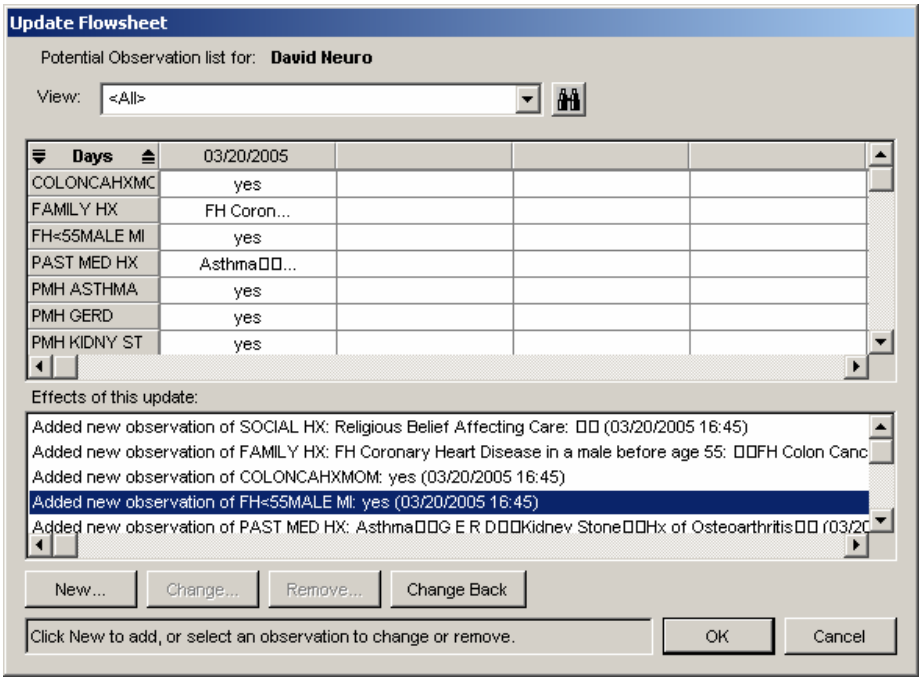

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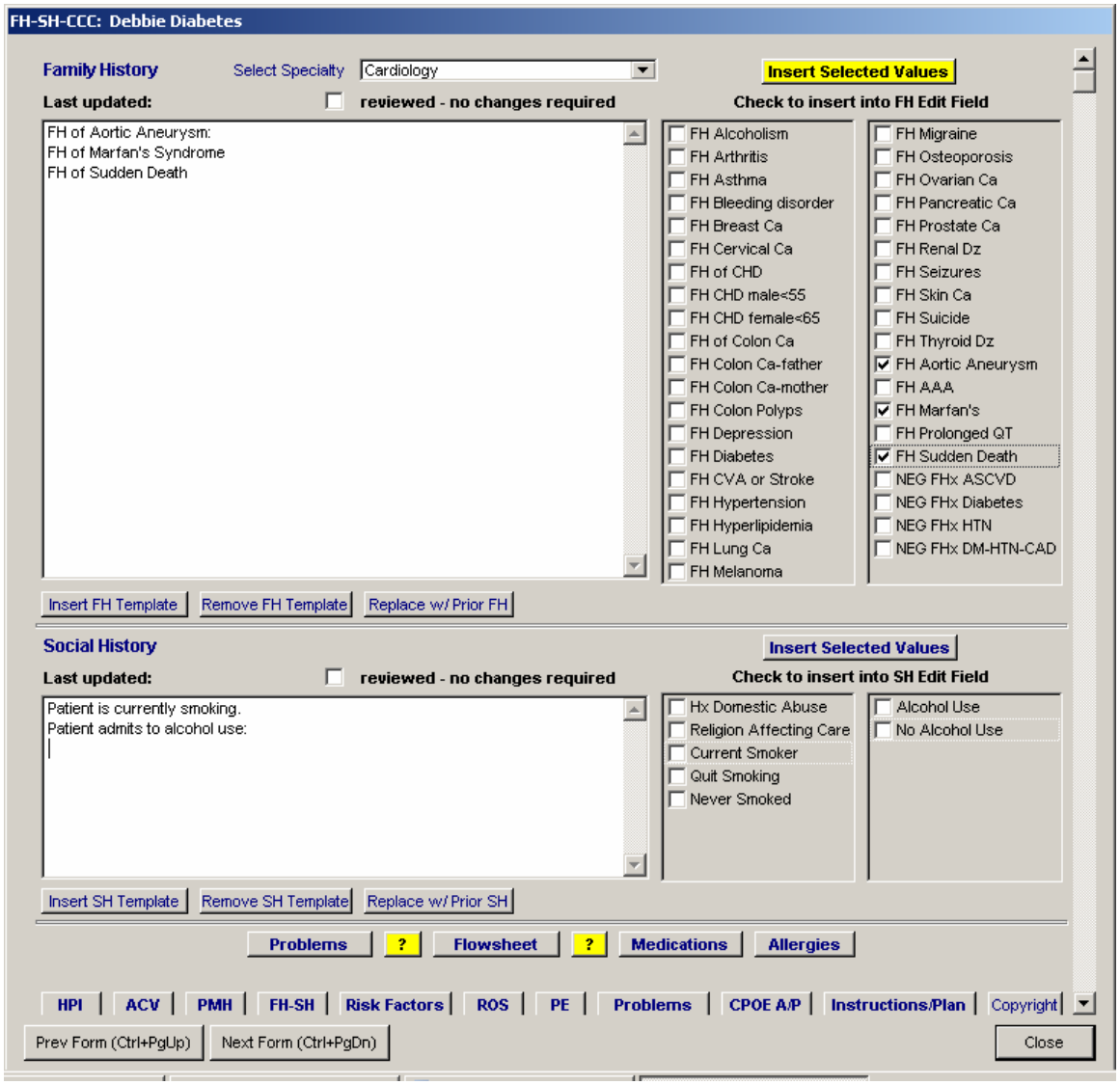
Example: FH-SH-CCC for Cardiology



1. Note the Cardiology-specific list box values (AAA, Marfan's, Sudden Death, etc.).
2. The Social History list boxes can also be customized to capture important, basic Risk Factor information. Values may be linked to the Risk Factors form to automatically populate the data captured. Use the Risk Factors form to document additional risk factor information.

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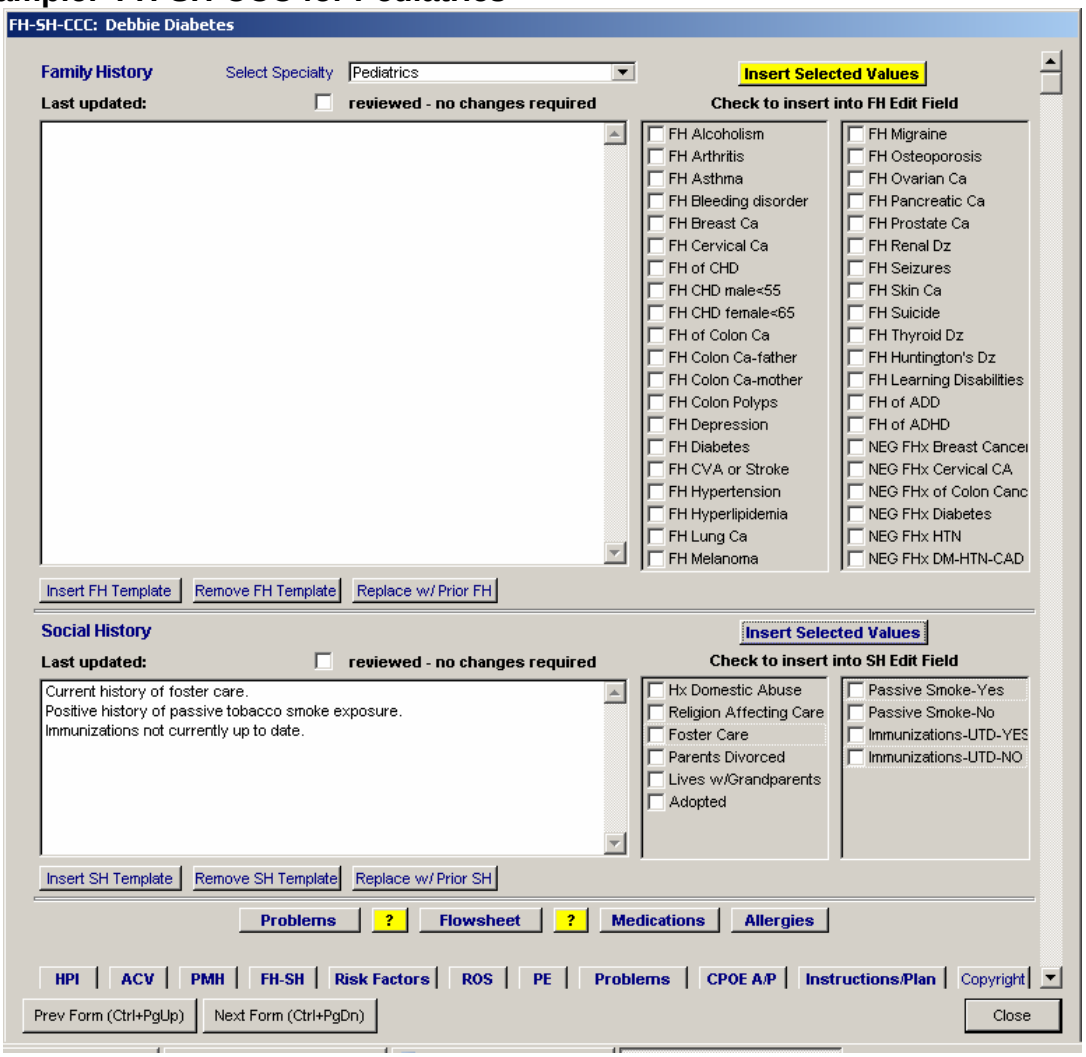
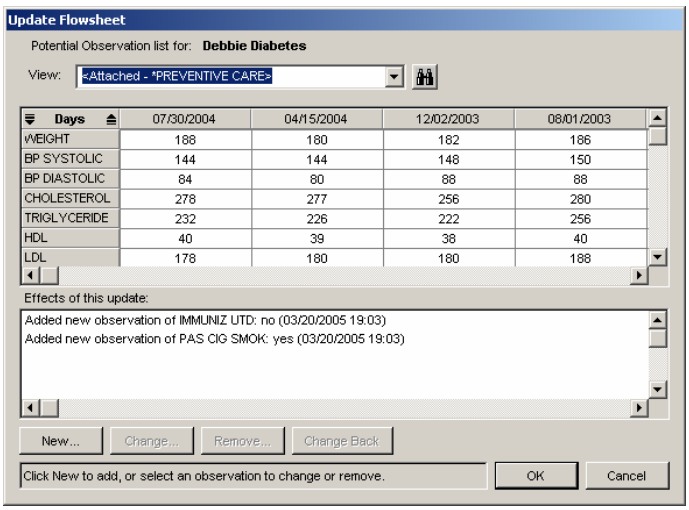
Example: FH-SH-CCC for Pediatrics



1. Note the Pediatric-specific list box values.
2. The Social History list boxes can also be customized to capture important, basic Risk Factor information. Values may be linked to the Risk Factors form to automatically populate the data captured such as immunization status and passive smoke exposure.



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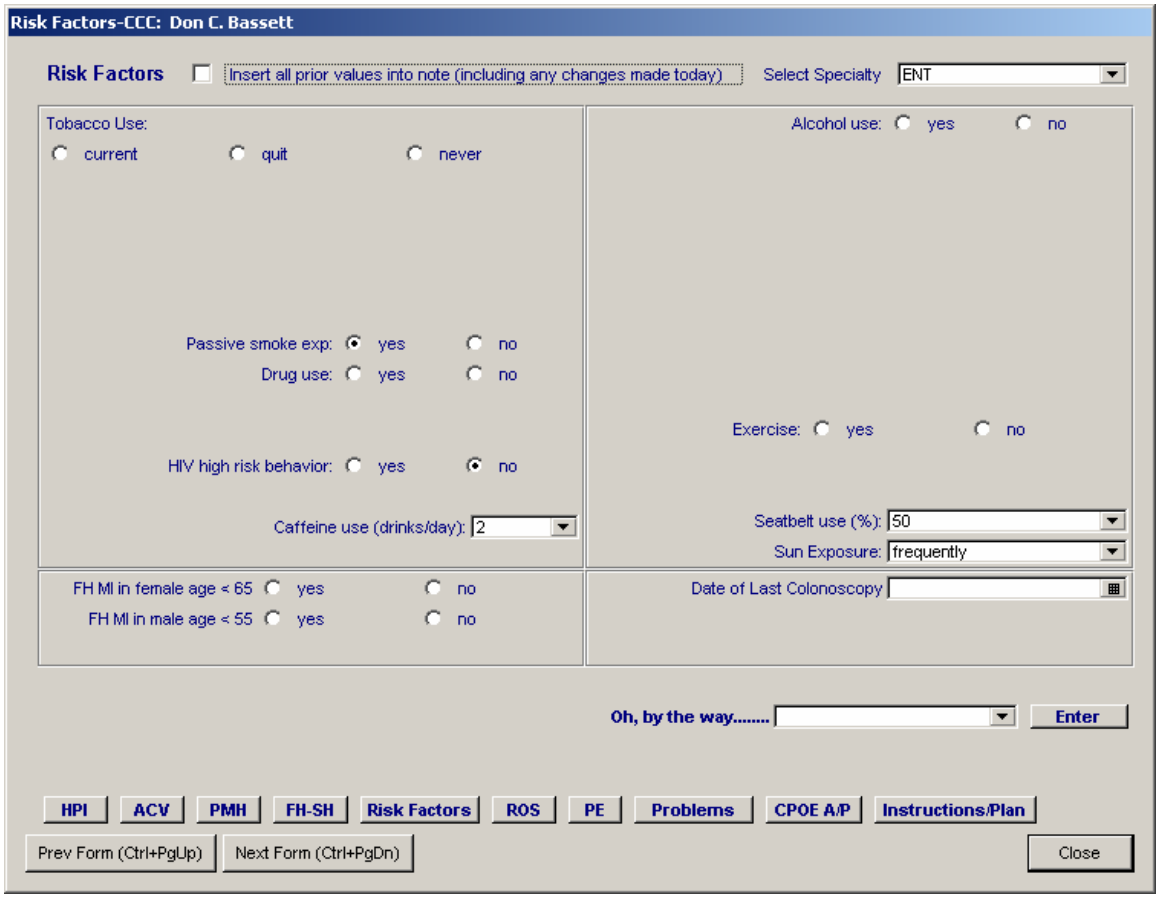
Risk Factors-CCC

The Risk Factors-CCC form is designed to allow for rapid point-and-click entry of the most common patient health risk factors. The results are entered as structured data which can be used for reporting or clinical decision support.



1. Risk factor items can be expanded for more detailed data entry (Examples: Tobacco Use, Alchol Use, Drug Use, HIV high risk behavior).
2. The provider does not have to complete every field, but any fields completed will be structured, allowing for clinical decision support and reporting in the future.
3. Risk Factor values can be automatically populated from the FH-SH-CCC form and the new PSIA-CDSS application within the CPOE A&P form.

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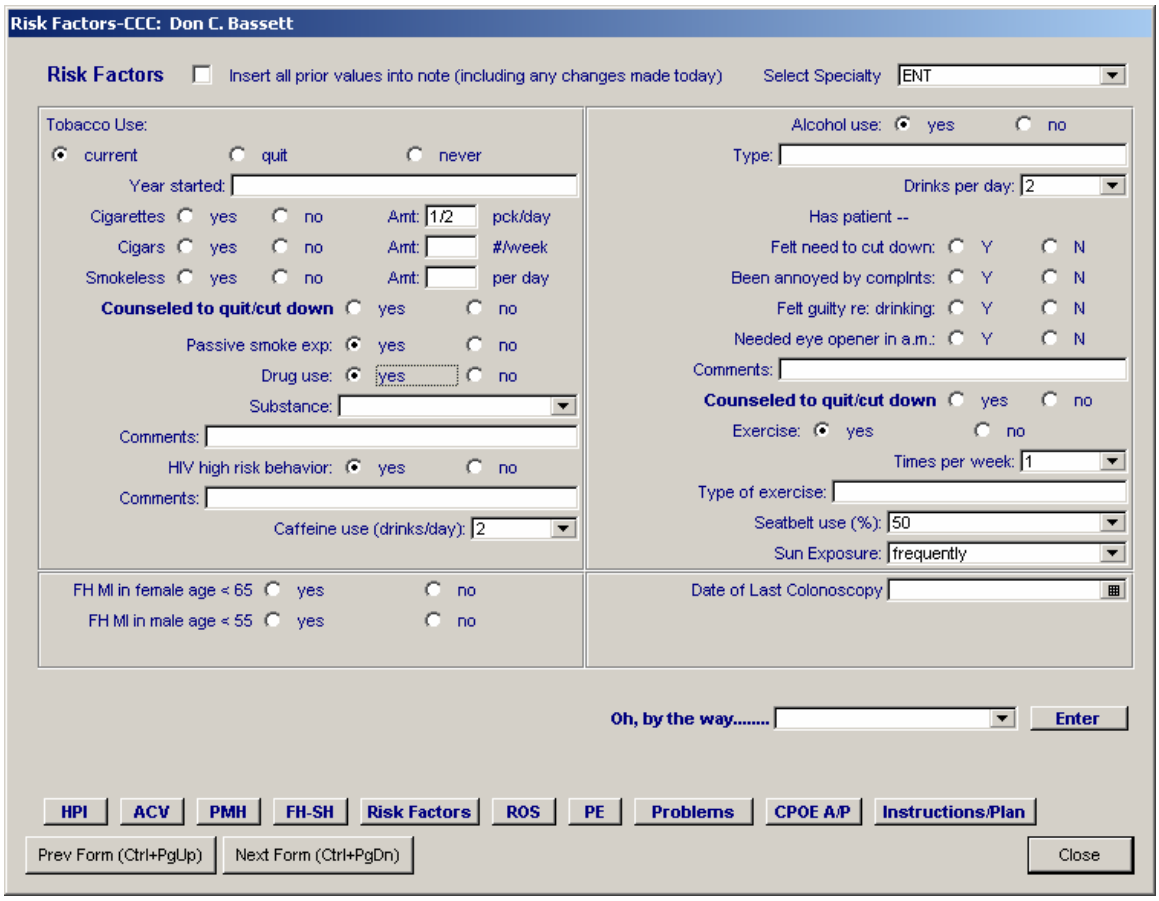
Example: Expanded Risk Factor-CCC Form Showing Additional Data Entry Fields



1. Risk factor items can be expanded for more detailed data entry (Examples: Tobacco Use, Alchol Use, Drug Use, HIV high risk behavior).
2. The provider does not have to complete every field, but any fields completed will be structured, allowing for clinical decision support and reporting in the future.
3. Risk Factor values can be automatically populated from the FH-SH-CCC form and the new PSIA-CDSS application within the CPOE A&P form.

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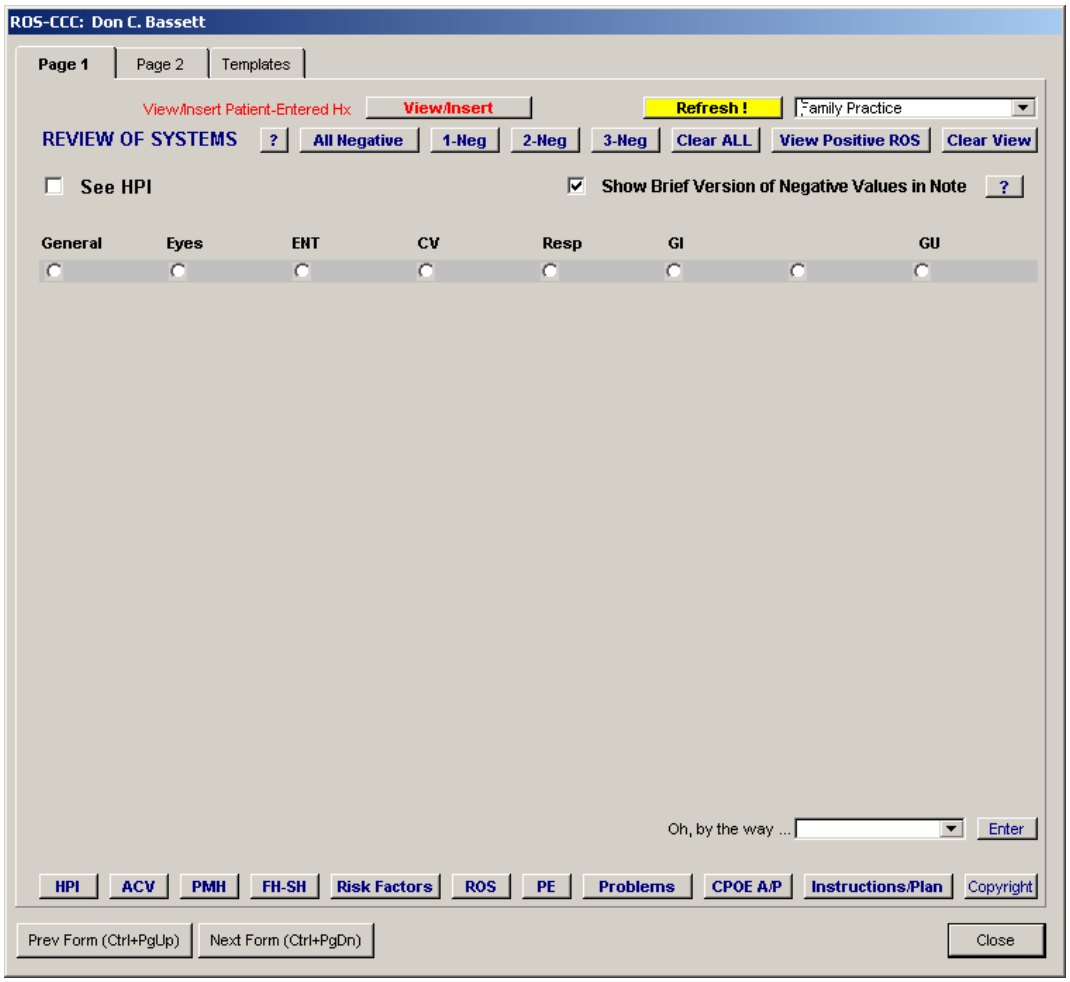
ROS-CCC

The ROS-CCC form is designed to allow for rapid point-and-click entry of specialty-specific medical/surgical review of systems. The headings and list box items can be customized as well as the order in which they appear and the observation terms with which they are associated. This decreases the time necessary document the visit as well as to capture structured data which can be used for reporting or clinical decision support.



1. The order and the value of radio button headings can be customized by specialty**.**
2. The List box values can be customized (add, subtract, or modify values).
3. Clicking a value in the ‘denies’ column (or ‘complains of’ column) automatically un-checks the values in the opposite list box.
4. Customization designates which body systems are populated by clicking the 1-NEG, 2-NEG, or 3-NEG action buttons.
5. The “super buttons” (All Negative or 1-NEG, 2-NEG, or 3-NEG action buttons) may be “hidden”, or not visible, for sites that want to “turn off” those features (through customization).
6. A problem-oriented ROS (ESRD, Prenatal, etc.) may be created through customization.
7. Patient-entered history from PatientLink® or Kryptiq® may be automatically inserted, or the user may be prompted that patient-entered history exists.

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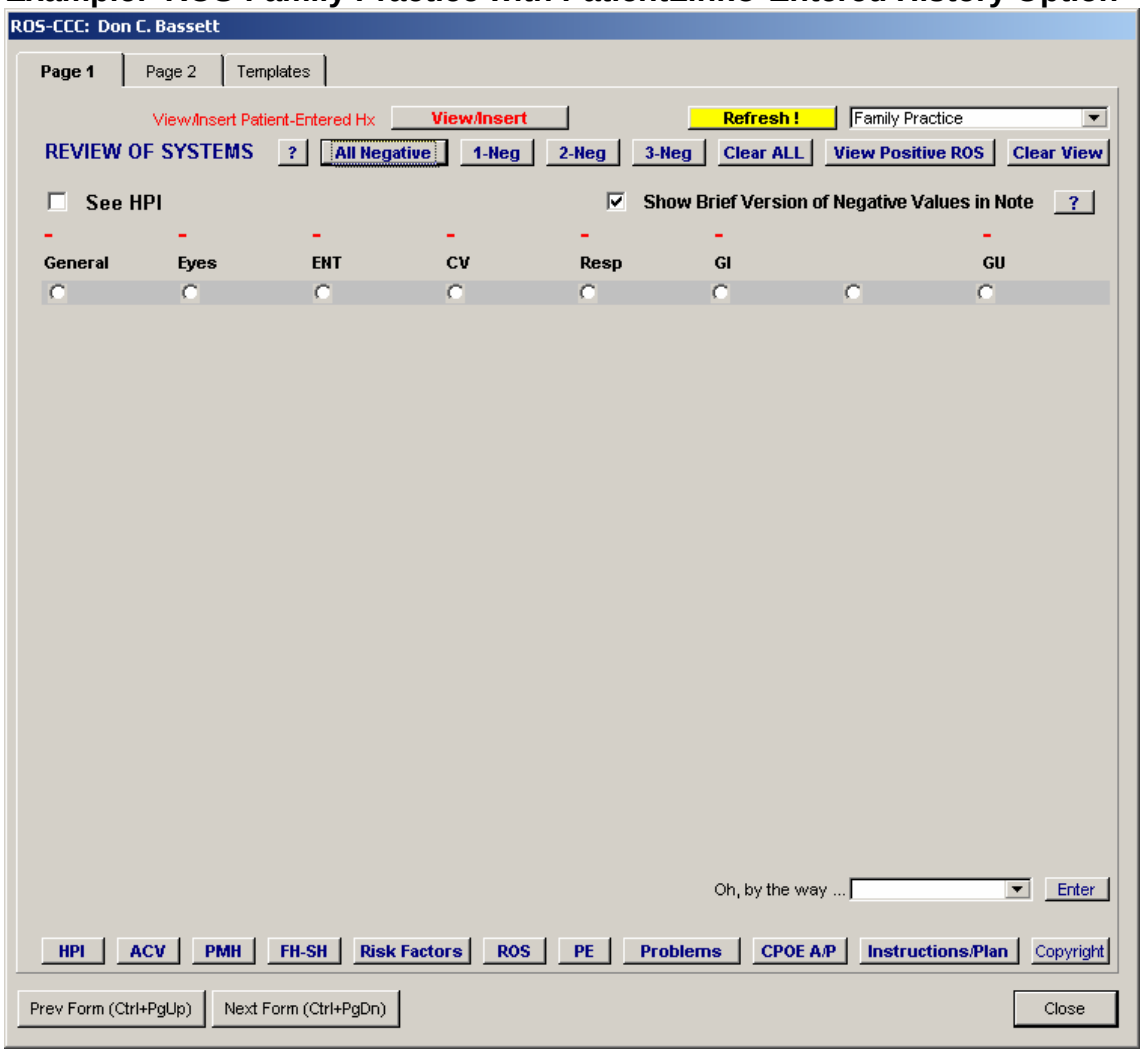
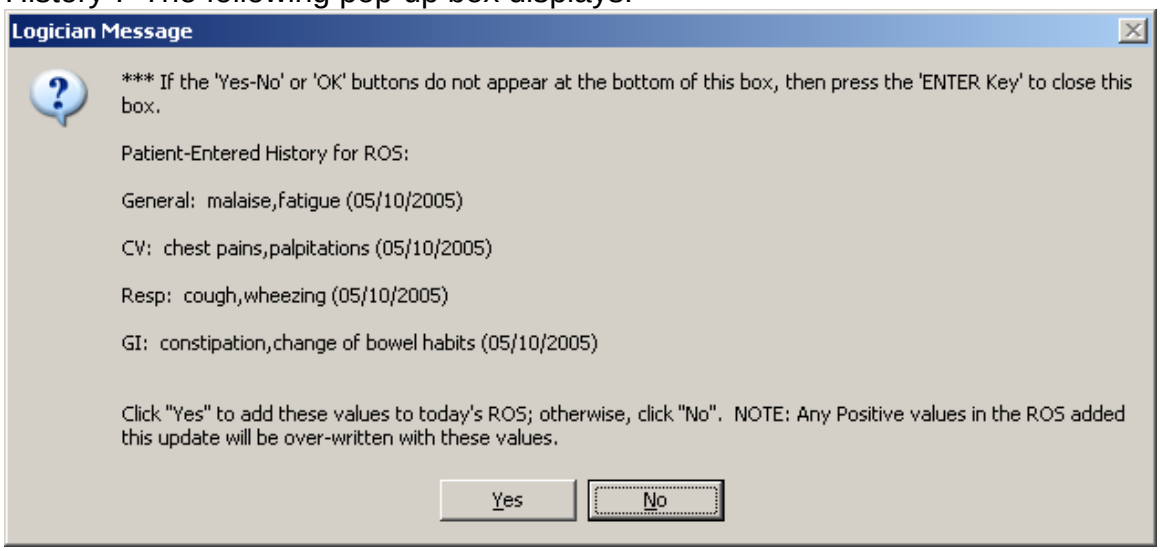
Example: ROS-Family Practice with PatientLink®-Entered History Option



Click the "All Negative" action button first then click "View/Insert Patient Entered History". The following pop-up box displays:



1. Click 'Yes' to insert the patient-entered history.
2. Positive complaints will automatically be checked (see below).

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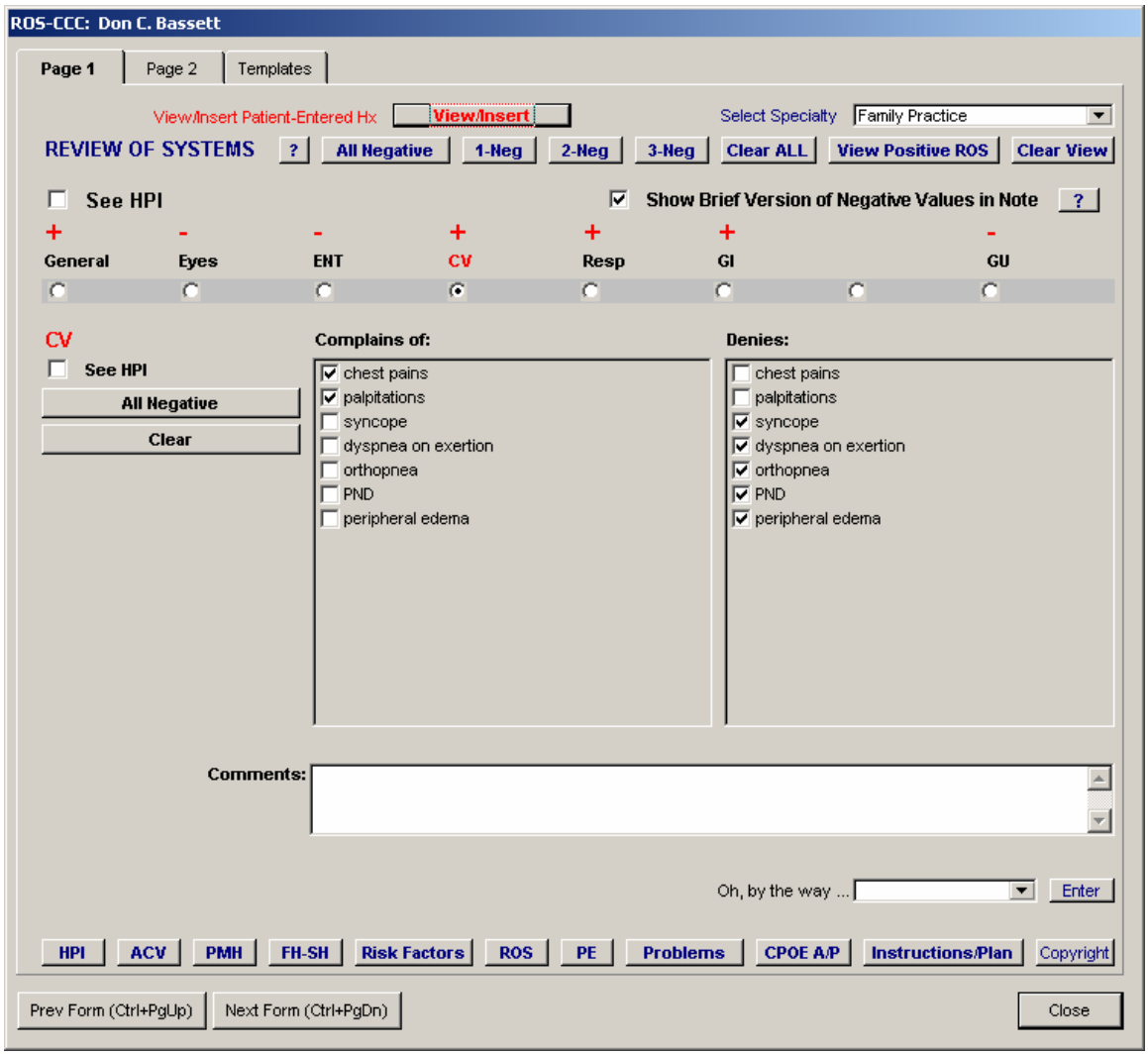
Example: Patient-Entered ROS for Family Practice (CV)



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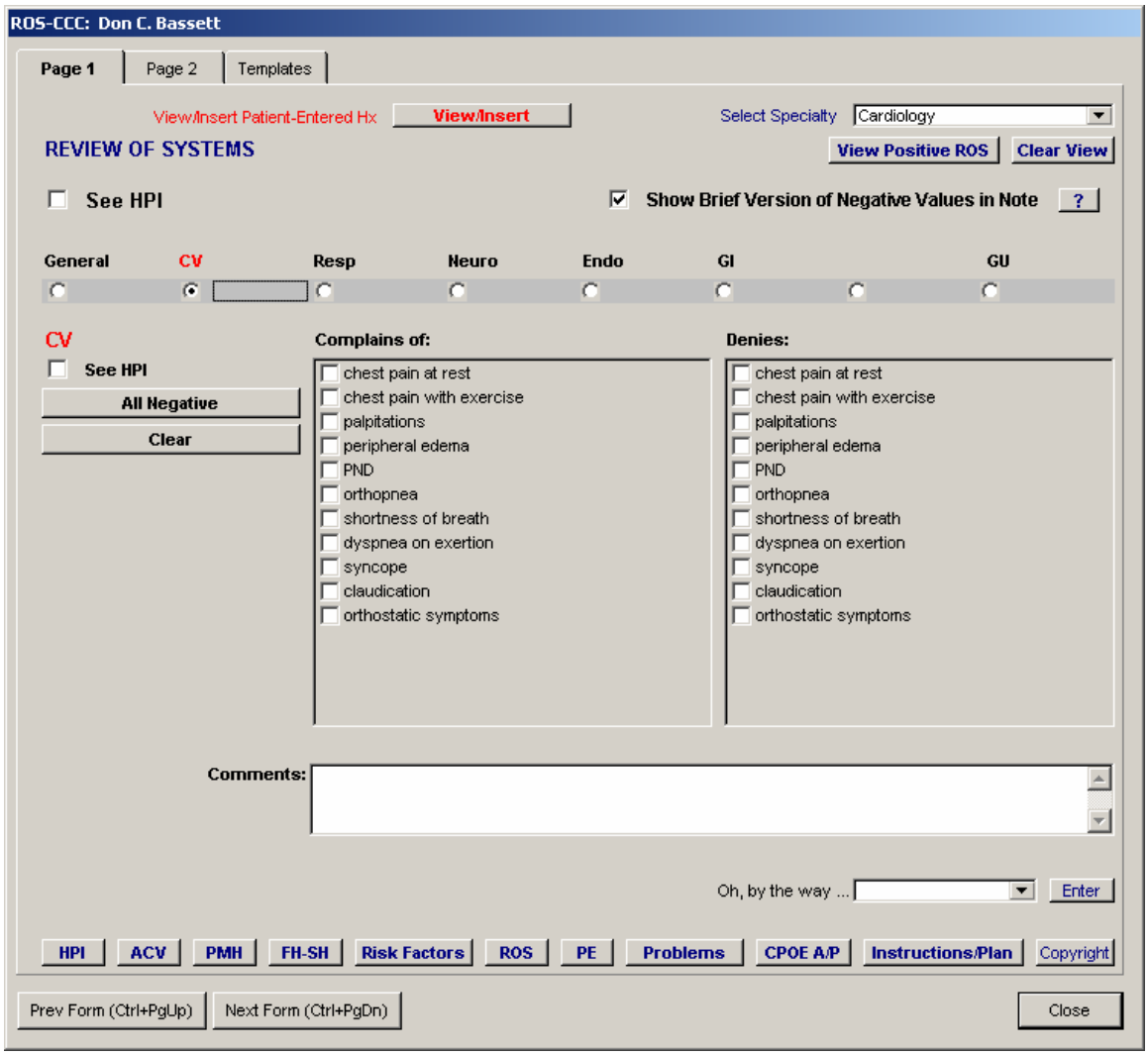
Example: ROS-Cardiology



1. Note that the list box for CV is more detailed and that the order of body systems is more cardiology-specific.
2. The “Show Brief Version of Negative Values in Note” generates an abbreviated text translation (see below). This may be customized to be the default value that is checked for all patients.

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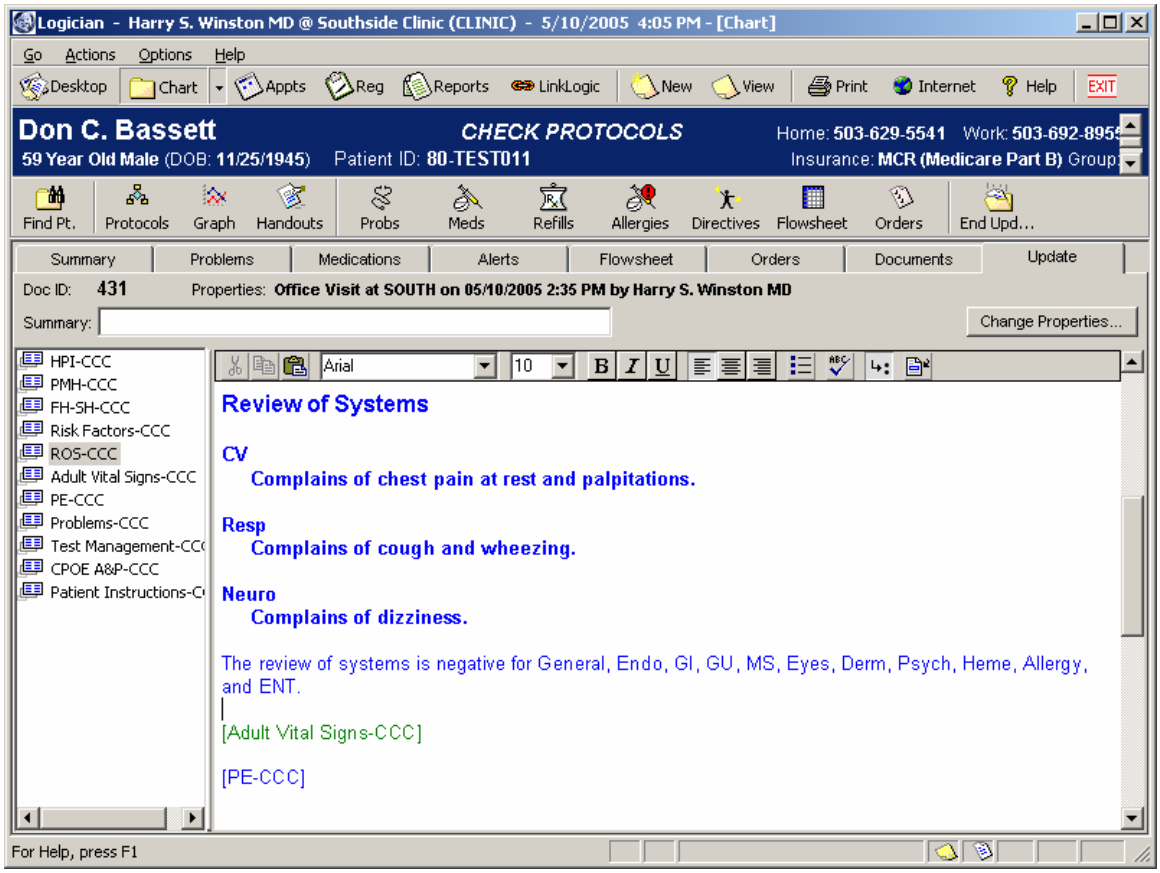
Example: Abbreviated ROS text translation set by checking "Show Brief Version of Negative Values in Note"



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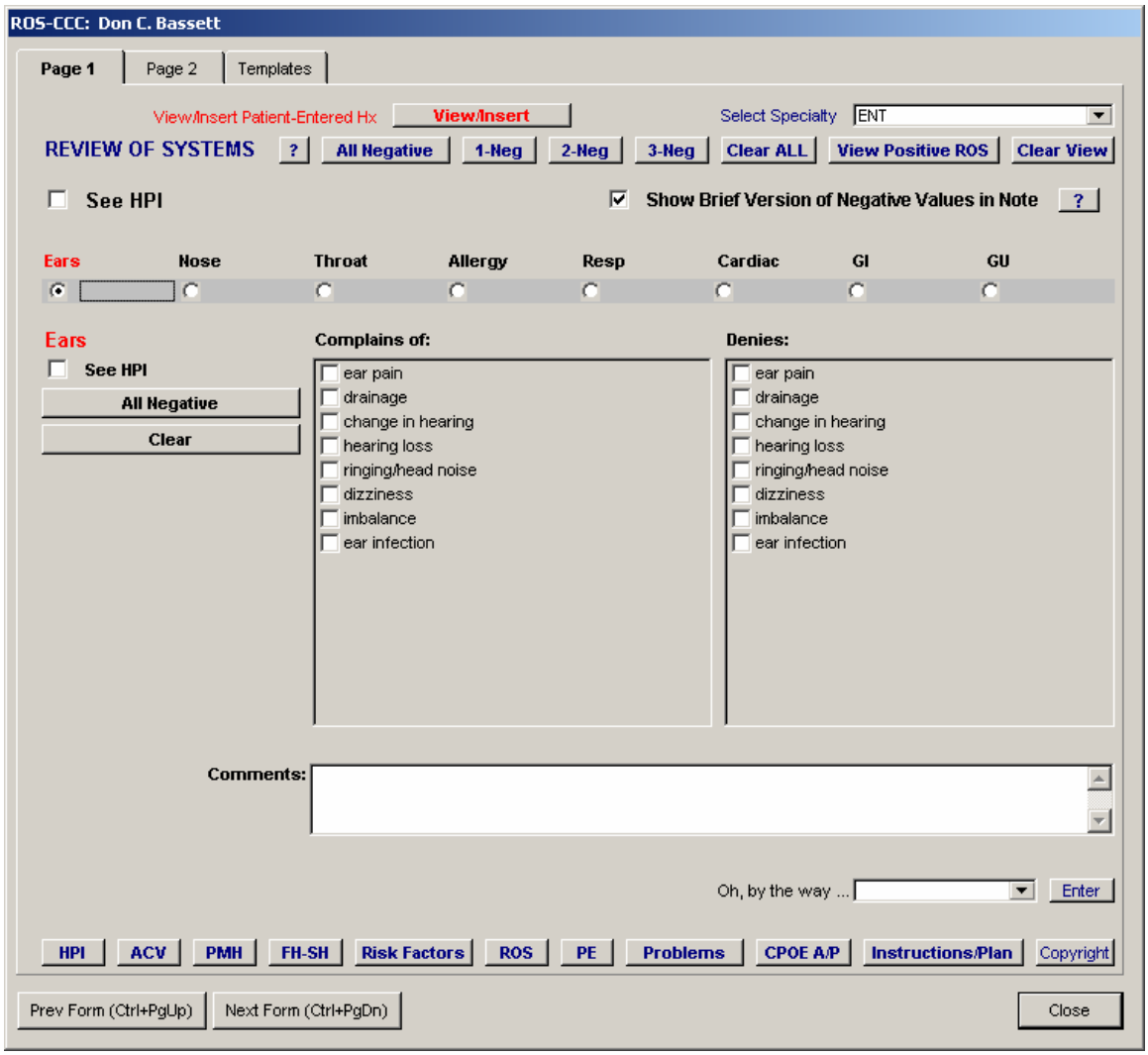
Example: ROS-ENT



1. The order and value of radio button headings can be customized by specialty**.**
2. The list box values can be customized (add, subtract, or modify values). Note in the example above, the order of the body systems and the body system values are expanded for ENT.
3. Clicking a value in the 'denies' column (or 'complains of' column) automatically un-checks the value in the opposite list box.
4. Customization designates which body systems are populated by clicking the 1-NEG, 2-NEG, or 3-NEG action buttons.
5. The "super buttons" (All Negative or 1-NEG, 2-NEG, or 3-NEG action buttons) may be "hidden", or not visible, for sites that want to "turn off" those features (through customization).
6. A problem-oriented ROS (ESRD, Prenatal, etc.) may be created through customization.
7. Patient-entered history from PatientLink® or Kryptiq® may be automatically inserted, or the user may be prompted that patient-entered history exists.

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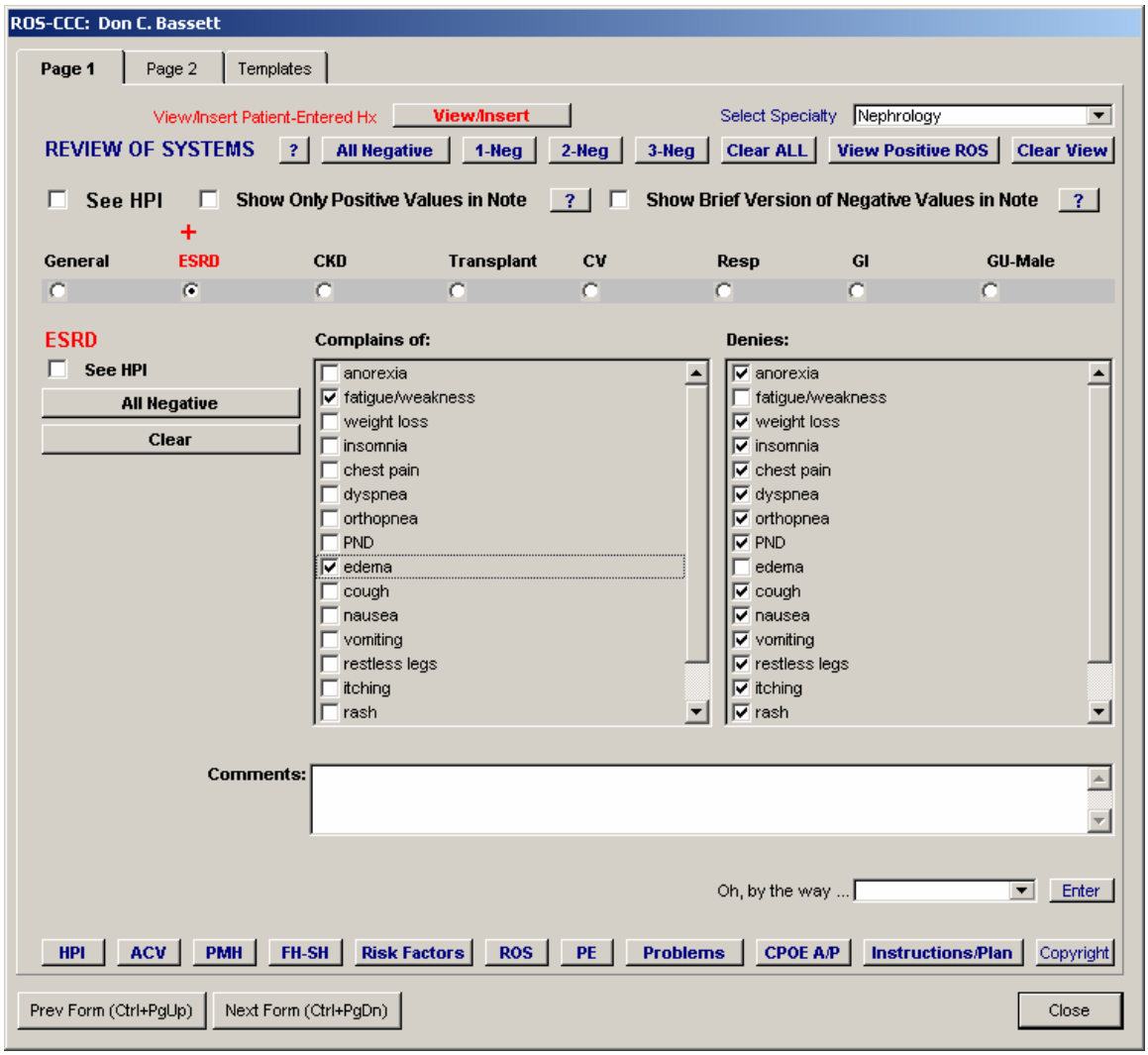
Example: ROS-Renal/Nephrology



1. The order and value of radio button headings can be customized by specialty**.** Note the order of systems and values expanded for Nephrology in the example above. Through customization, this can also be problem-specific (i.e., ESRD displays ROS values for multiple systems all in one list box, which allows the provider to rapidly document an intermediate disease-specific ROS.)
2. The list box values can be customized (add, subtract, or modify values).
3. Clicking a value in the 'denies' column (or 'complains of' column) automatically un-checks the value in the opposite list box.
4. Customization designates which body systems are populated by clicking the 1-NEG, 2-NEG, or 3-NEG action buttons.
5. The "super buttons" (All Negative or 1-NEG, 2-NEG, or 3-NEG action buttons) may be "hidden", or not visible, for sites that want to "turn off" those features (through customization).
6. Patient-entered history from PatientLink® or Kryptiq® may be automatically inserted, or the user may be prompted that patient-entered history exists.

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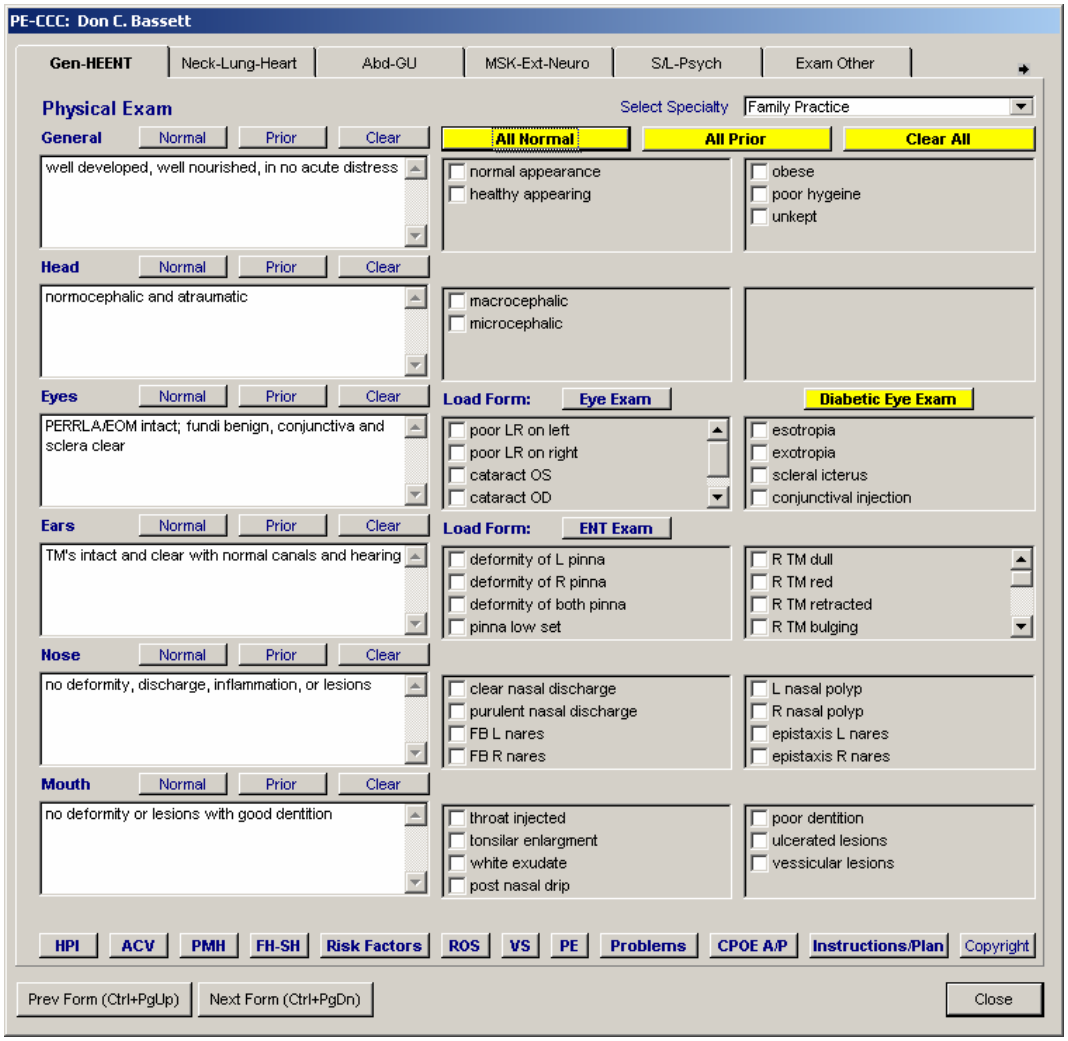
PE-CCC

The PE–CCC form is designed to allow for rapid point-and-click entry of a general physical exam, as well as to load and go to a variety of expanded detailed examinations (cardiac, GU, orthopedic, ENT, etc.). Each site can customize the normal default values, the observation terms to which they are attached, and the values in the two list boxes. The list box values can be either normal or abnormal values. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.

Example: General-HEENT



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. A variety of expanded detailed examinations can be loaded and accessed by clicking the specific exam action button: ENT Exam, EYE Exam, Diabetic Eye Exam (highlighted in yellow if diagnosis on problem list), CV Exam, GU Exam, Orthopedic Exams, Diabetic Foot Exam (highlighted in yellow if diagnosis on problem list), and Neurologic Exam.

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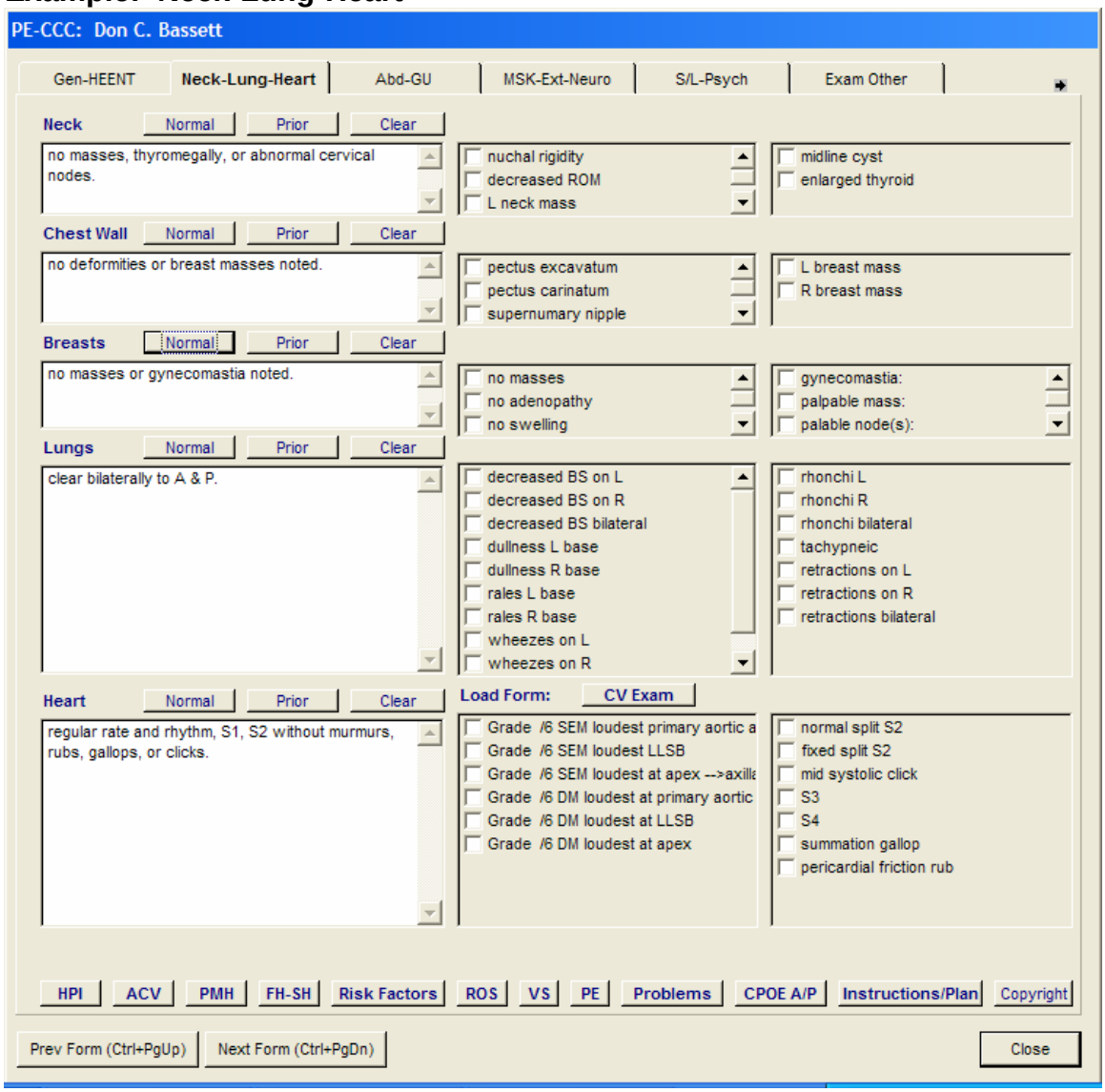
Example: Neck-Lung-Heart



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Click the CV Exam action button to load and go to detailed cardiovascular exam form.

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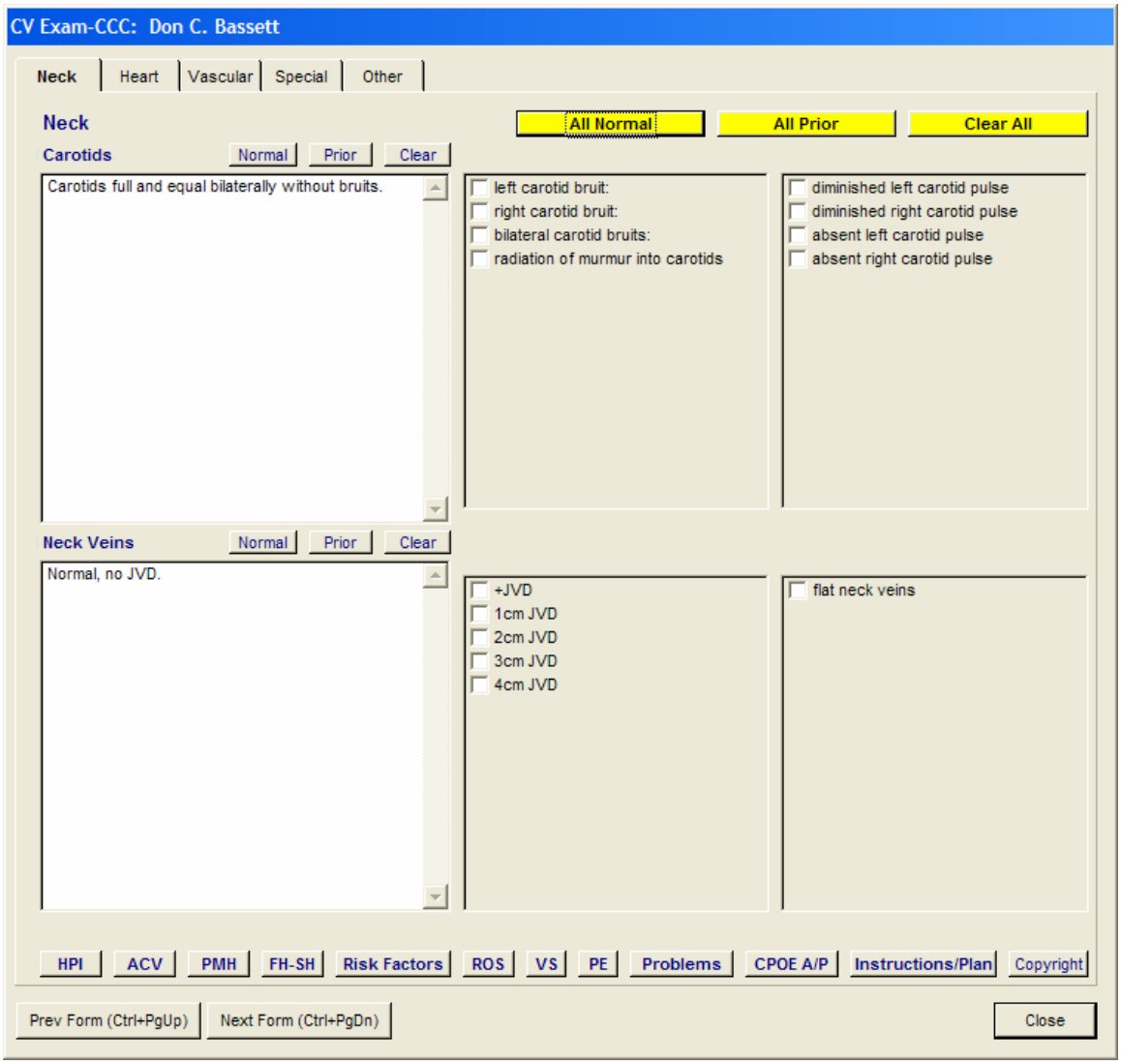
Example: Detailed Cardiovascular Exam

CV Exam-CCC

Neck



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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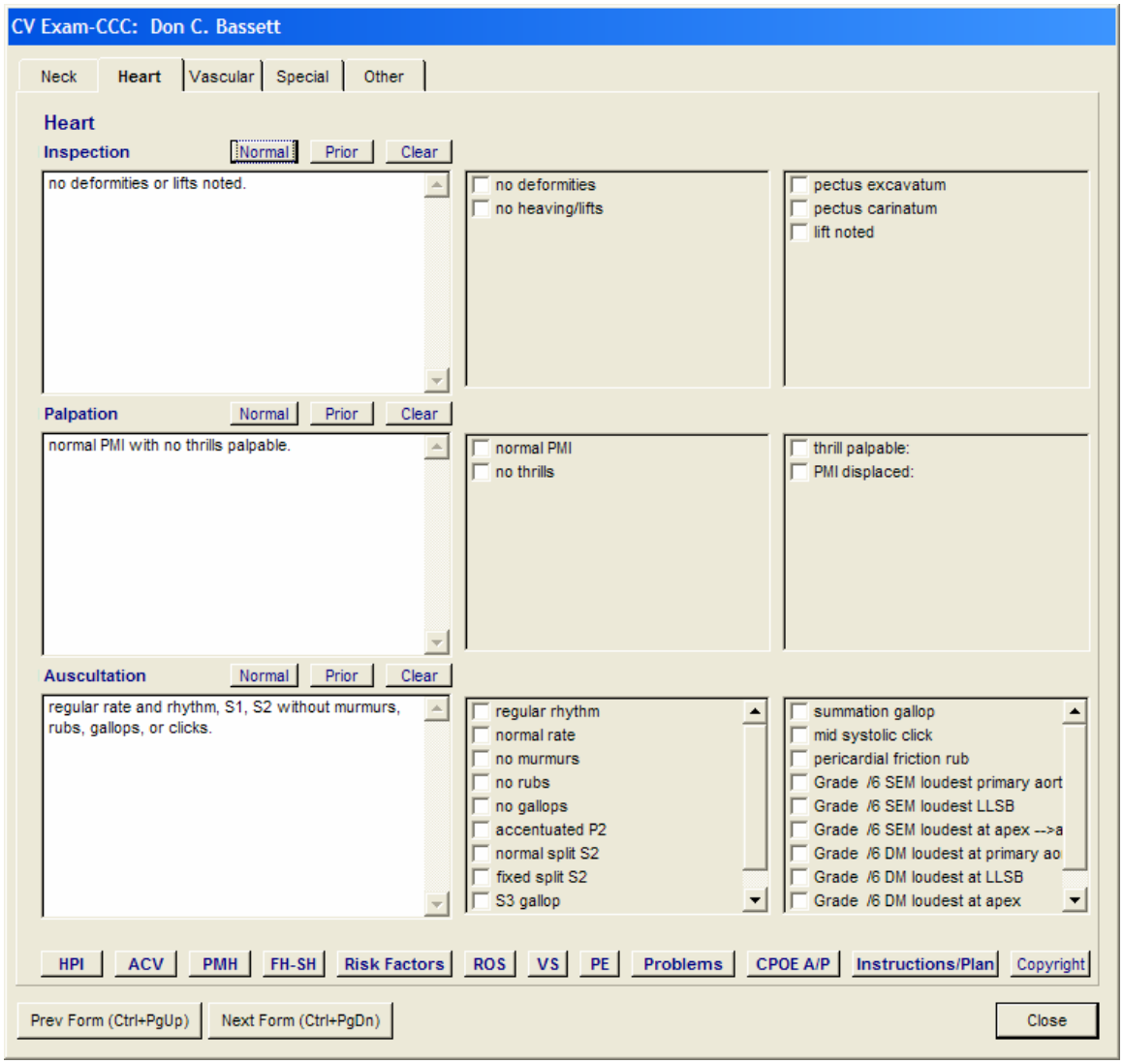
Example: CV Exam-CCC
Heart



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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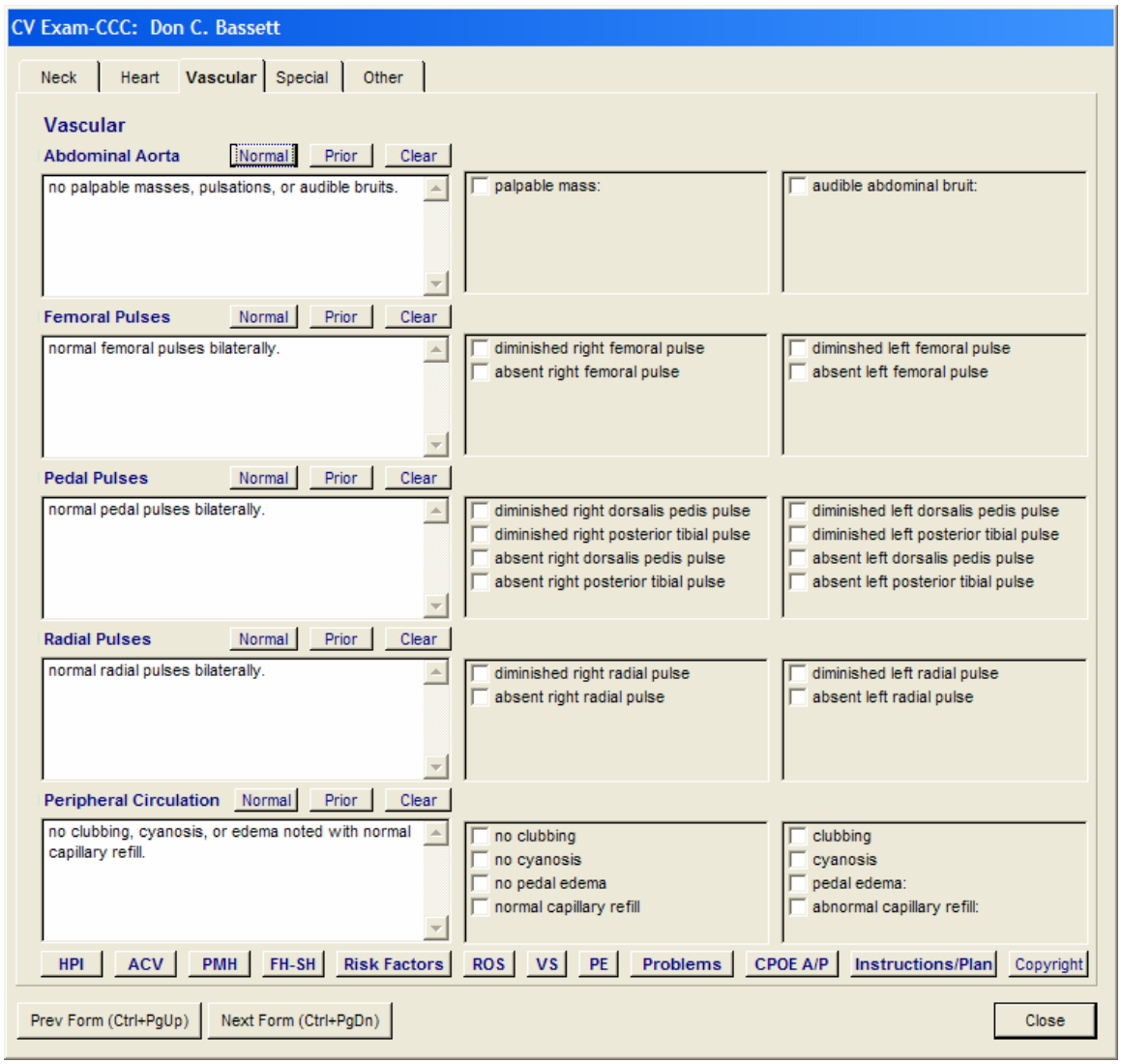
Example: CV Exam-CCC
Vascular



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.
5. Additional fields may be added on the “Special” Tab such as ABI (Ankle Brachial Index), etc.

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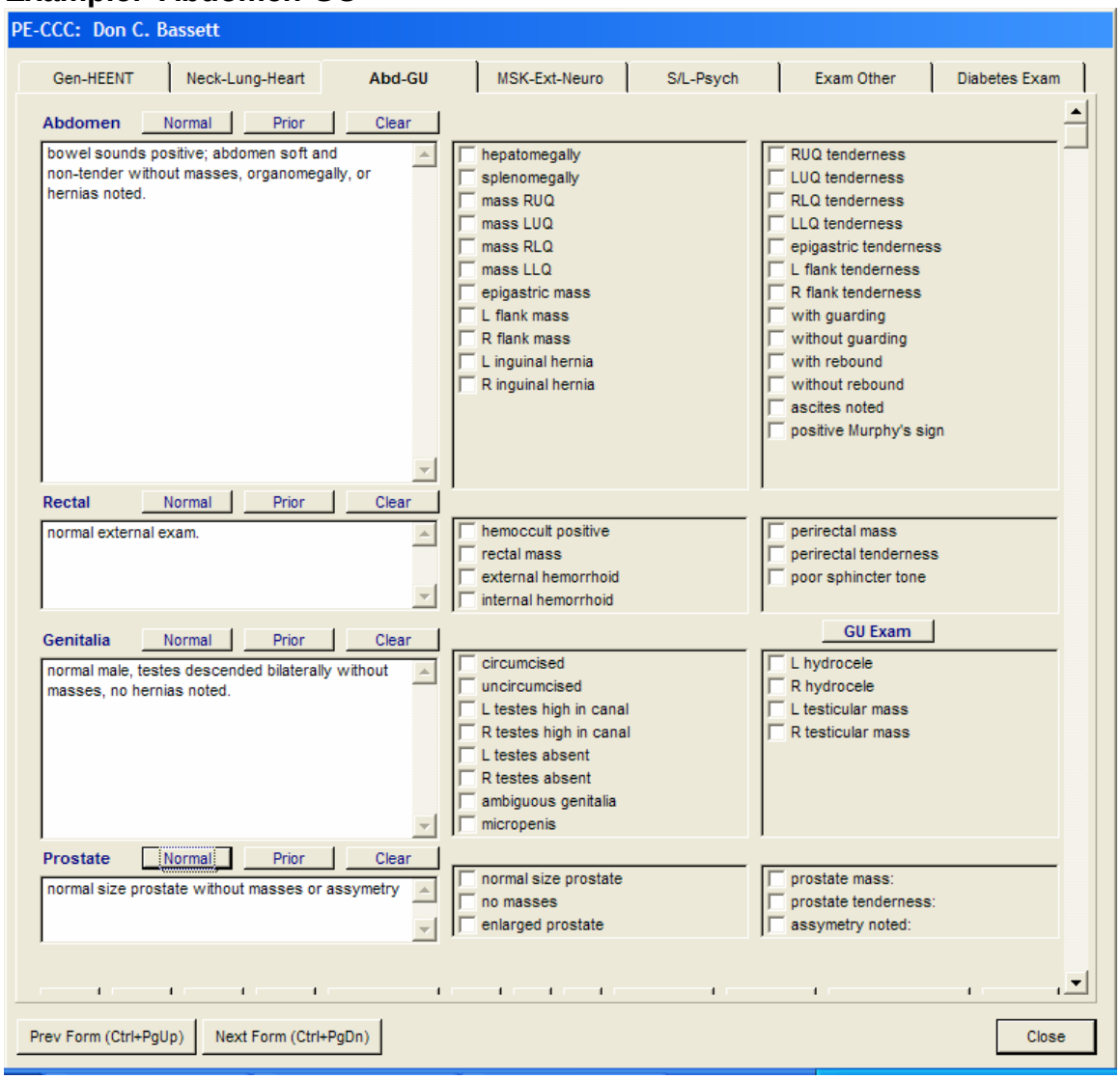
Example: Abdomen-GU



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.
5. Click the GU Exam action button to load and go to detailed genitourinary exam form (male or female).

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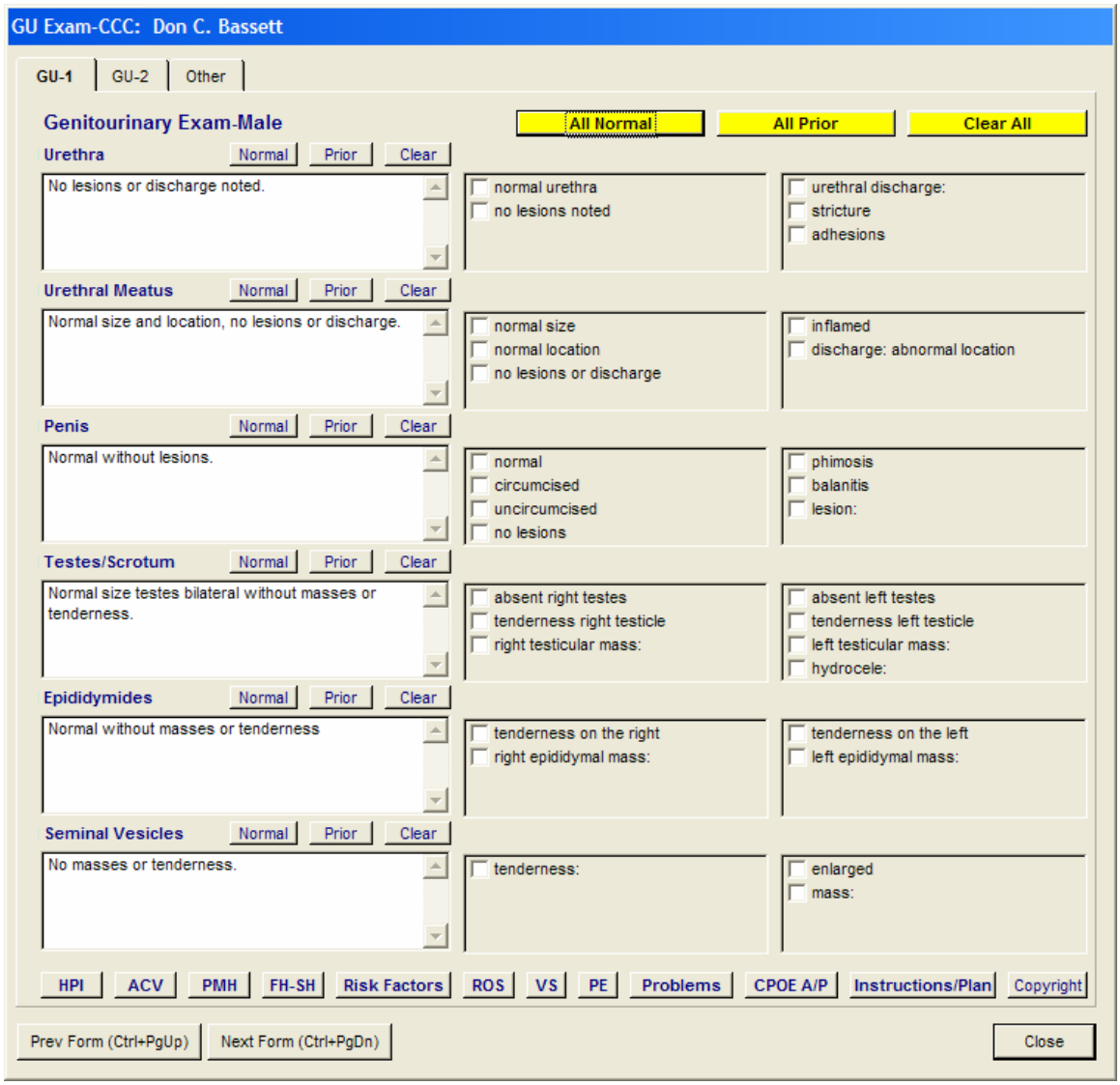
Example: Detailed GU Exam-Male
GU Exam-CCC
Male GU-1



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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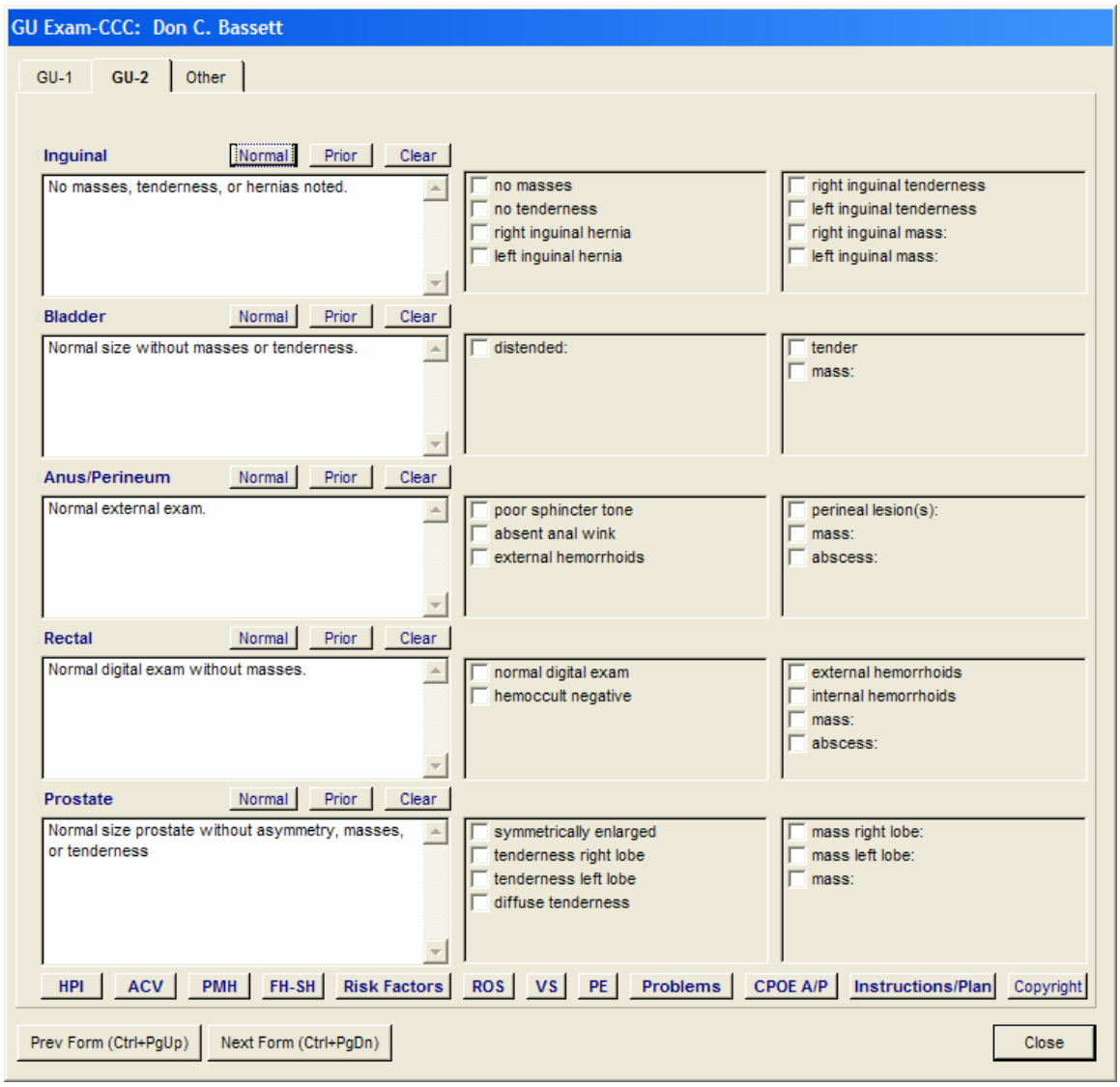
Example: GU Exam-CCC
Male GU-2



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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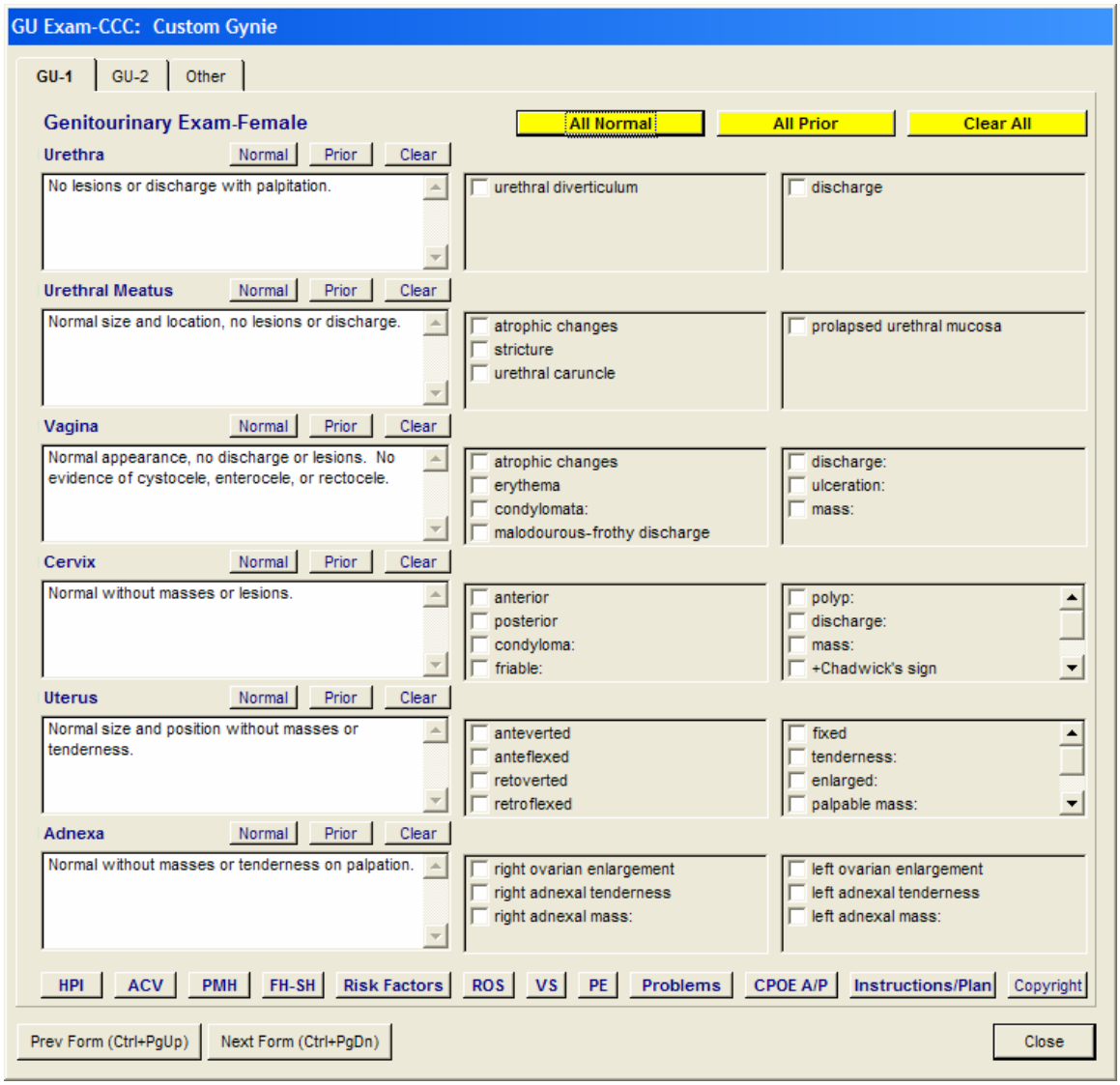
Example: Detailed GU Exam-Female
GU Exam-CCC
Female GU-1



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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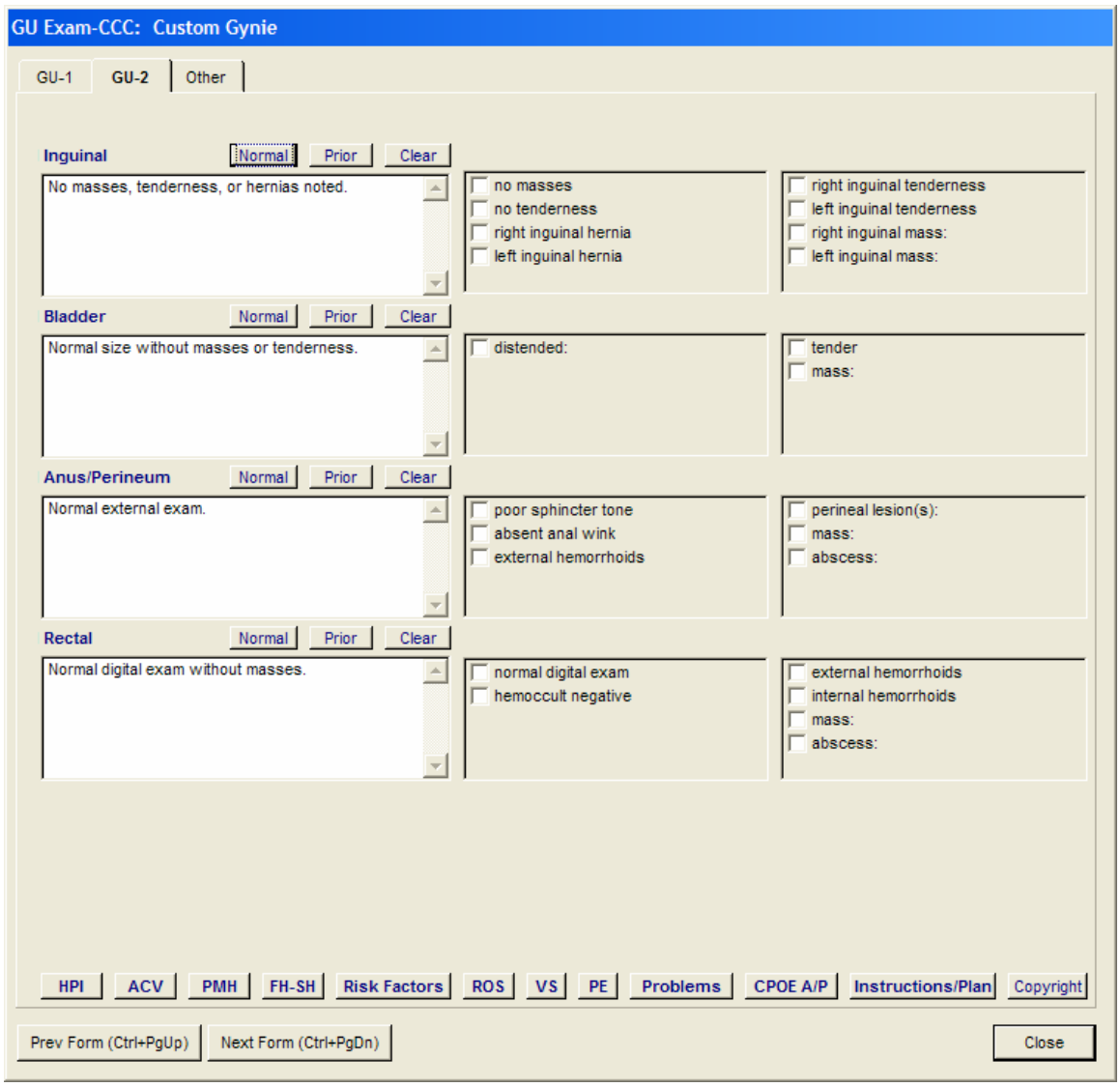
Example: GU Exam-CCC
Female GU-2



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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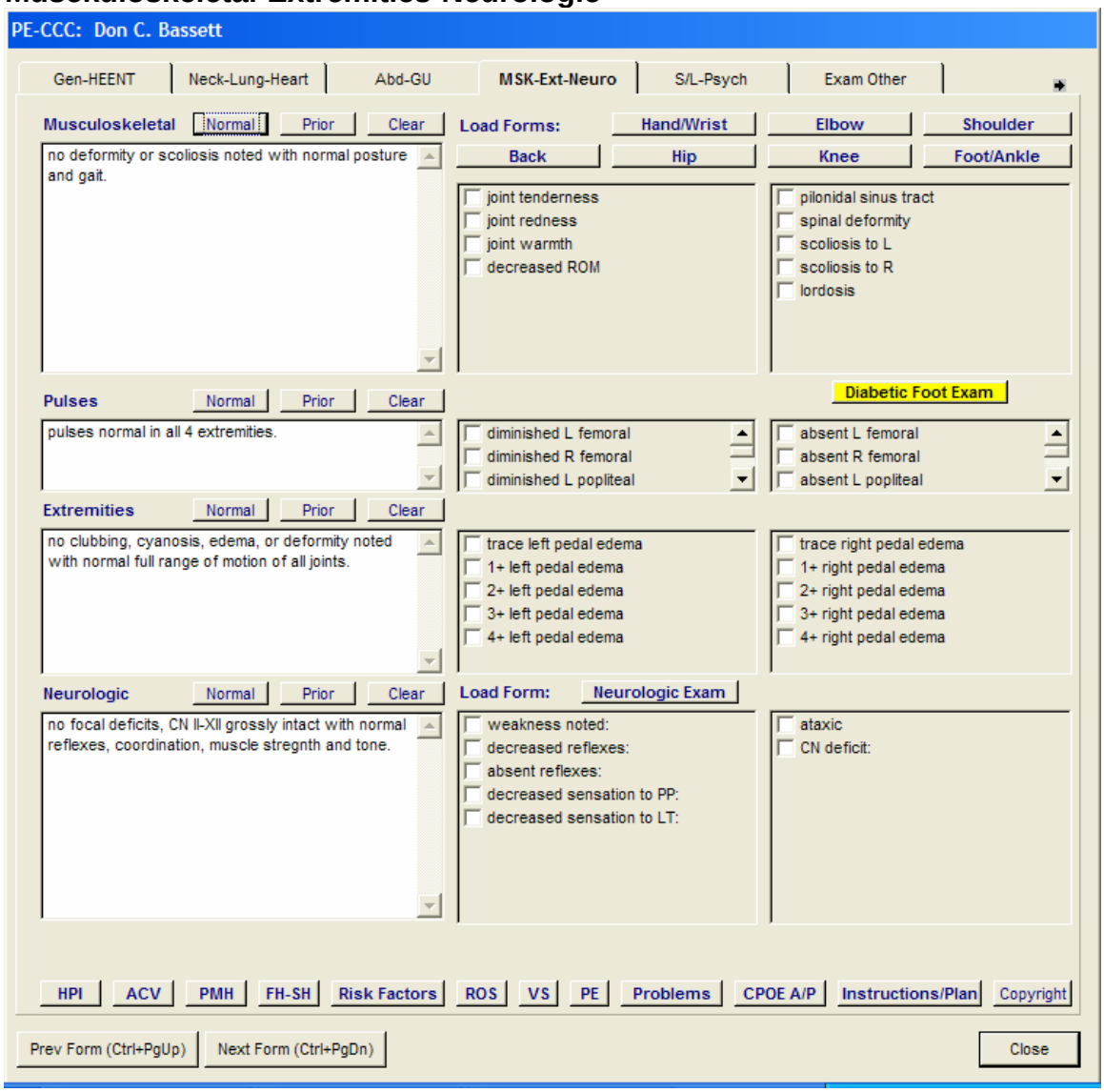
Example: MSK-Ext-Neuro

Musckuloskeletal-Extremities-Neurologic



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.
5. Click the Diabetic Foot Exam action button to go to the Diabetic Foot Exam section (the button is highlighted in yellow if a diagnosis of Diabetes is on the patient's Problem List.)
6. Click the Neurologic Exam action button to load and go to detailed neurologic exam form.

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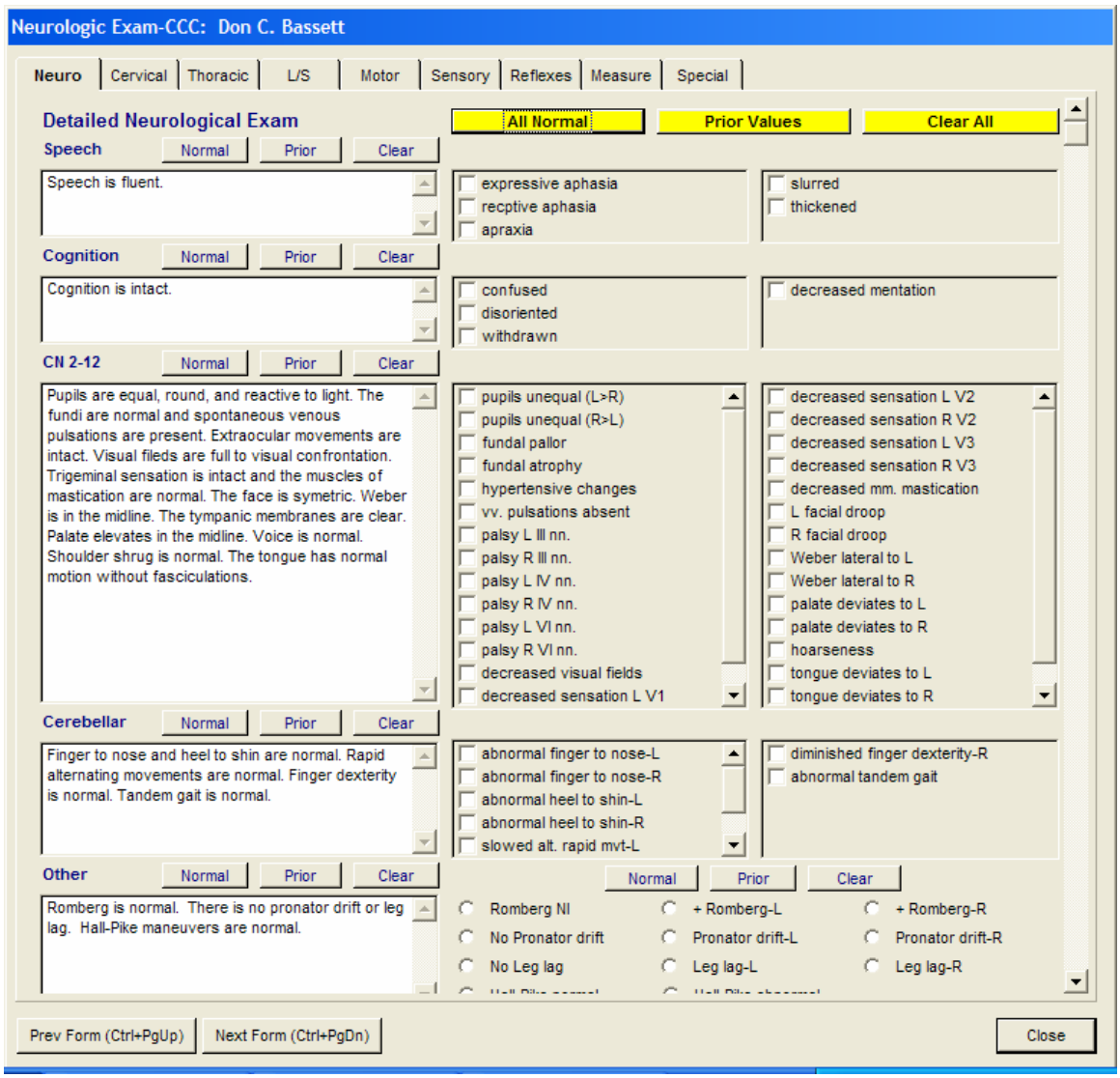
Example: Detailed Neurologic Exam
Neurologic Exam-CCC
Speech
Cognition
Cranial Nerves
Cerebellar
Other



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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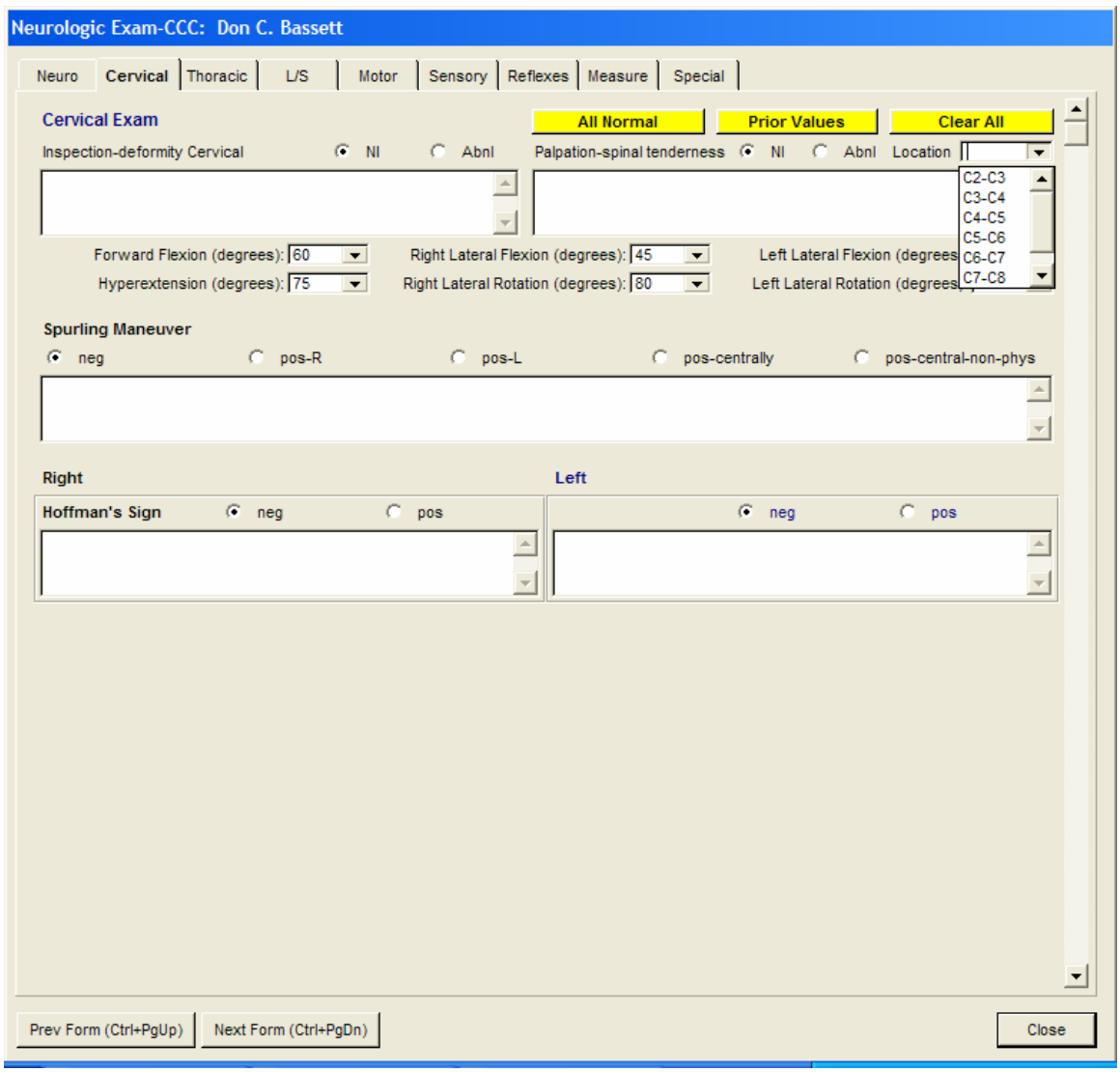
Example: Neurologic Exam-CCC Cervical



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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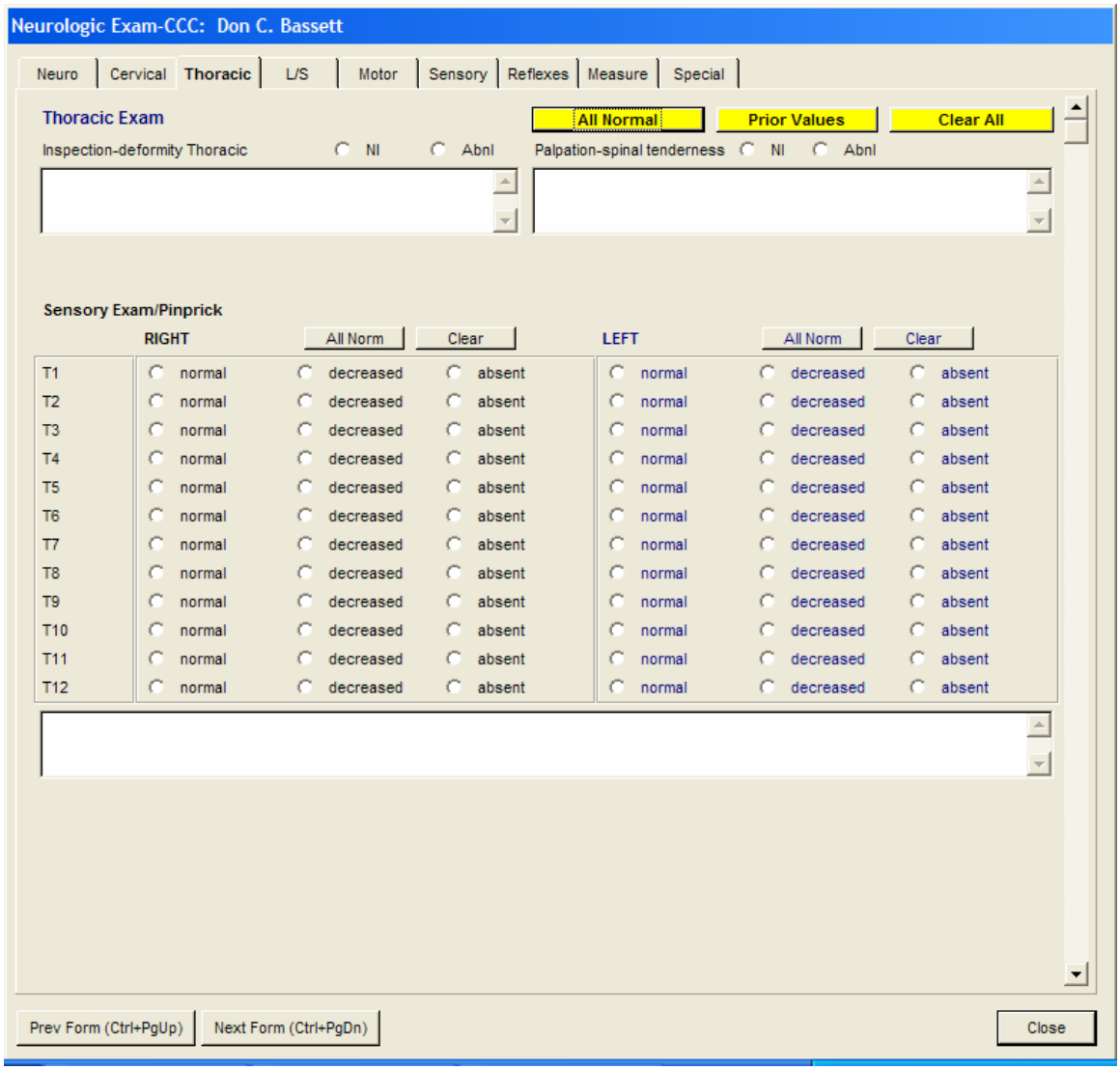
Example: Neurologic Exam-CCC
Thoracic



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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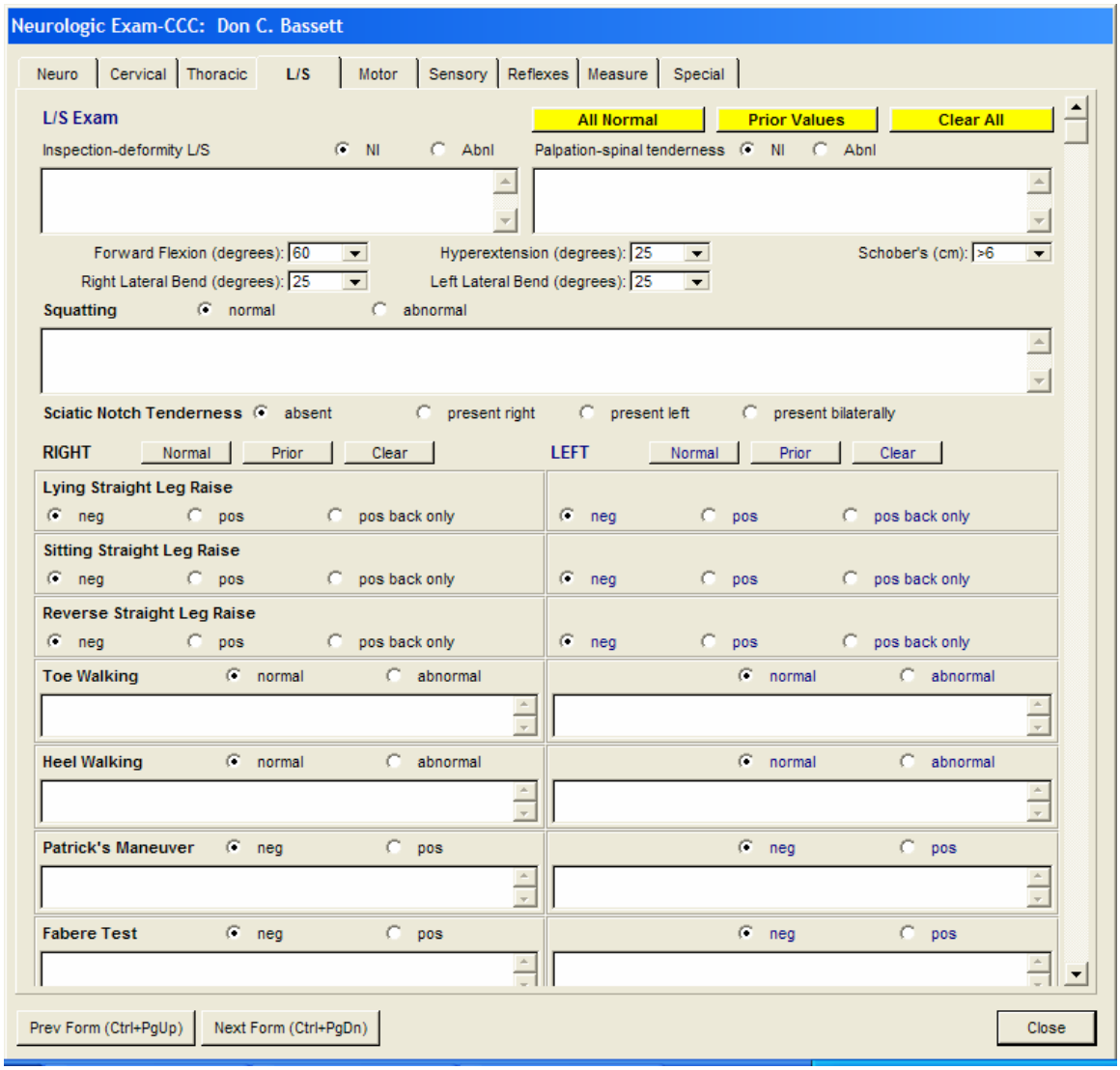
Example: Neurologic Exam-CCC Lumbar/Sacral



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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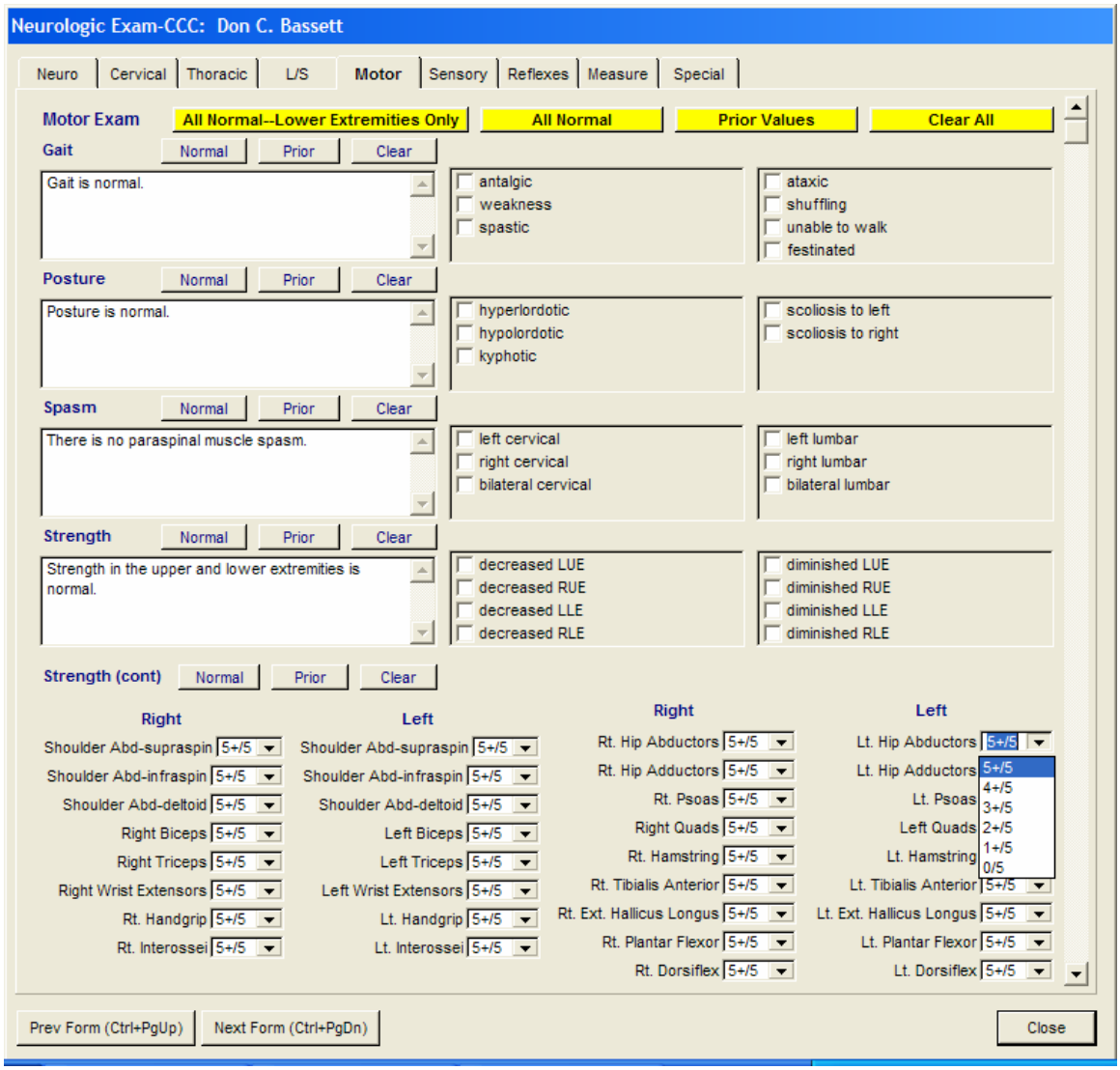
Example: Neurologic Exam-CCC
Motor



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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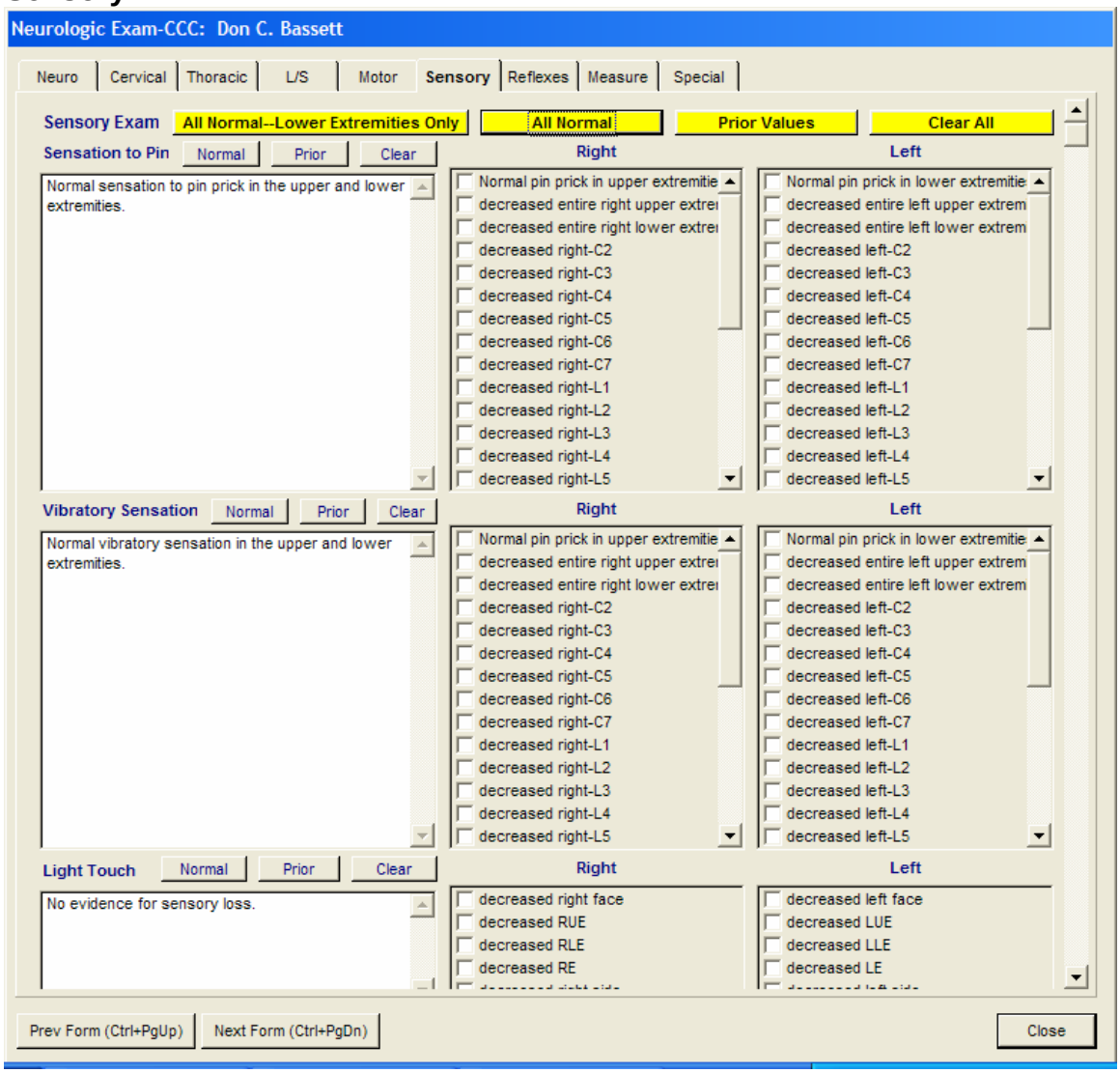
Example: Neurologic Exam-CCC Sensory



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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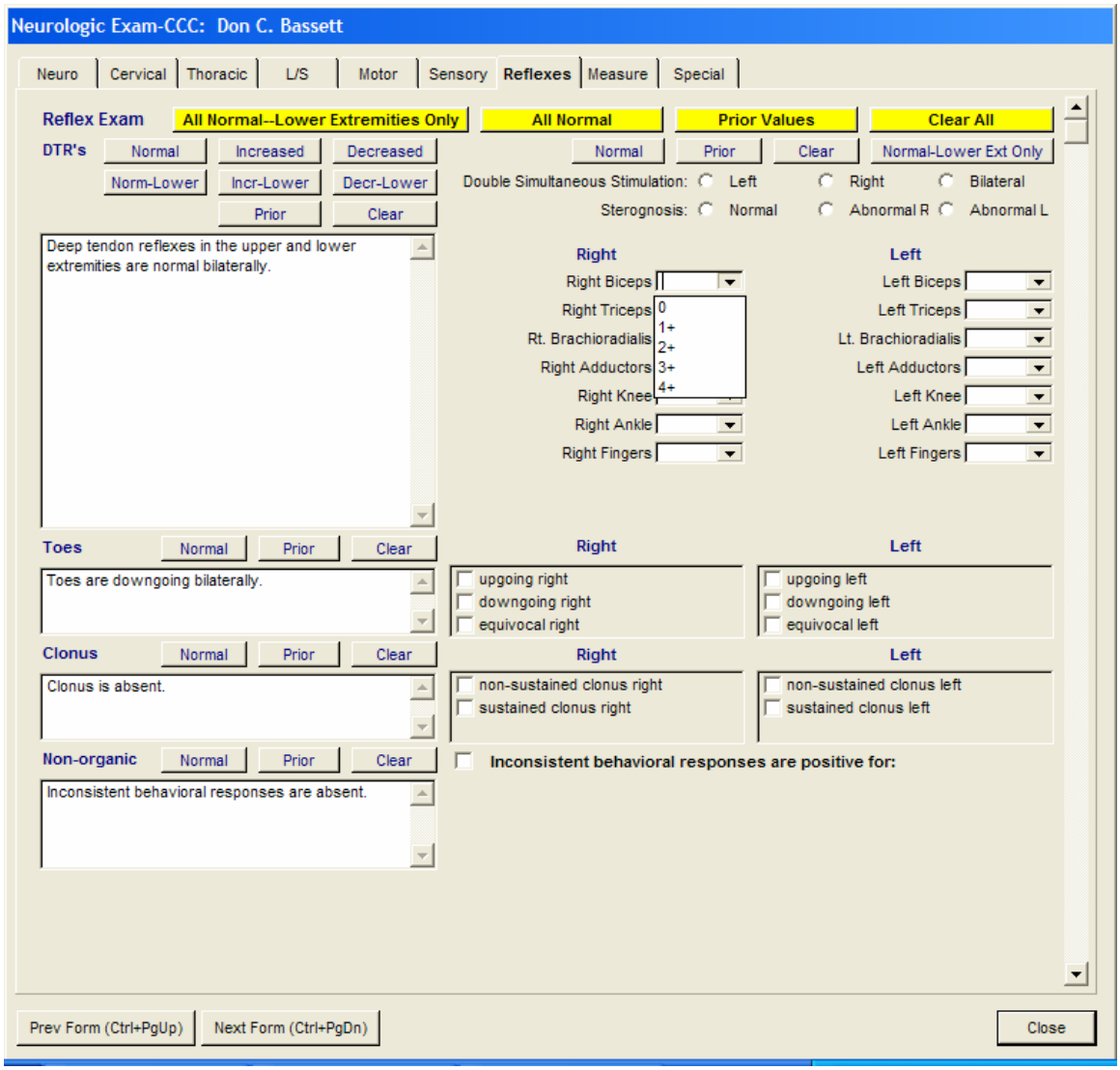
Example: Neurologic Exam-CCC
Reflexes



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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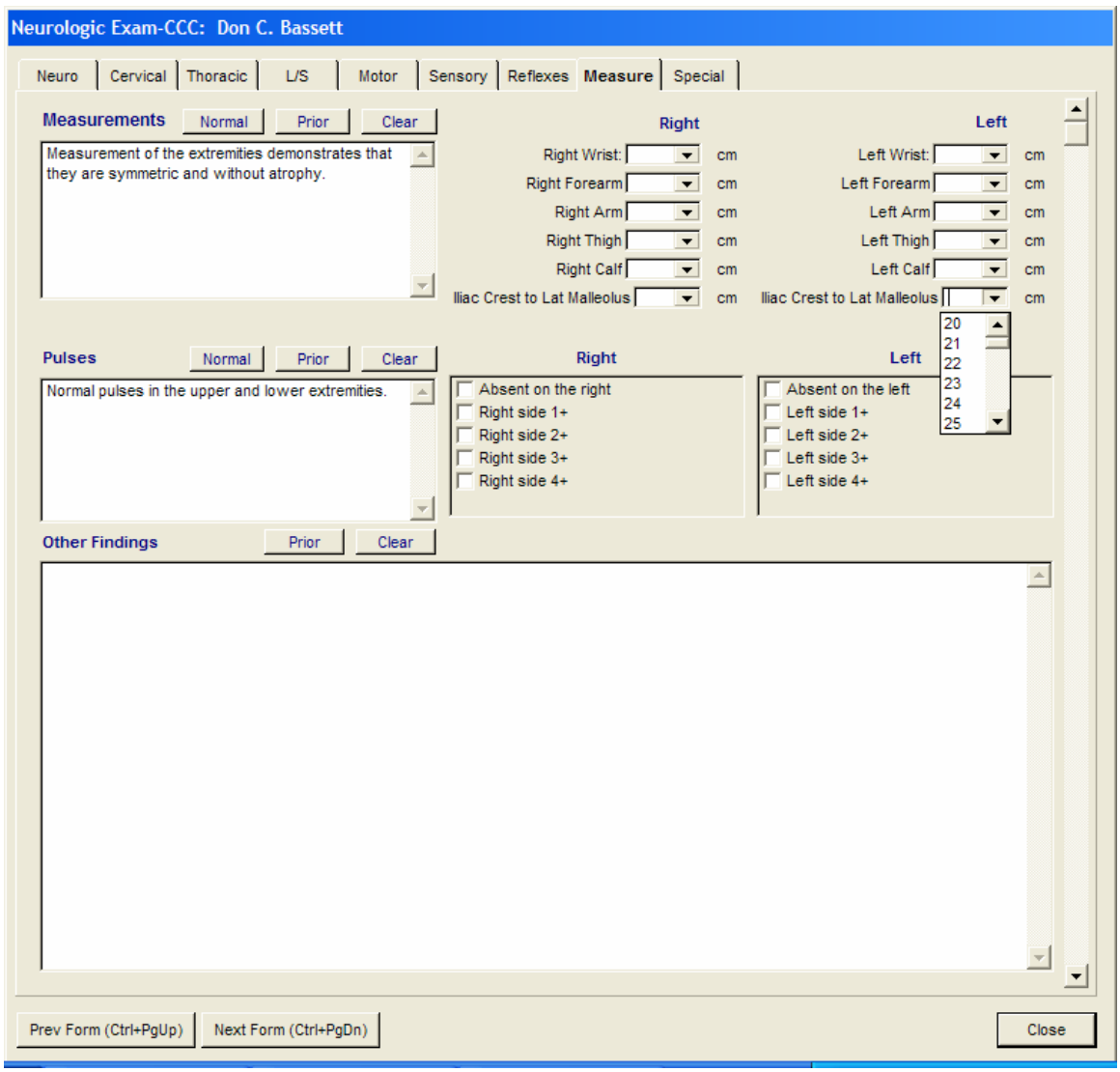
Example: Neurologic Exam-CCC Measure



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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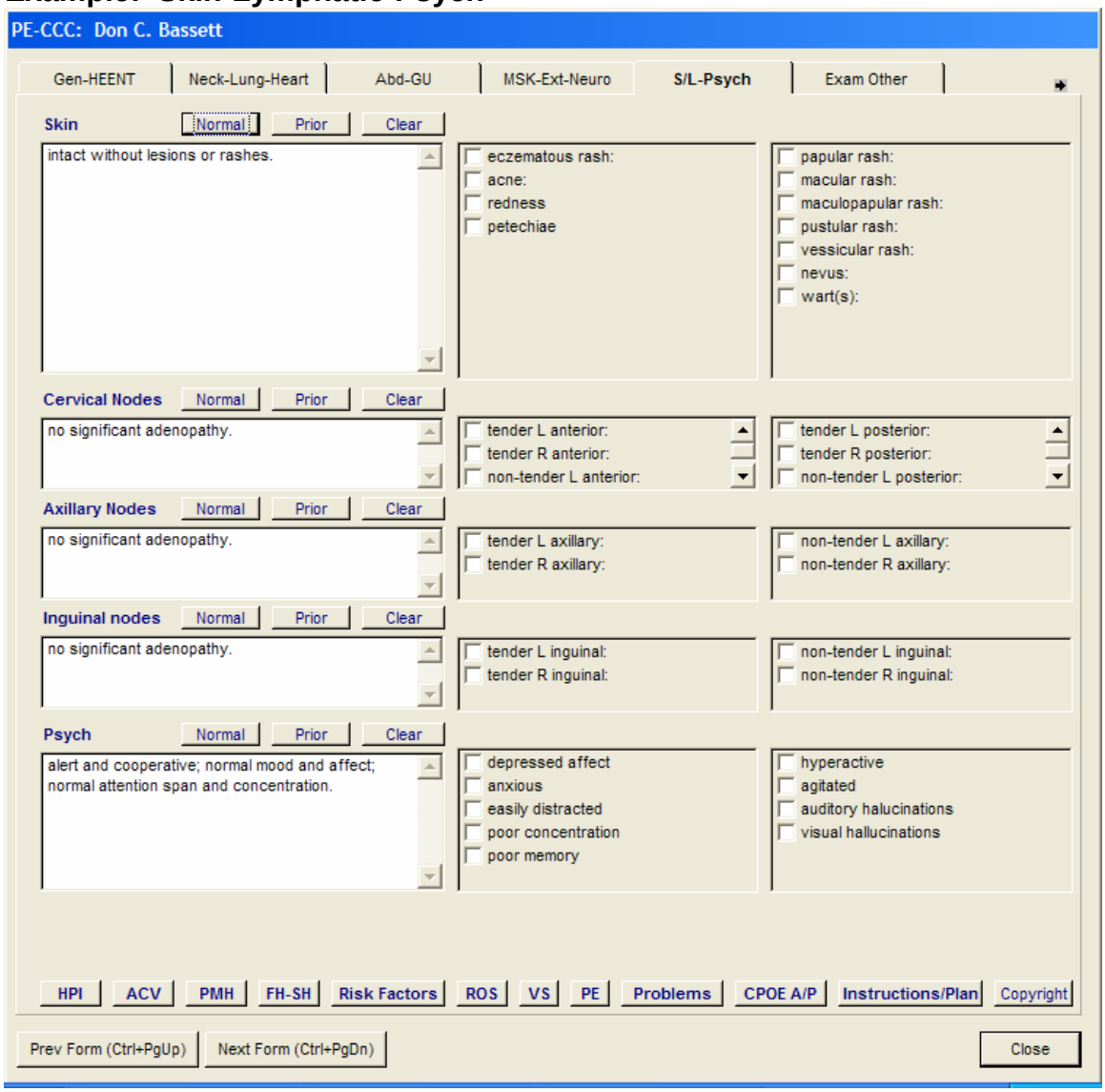
Example: Skin-Lymphatic-Psych



1. The following may be customized by specialty: normal default values, observation terms that are populated, and the items in the two list boxes.
2. The list box values may contain either normal or abnormal values.
3. Charting by exception allows the provider to rapidly document a detailed PE as well as capture structured data which can be used for reporting or clinical decision support.
4. The provider can use voice recognition (CCC VRI-Dragon 8 Medical) to dictate into structured data fields.

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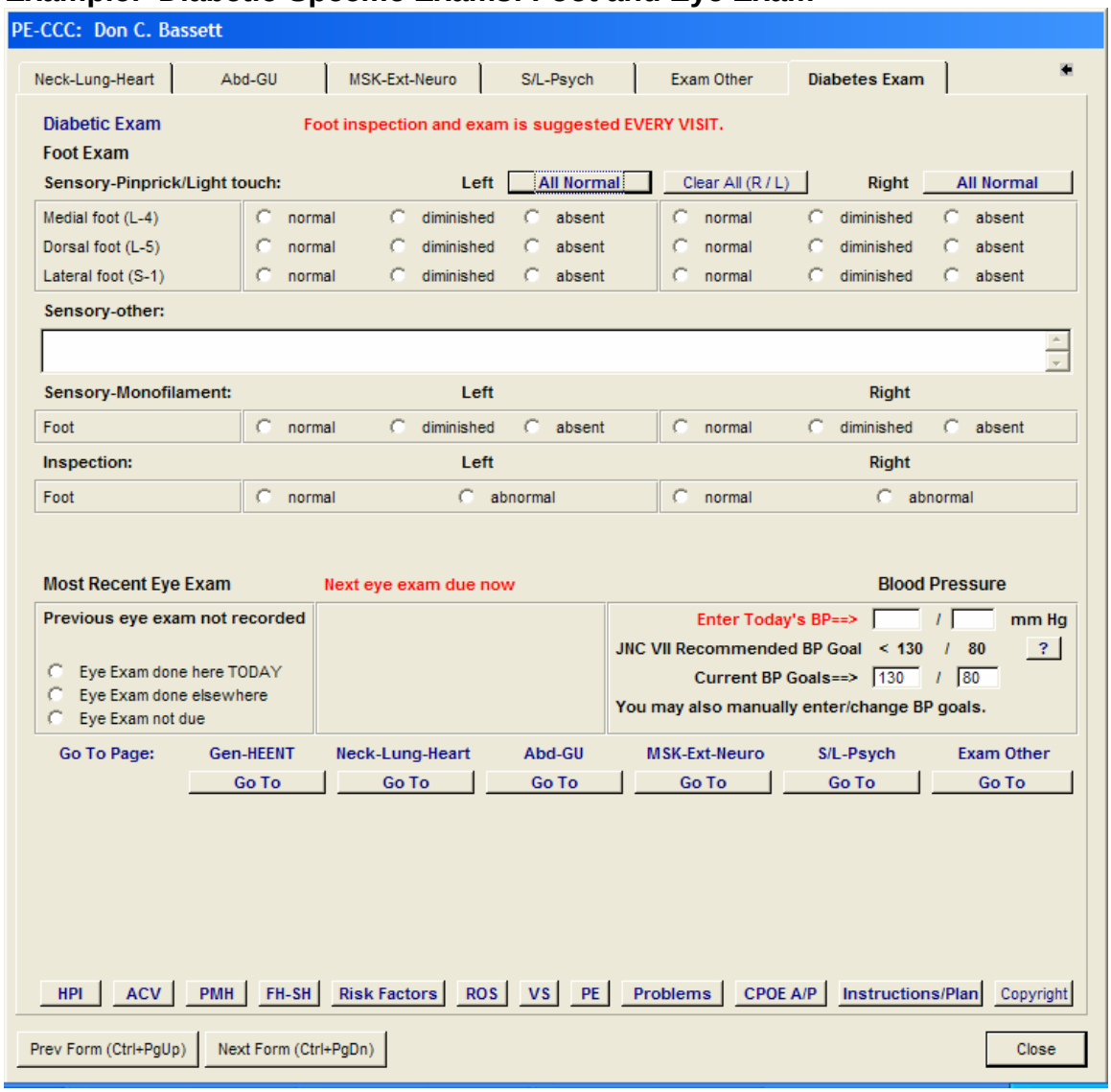
Example: Diabetic-Specific Exams: Foot and Eye Exam



NOTE: The results push to multiple obs terms for outcomes tracking purposes (i.e., Diab Eye Exam, Monofilament Exam, and Diab Foot Exam, but each site can also designate one alternative observation term to populate for reporting consistency.)

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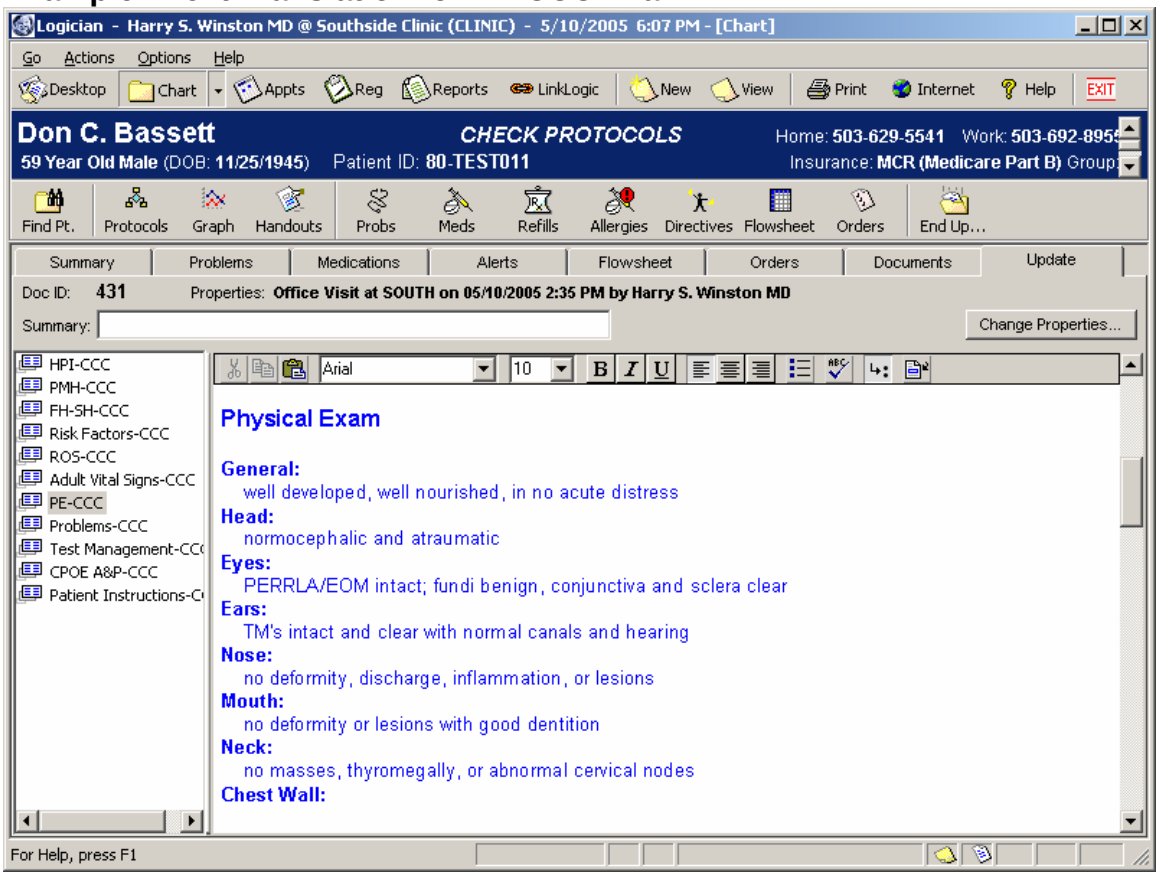
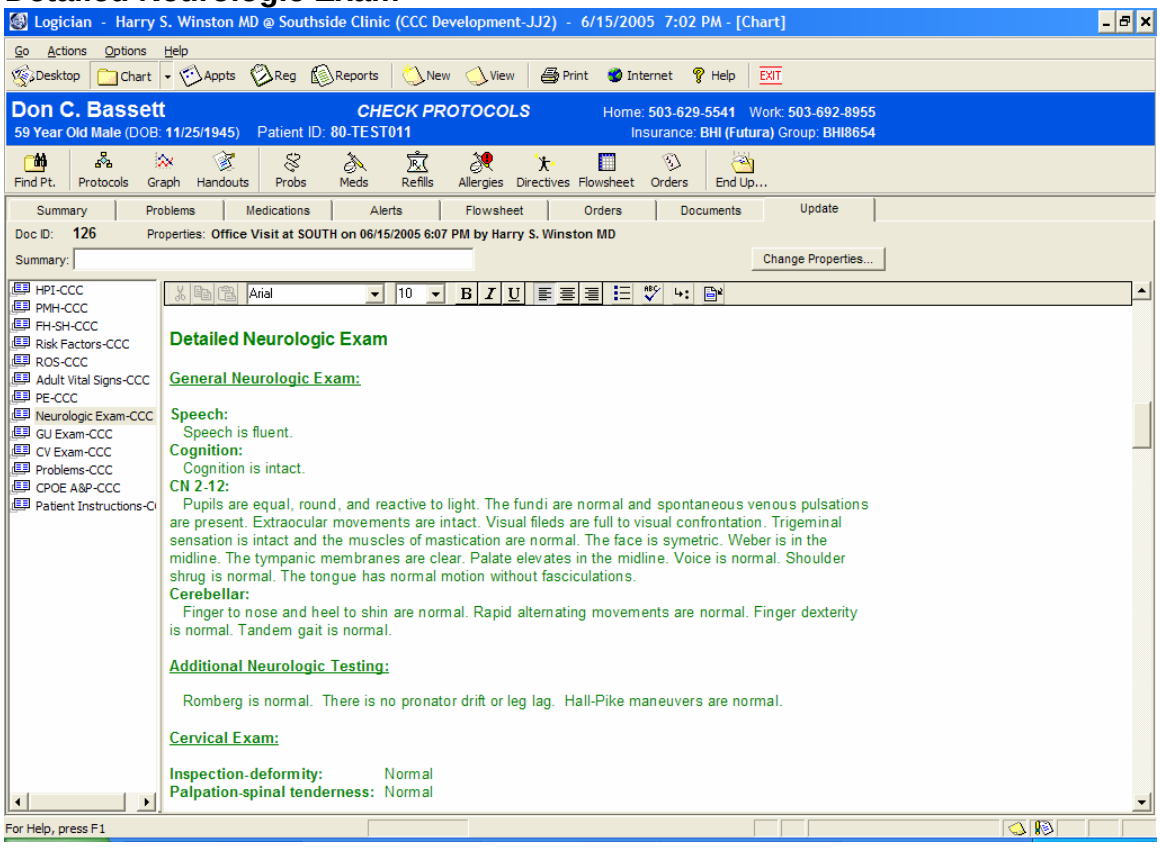
Example: Text Translation for PE-CCC Exam



Example: Text Translation for PE-CCC Exam
Detailed Neurologic Exam



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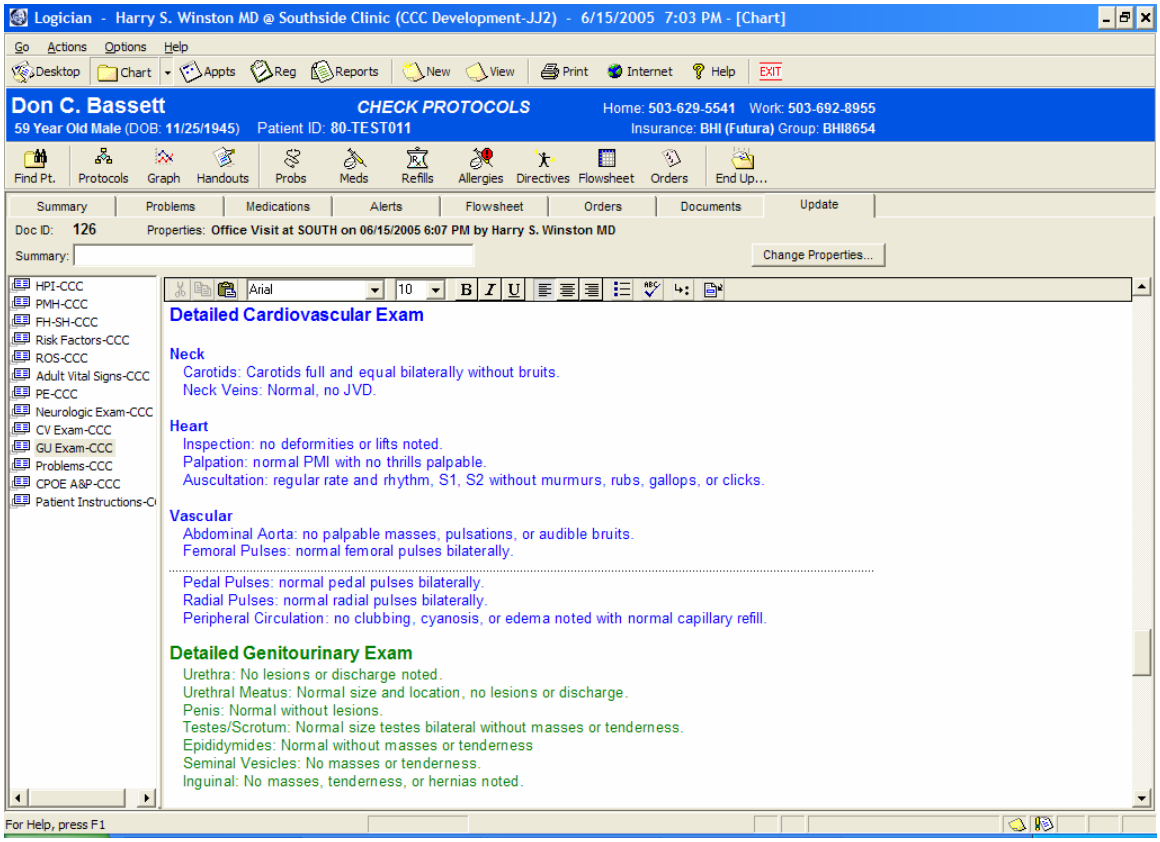
Example: Text Translation for PE-CCC Exam
Detailed Cardiovascular and Detailed GU Exams



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Problems-CCC

The Problems-CCC form is designed to allow for rapid point-and-click entry of the most common specialty-specific medical/surgical problems to the active problem list. The list box values may be customized by specialty. The customization can also designate if a single diagnosis code is pushed to the problem list of if a custom problem list is to be opened, allowing the provider to select the diagnosis with the highest degree of specificity. The prefix (Diagnosis of, Minor Diagnosis of, etc.) and the number of days that a problem designated as a Minor Diagnosis stays on the patient's active problem list is also specified in the customization. Finally, for those sites using the CCC VRI module with Dragon NaturallySpeaking 8 Medical, each diagnosis or problem list can also be triggered by using voice activated macros (Example: "add diagnosis chest pain", "add diagnosis UTI").

Key Points:

1. The Problem-CCC list boxes can be customized by specialty.
2. The customization designates if a single diagnosis (description and ICD code) is to be added to the patient's problem list or if a custom problem list containing several related diagnoses displays, allowing the provider to select the diagnosis with the highest degree of specificity.
3. The prefix (Diagnosis of, Minor Dx of, Family History of, etc.) for the problem being pushed to the patient's problem list is assigned in the customization.
4. The number of days for a problem added as a Minor Dx to stay on the patient's active problem list can be specified in the customization.
5. For Version 8.3 and forward, there is no limit to the number of problems that can be listed on the Problem-CCC form. Previously, the limitation was 125 list box items. Please note that 125 list box items will display on the form without scrolling. Adding more than 125 list box items will require the user to scroll down in the list box to see the additional items that do not "fit" in the normal display.
6. For those providers using the CCC VRI voice recognition, any item on the Problem-CCC form can now be voice activated. A provider can add a diagnosis (or access a custom problem list) simply by saying "Add diagnosis <insert name of problem as listed on Problem-CCC Form>.
   Examples:
   "Add diagnosis UTI" adds the diagnosis UTI.
   "Add diagnosis diabetes" displays the diabetes custom problem list.

The provider can use the "Add diagnosis" commands to add problems to the patient's problem list anywhere within an update that Quicktext can be used.

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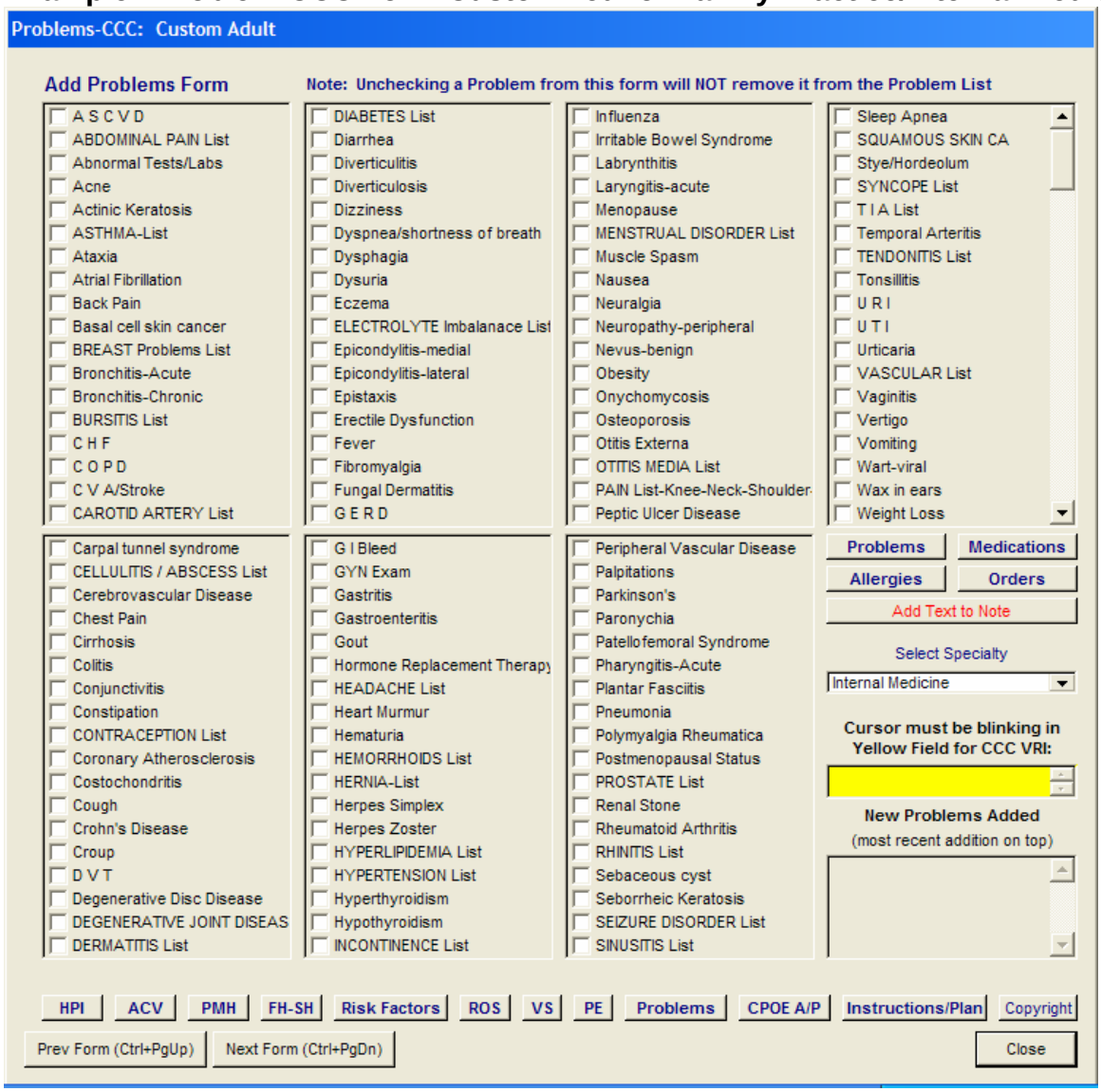
Example: Problem-CCC Form Customized for Family Practice/Internal Medicine



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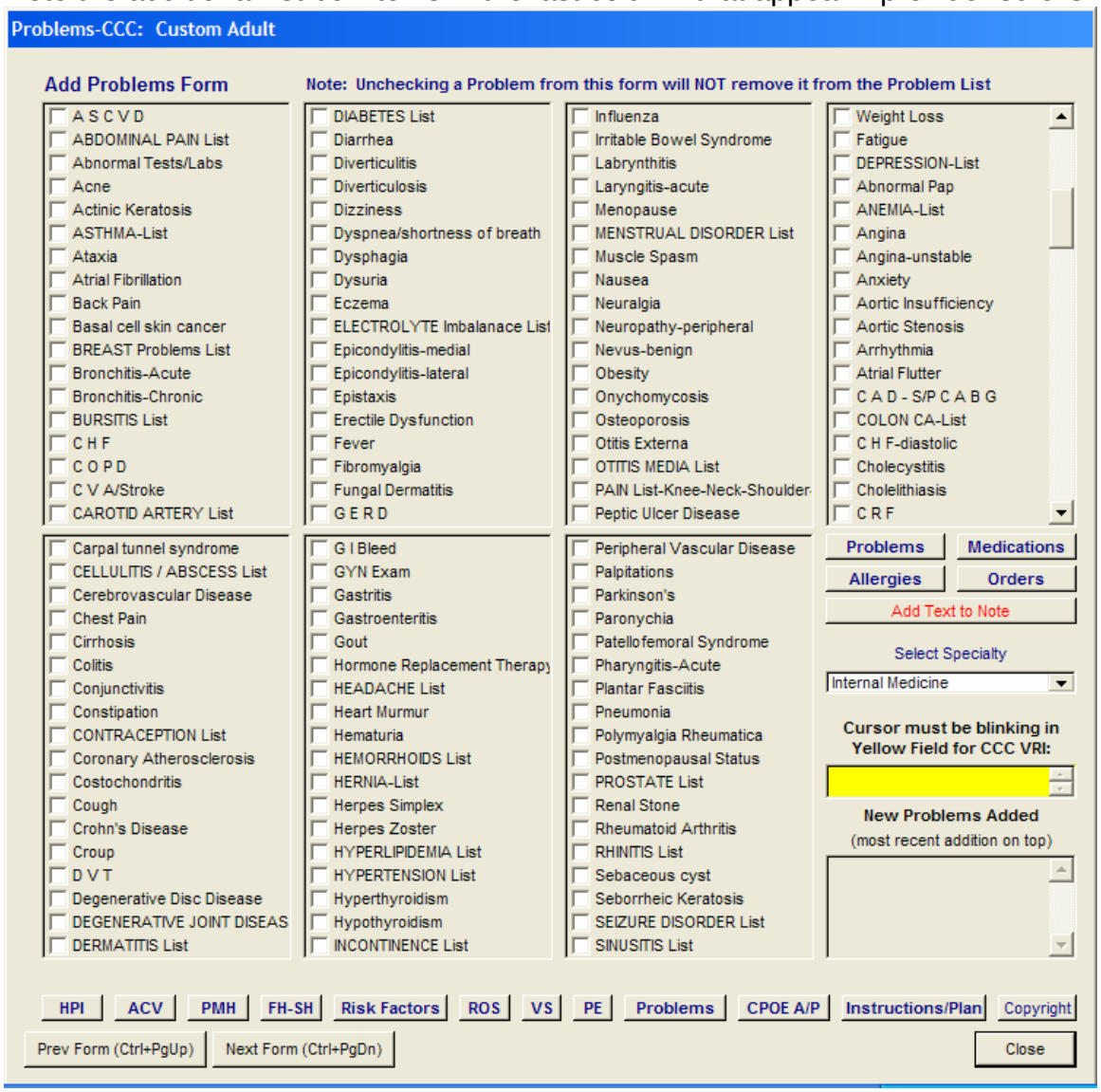
Example: Problems-CCC for Internal Medicine/Family Practice (continued)

Note the additional list box items in the last column that appear if provider scrolls:



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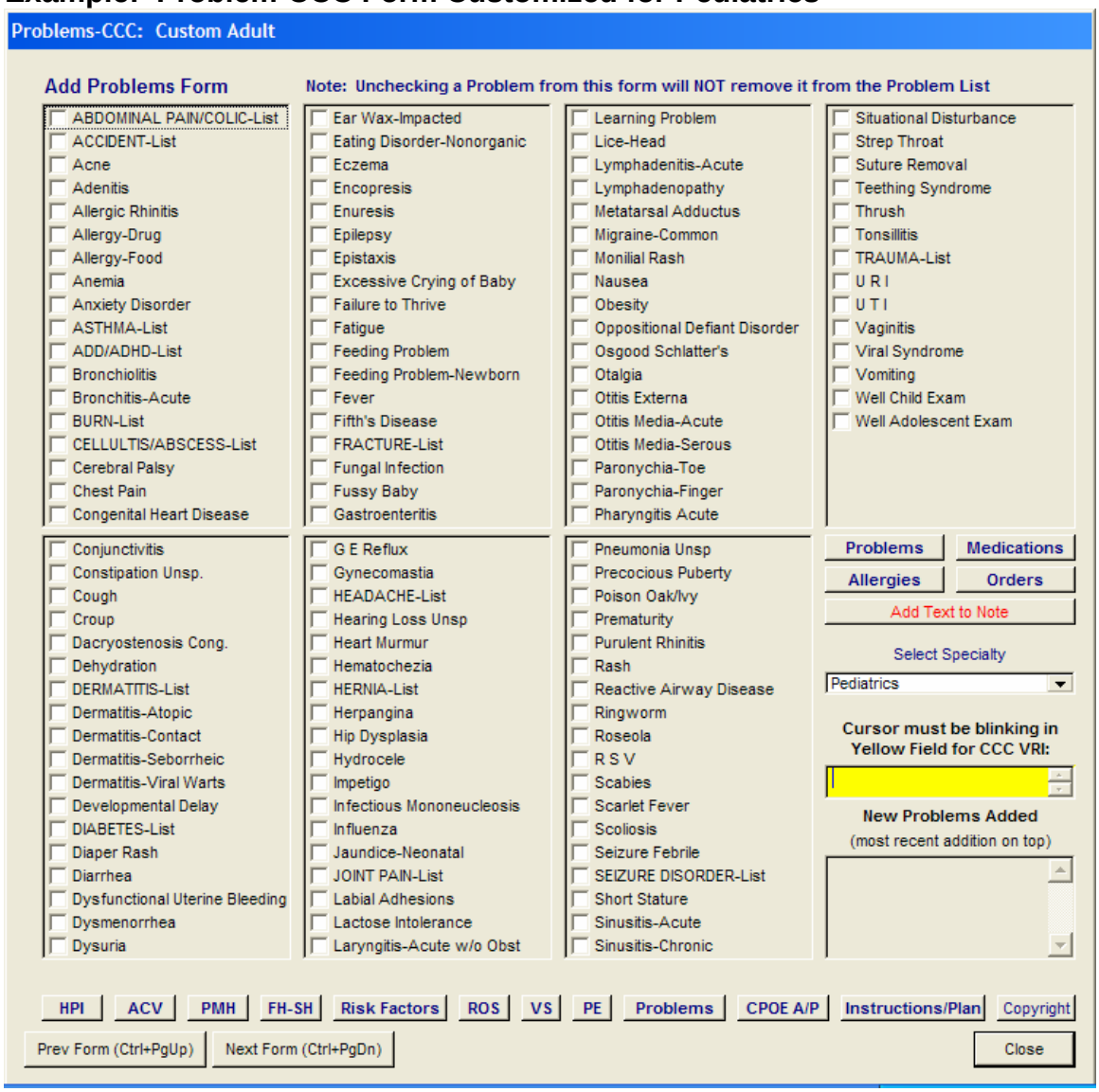
Example: Problem-CCC Form Customized for Pediatrics



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The provider can use the "Add diagnosis" commands to add problems to the patient's problem list anywhere within an update that Quicktext can be used.

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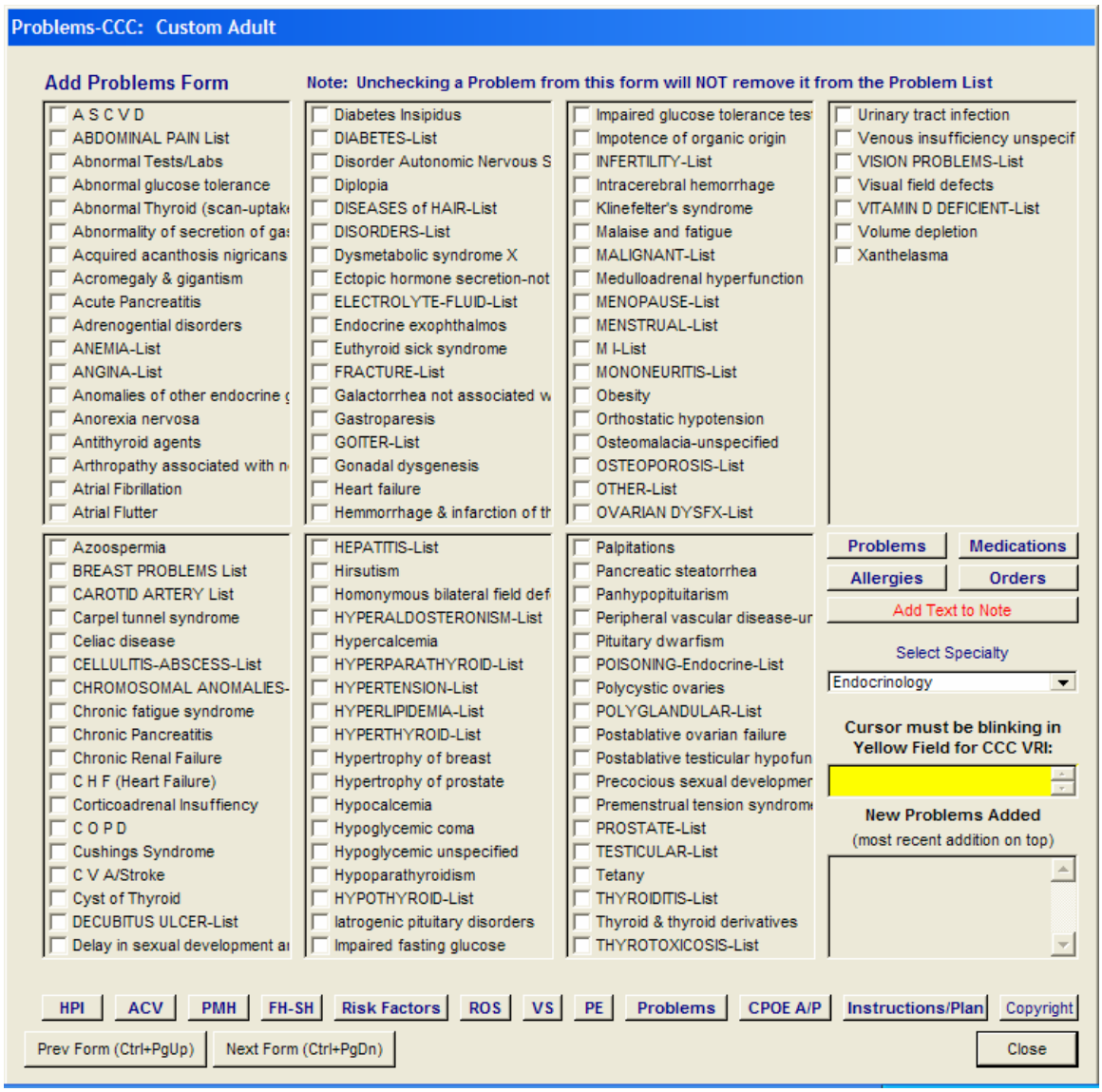
Example: Problem-CCC Form Customized for Endocrinology



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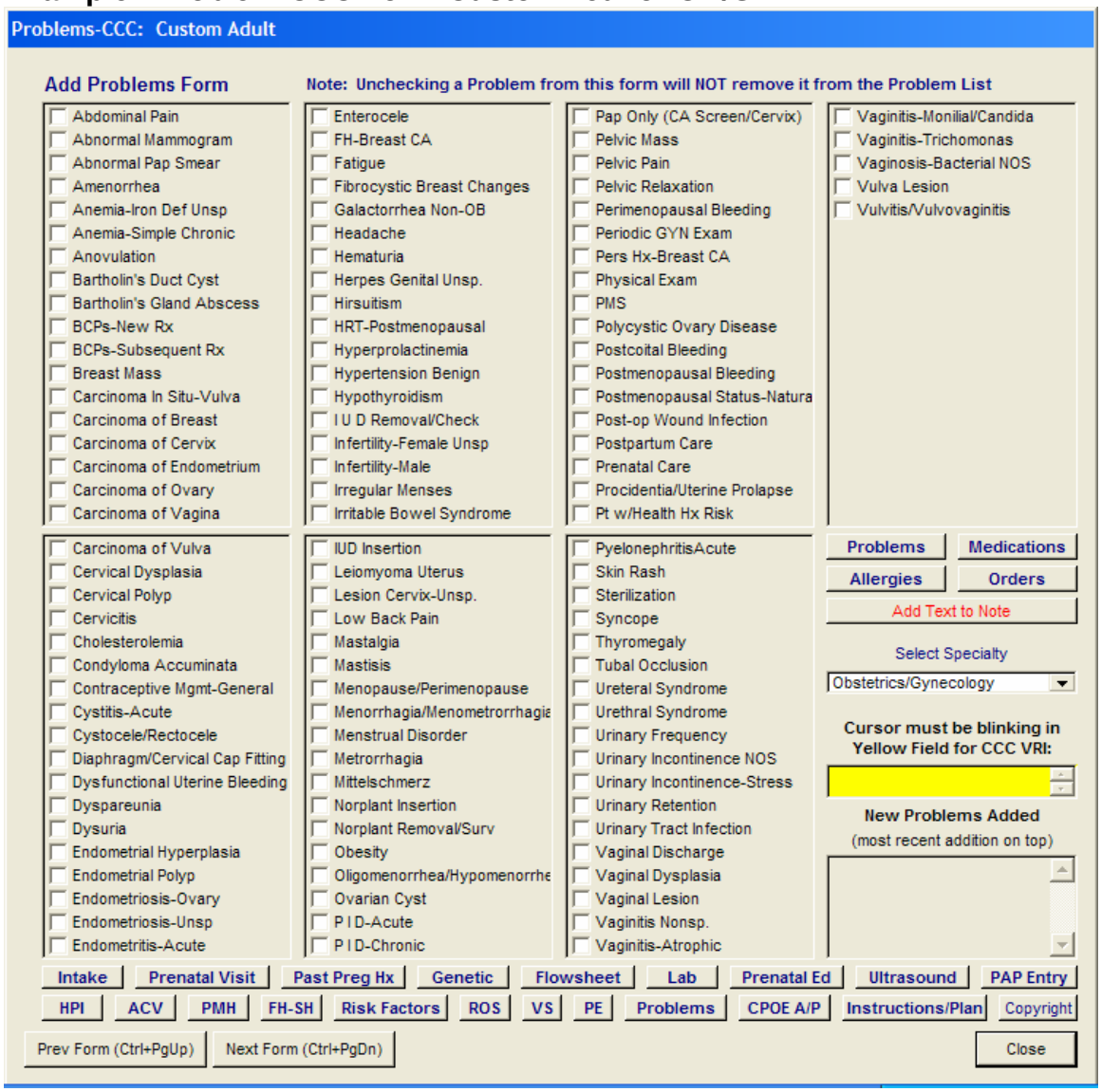
Example: Problem-CCC Form Customized for OB/GYN



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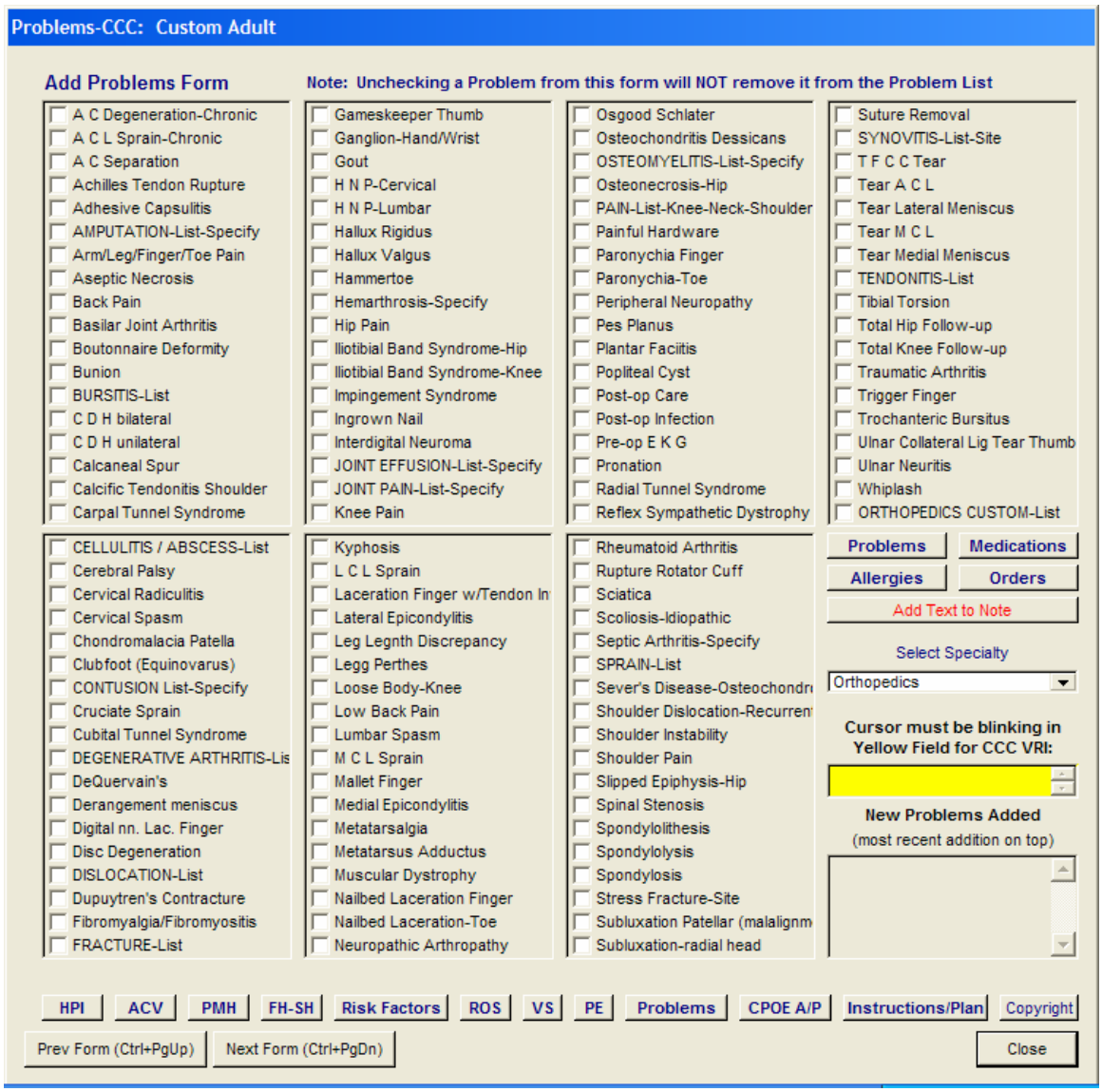
Example: Problem-CCC Form Customized for Orthopedics



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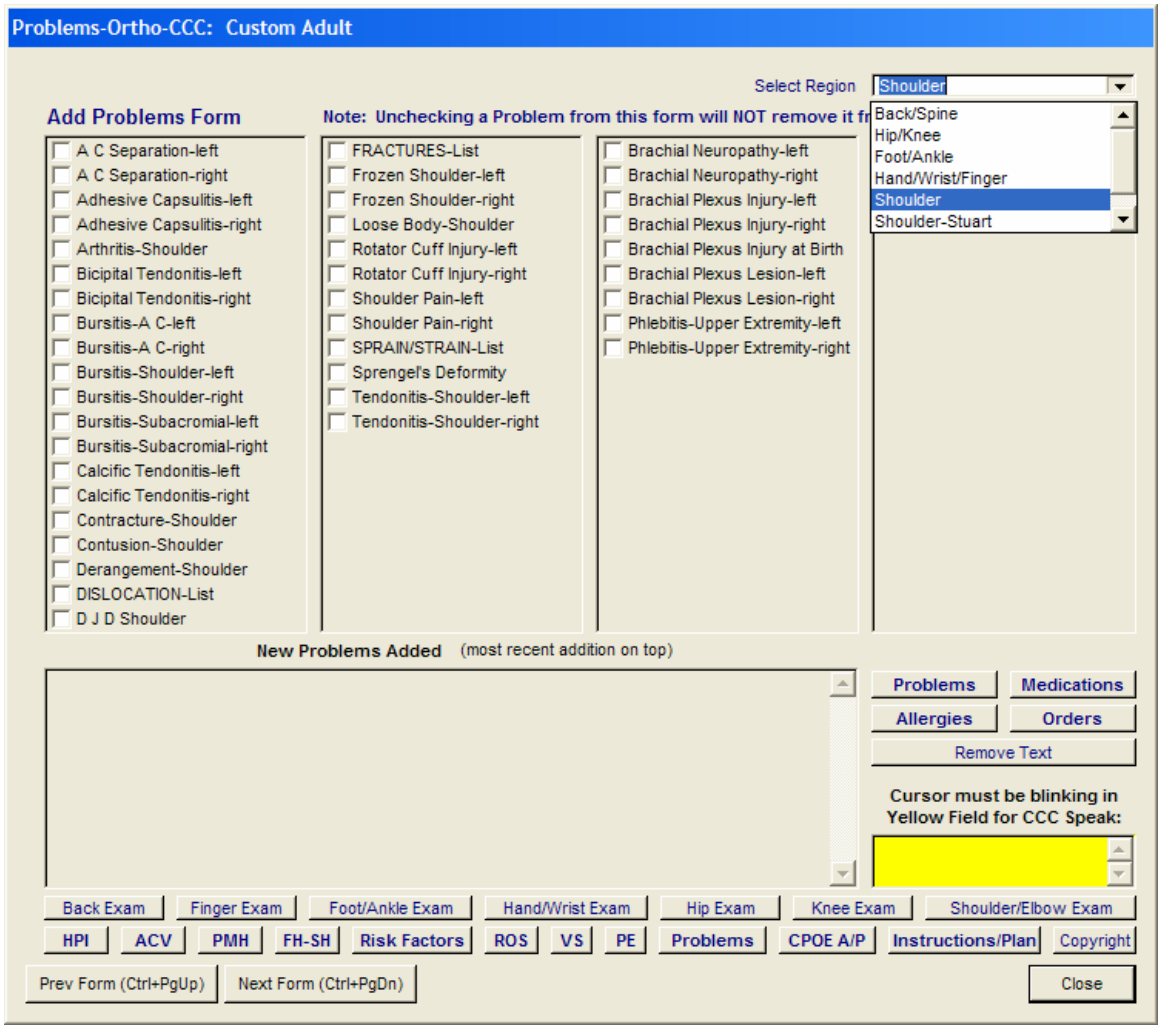
Problems-Ortho-CCC

The Problems-Ortho-CCC form is an alternative problem entry form for Orthopedic Specialists that allows problems to be grouped together by specific body regions. Examples include Back/Spine, Elbow, Knee, Shoulder, Hip, etc. Sites can also have more than one region per provider (see examples below).



1. The Problem-CCC list boxes can be customized by specialty and/or provider.
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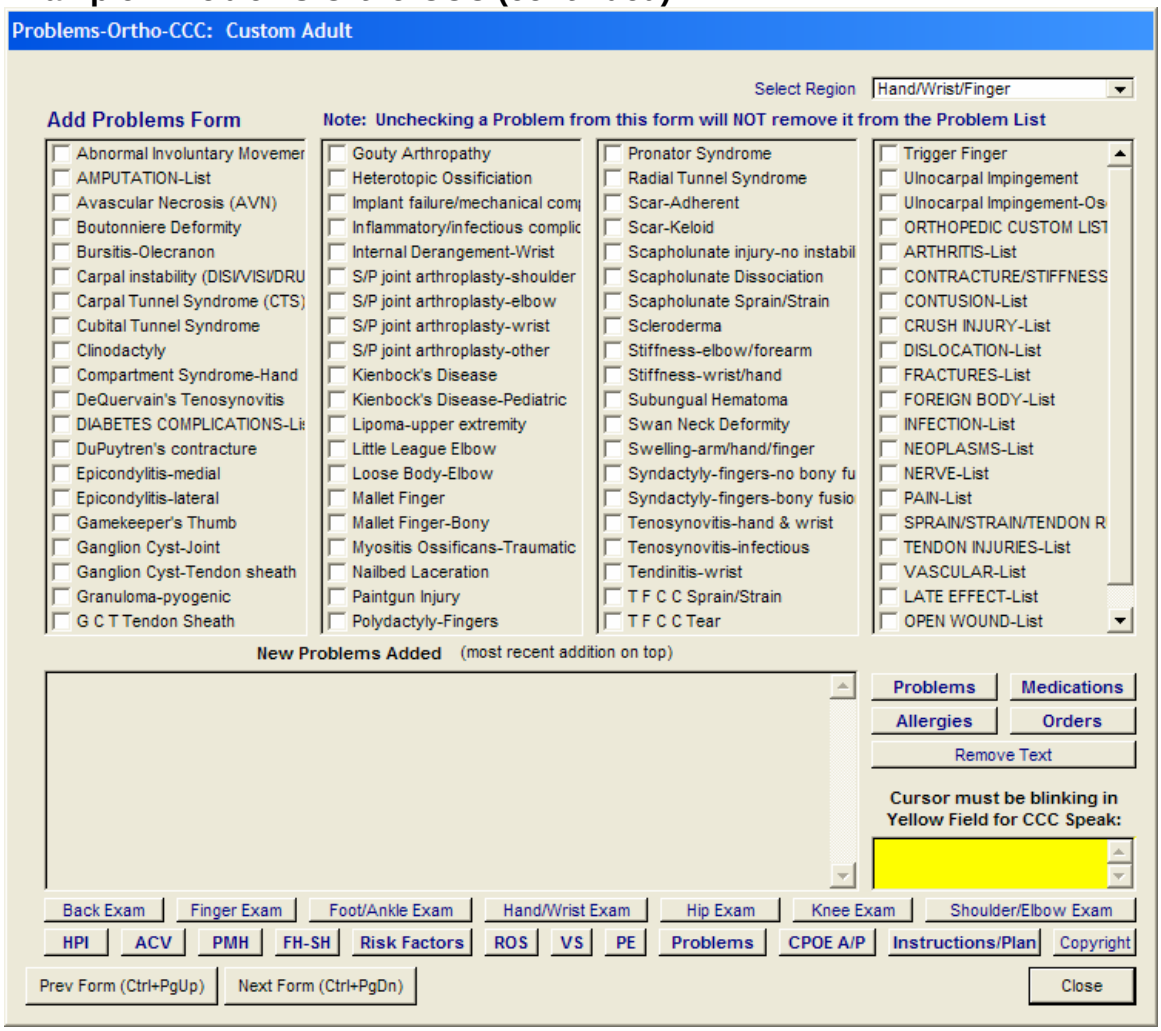
Example: Problems-Ortho-CCC (continued)



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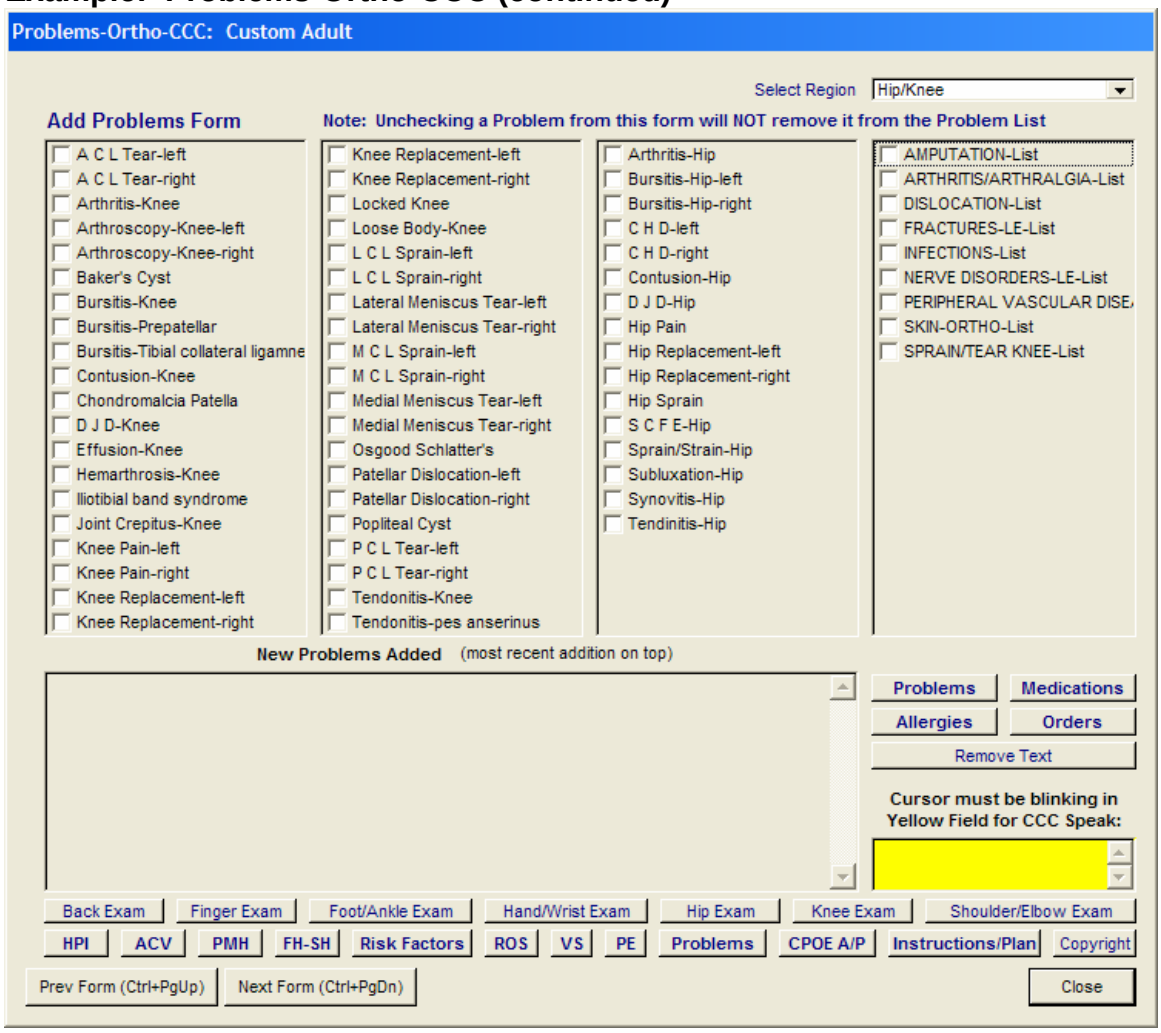
Example: Problems-Ortho-CCC (continued)



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CPOE A&P-CCC

The CPOE-CCC form is designed to allow providers to create a problem-oriented assessment & plan that automatically documents new medications, medication changes, lab and diagnostic tests reviewed, new orders, and any additional descriptions or patient instructions.

Using the CCC-TFE (text file editor), sites can create custom CPOE Templates which can replace cumbersome encounter forms. Disease- or problem-specific custom medication lists, order sets, and evaluation and management sets can be created. CCC provides over 100 different CPOE templates for Family Practice/Internal Medicine, 50 different CPOE templates for Pediatrics, and 20 for OB/GYN. Additional CPOE templates are continuously being developed for various medical and surgical subspecialties.

With the release of Version 8.3, a fully customizable clinical decision support system (CDSS) and patient severity index assessment (PSIA) application has been built into the CPOE A&P-CCC form.

Using a combination of provider/specialty specific CPOE Templates, CDSS, and PSIA protocols, providers can manage any problem, assuring evidence-based quality therapeutic review, diagnostic test ordering, and diagnosis-specific management, no matter what specialty or condition.

With a properly customized and managed CPOE A&P module, the need for diagnosis- or disease-specific encounter forms is eliminated. This decreases the amount of time necessary to develop, design, train, and maintain encounter forms.

Key Points:

1. CPOE Templates can be set up by provider and/or by specialty, based on specific diagnosis codes.
2. Once the provider selects a problem from the dropdown list (which contains a listing of the patient's active problems, with newly added problems listed at the top), the customization associated with that problem allows the provider to quickly and easily:
    - navigate to problem-oriented/disease-specific Custom Medication Lists.
    - navigate to problem-oriented/disease-specific Custom Order Lists.
    - insert custom templates to document the review of protocol-specific labs, diagnostics, or other structured data as well as insert patient instructions or diagnosis-specific details.
    - trigger a set of automatic clinical decision support reminders that are dynamic (allow provider to act on recommendations; order tests, order medications, and document clinical information, all with a single click).
3. Starting with Version 8.3, the CCC Text File Editor (TFE) can be used to customize the CPOE A&P forms (see section on TFE).

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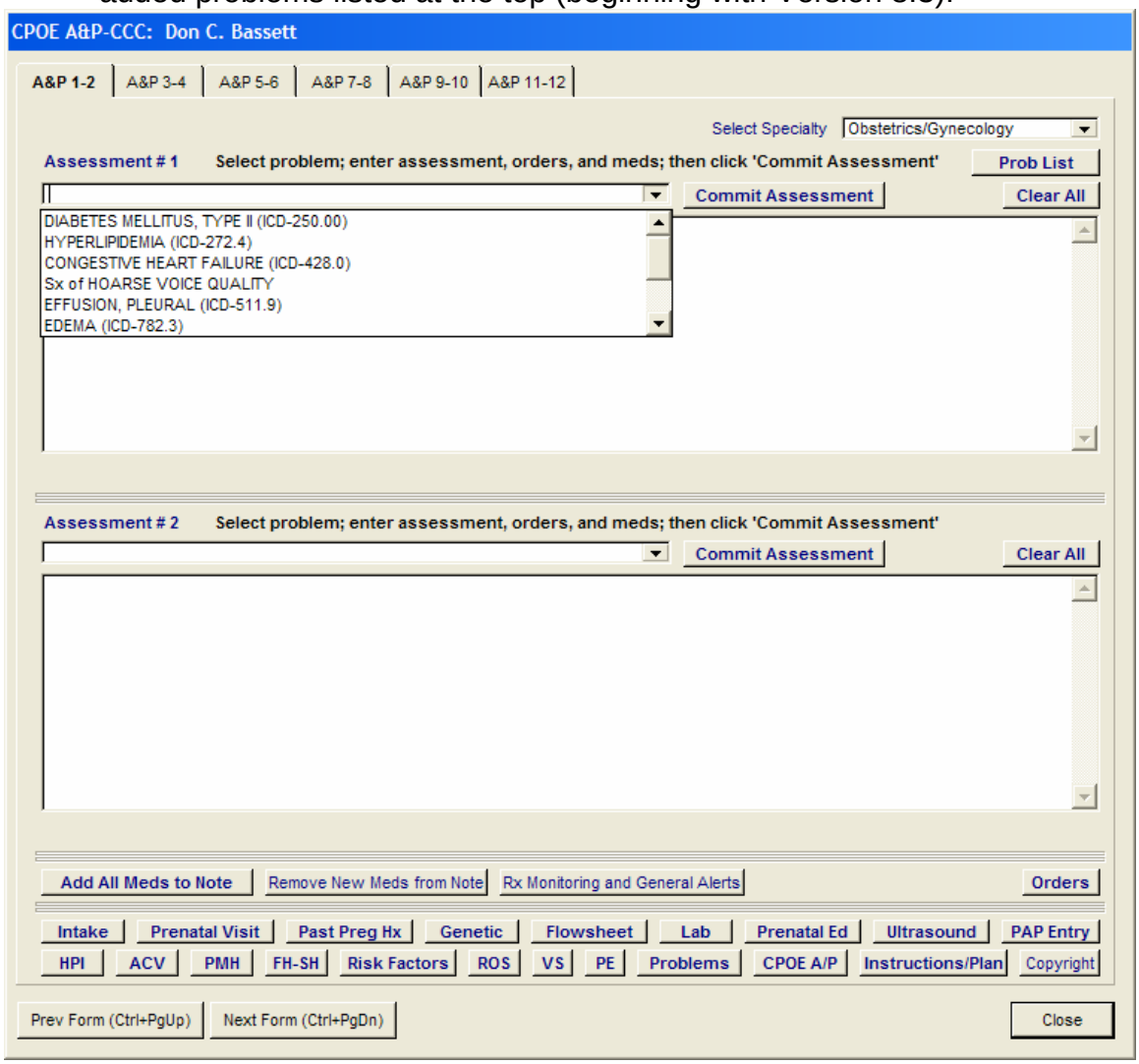
CPOE A&P-CCC Workflow

Step 1: Select a problem from the dropdown list

The dropdown list contains a listing of the patient's active problems, with newly added problems listed at the top (beginning with Version 8.3).



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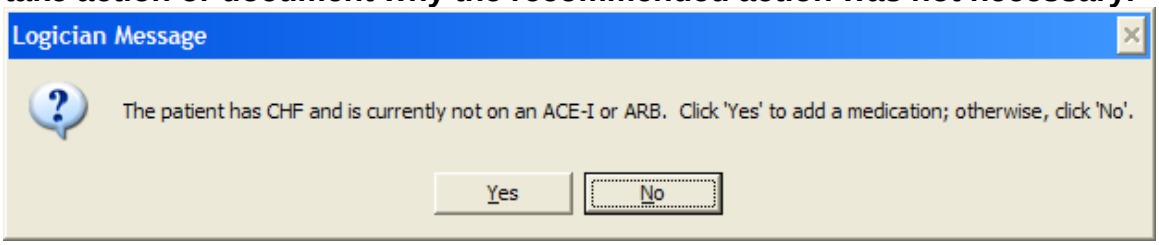
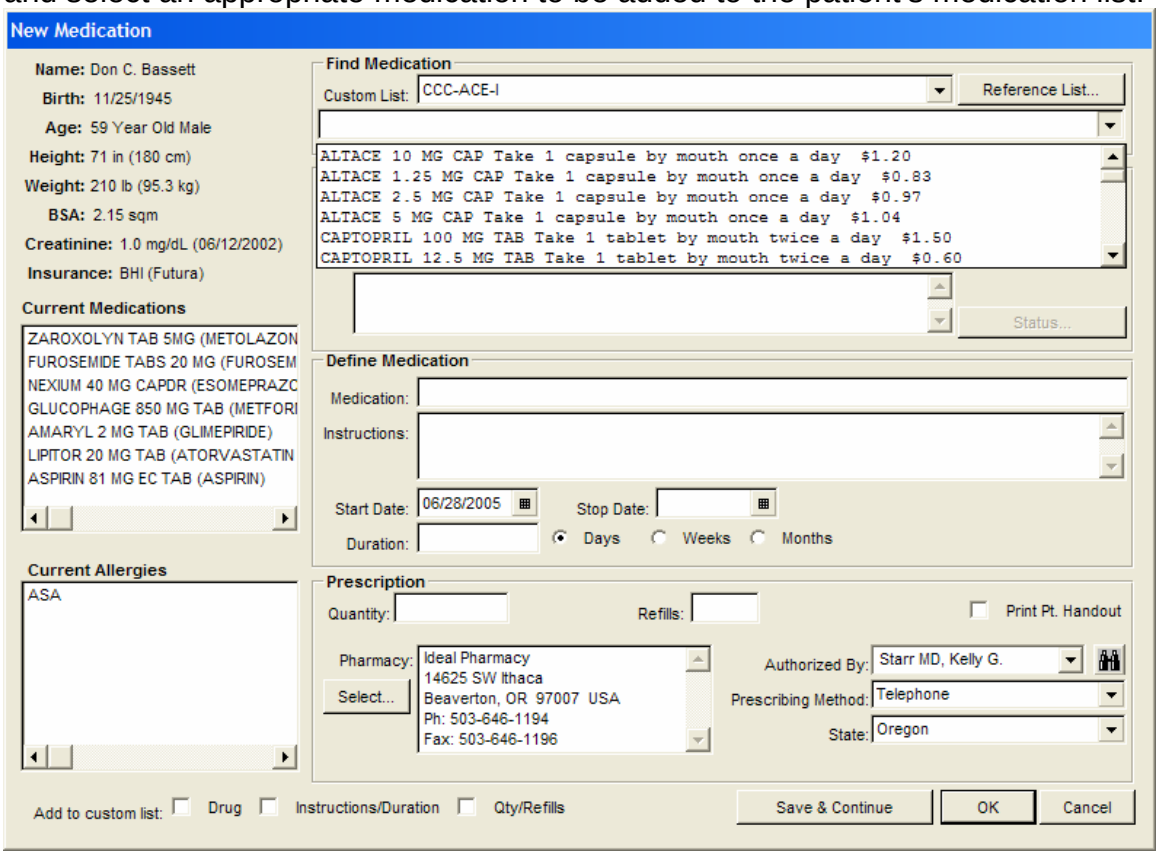
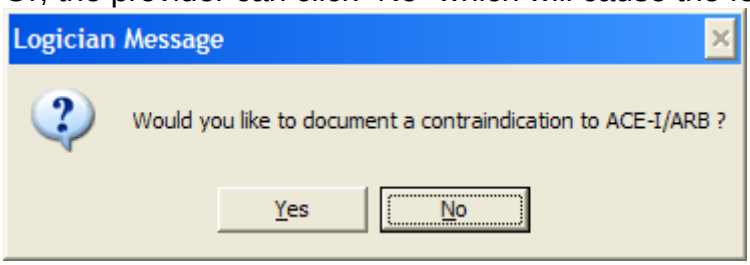
Step 2: If programmed for the selected diagnosis, a series of dynamic clinical decision support prompts will automatically appear, allowing the provider to take action or document why the recommended action was not necessary.



The provider can click “Yes” to display the ACE-Inhibitors custom medication list – and select an appropriate medication to be added to the patient’s medication list.



Or, the provider can click “No” which will cause the following prompt to appear:



The provider can click “No” and no further pop-up messages will display or the provider can click “Yes” which will allow them to document the contraindication using the CDSS Contraindication-CCC form (or any other form the site may have developed).

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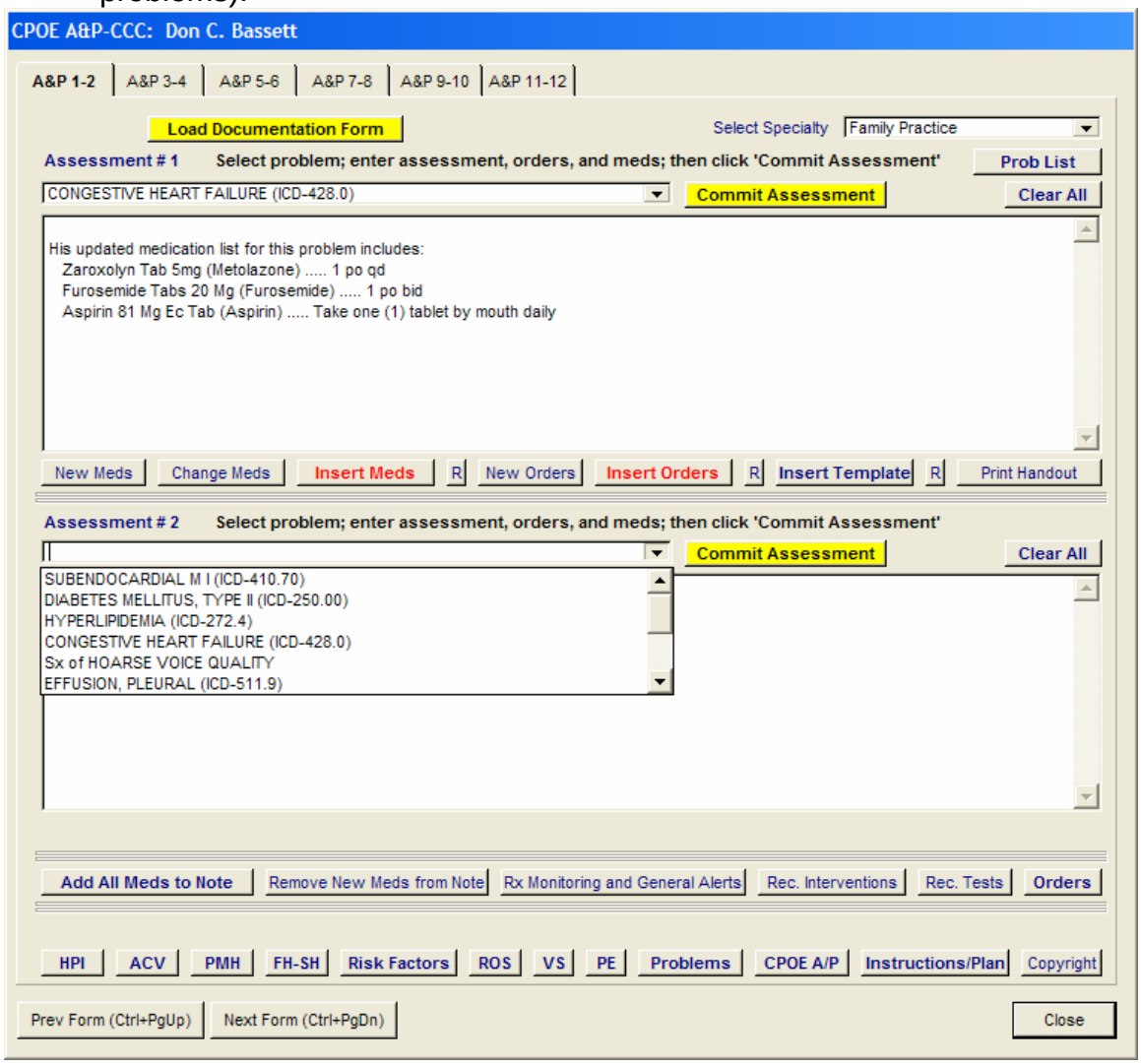
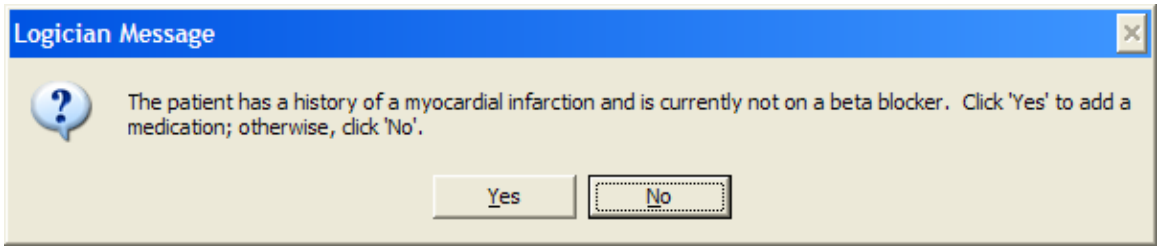
Example of Beta-blocker Usage Post-MI CDSS

The provider selects Subendocardial MI from dropdown list.

Note: The CHF medications that the patient is being treated with automatically appear in the section for CHF (as do all problem/medication class designated problems).



The following prompt appears:



The provider can click “Yes” to display the Beta-blocker custom medication list – and select an appropriate medication to be added to the patient’s medication list.

The provider can click “No” and a prompt will appear – asking if the provider wishes to document the contraindication to the Beta-blocker.

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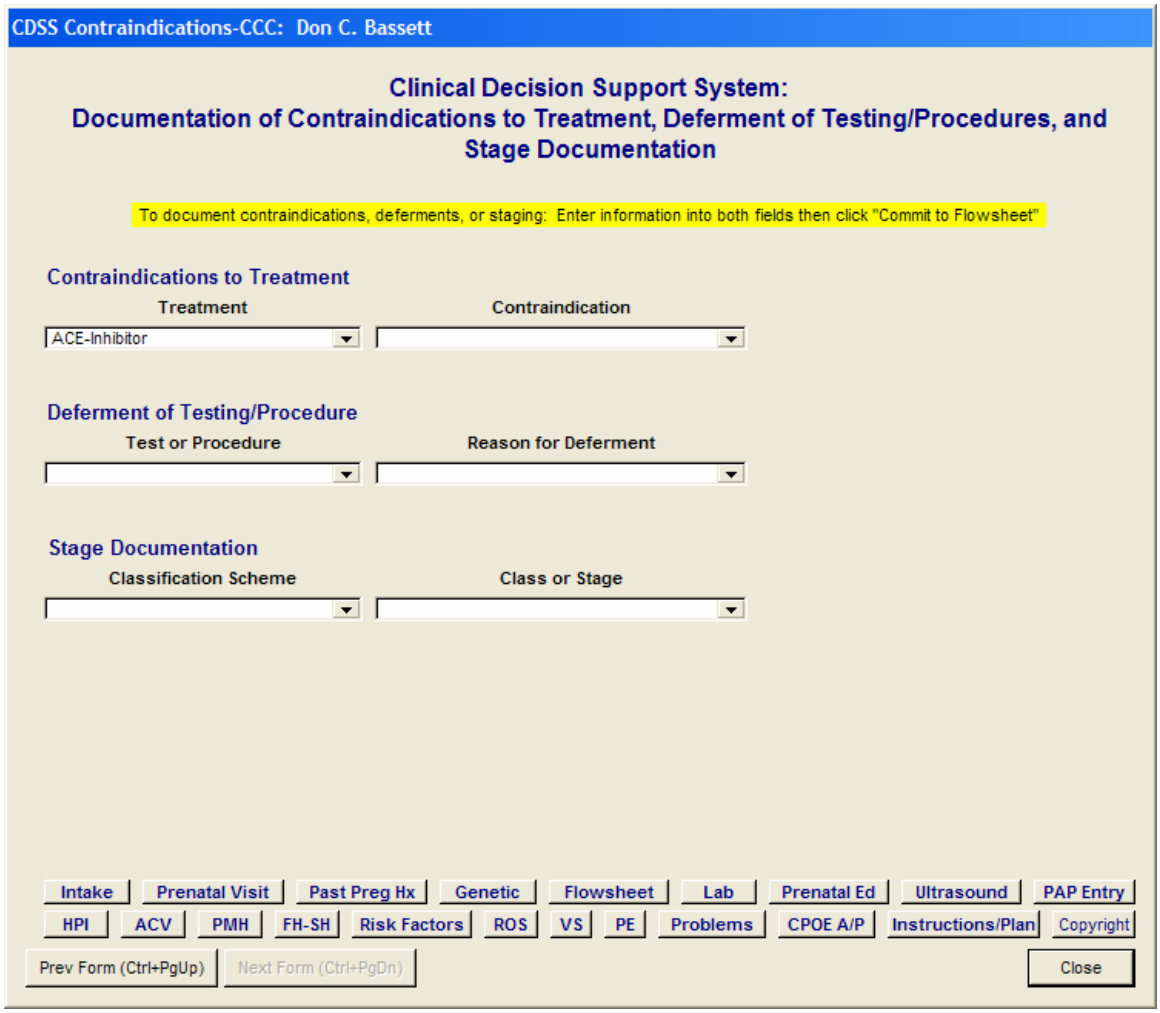
Documenting the contraindication will prevent the prompt from reappearing during subsequent visits as well as provide structured documentation for the specific contraindication.

The **CDSS Contraindications Form** allows the provider to document contra-indications to treatment, diagnostic tests or procedures, or to document a variety of staging values. The form can be customized by site and specialty.



Select the Treatment, Test/Procedure, or Staging to be documented from the appropriate dropdown list.

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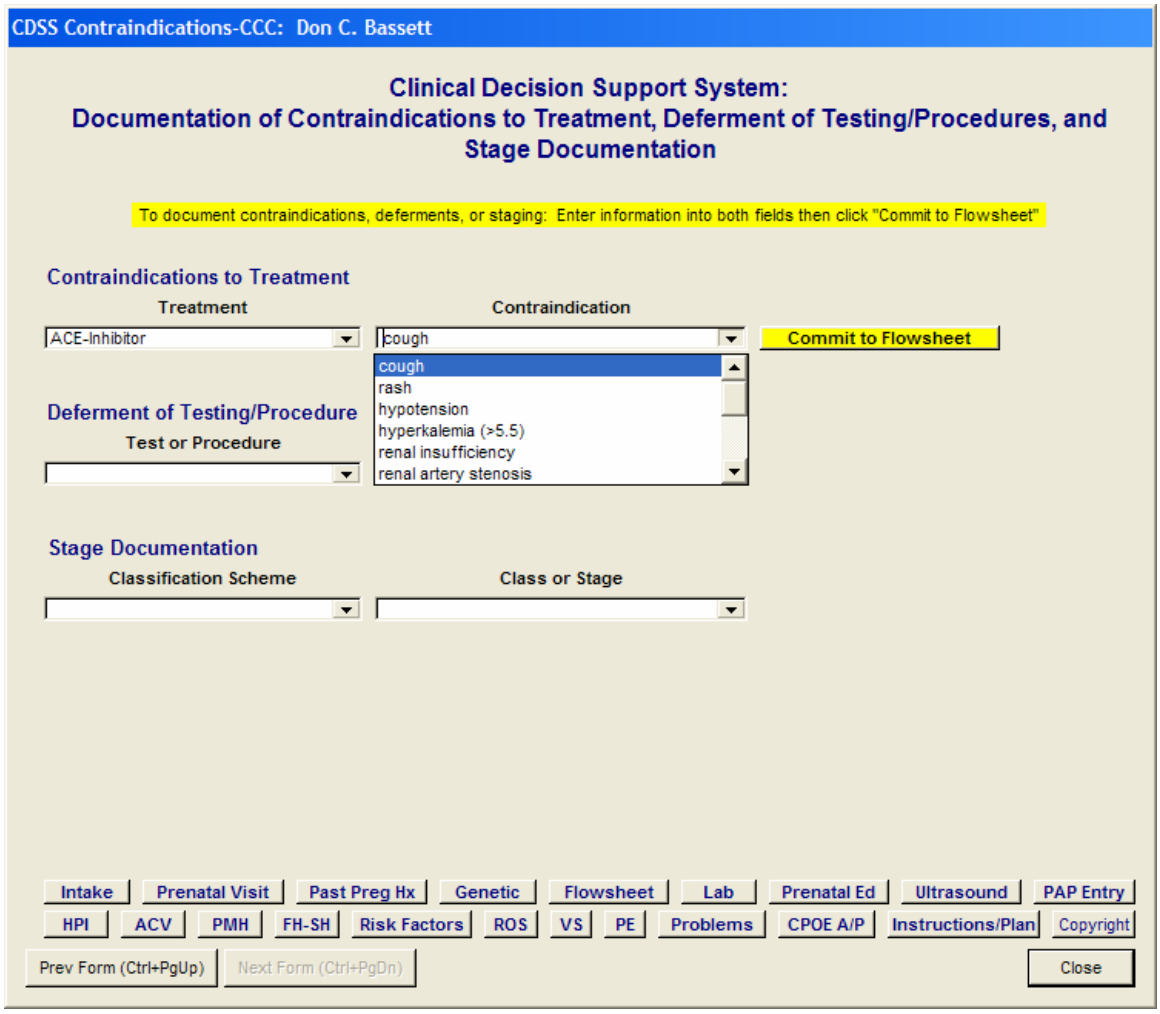

Select the contraindication (or stage) from the appropriate dropdown list, then click the “Commit to Flowsheet” button.

Note: more than one contraindication may be documented at a time using the same form/update.

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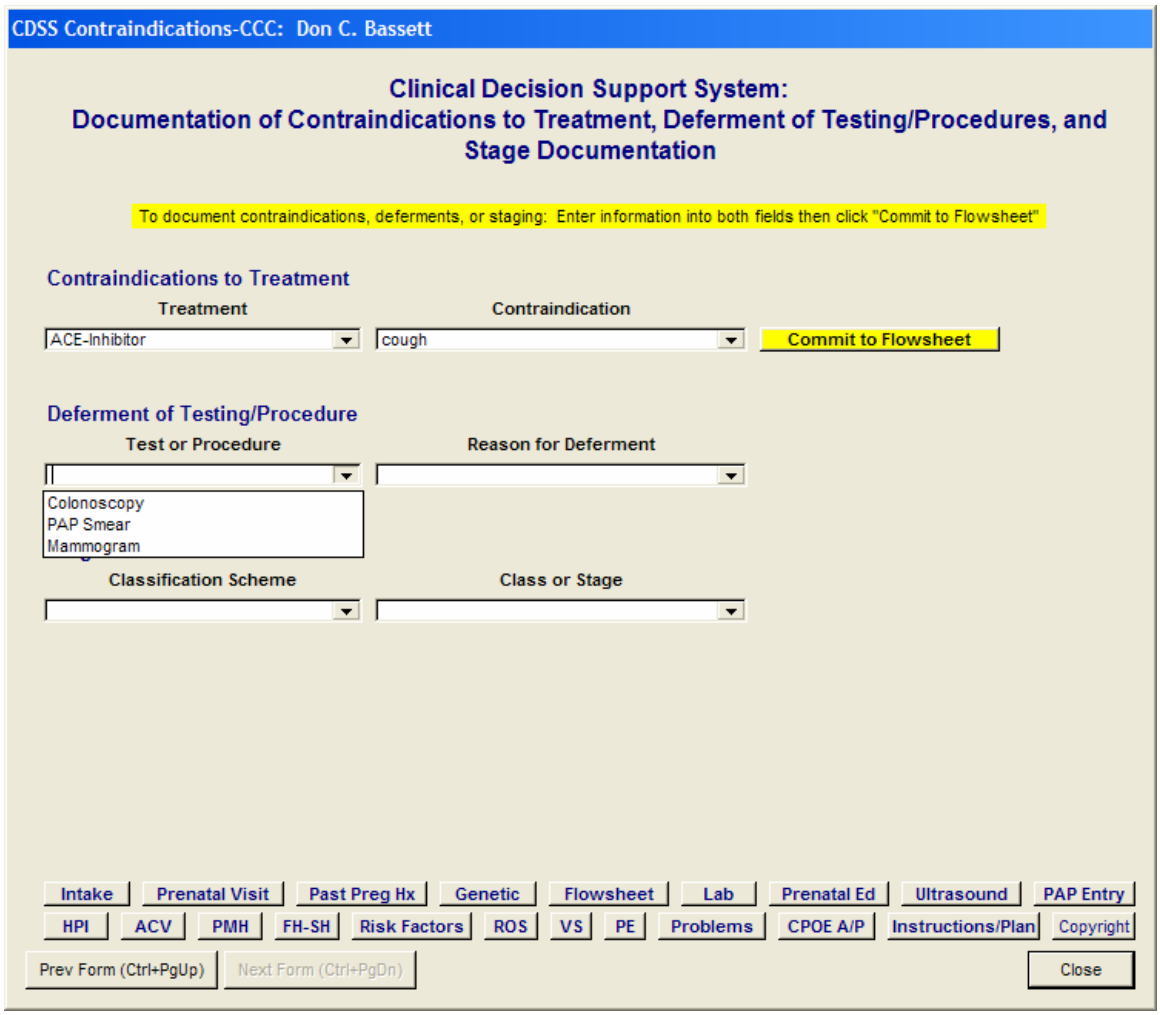
Example: Contraindication to Test/Procedure Documentation



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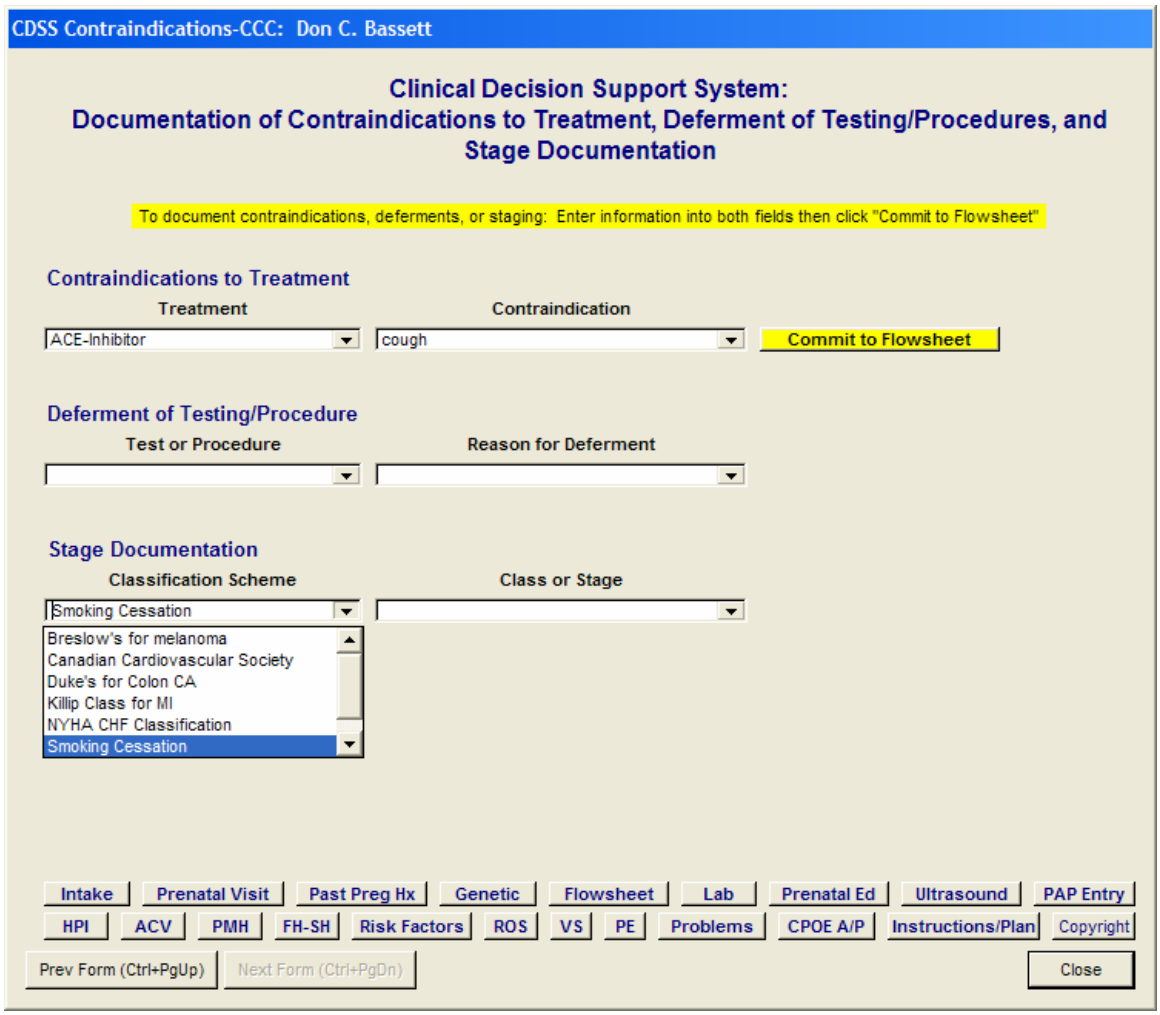
Example: Staging Documentation



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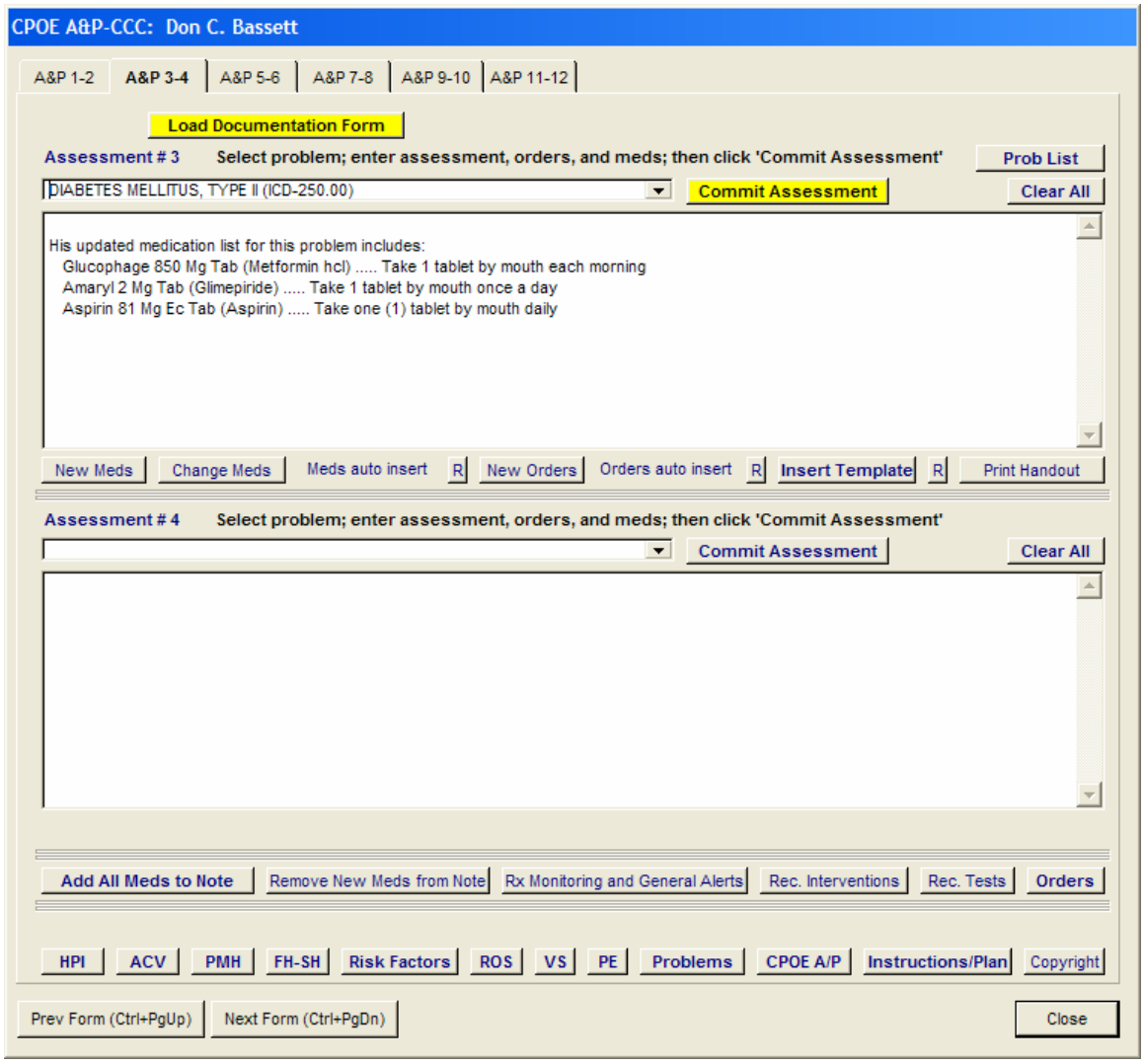
Adding Medications Using the CPOE A&P Form

To add a new medication, click the "New Meds" action button. Based on the customization, one of the following will occur:

Option 1: A custom medication list will display (examples: CCC-ACE-I, CCC-Lipids, CCC-Antibiotics-UTI).

Option 2: Inserts an encounter form into the update and displays that encounter form for data entry. In some cases, using an encounter form is more effective when ordering multiple medications or monitoring regimens (examples: Asthma > go to the Asthma Management-CCC form, Atrial Fibrillation or DVT > go to the CPOE Anticoagulation-CCC form).

Option 3: The standard Update Medications dialogue box will display. Note: this is the default if option 1 or option 2 is not selected or if the problem has not been customized in the CPOE).



To change or remove a medication > click "Change Meds" action button.

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Ordering Tests or Diagnostics Using the CPOE A&P Form

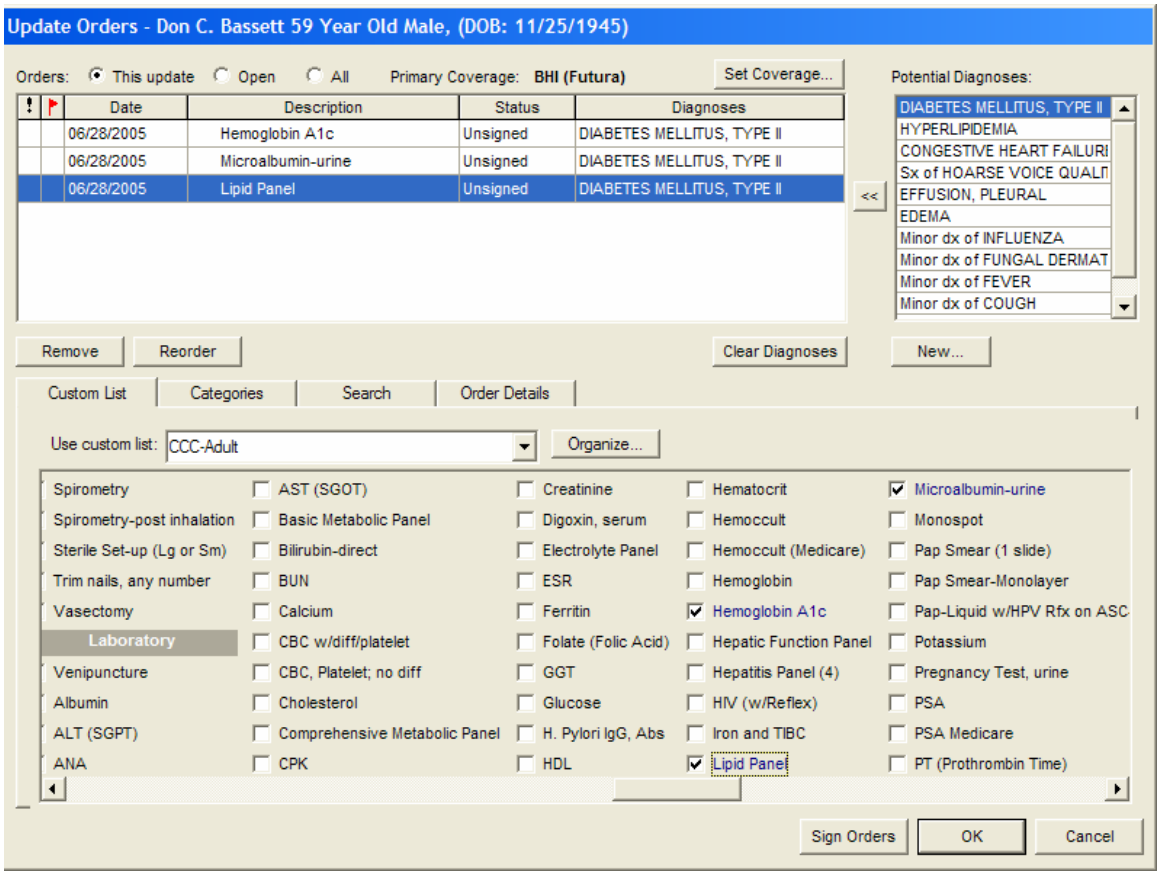
To order a lab, diagnostic test, or referral > click the "New Orders" action button. Based on the customization, one of the following will occur:

Option 1: A custom order list will display (examples: CCC-Adult, CCC-Pediatrics, CCC-Prenatal). This can be customized to display any custom order list.

Option 2: Inserts an encounter form into the update and displays that encounter form for data entry. In some cases, using an encounter form is more effective when ordering multiple medications or monitoring regimens (examples: Chemotherapy Prescriptions > go to Chemotherapy RX-CCC form).

Option 3: The standard Update Orders dialog box (with the last custom order list that was accessed) will display. Note: this is the default if option 1 or option 2 is not selected or if the problem has not been customized in the CPOE).

NOTE: Any labs or diagnostics associated with a diagnosis/problem will automatically appear in the assessment field for that problem in the CPOE A&P form (see below).



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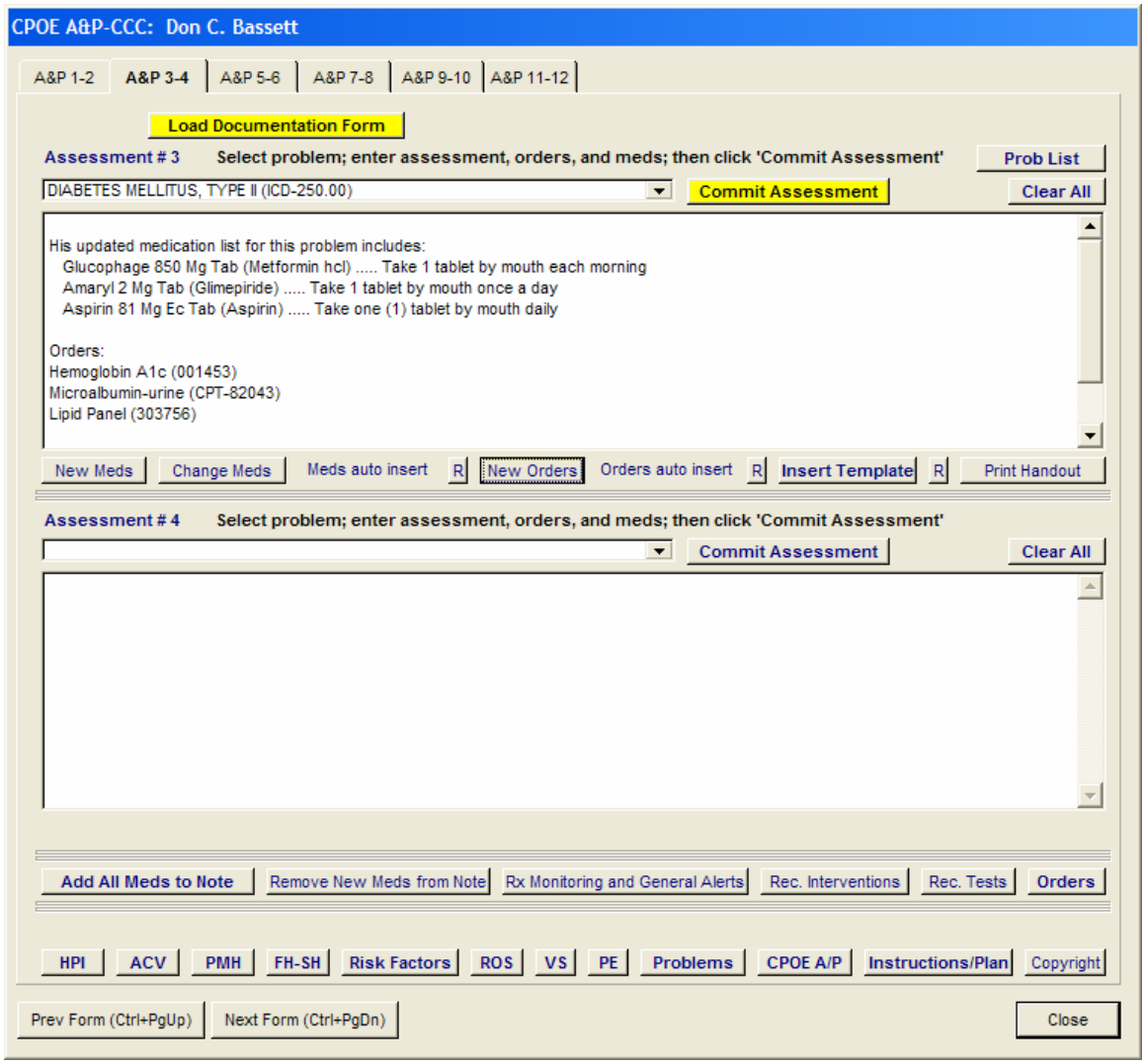

NOTE: Any labs or diagnostics associated with a diagnosis/problem will automatically appear in the assessment field for that problem in the CPOE A&P form (see above).

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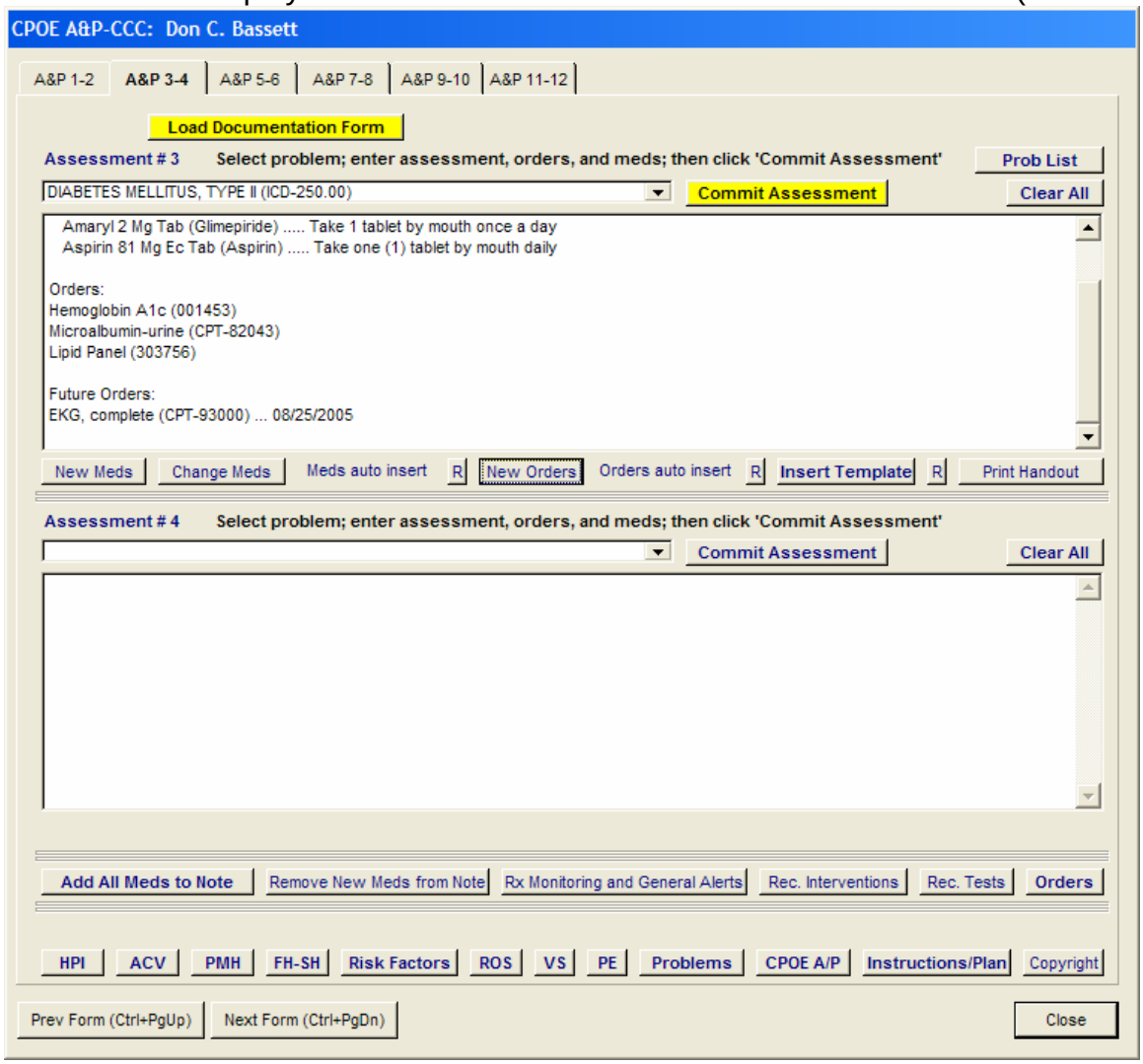
Future orders display as “Future Orders” with the associated future date (see below).



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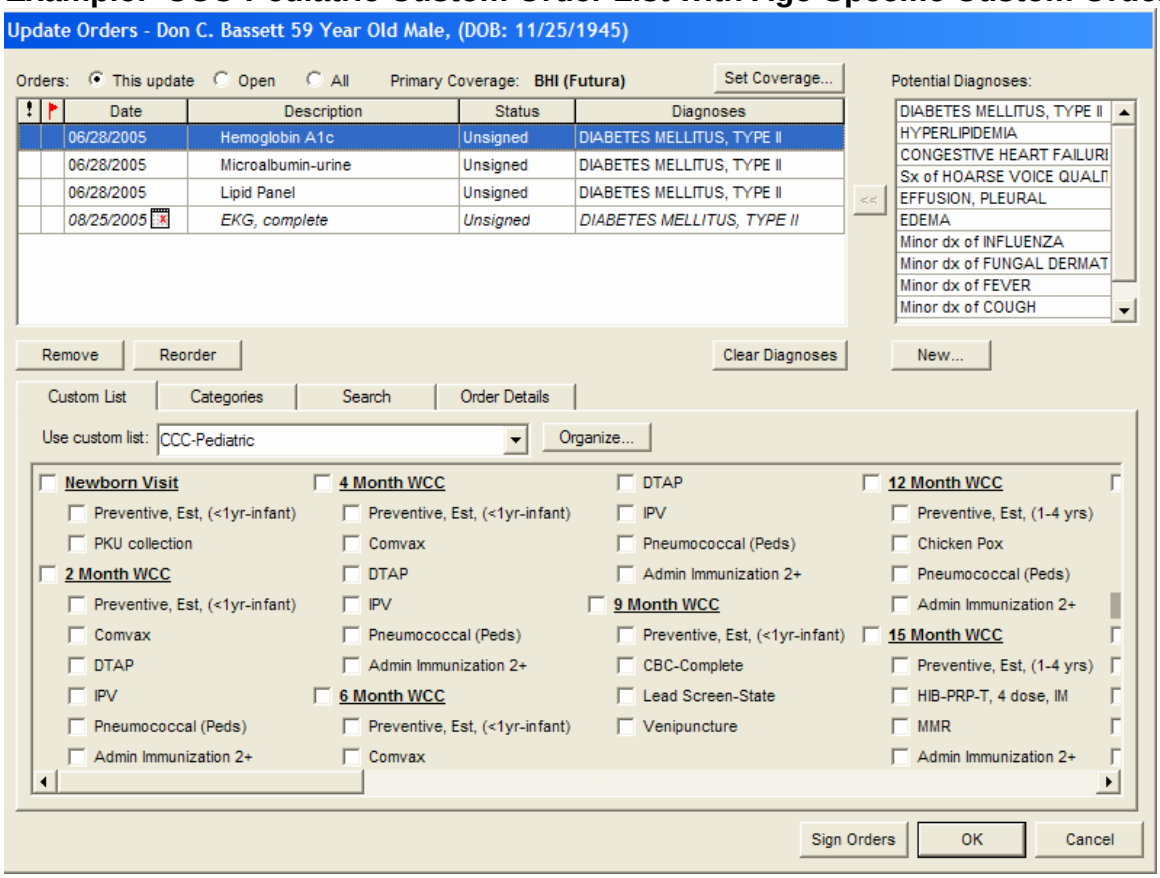
A variety of Custom Order Lists and Order Sets can be created to link with the CPOE A&P-CCC Form and templates (see examples below of Pediatrics and Prenatal)

Example: CCC-Pediatric Custom Order List with Age-Specific Custom Order Sets



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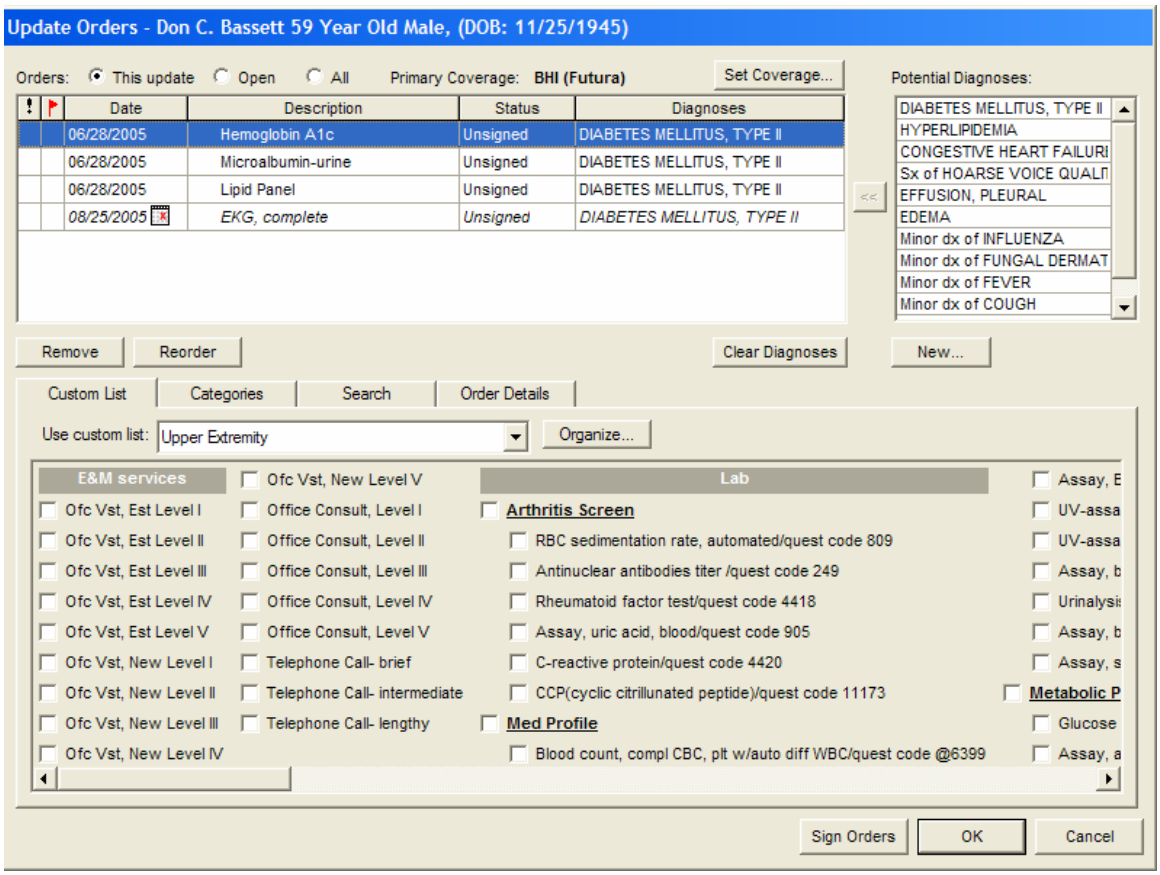
Example: Orthopedic Specific (Upper Extremity) Custom Order List



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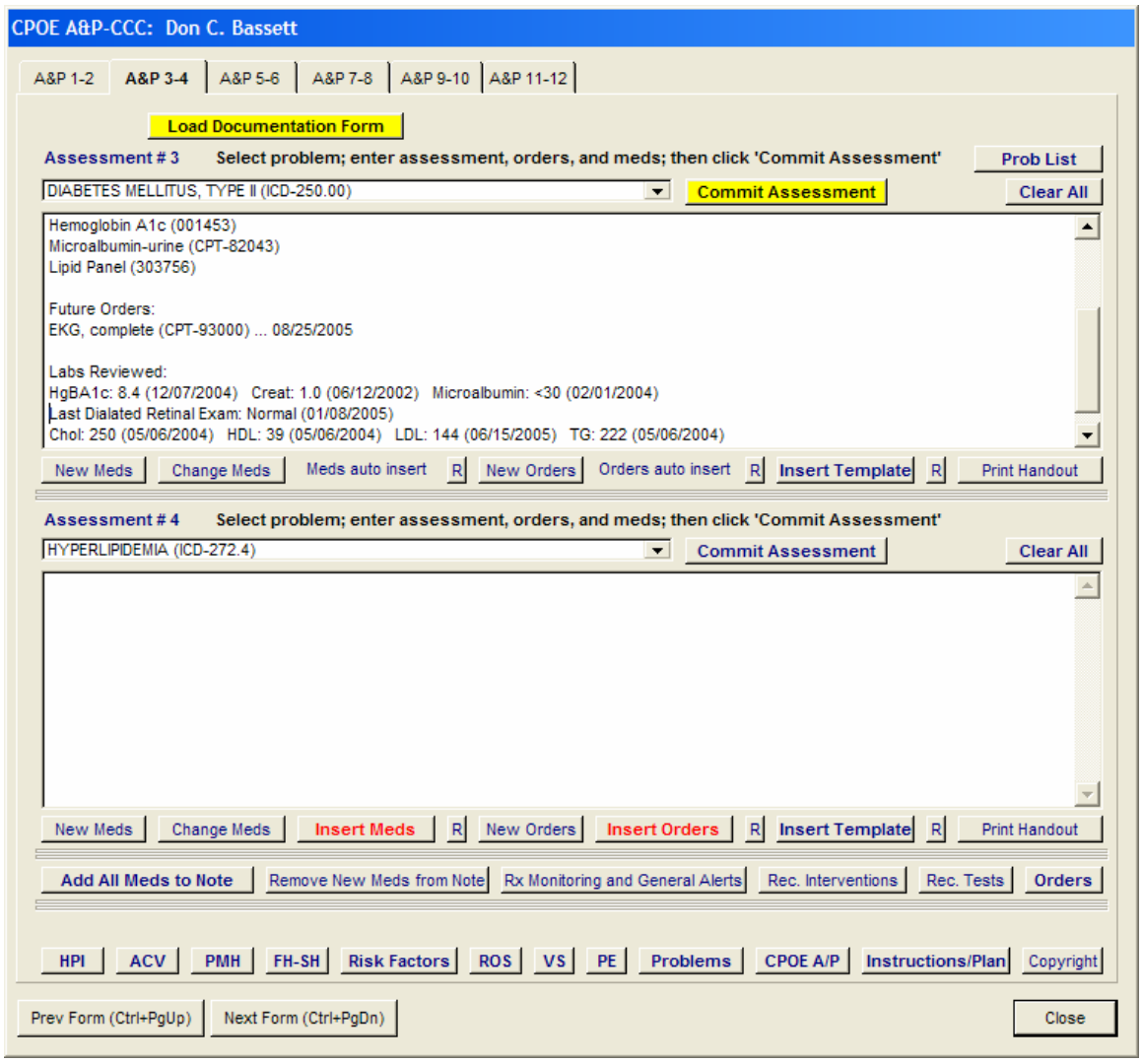
Documenting Review of Labs or Diagnostics Using the CPOE A&P Form "Insert Template"

Using custom templates or the CCC CPOE Templates allows providers to quickly review diagnosis-specific labs, diagnostics, or clinical data while documenting that review in the note.

NOTE: A large part of E&M coding is contingent on the provider documenting the order or review of diagnostic tests. This documentation is automatically captured within the CPOE A&P-CCC form.



Clicking the "Insert Template" action button for the problem DIABETES MELLITUS automatically inserts "Labs Reviewed" and includes the last set of values for the tests which should be reviewed at each visit into the assessment field for that problem.

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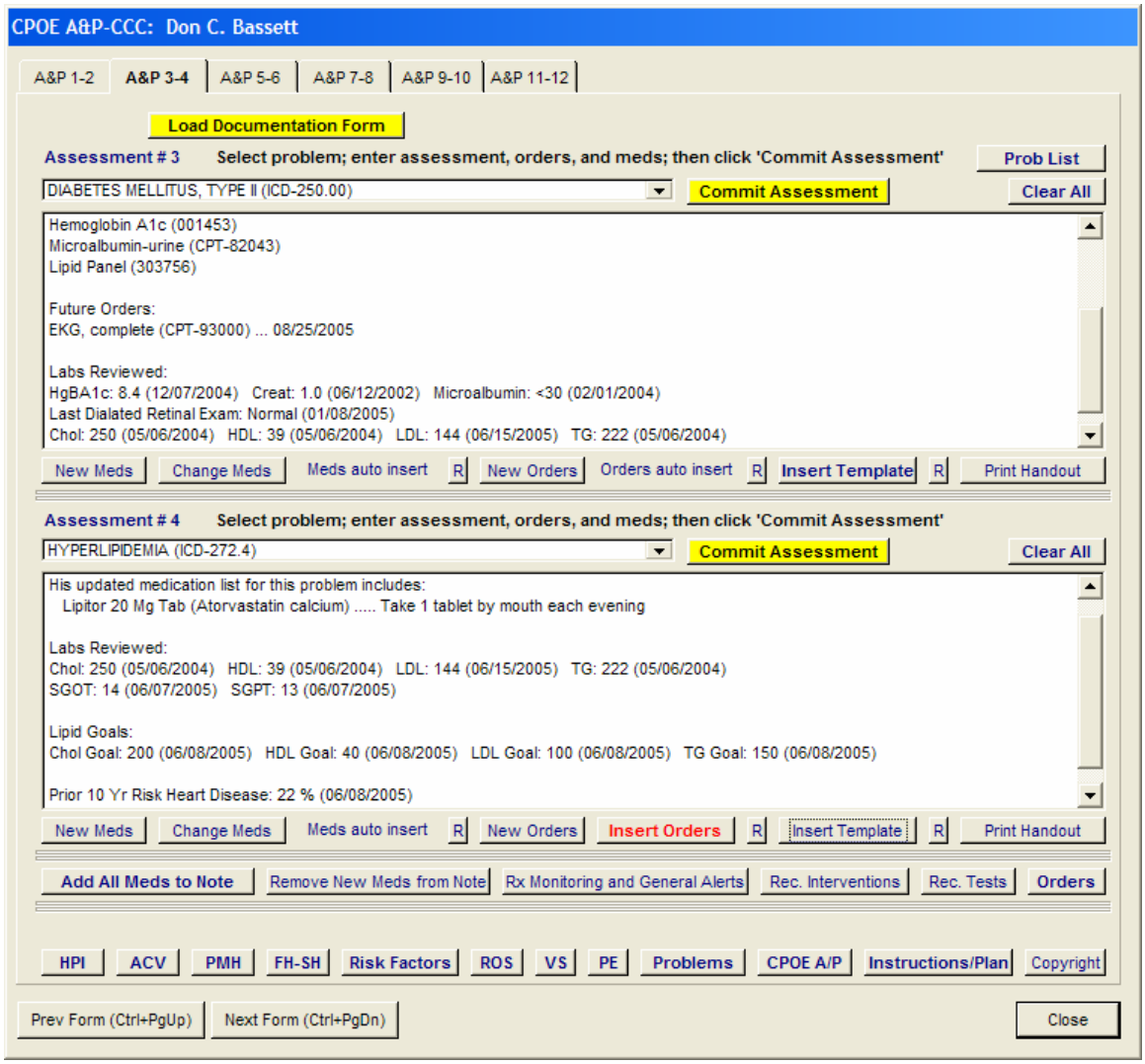

Clicking the “Insert Template” action button for the problem HYPERLIPIDEMIA automatically inserts “Labs Reviewed” and includes the last set of values for the tests which should be reviewed at each visit into the assessment field for that problem. Note: since patient is currently on a statin, the last documented SGOT and SGPT also displayed.

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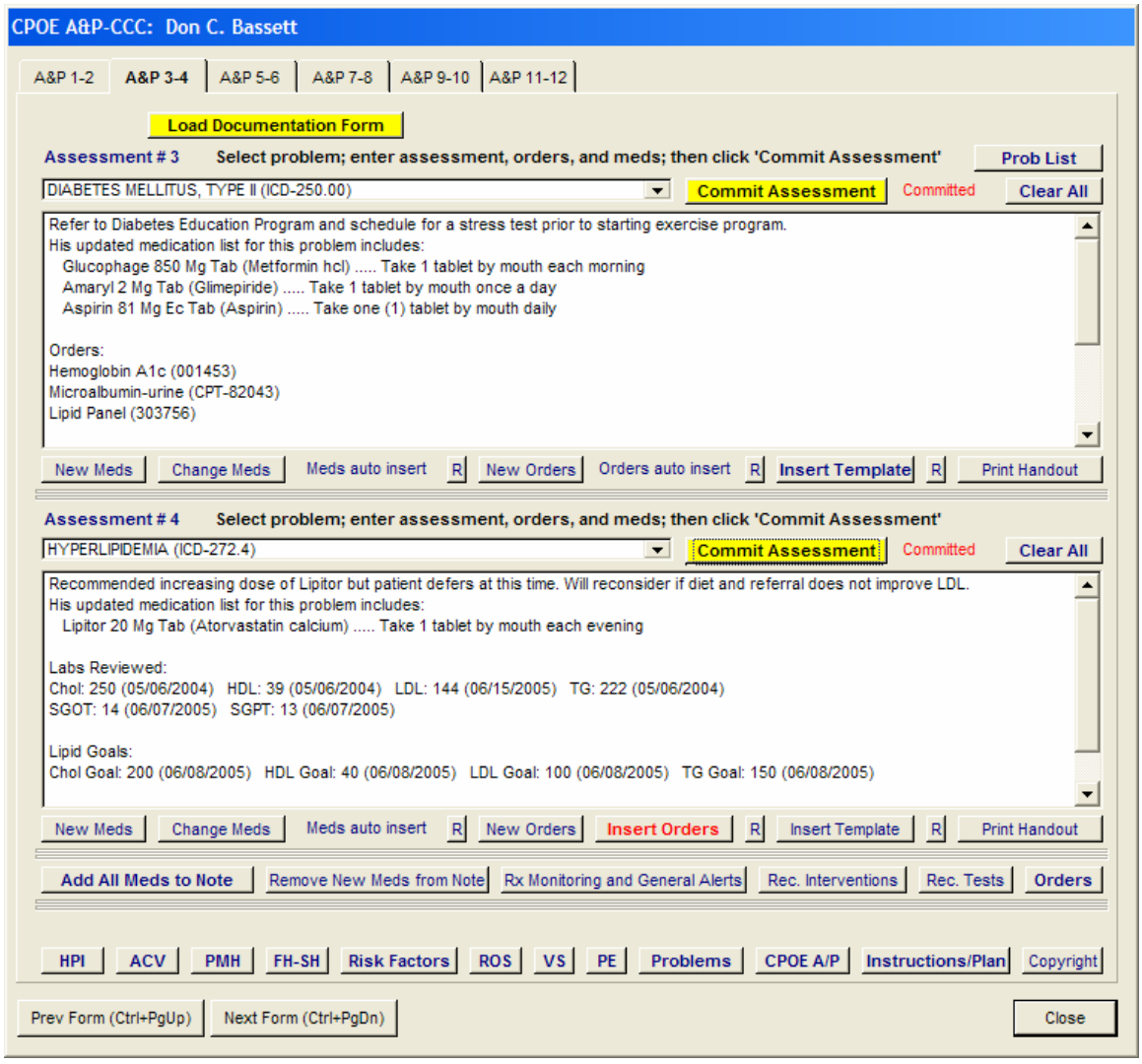
Committing Assessments and Additional Documentation

Providers can use Quicktext, type, or voice recognition to add in any additional assessment and plan information for each diagnosis. Once the assessment is complete, if the provider clicks the yellow “Commit Assessment” action button, the documentation in the assessment field (white space) will be pushed to the Problem List and will be associated with that diagnosis for that date. This allows for more detailed, problem-oriented notes and treatment plans (see examples below).

Once the “Commit Assessment” button is clicked for a given problem/assessment, the word “Committed” will appear in red to the right of the Commit Assessment action button.



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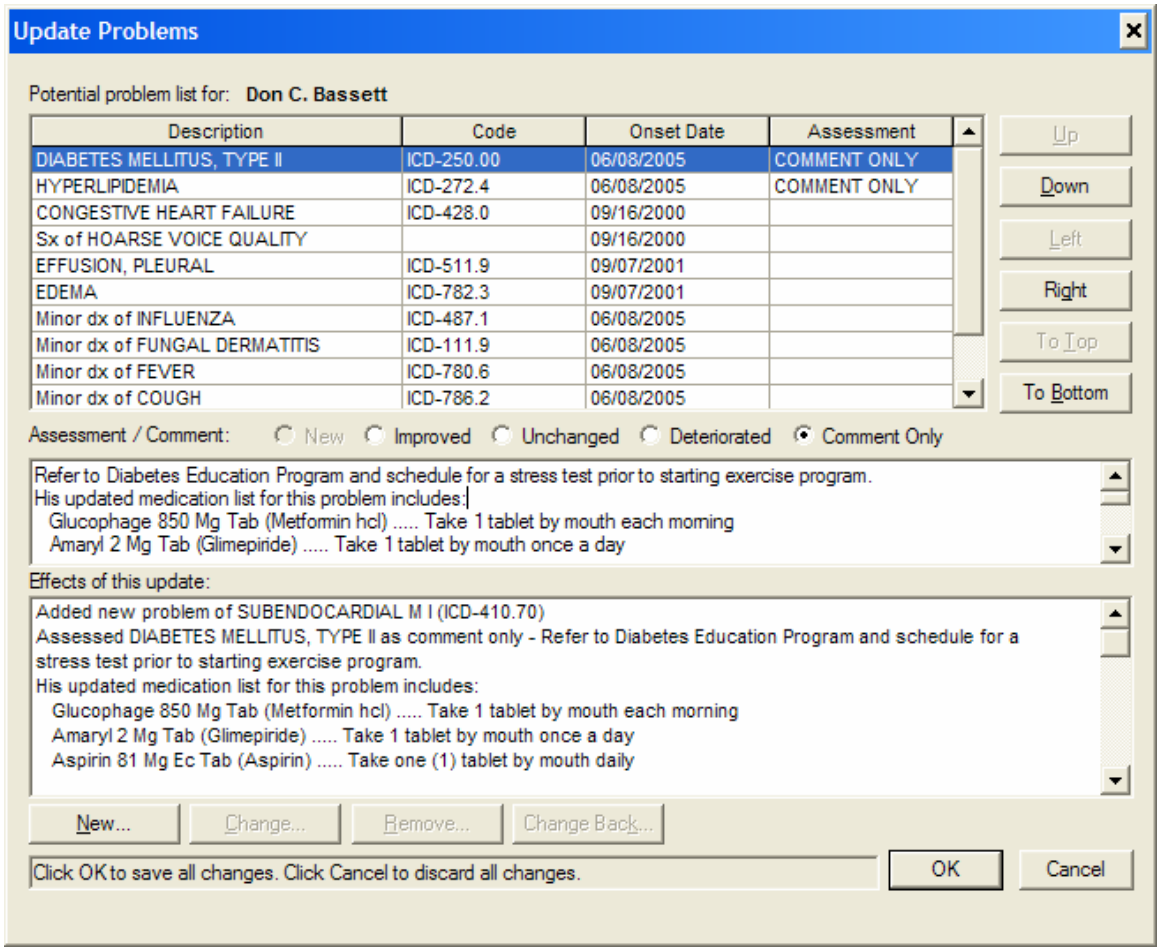

Note that all of the documentation entered in the assessment field (multi-line edit field) has been “committed”, or attached, to the designated problem on the patient’s problem list. Problem-specific assessments may be easily reviewed in the future simply by going to the problem list. Assessments can be reviewed by date. This is much easier than reviewing previous visits to determine the assessment/plan for a given problem over time.

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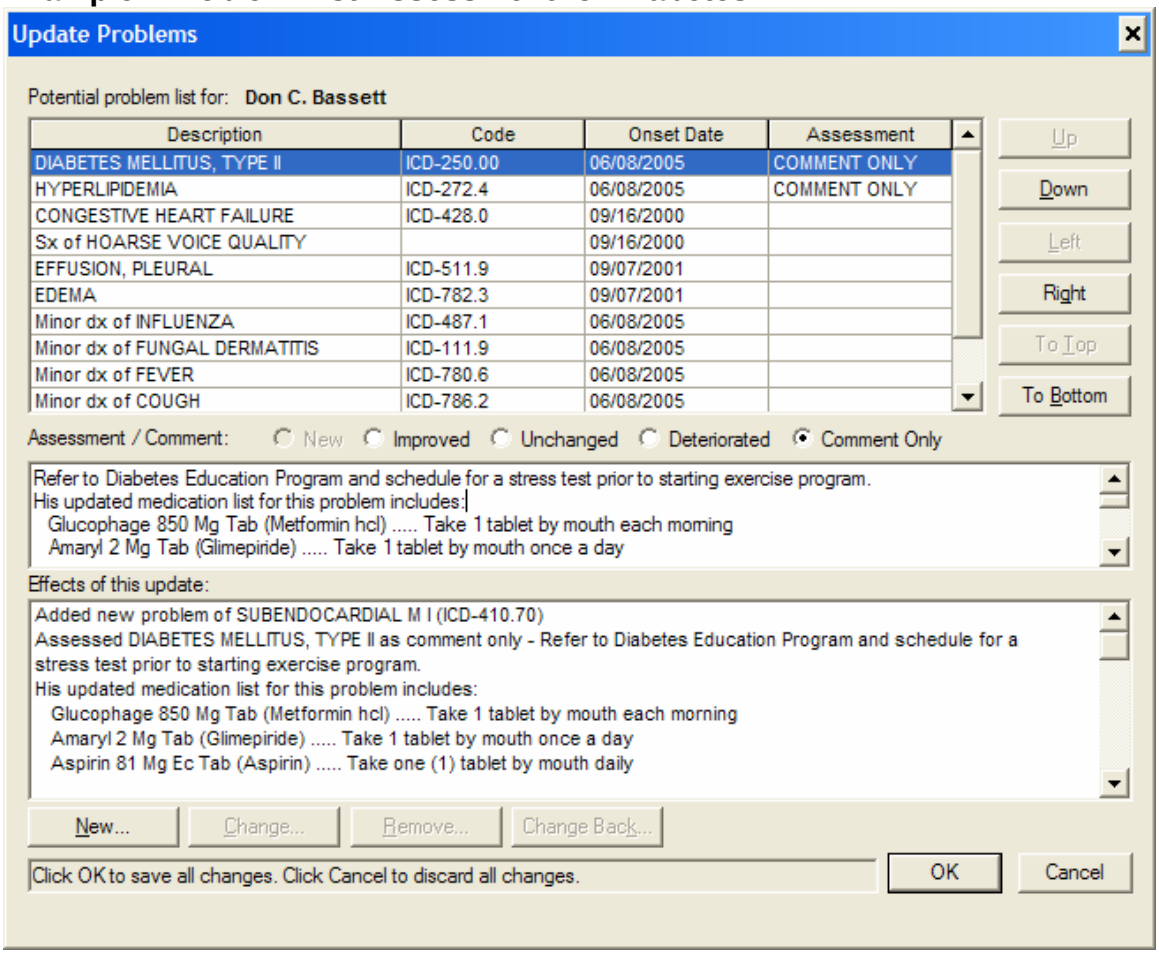
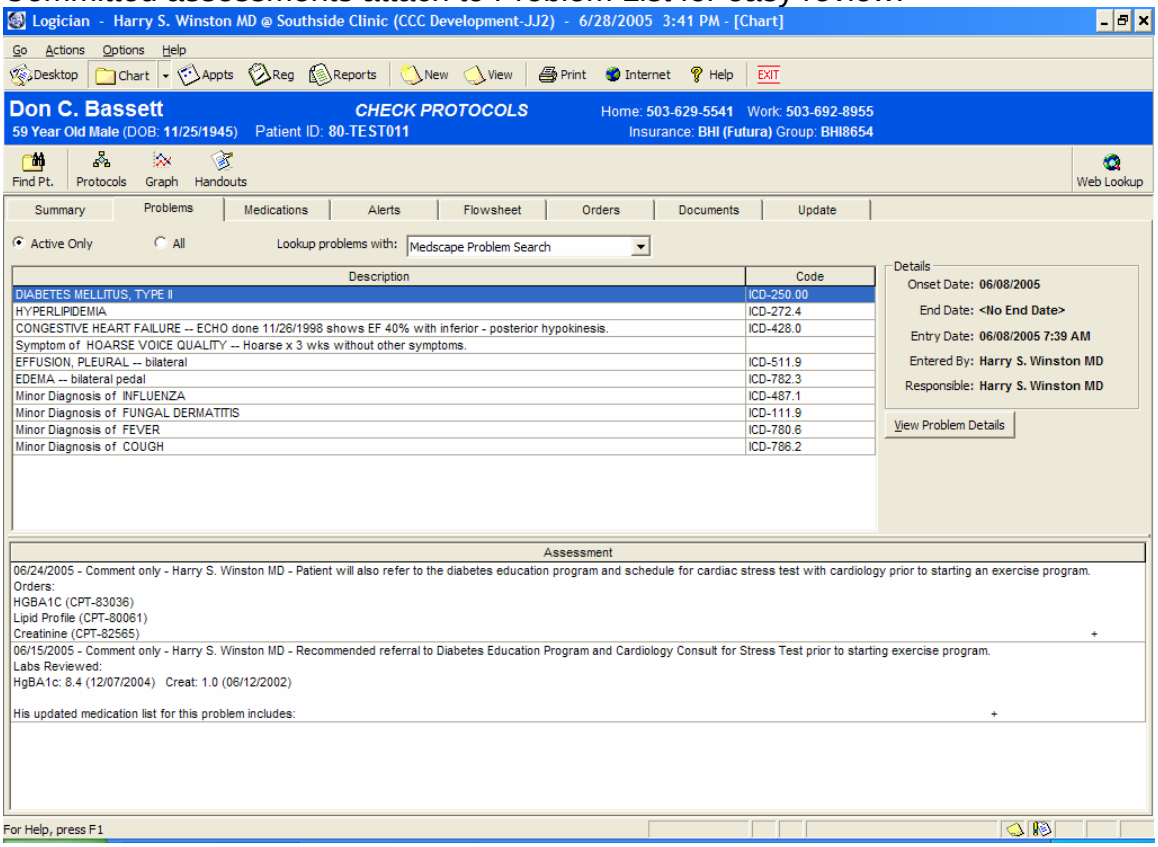
Example: Problem List Assessment for Diabetes



Committed assessments attach to Problem List for easy review:



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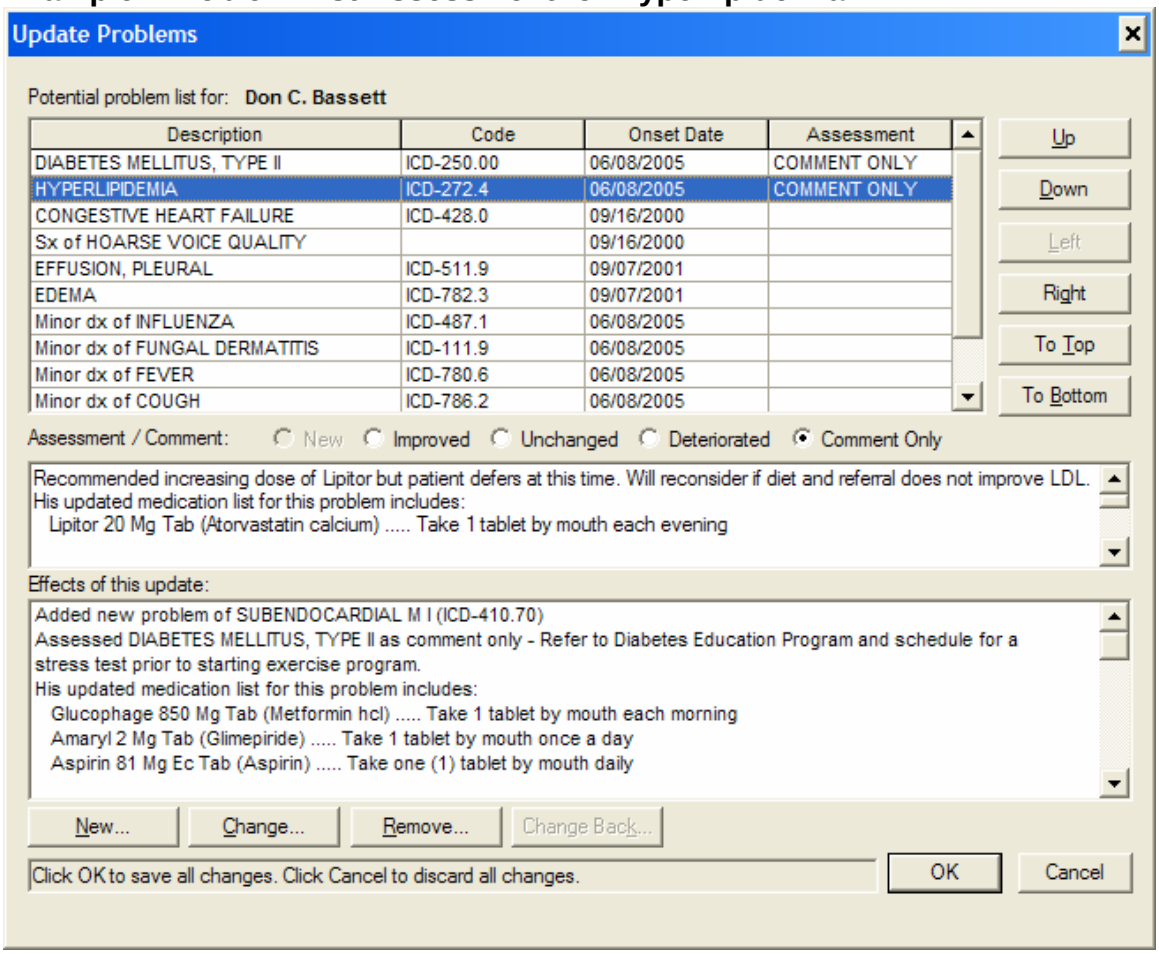
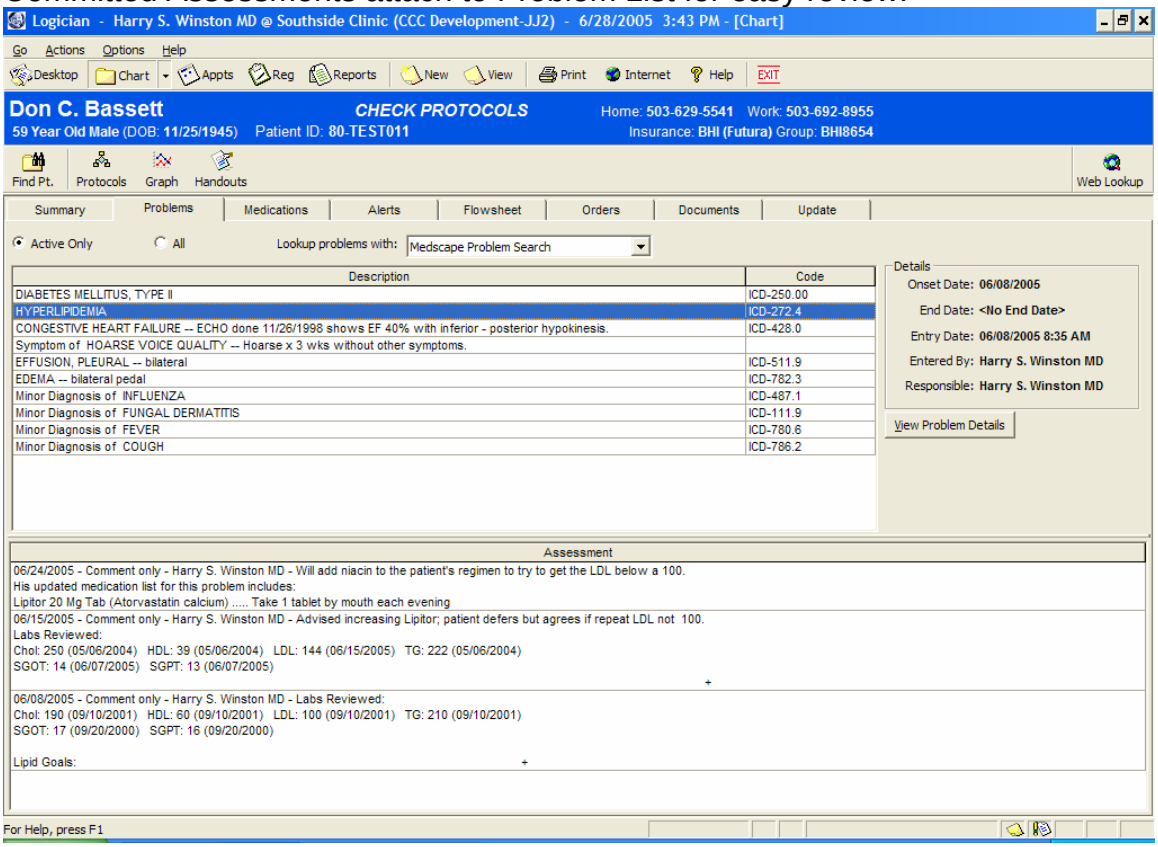
Example: Problem List Assessment for Hyperlipidemia



Committed Assessments attach to Problem List for easy review:



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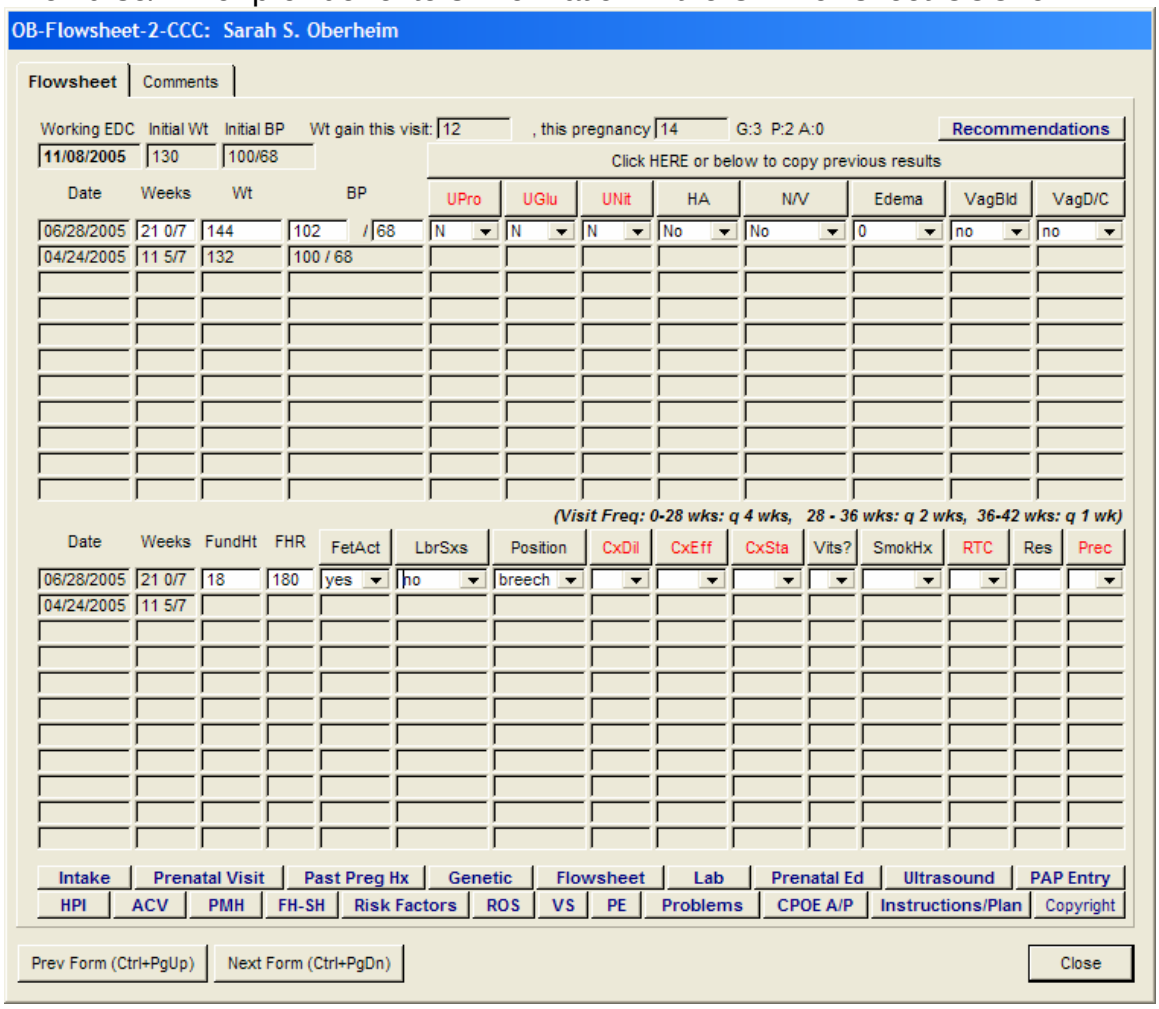
Example of CPOE Template and Workflow for Prenatal Visit

The nurse/MA or provider enters information in the OB-Flowsheet-CCC form:



The provider can review the data and enter comments within the OB-Flowsheet form, or skip directly to the CPOE A&P form and select Prenatal Care.

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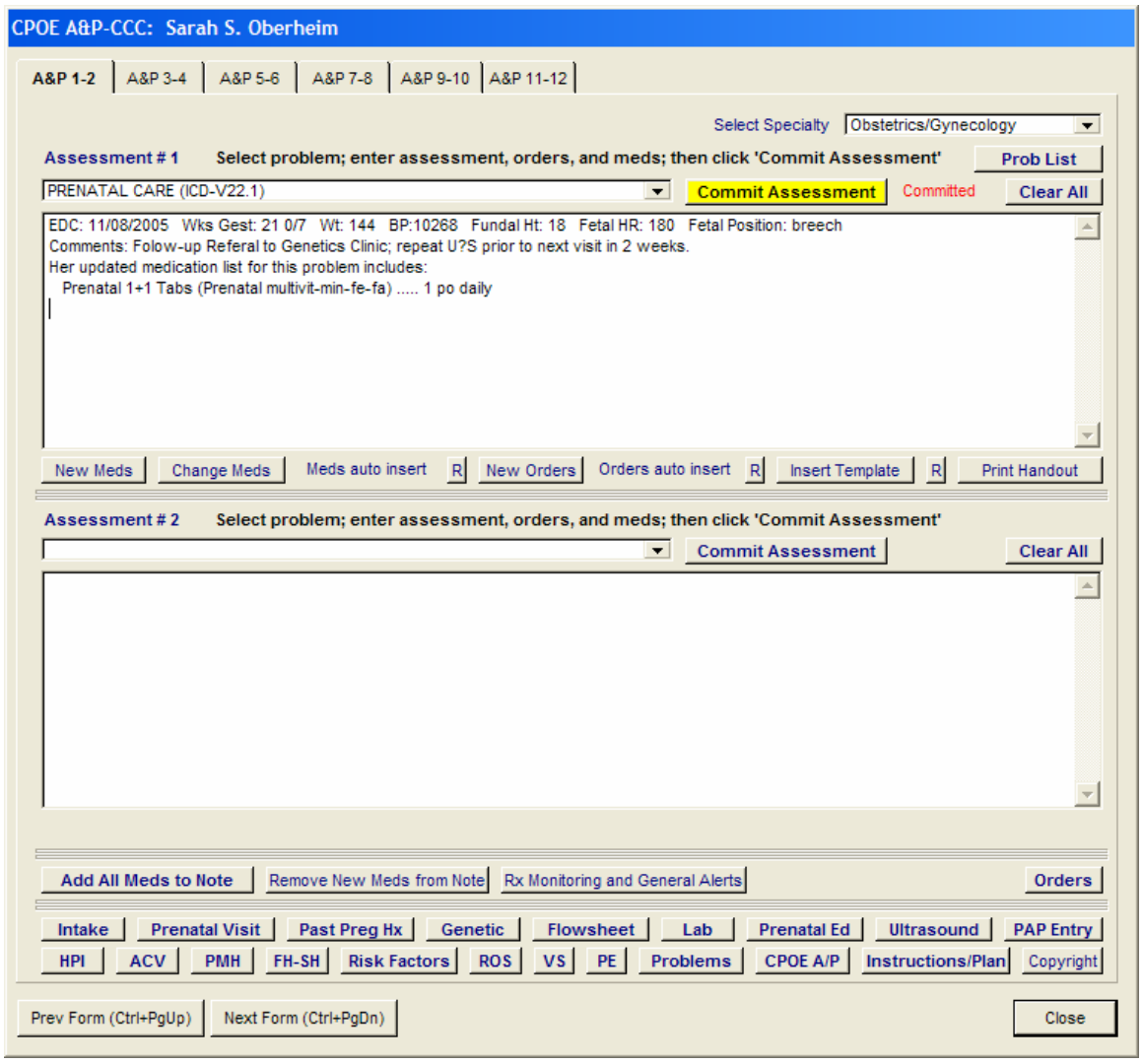
In the CPOE A&P form, the patient's current medications automatically populate the assessment field.

The provider can click the "Insert Template" button, which will populate the following information into the assessment field for Prenatal Care: EDC, Weeks gestation, and other values for today's visit such as weight, BP, FHR, fundal height, and position.

When the provider clicks the "Commit Assessment" action button, the documentation in the assessment field will be pushed to the patient's problem list (associated with the problem Prenatal Care).



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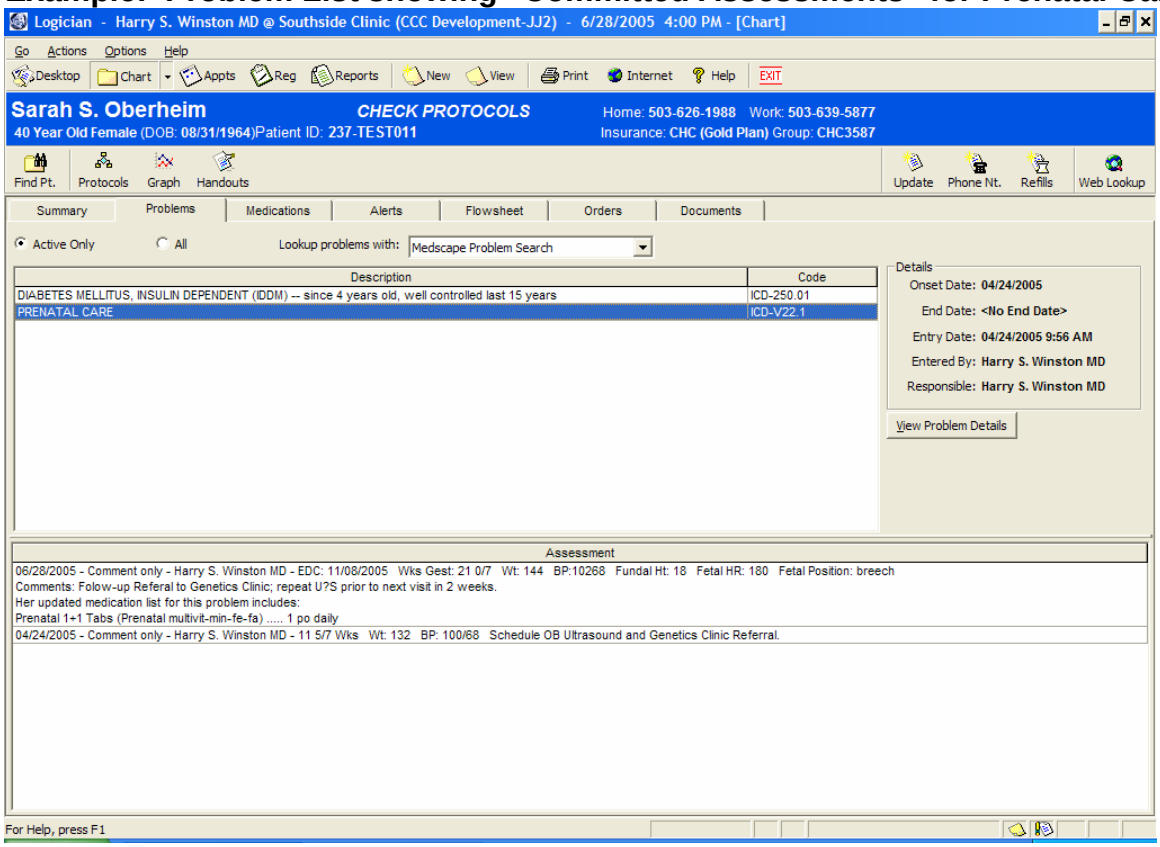
Example: Problem List showing "Committed Assessments" for Prenatal Care



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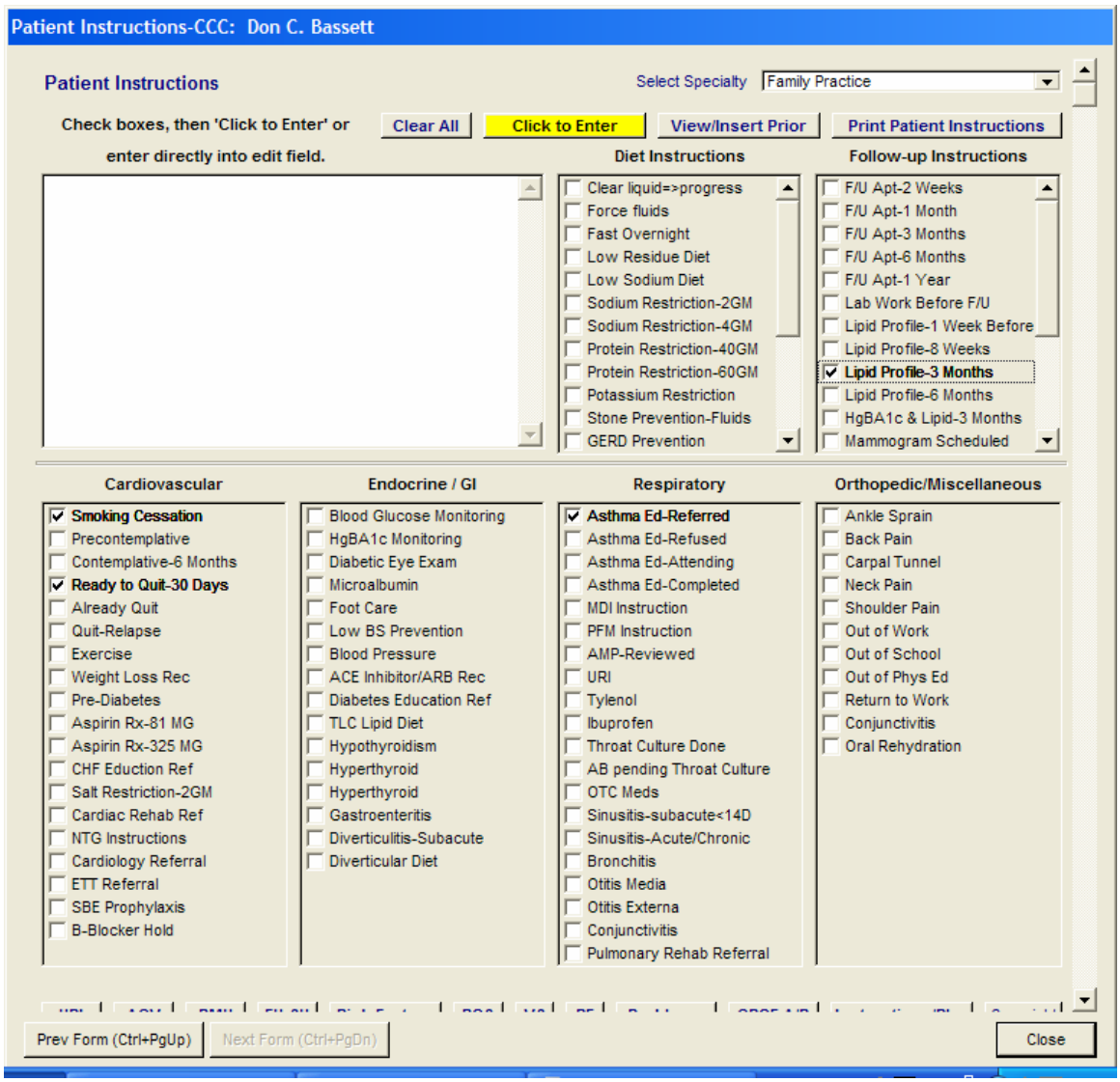
Patient Instructions-CCC

The Patient Instructions-CCC form is designed to allow for rapid point-and-click entry of the most common specialty-specific medical/surgical patient instructions provided during a visit. The list box items can be customized by specialty. In addition, the customization can also determine if an observation term is automatically populated and with what value. This decreases the time necessary to provide patient specific instructions as well as capture structured data which can be used for reporting or clinical decision support.

Example: Adult Patient Instructions-CCC



1. The Patient Instructions-CCC list boxes can be customized by specialty and/or provider. Customization options include list box headings, list box items, the obs term that is to be populated by clicking the list box item, and the value that gets pushed to that obs term.
2. The provider clicks all of the applicable instructions and clicks the “Click to Enter” action button to populate the patient instructions field (and any specified obs terms).
3. The values populate the patient instructions field (the INSTRUCTIONS obs term) which populate the chart note and the Patient Instruction Handout. Click the “Print Patient Instructions” action button to select and print the handout.
4. The Patient Instructions Handout may be further customized.

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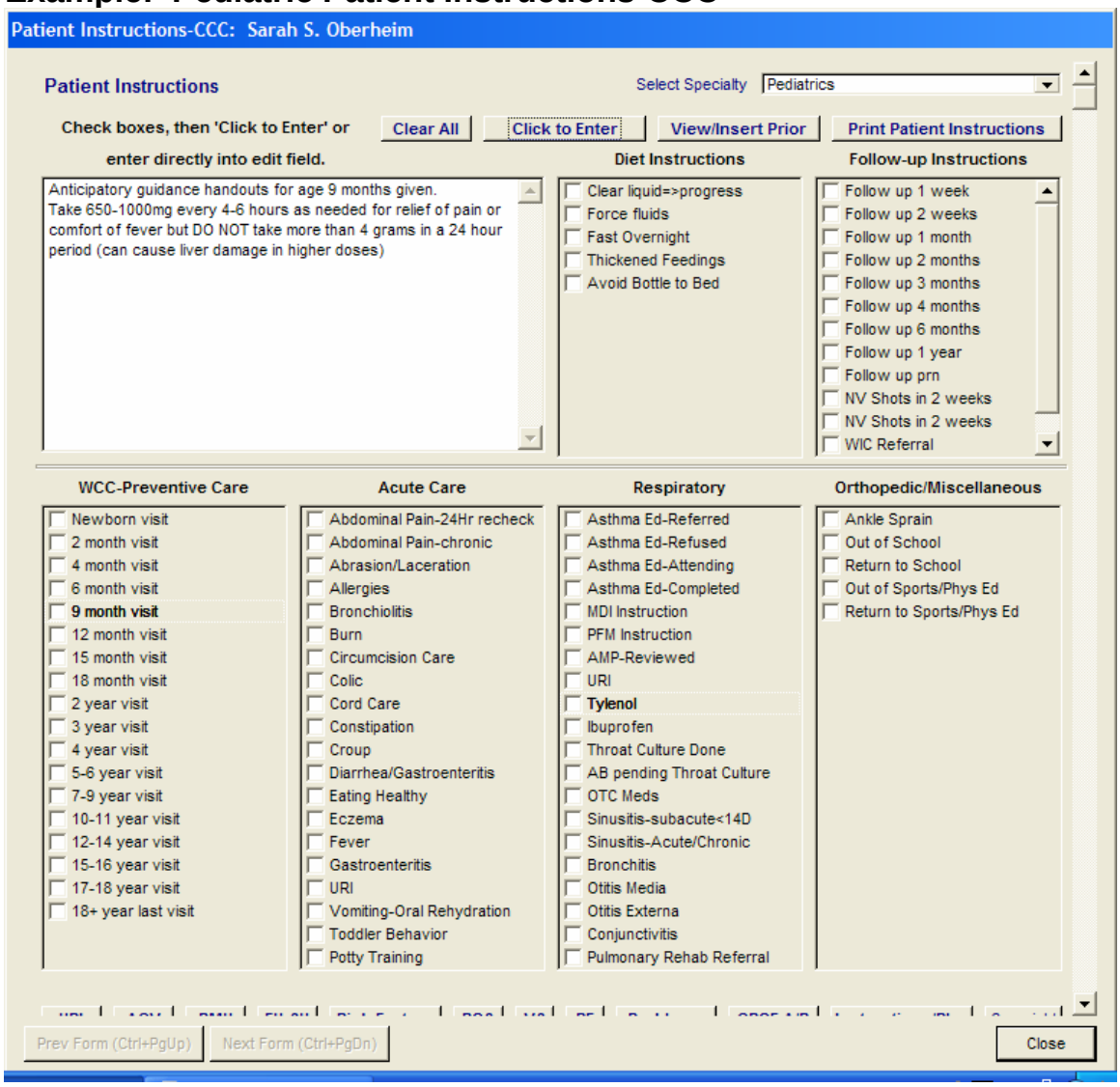
Example: Pediatric Patient Instructions-CCC



1. The Patient Instructions-CCC list boxes can be customized by specialty and/or provider. Customization options include list box headings, list box items, the obs term that is to be populated by clicking the list box item, and the value that gets pushed to that obs term.
2. The provider clicks all of the applicable instructions and clicks the “Click to Enter” action button to populate the patient instructions field (and any specified obs terms).
3. The values populate the patient instructions field (the INSTRUCTIONS obs term) which populate the chart note and the Patient Instruction Handout. Click the “Print Patient Instructions” action button to select and print the handout.
4. The Patient Instructions Handout may be further customized. Note that in the example above, the headings and instructions are broken into Well Child Check and other sections appropriate for Pediatrics.

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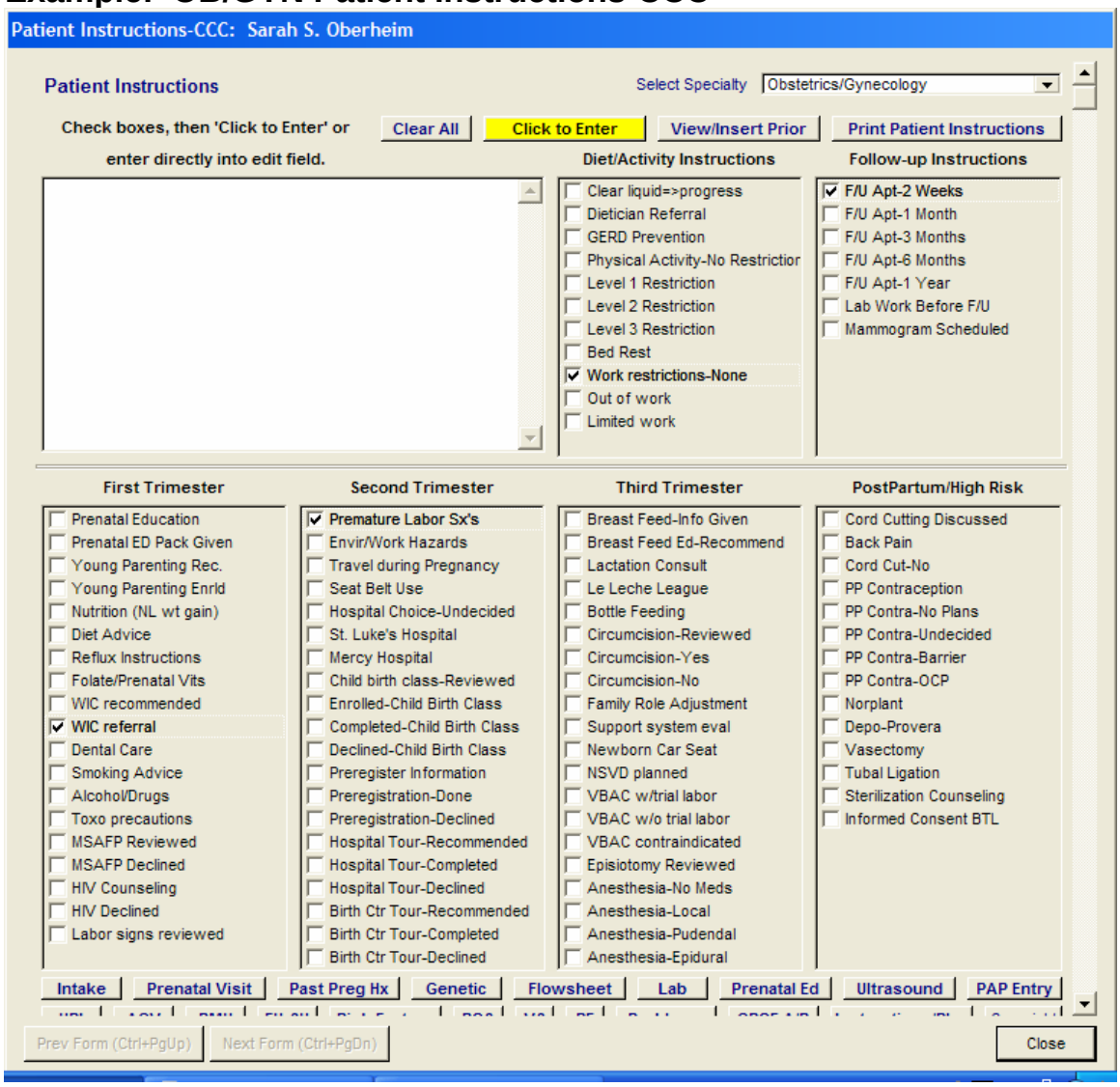
Example: OB/GYN Patient Instructions-CCC



1. The Patient Instructions-CCC list boxes can be customized by specialty and/or provider. Customization options include list box headings, list box items, the obs term that is to be populated by clicking the list box item, and the value that gets pushed to that obs term.
2. The provider clicks all of the applicable instructions and clicks the “Click to Enter” action button to populate the patient instructions field (and any specified obs terms).
3. The values populate the patient instructions field (the INSTRUCTIONS obs term) which populate the chart note and the Patient Instruction Handout. Click the “Print Patient Instructions” action button to select and print the handout.
4. The Patient Instructions Handout may be further customized. Note that in the example above, the headings and instructions are broken into First, Second, and Third Trimester as well as High Risk/Post-Partum care.

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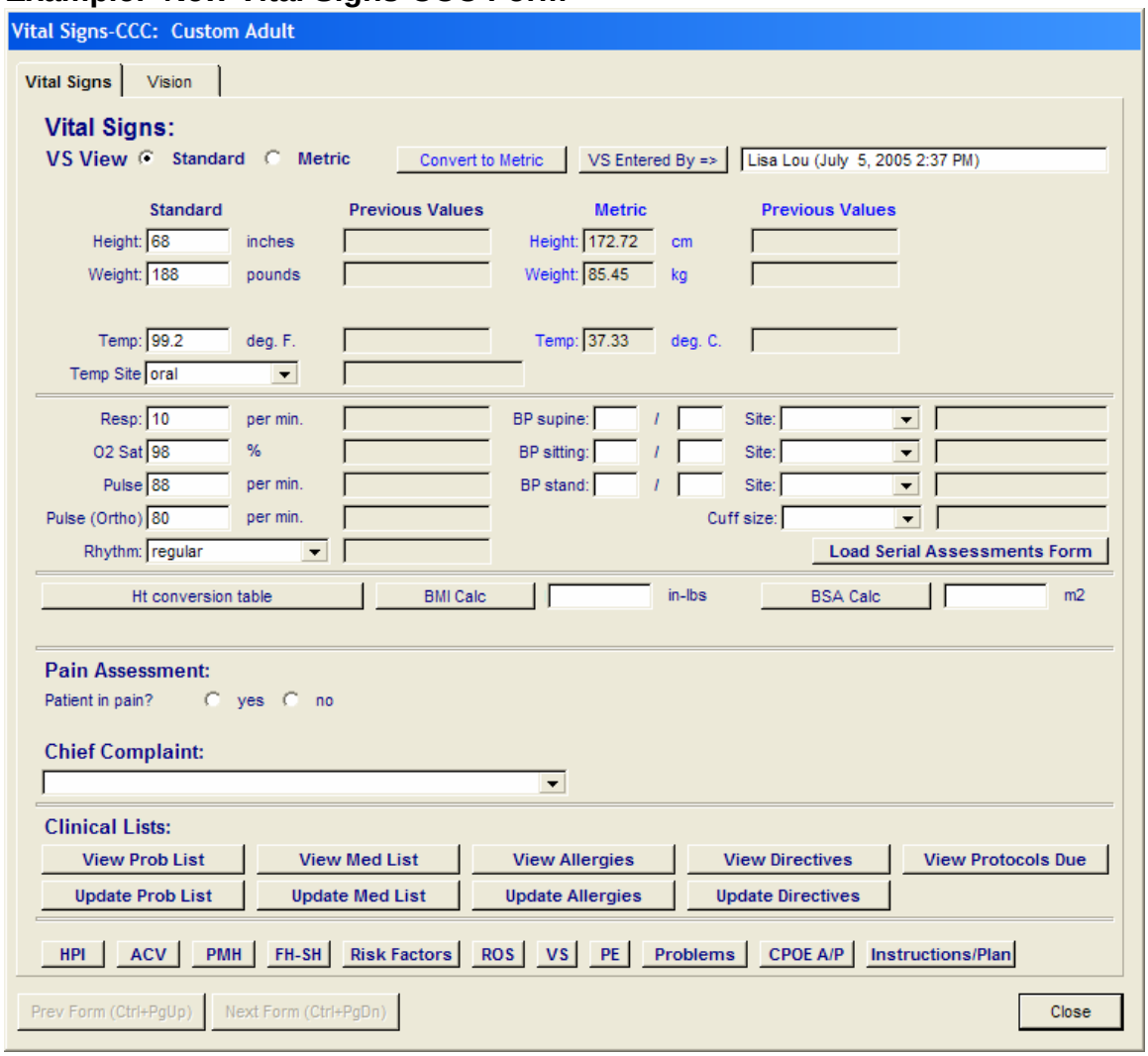
Vital Signs-CCC

The Vital Signs-CCC form is designed to allow for rapid point-and-click entry of the most common vital signs. Since each site has unique documentation needs, the Vital Signs-CCC form is the only CCC form that can be fully customized by a site. With the CCCQE-Version 8.3 release, CCC is providing the .fd and .fs files to allow sites to edit or further customize the form. CCC has also created a Serial VS Form which allows the documentation of multiple, serial sets of vital signs including postural BPs and multiple BP sites.

Example: New Vital Signs-CCC Form



1. The patient's vital signs can be entered in either "Standard" or "Metric" units. To convert to the other standard, click the "Convert to Metric/Convert to Standard" action button.
2. Previously recorded values will display, along with the date recorded, for quick review.
3. This form allows the documentation of lying, sitting, and standing BP in multiple sites.
   NOTE: to document more than one set of vital signs, click the "Load Serial Assessments Form" action button and enter multiple sites/serial values using this new form.

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4. The BMI and BSA values may be calculated by clicking the “BMI Calc” and “BSA Calc” action buttons.
5. A nursing pain assessment may be documented by clicking the “yes” radio button for “Patient in Pain?”. The location, intensity, and type of pain can be documented.
6. For female patients, a LMP edit field will display to document the Last Menstrual Period (LMP) date.
7. The second page of the form component allows a vision screening to be documented.
8. NOTE: With Version 8.3, the .FD and .FS files for the Vital Signs-CCC form are available so each site can make further changes/customization to meet their needs.

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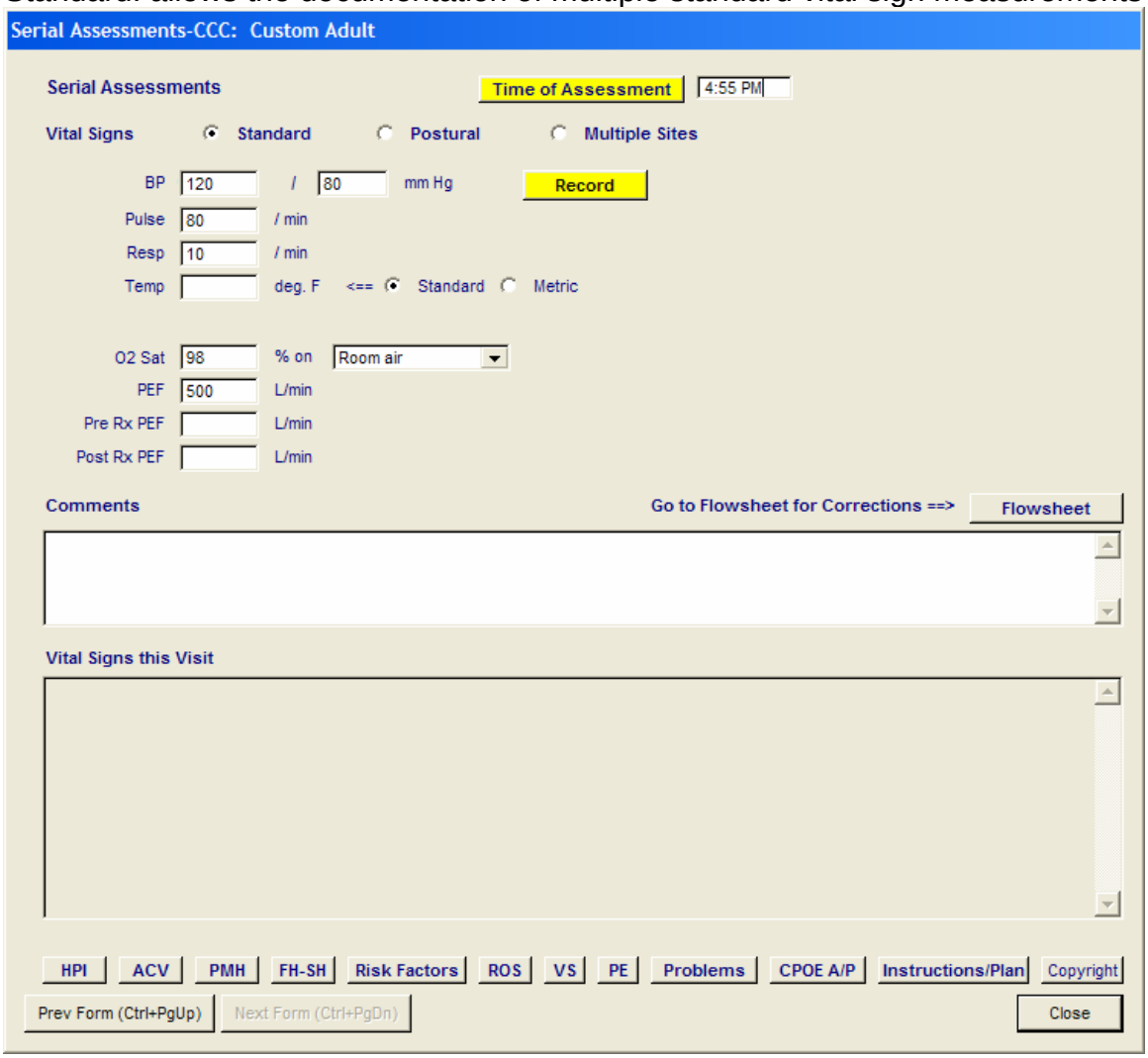
Example: Serial Assessments-CCC

Standard: allows the documentation of multiple standard vital sign measurements



1. Click the “Time of Assessment” action button to enter the time of assessment, enter all values that are to be documented, and click the “Record” action button.
2. Repeat the process to record the next set of measurements.
3. A flowsheet view of the vital signs will be created in the “Vital Signs this Visit” data display and in the chart note.
4. The Comments field may be used to document comments regarding patient status or treatment decisions.

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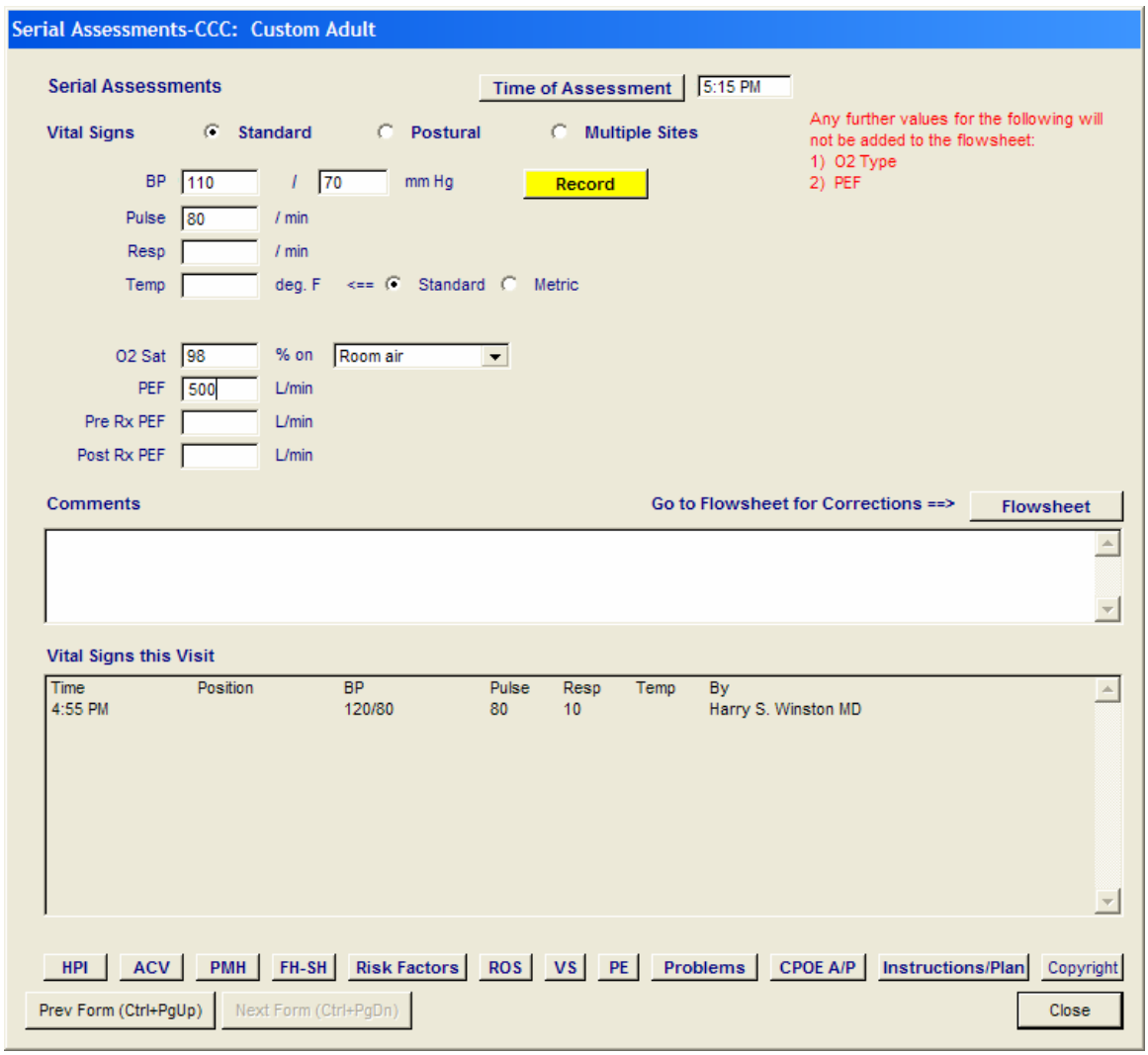
Example: Serial Assessments-CCC

Standard: continued



1. Click the “Time of Assessment” action button to enter the time of assessment, enter all values that are to be documented, and click the “Record” action button.
2. Repeat the process to record subsequent sets of measurements.
3. A flowsheet view of the vital signs will be created in the “Vital Signs this Visit” data display and in the chart note.
4. The Comments field may be used to document comments regarding patient status or treatment decisions .

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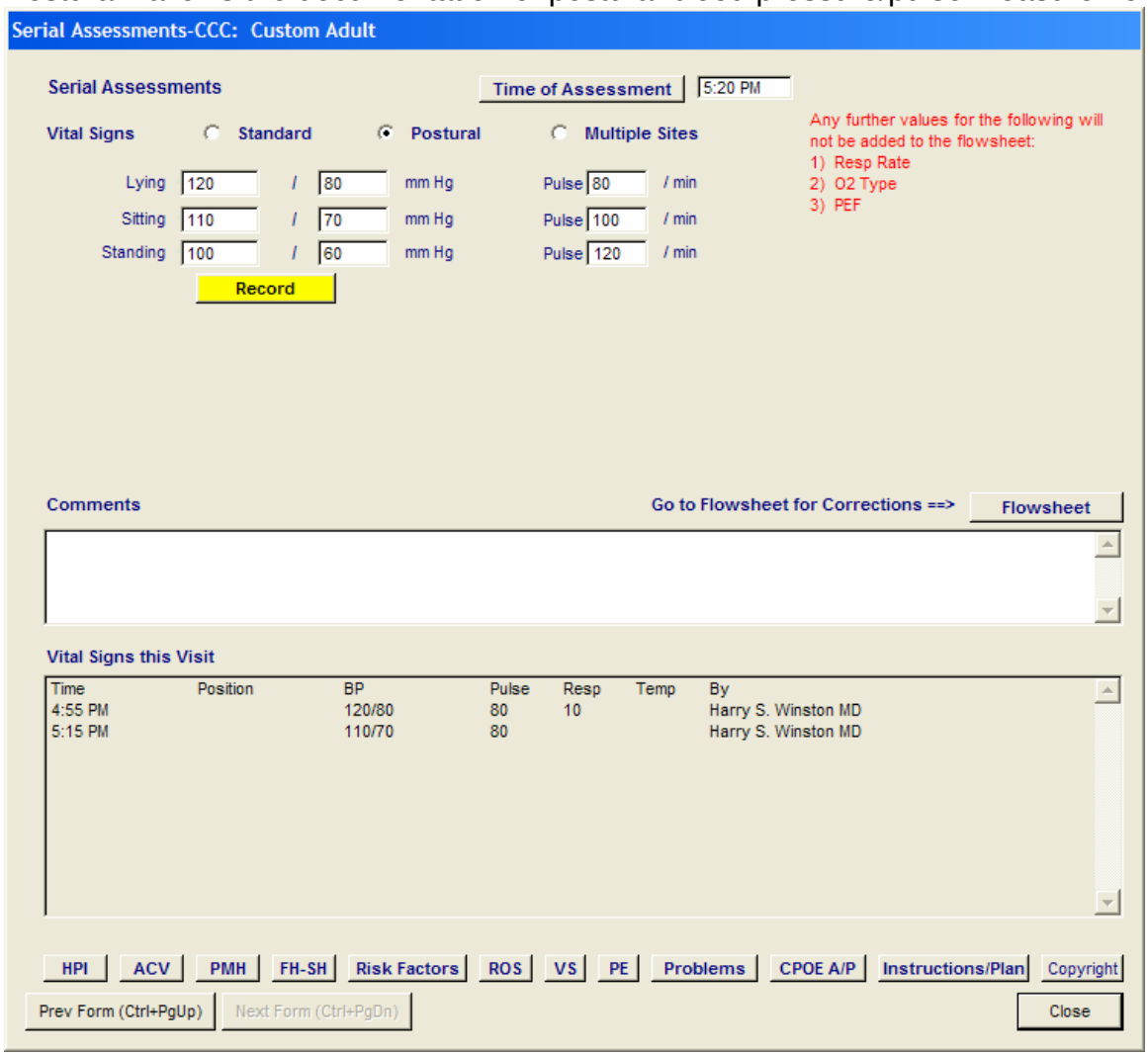
Example: Serial Assessments-CCC

Postural: allows the documentation of postural blood pressure/pulse measurements



1. Click the “Time of Assessment” action button to enter the time of assessment, enter all values that are to be documented, and click the “Record” action button.
2. Repeat the process to record subsequent sets of measurements.
3. A flowsheet view of the vital signs will be created in the “Vital Signs this Visit” data display and in the chart note.
4. The Comments field may be used to document comments regarding patient status or treatment decisions.

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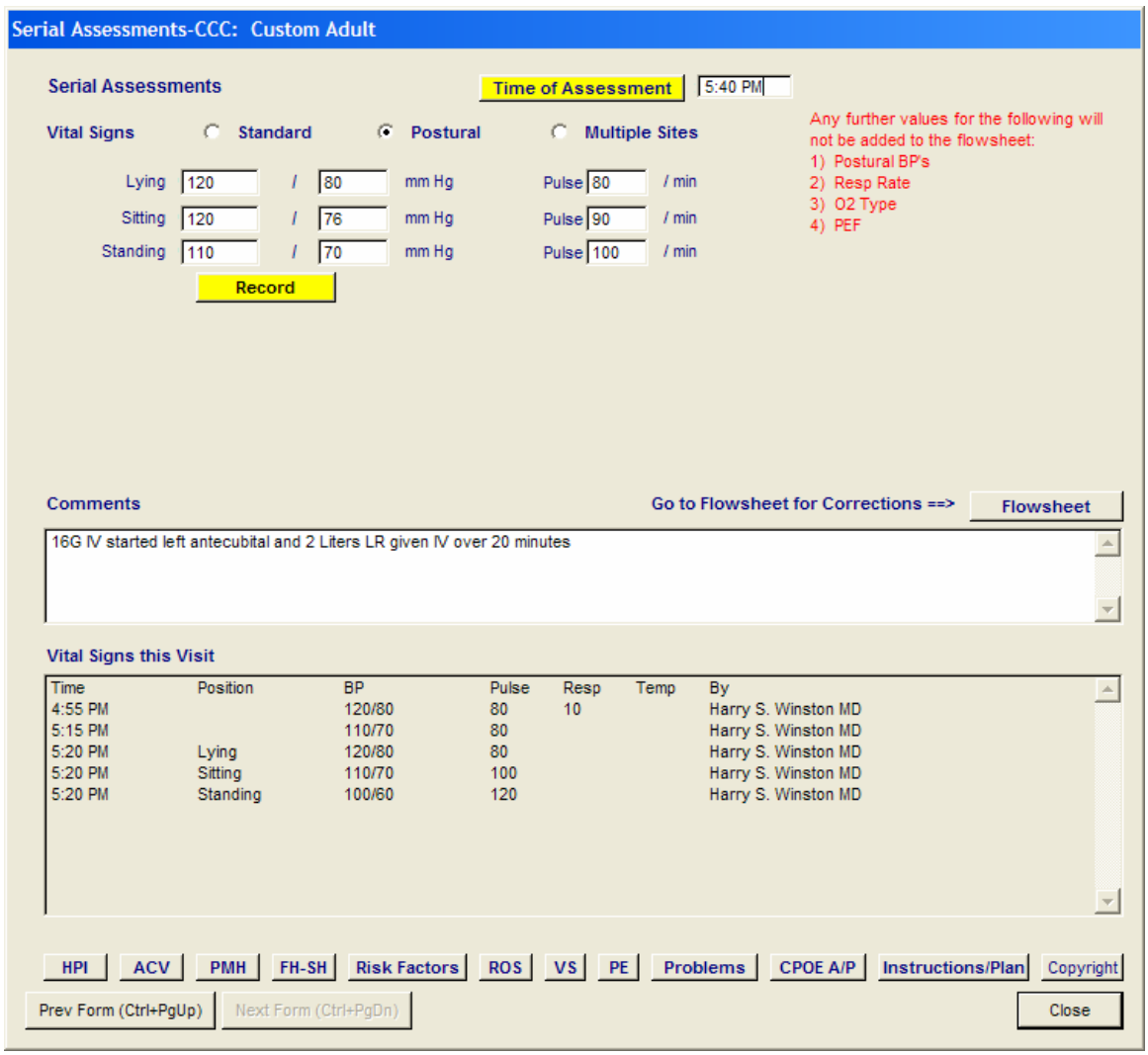
Example: Serial Assessments-CCC

Postural: continued



1. Click the “Time of Assessment” action button to enter the time of assessment, enter all values that are to be documented, and click the “Record” action button.
2. Repeat the process to record subsequent sets of measurements.
3. A flowsheet view of the vital signs will be created in the “Vital Signs this Visit” data display and in the chart note.
4. The Comments field may be used to document comments regarding patient status or treatment decisions (see IV and fluid comments above).

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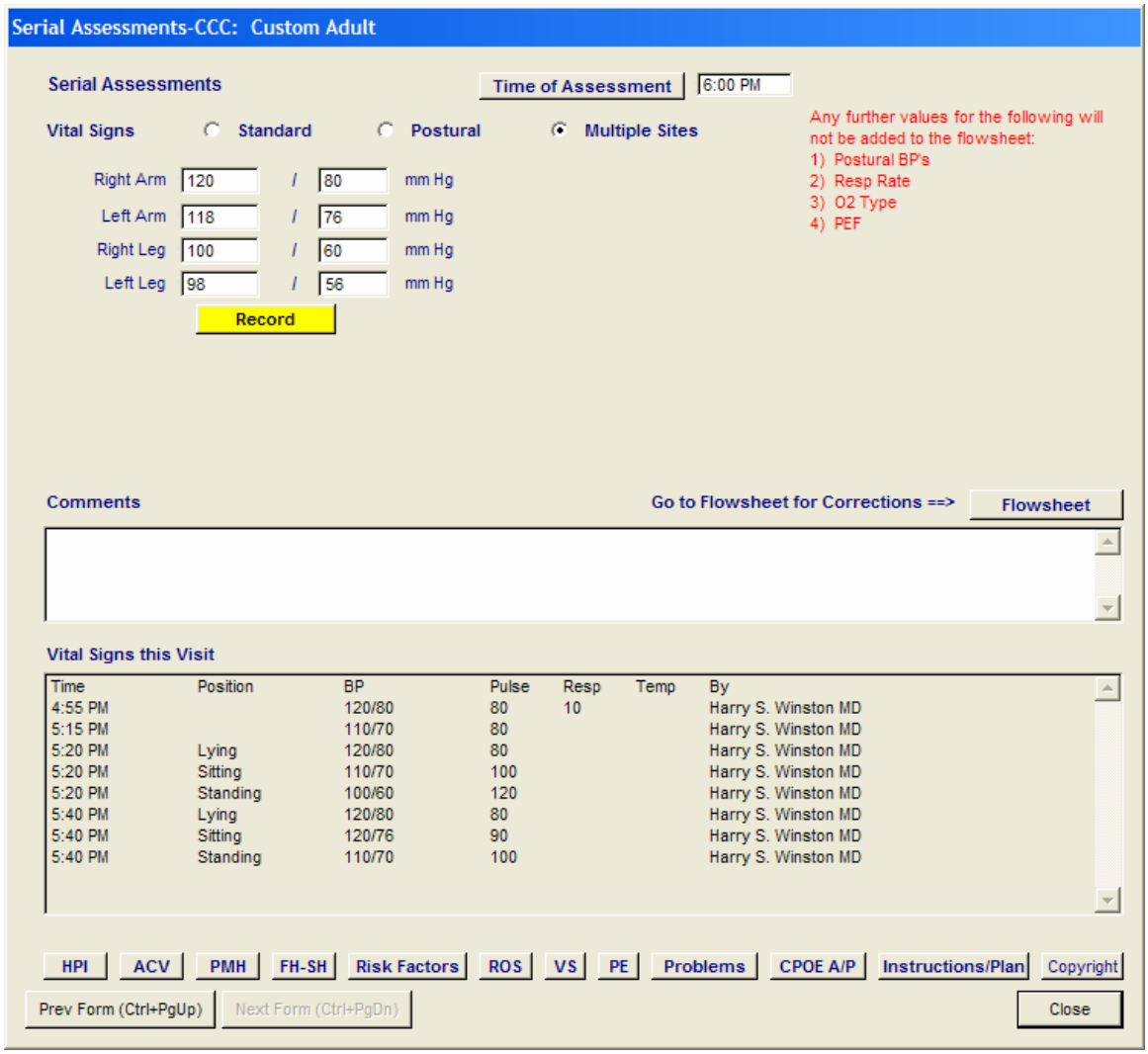
Example: Serial Assessments-CCC

Multiple Sites: allows the documentation of additional blood pressure measurements by site



1. Click the “Time of Assessment” action button to enter the time of assessment, enter all values that are to be documented, and click the “Record” action button.
2. Repeat the process to record subsequent sets of measurements.
3. A flowsheet view of the vital signs will be created in the “Vital Signs this Visit” data display and in the chart note.
4. The Comments field may be used to document comments regarding patient status or treatment decisions.

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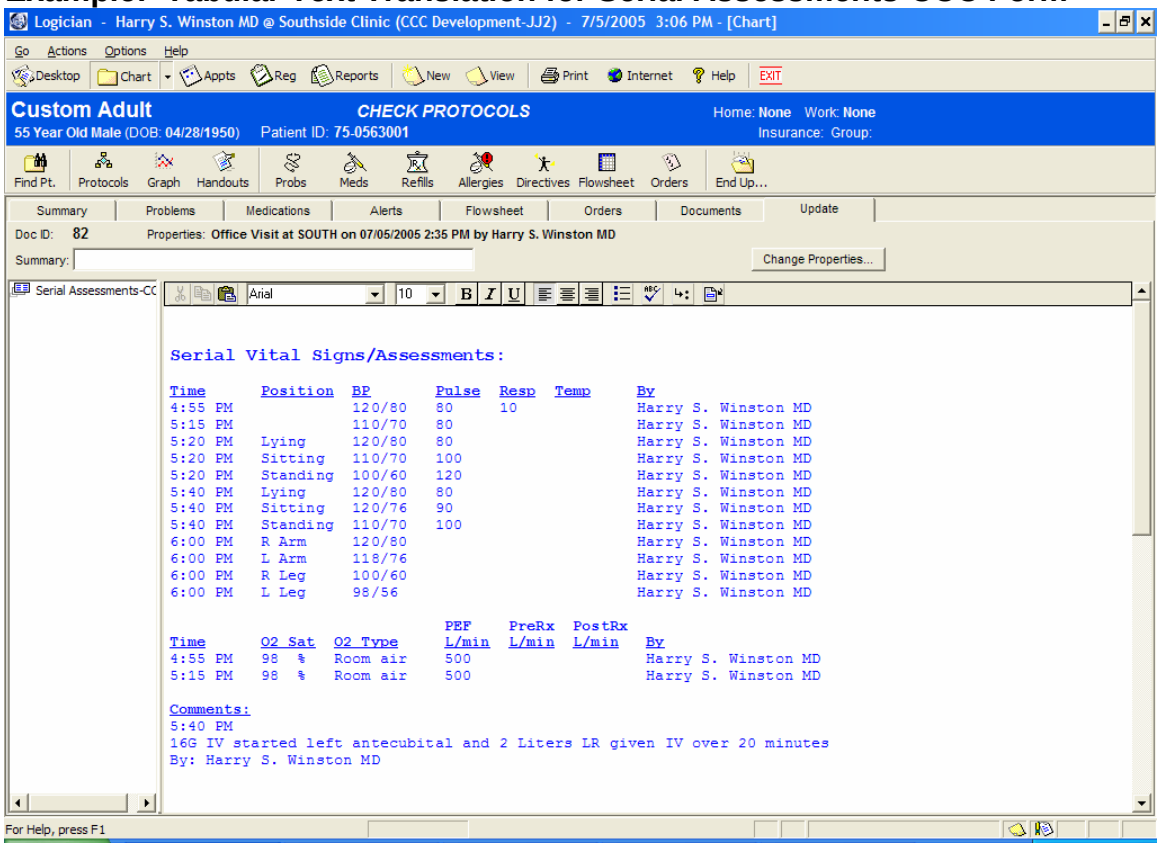
Example: Tabular Text Translation for Serial Assessments-CCC Form



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Section 2

CCCQE™ Text File Editor (TFE) User Guide

Overview

The CCCQE™ Text File Editor (TFE) was designed to allow users to more easily and quickly customize, edit, or create specialty- and site-specific custom clinical content. The Core CCCQE™ forms can be edited using the new CCC Text File Editor encounter form. This new editor automatically rewrites the MEL code for the CCCQE-User-Edit text files and can be used to edit the following forms:

- HPI-CCC
- PMH-CCC
- PMH-PSH-CCC
- FH-SH-CCC
- ROS-CCC
- PE-CCC
    - PE-Age Specific (for FP and Pediatrics)
    - PE-Detailed Specialty-Specific Forms such as:
        - ENT, Cardiovascular, Thyroid, and GU
- Problems-CCC
- CPOE A&P-CCC
- Patient Instructions-CCC

There is a separate TFE form to create custom templates for the new Test Management-CCC encounter form.

The CCCQE™ Text File Editor (TFE) will allow sites that have previously customized their CCCQE-User-Edit files to pull those changes forward and rewrite the MEL code into the new TFE format.

In writing the new TFE format, CCC has significantly decreased the size of the files and memory requirements of the new CCCQE™ MEL functions which will be reflected in improved performance and speed.

Detailed instructions for using the new CCC-TFE are built directly into the TFE Encounter Form. Clicking the yellow “General Instructions” action button will open the directions needed to get started. For more detailed instructions for any action button contained within the editor, simply click on the various (?) action buttons next to each item for expanded instructions.

Since sites will want to limit/restrict access to editing of the text files, you will need to determine the users within the group who will have the privilege to make changes/edits. Once this is determined, open the CCCQE-User-Edit-Setup.txt file and search for the instructions/function at the bottom of the file shown below. The default conditional statement allows access for hwinston and kstarr.

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Default Authorized TFE Users

// Authorized TFE Users:
// This function must return the value of 1 for the user to be authorized.
// For any and all users to use the "CCC Text File Editor", simply place the number 1 between the curly brackets.
// Otherwise, a conditional statement will be needed to limit the use of this encounter form.

```
fn ccc_TFE_authorized_users()
{
cond
case user.loginname="hwinston" return 1
case user.loginname="kstarr" return 1
else return ""
endcond
}
```

Change the login names to those authorized at your site. Add in additional conditional statements if needed to allow more than two providers to have editing access.

Suggestions/Recommendations for Editing Text Files Using The New CCC-TFE

1. Make a back-up copy of all you User-Edit Files prior to any editing.

2. Make all edits and test on a Test Server database **OR** in Network Training on a local workstation.

3. Use either a blank open NotePad (or WordPad) page or the Dictation Box within CCC VRI (Voice Recognition) that comes with Dragon NaturallySpeaking 8 Medical when entering large amounts of text (descriptions or templates) into small edit fields.

4. Be sure to have wordwrap turned off within NotePad (or WordPad). If wordwrap is on when you cut and paste text into the CCC-TFE, any text after the first carriage return WILL NOT paste into the edit field.

5. Read the instructions below as well as those within the editor itself before attempting to edit any files.

6. Be patient; with time and experience, making edits and customizations will become routine.

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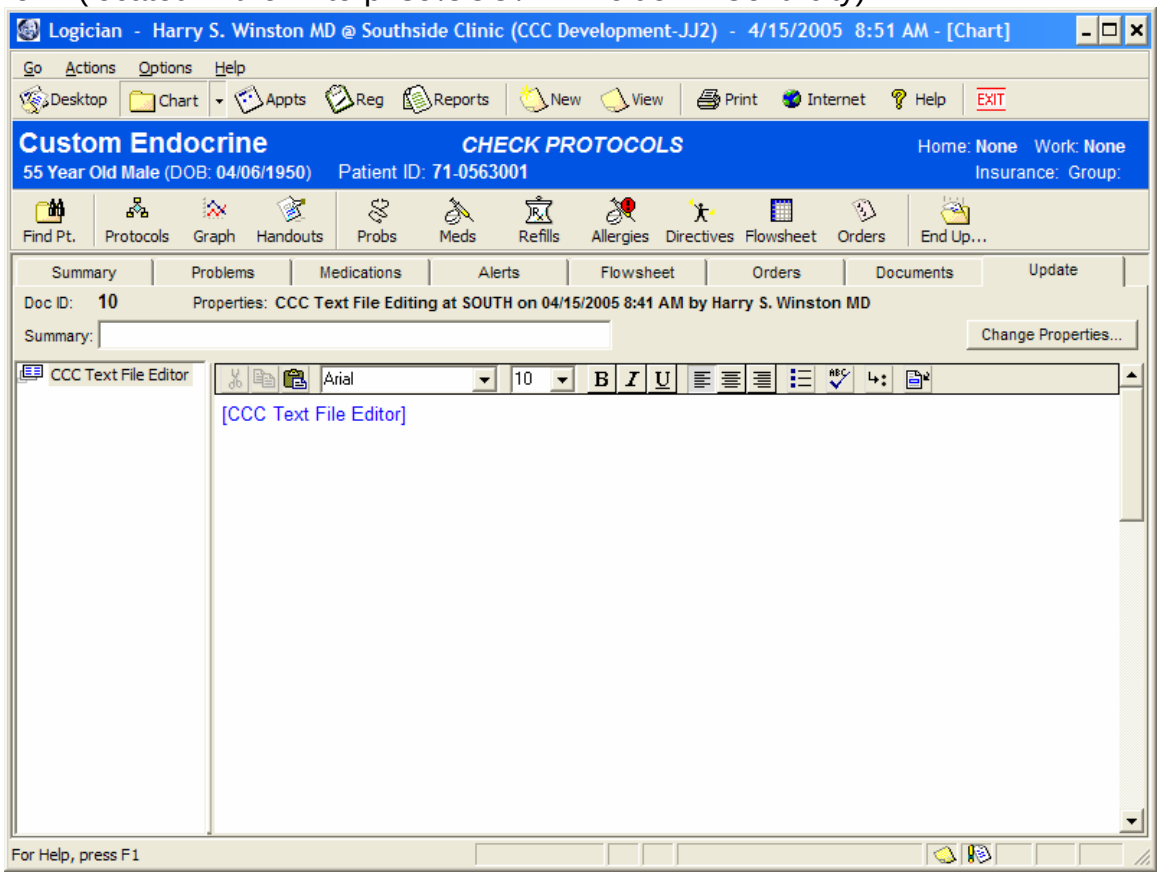
1. Getting Started

Start an update in a test patient's chart and insert the CCC Text File Editor encounter form (located in the Enterprise\CCC\ TFE folder in Centricity).



The CCC Text File Editor form may be used to create or edit the customization for the following Core CCC forms:

- HPI-CCC
- PMH-CCC
- PMH-PSH-CCC
- FH-SH-CCC
- ROS-CCC
- PE-CCC
- Problems-CCC
- CPOE A&P-CCC
- Patient Instructions-CCC

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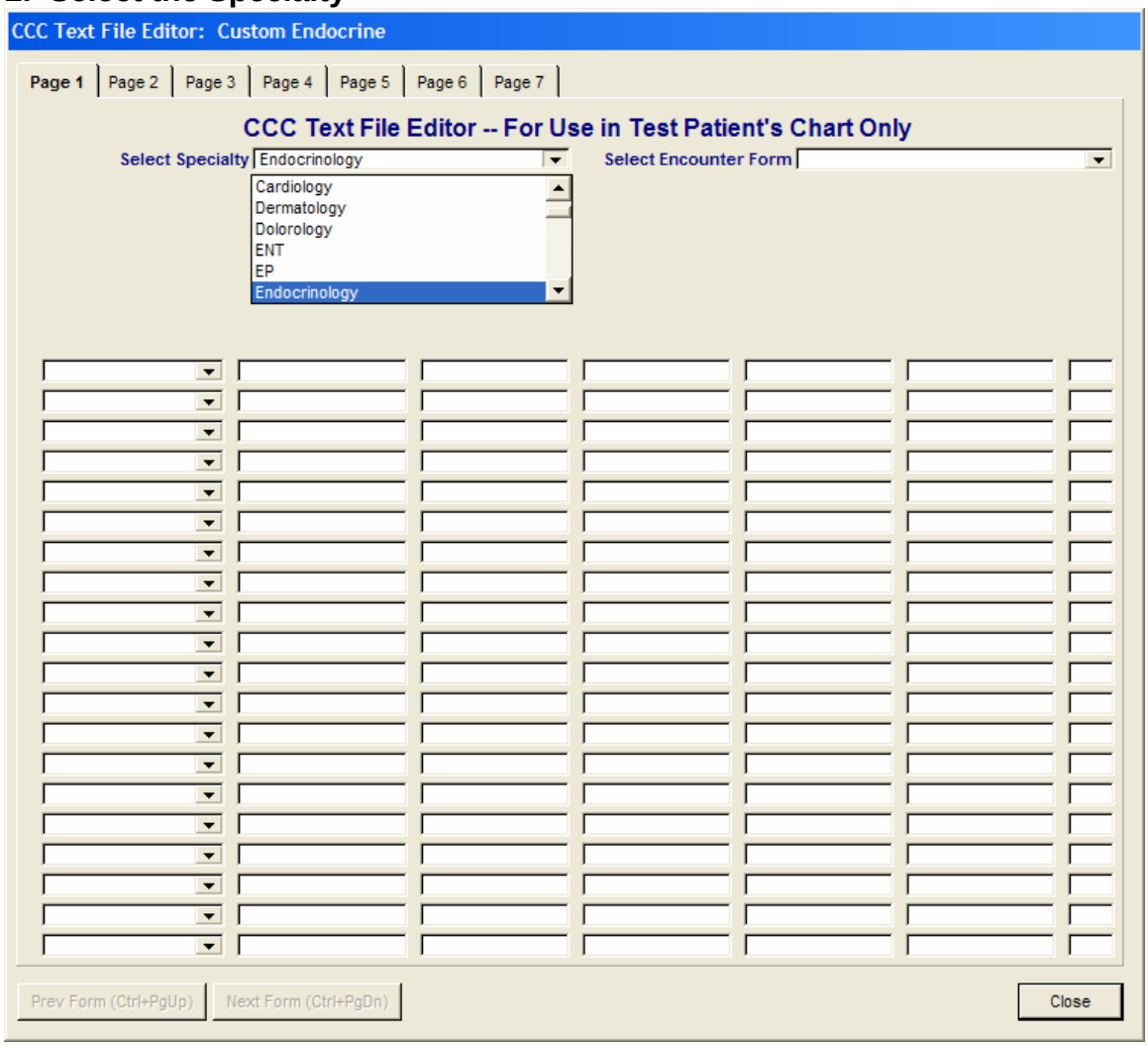
2. Select the Specialty



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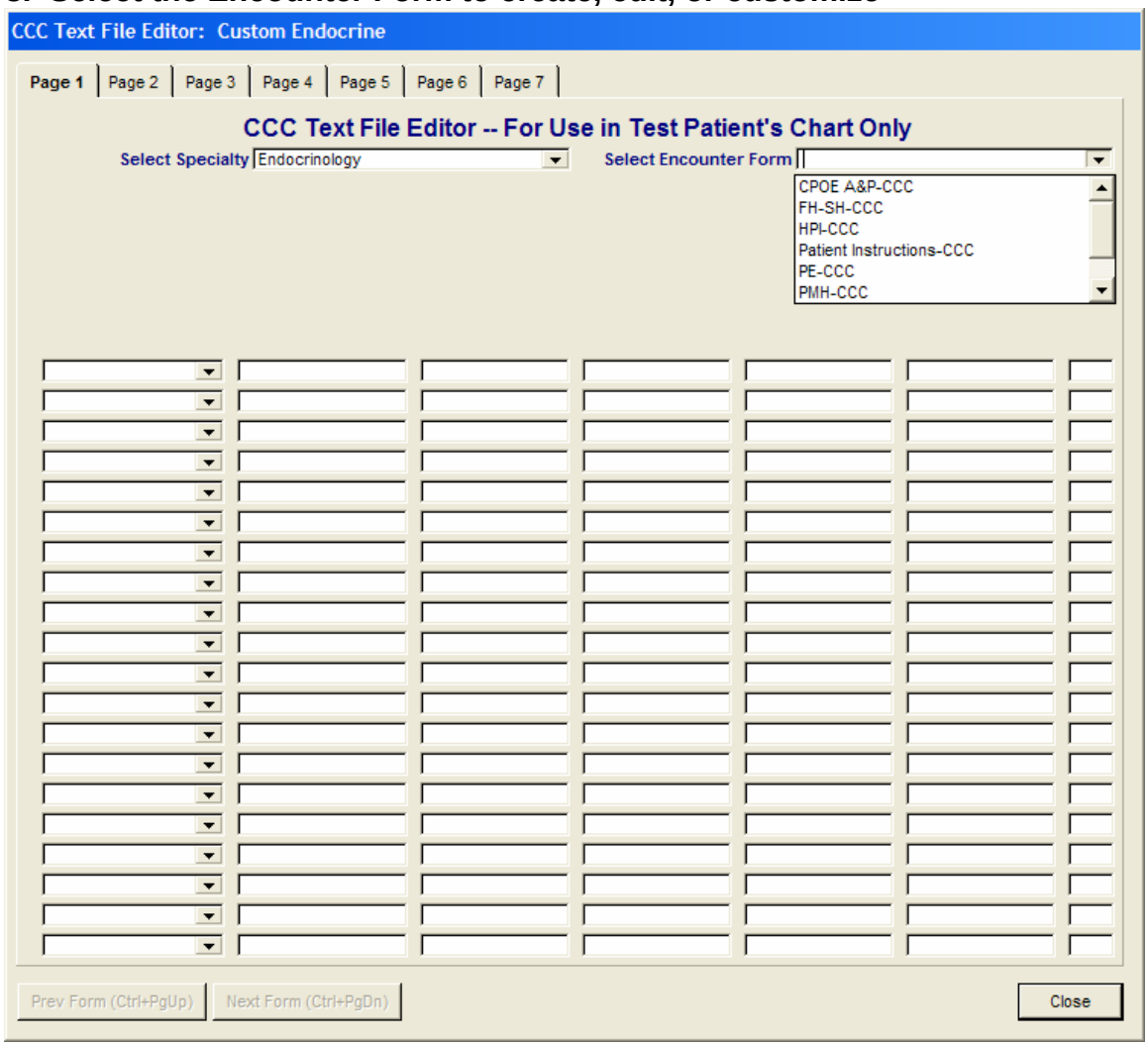
3. Select the Encounter Form to create, edit, or customize



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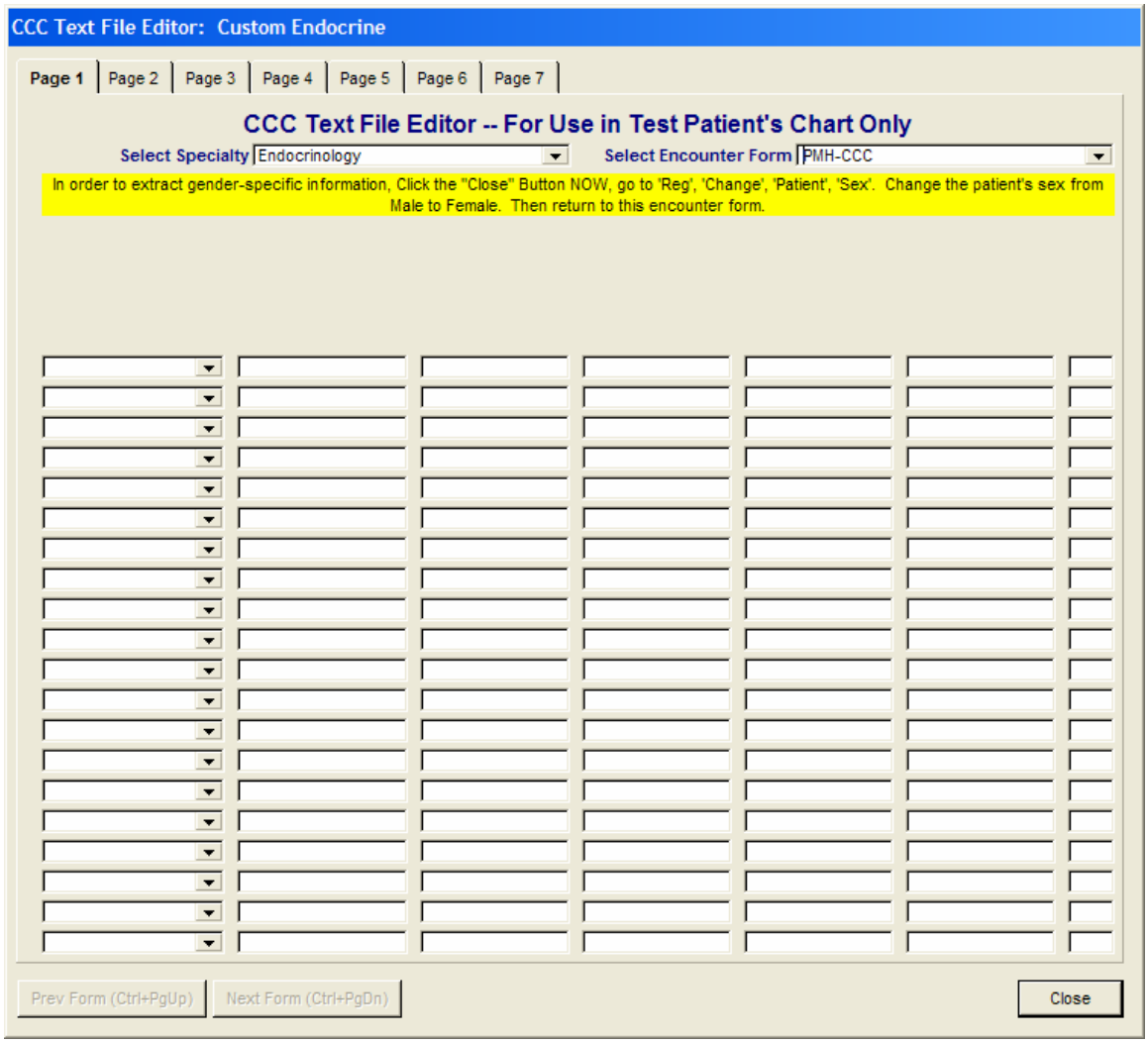
The first time you select a form to edit, it will pull in the old CCCQE-User-Edit text files. A yellow alert with instructions will appear.



In order to extract the gender specific functionality from the old text file format, you must close the form, go to the Registration module, then change the test patient's sex form male to female (or female to male). When the update is re-opened, the yellow prompt will be gone and the TFE tools will appear.

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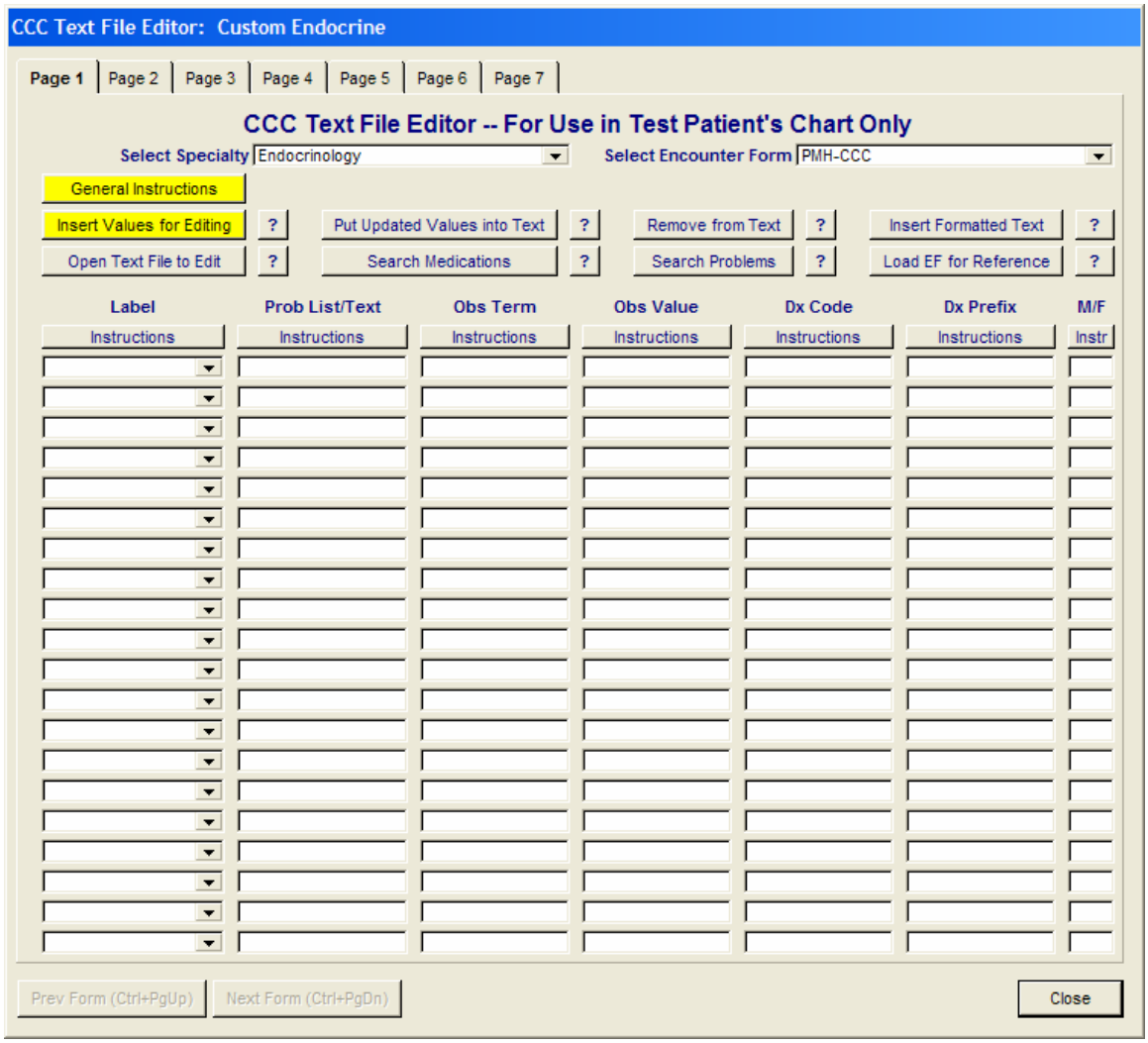

CCC TFE action buttons/Tools for PMH-CCC

1. **General Instructions:** click this button to open a pop-up window with general instructions on how to use the CCC TFE
2. **Insert Values for Editing:** click this button to automatically extract the values from your current CCCQE-User-Edit Files. NOTE: Be sure to click the yellow “Insert Values for Editing” action button on every tab before starting to edit or customize.
3. **Open Text File to Edit:** click this button to automatically open the correct CCCQE-User-Edit-TFE text file to create/edit. Once the form customization is complete, copy and paste the new code into this file, then click “Yes” to save.
4. **Put Updated Values into Text**: click this button to rewrite the new CCCQE™ User-Edit MEL code which can be copied and pasted in the CCCQE-User-Edit-TFE text file.
5. **Remove from Text:** click this button to remove the new CCCQE-User-Edit MEL code.
6. **Search Medications:** click this button to open the Medication Module of Centricity and search the medication database.
7. **Search Problems:** click this button to open the Problems Module of Centricity and search the problems database (ICD and CPT codes).
8. **Insert Formatted Text:** click this button to create a plain text translation of all the customization that has been created (see example).
9. **Load EF for Reference:** click this button to load the corresponding encounter form you are editing for reference purposes.
10. **? Buttons** next to each action button: click these buttons to explain what the larger buttons do.

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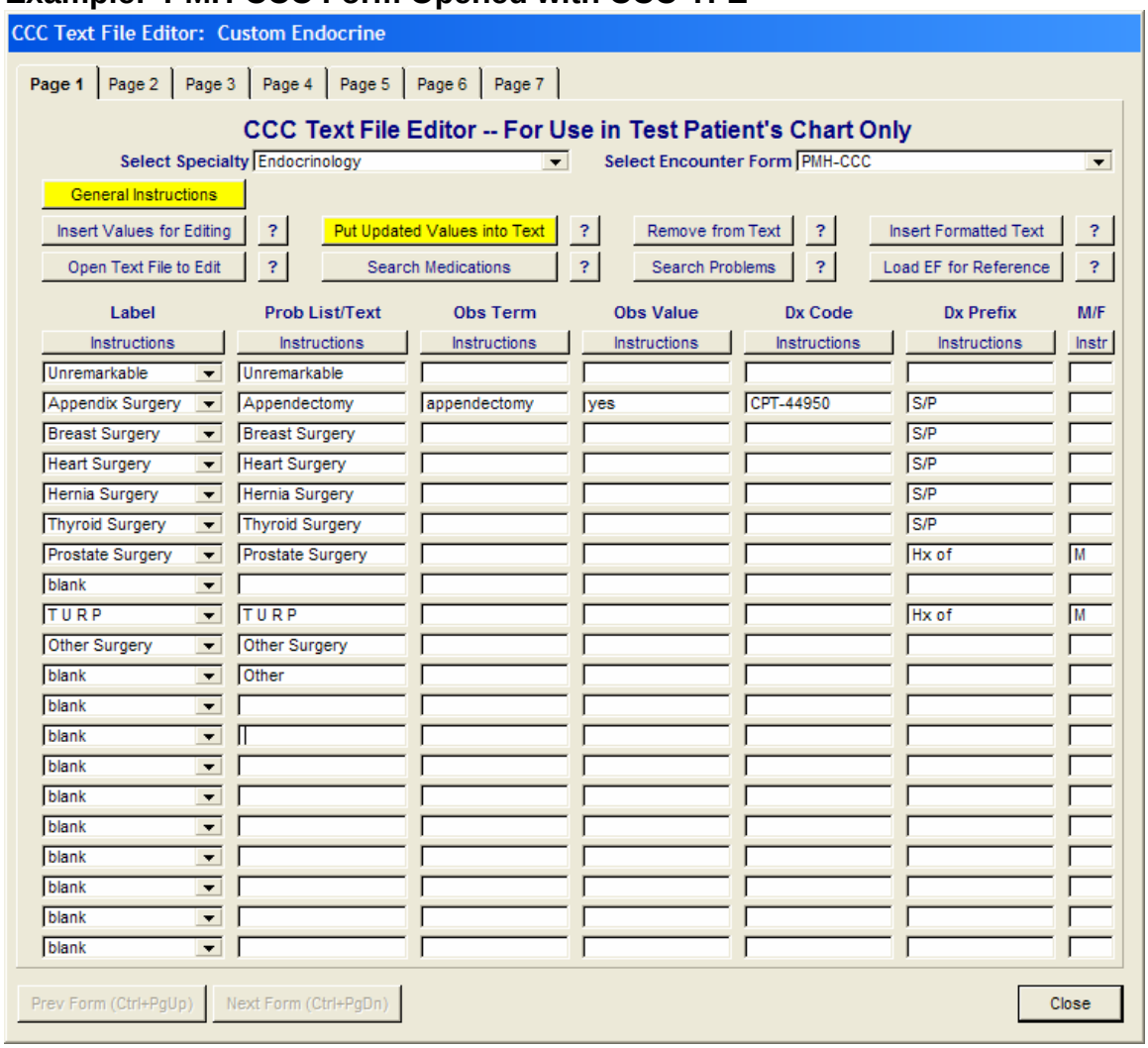
Example: PMH-CCC Form Opened with CCC-TFE



Depending on which of the Core forms is being edited, the column headers and corresponding "Instructions" action buttons will be different. For the PMH-CCC form, the columns will be:

1. **Label:** This is the value that appears in the list box on the PMH-CCC form.
2. **Prob List/Text:** This is the description that will be entered in the PMH field or pushed to the Problem List.
3. **Obs Term:** This is the observation term you wish to populate (leave blank if you do not wish to populate an obs term).
4. **Obs Value:** This is the value that is to be pushed to the designated Obs Term (leave blank if you do not wish to populate an obs term).
5. **Dx Code:** This is the complete ICD- or CPT-code that is to be pushed to the problem list. Be sure to include the "ICD-" or "CPT-" prefix. If you do not wish to populate the problem list, leave this field blank
6. **Dx Prefix:** This is the type of problem prefix to be added (Dx of, MDx of, S/P, etc.). A complete list of the prefixes is available by clicking the "Instructions" action button. If you leave this field blank, the default is "Dx of".
7. **M/F:** Place "M" in this field to display the list box value for males only and "F" for females only. The default blank field is for both male and female.

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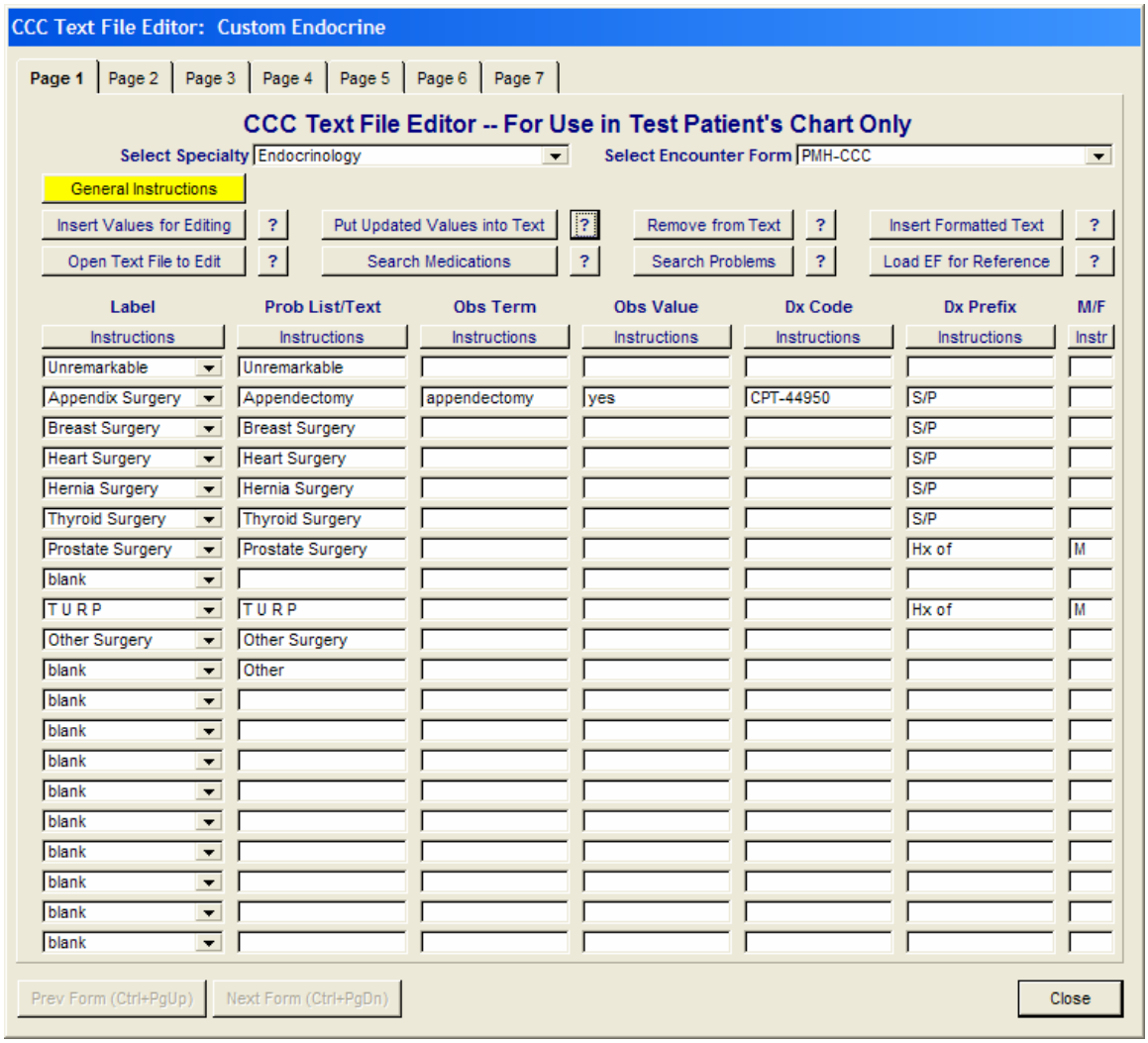

Click the yellow “Put Updated Values into Text” action button to write the CCCQE™ MEL code. The action button will turn blue/grey.
Click the “Remove from Text” action button to remove the text.

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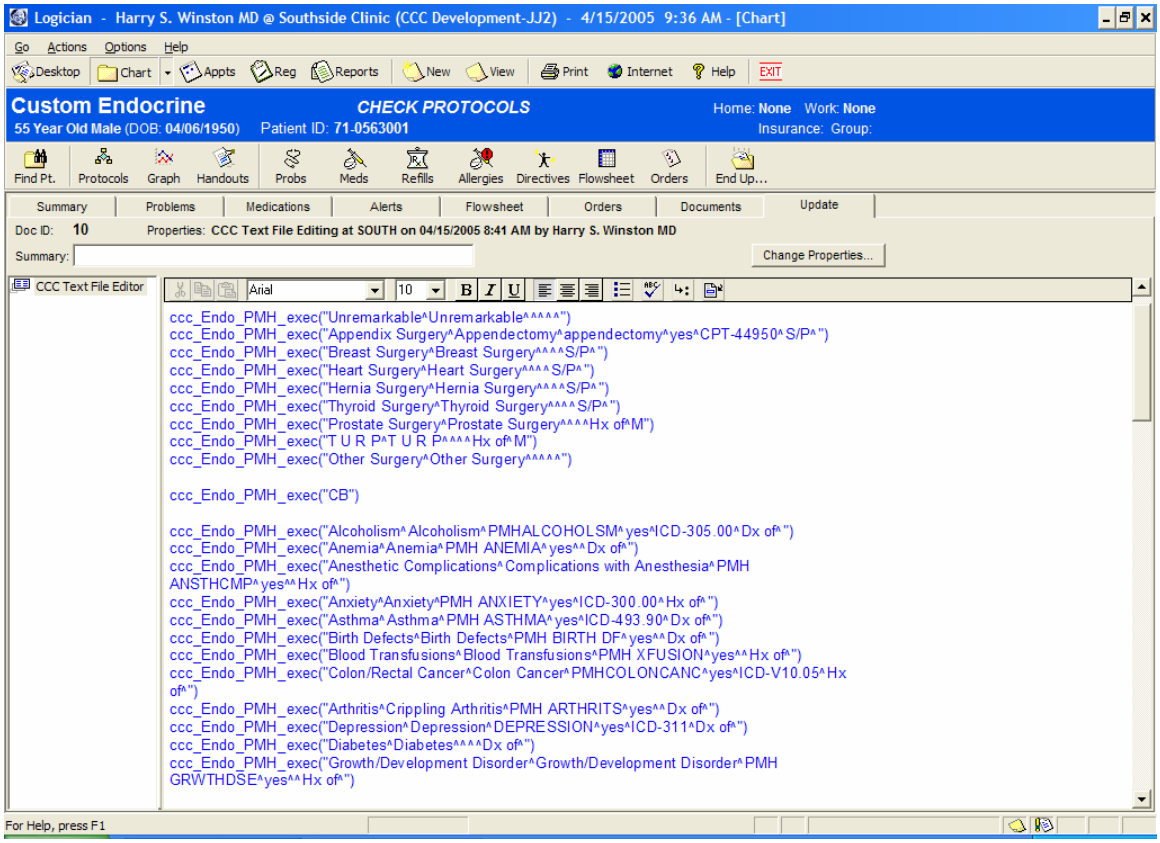
Click the yellow “Put Updated Values into Text” action button to write the CCCQE™ MEL Code. The action button will turn blue/grey.



Note: if you inserted the form component as a reference during the editing process, you will need to remove the form component from the chart update before doing the steps listed below.

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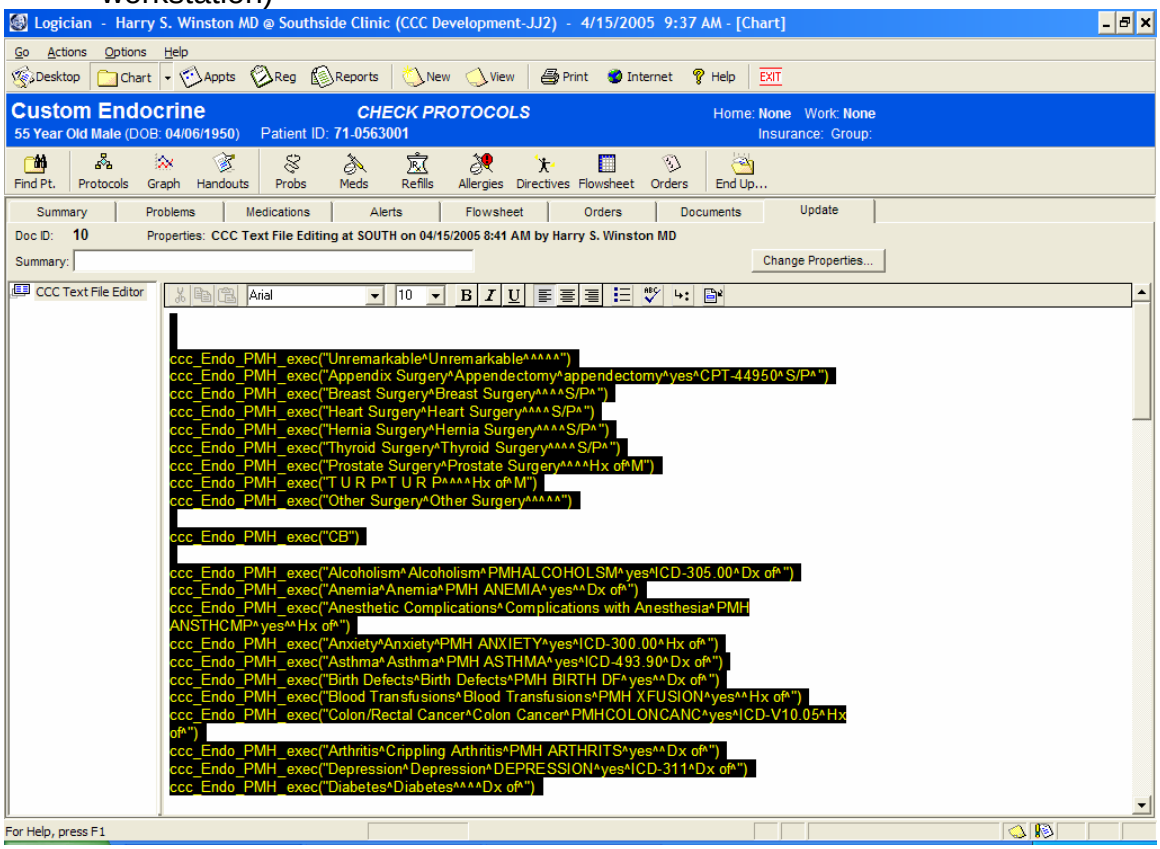
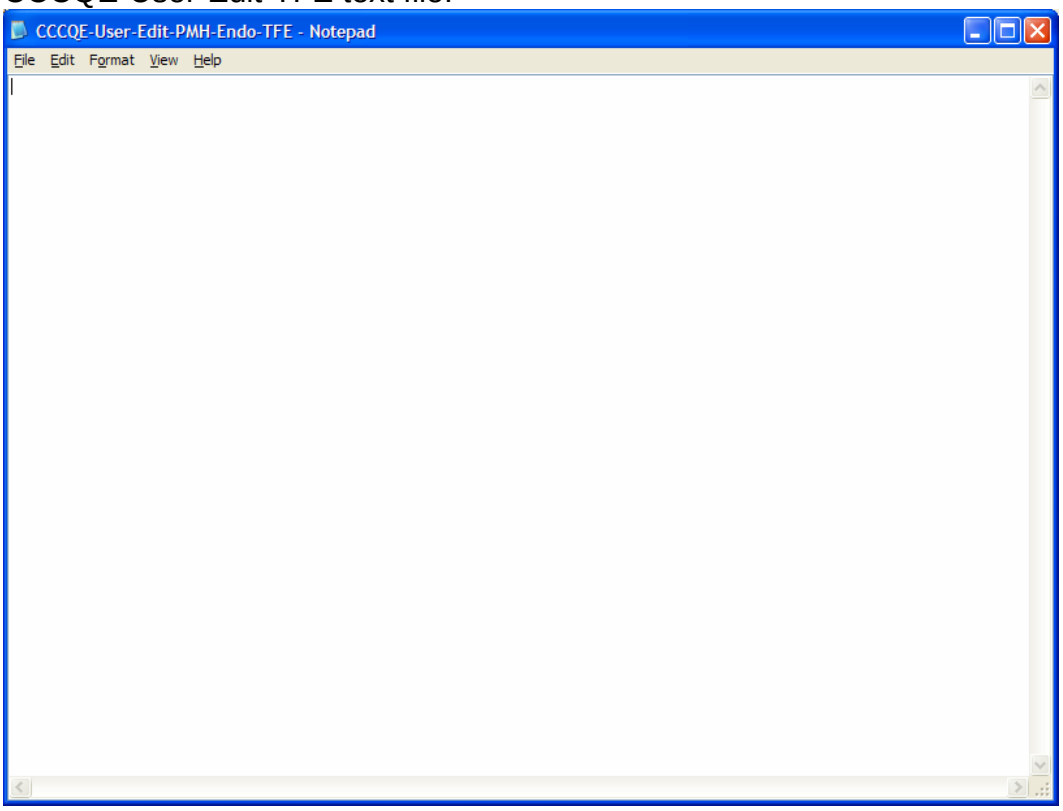
To copy and paste the CCCQE™ MEL functions from the TFE form, do the following:

- Press CTRL + A (this selects all of the text within the update)
- Press CTRL + C (this copies all of the selected text to the clipboard of the workstation)



Click the “Open Text File to Edit” action button which will automatically open the CCCQE-User-Edit-TFE text file.



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To paste the CCCQE™ MEL functions into the CCCQE-User-Edit-TFE text file, do the following:

- Press CTRL + V (this inserts the selected text into the TFE text file)
- Press CTRL + S (this saves the TFE text file)
- Close the TFE text file.
- Open the Text File Editor form component
- Click the “Remove from Text” action button to remove the CCCQE™ MEL functions from the chart note.
- Click the “Insert Formatted Text” action button to insert a summary description of customizations into the chart note.
- Copy and paste the formatted text into a Word document for your records.

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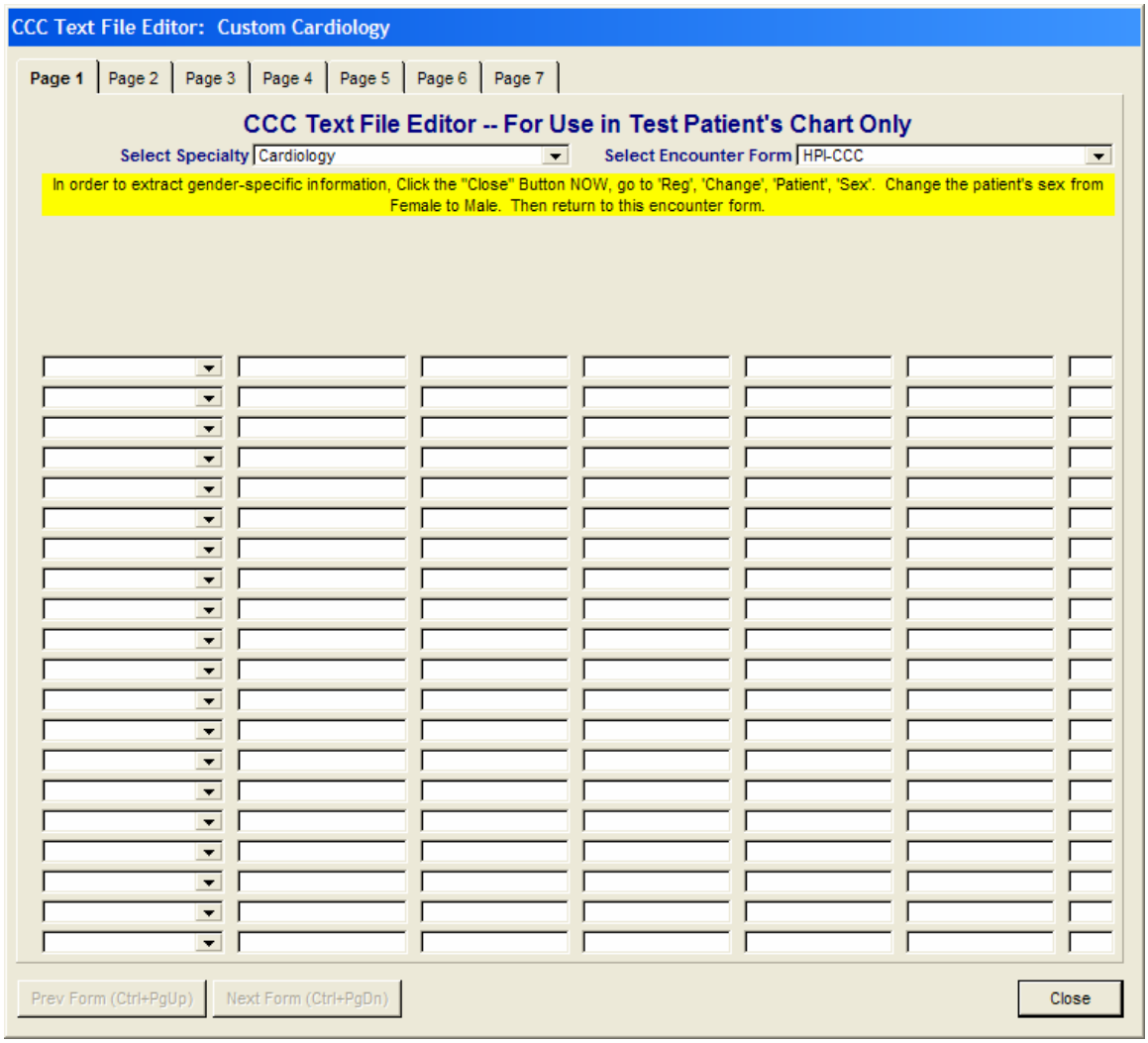
Example: Customize the HPI-CCC

1. Start an update in a test patient's chart and insert the CCC Text File Editor encounter form.
2. Select the specialty of the form you wish to customize.
3. Select the encounter form to be customized.
4. The first time you select a form to edit, your old CCCQE-User-Edit text file customization will be extracted and inserted into the TFE. A yellow alert with instructions will appear.
5. In order to extract the gender specific functionality from the old text file format, you must close the form, go to the Registration module and change the test patient's sex form male to female (or female to male). When the update is re-opened, the yellow prompt will be gone and the TFE tools will appear.



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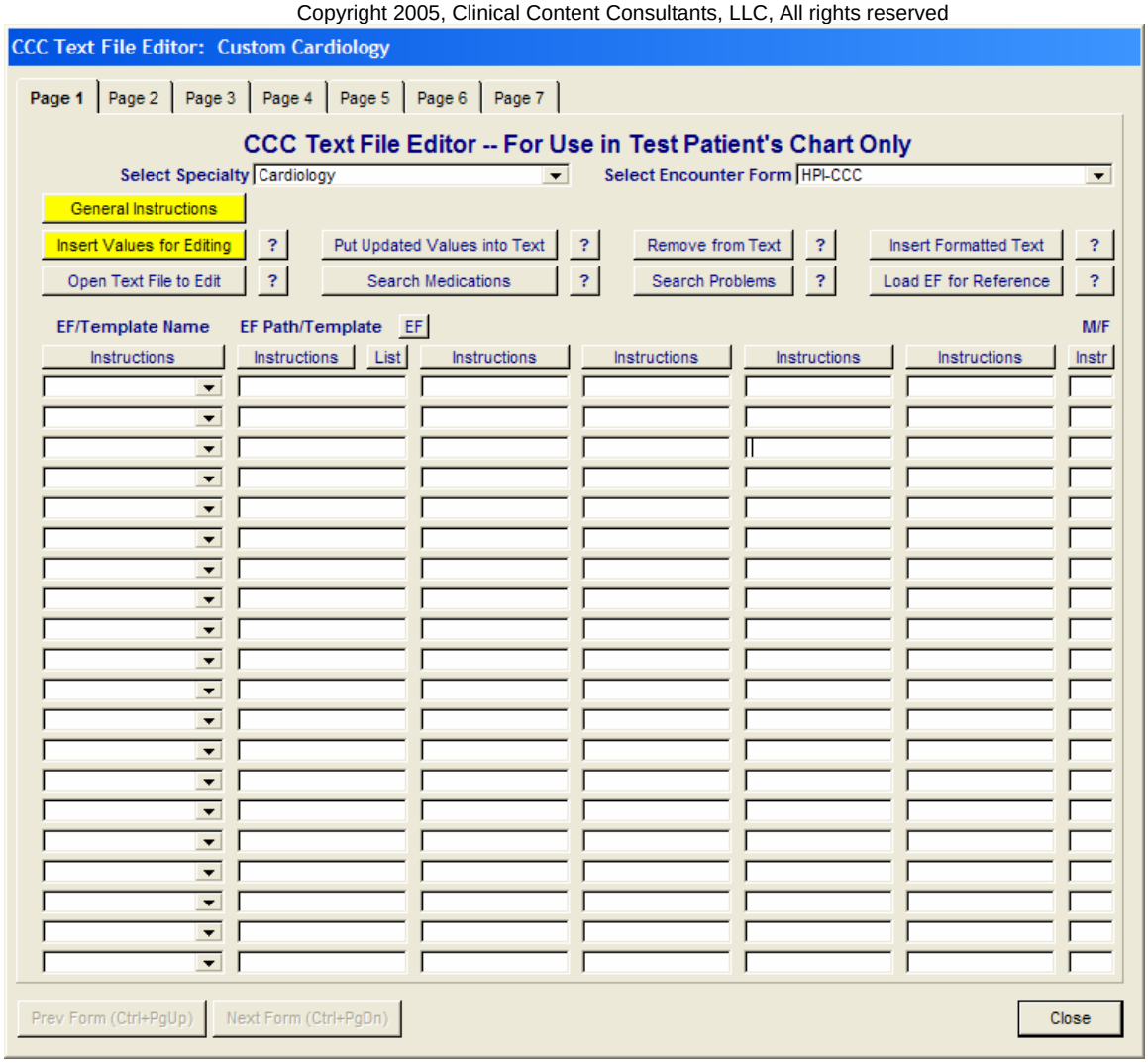

CCC TFE action buttons/Tools for HPI-CCC

1. **General Instructions:** click this button to open a pop-up window with general instructions on how to use the CCC TFE
2. **Insert Values for Editing:** click this button to automatically extract the values from your current CCCQE-User-Edit Files. NOTE: Be sure to click the yellow "Insert Values for Editing" action button on every tab before starting to edit or customize.
3. **Open Text File to Edit:** click this button to automatically open the correct CCCQE-User-Edit-TFE text file to create/edit. Once the form is complete, you'll copy and paste the new code into this file then click save.
4. **Put Updated Values into Text**: click this button to rewrite the new CCCQE™ User-Edit MEL code which can be copied and pasted in the CCCQE-User-Edit-TFE text file.
5. **Remove from Text:** click this button to remove the new CCCQE-User-Edit MEL code.
6. **Search Medications:** click this button to open the Medication Module of Centricity and search the medications database.
7. **Search Problems:** click this button to open the Problems Module of Centricity and search the problems database (ICD and CPT codes).
8. **Insert Formatted Text:** click this button to create a plain text translation of all of the customization that has been created (see example).
9. **Load EF for Reference:** click this button to load the corresponding encounter form you are editing for reference purposes.
10. **? Buttons** next to each action button: click these buttons to explain what the larger buttons do.

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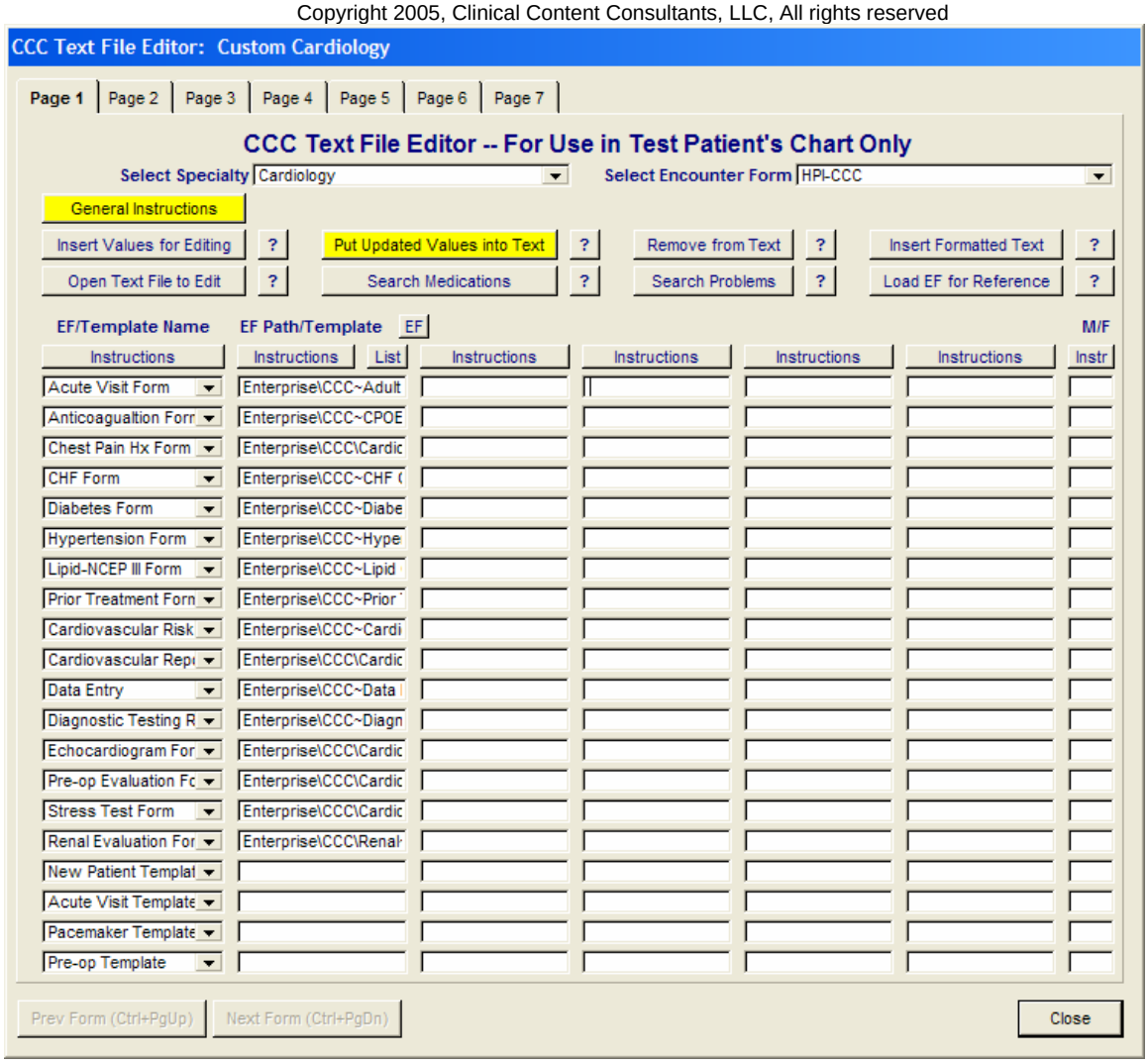

Depending on which of the Core forms is being edited, the column headers and corresponding "Instructions" action buttons will be different. For the HPI-CCC form, the columns will be:

1. **EF/Template Name:** This is the value that appears in the list box on the HPI-CCC form describing the encounter form name or the text template name that will be loaded or inserted.
2. **EF Path/Template:** This is where the path name for the encounter form you wish to load or the text template you wish to insert. NOTE: Users of CCCQE VRI with Dragon NaturallySpeaking 8 Medical can use the Edit All voice macro to open a larger text box to edit templates. Users of CCCSpeak can use the Edit Now voice macro to open up a larger text box to edit templates.
3. **EF Button:** Opens a list of common forms and paths that can be copied and pasted into the form.
4. **M/F:** Place "M" in this field if you only want the list box values to appear for males only and "F" for females only. The default blank field is for both male and female.

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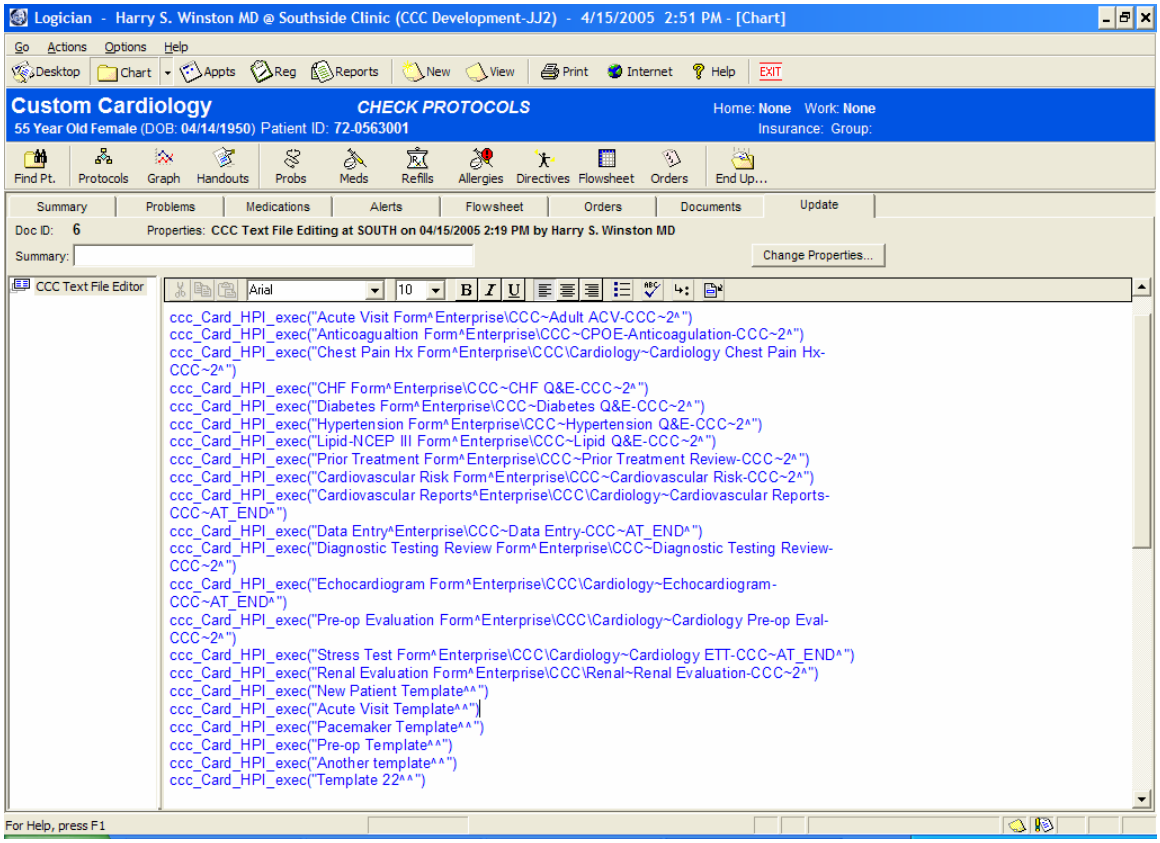
Click the yellow “Put Updated Values into Text” action button to write the CCCQE™ MEL Code. The action button will turn blue/grey.



T

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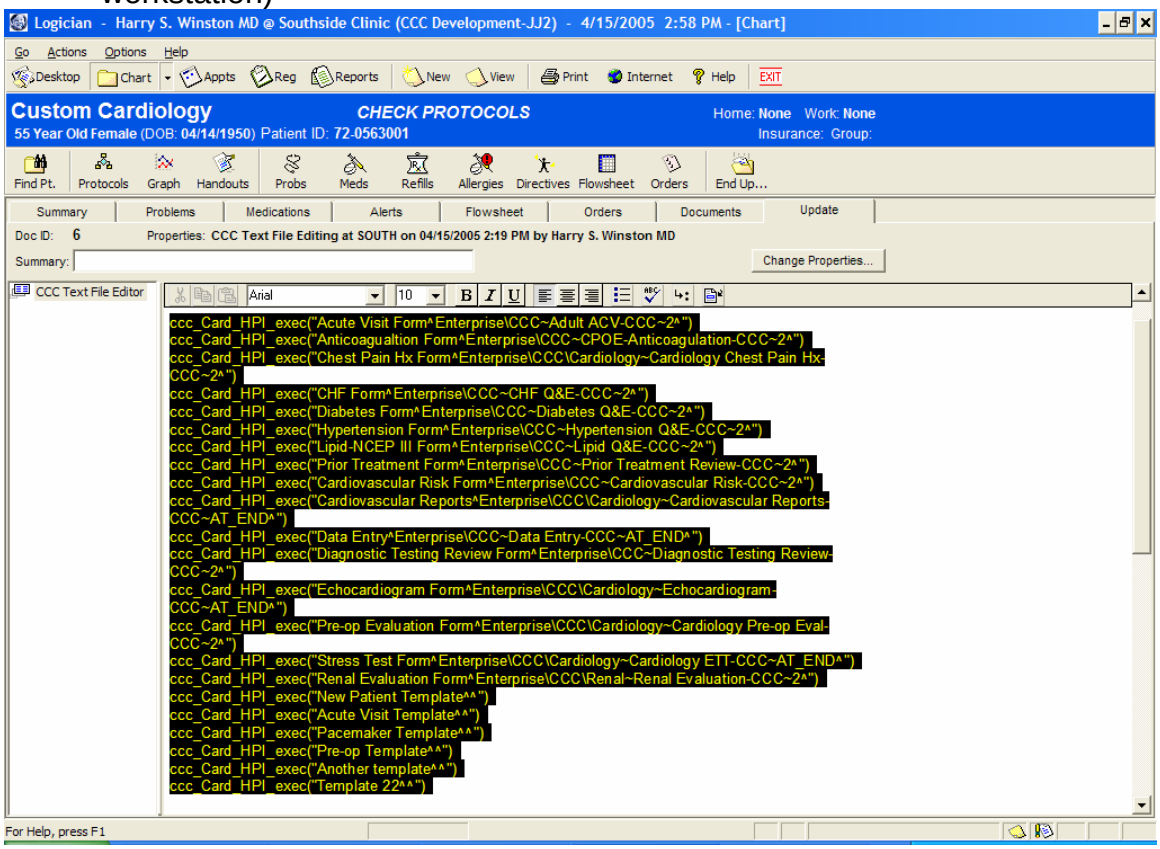
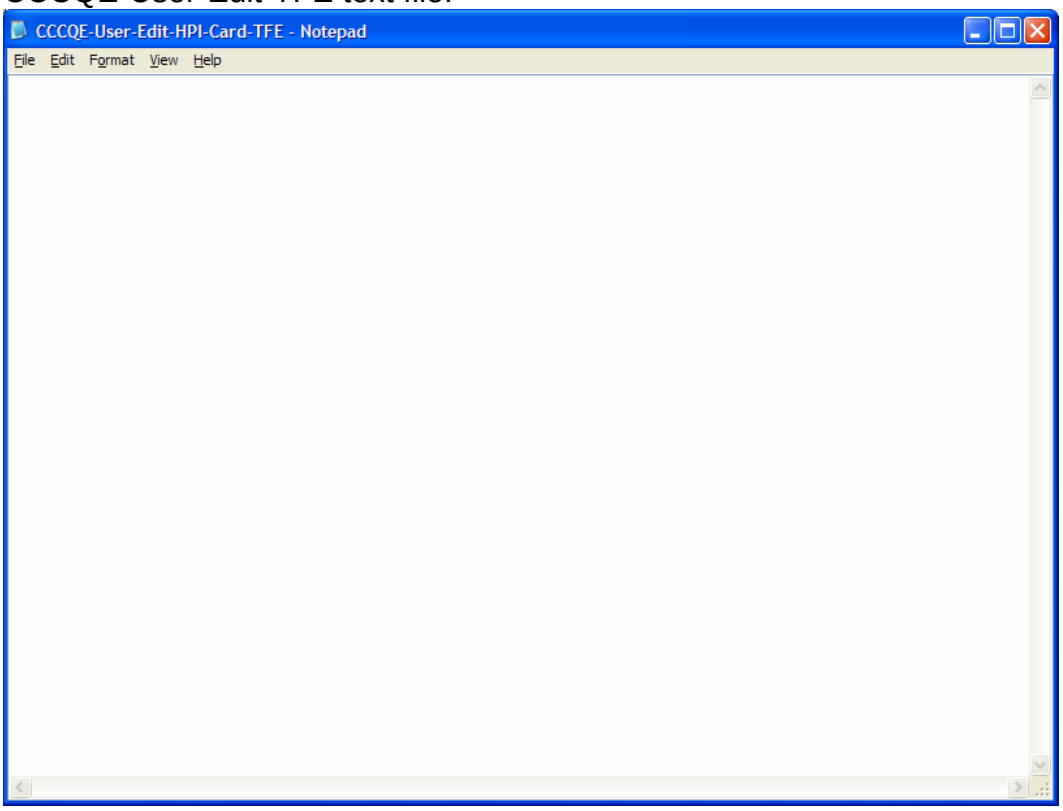
To copy and paste the CCCQE™ MEL functions from the TFE form, do the following:

- Press CTRL + A (this selects all of the text within the update)
- Press CTRL + C (this copies all of the selected text to the clipboard of the workstation)



Click the “Open Text File to Edit” action button which will automatically open the CCCQE-User-Edit-TFE text file.



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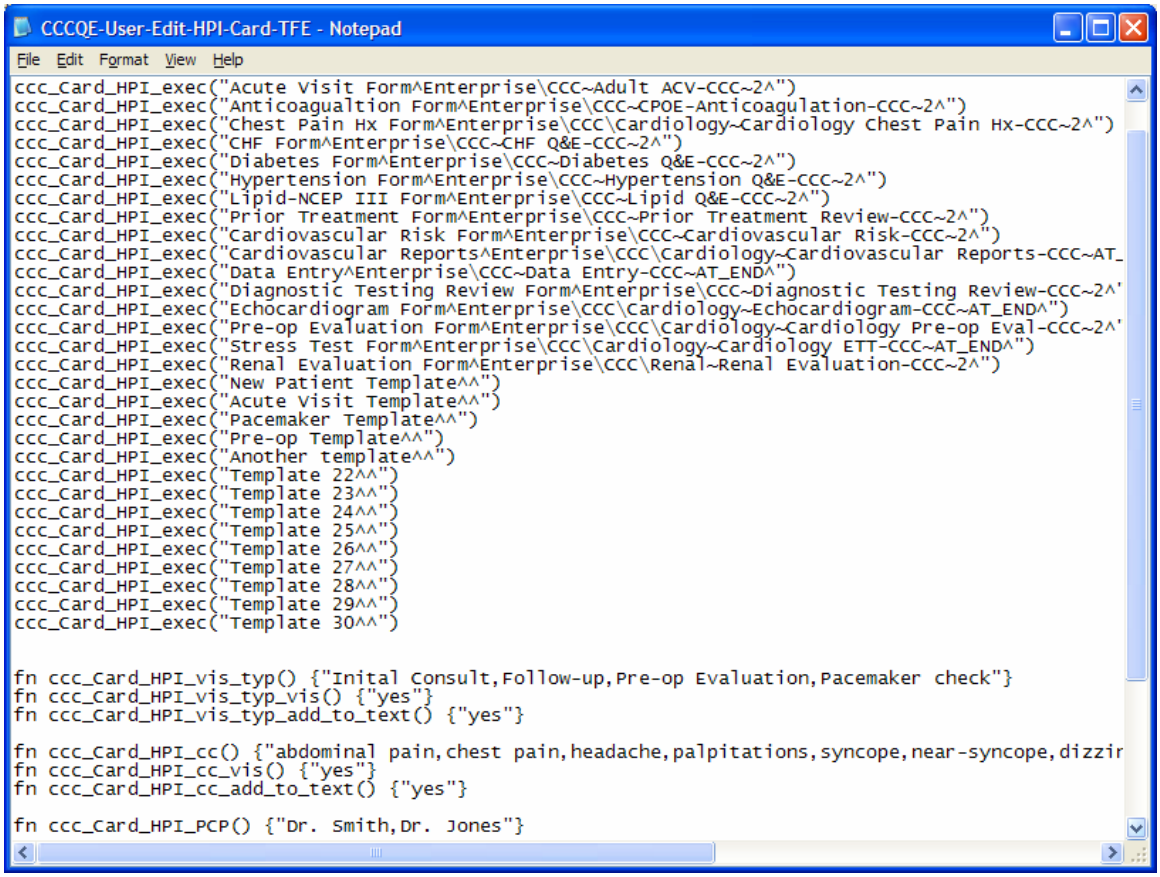
To paste the CCCQE™ MEL functions into the CCCQE-User-Edit-TFE text file, do the following:

- Press CTRL + V (this inserts the selected text into the TFE text file)
- Press CTRL + S (this saves the TFE text file)
- Close the TFE text file.
- Open the Text File Editor form component
- Click the “Remove from Text” action button to remove the CCCQE™ MEL functions from the chart note.
- Click the “Insert Formatted Text” action button to insert a summary description of customizations into the chart note.
- Copy and paste the formatted text into a Word document for your records.



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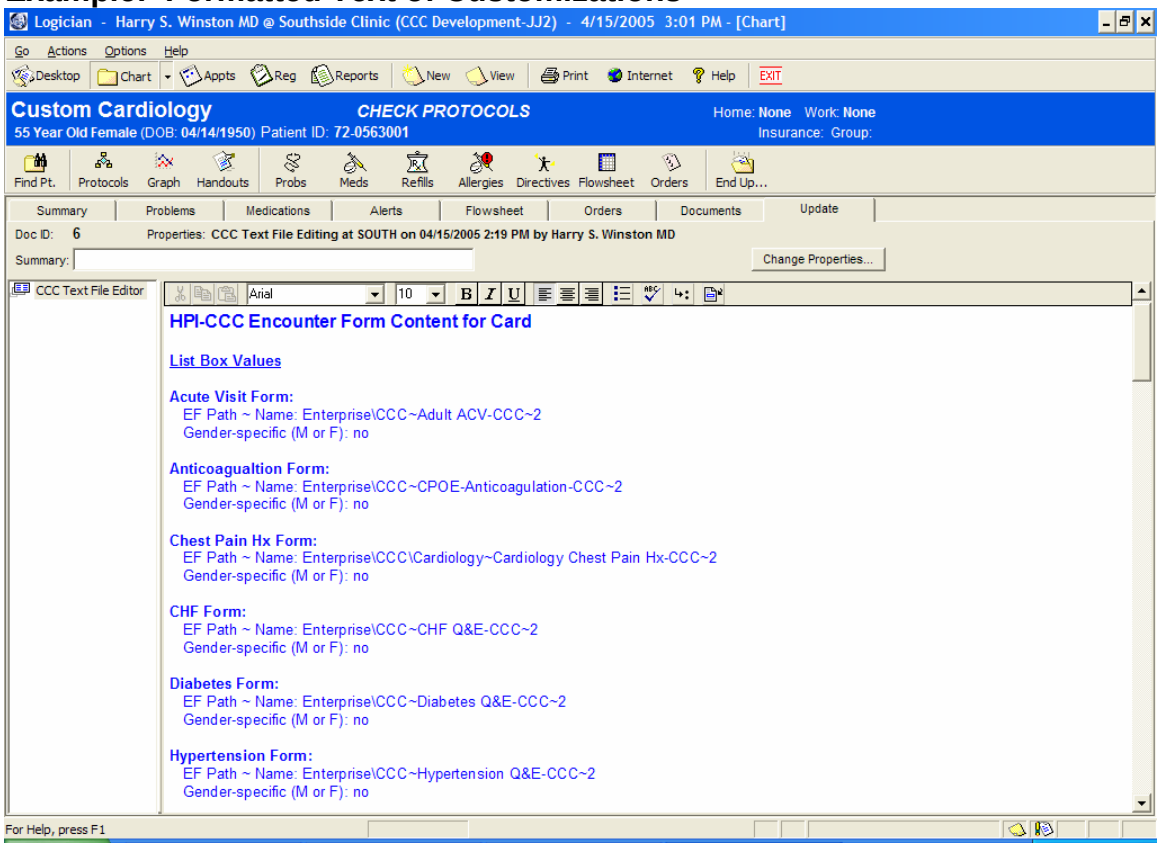
Example: Formatted Text of Customizations



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Section 3

CCCQE™ Clinical Decision Support and

Patient Severity Index Assessment

The CCCQE™ Clinical Decision Support (CDS) and Patient Severity Index Assessment (PSIA) applications were designed to improve the clinical workflow and provide clinical decision support during the assessment and plan of the patient visit. As more and more insurers and regulators require documentation of quality of care and patient disease severity, additional charting and documentation responsibilities are being demanded of the provider. The CCCQE™ CDS and PSIA application allows the provider to receive a variety of cascading clinical decision support prompts that remind the provider to document specific clinical quality indicators. In order to make this process non-intrusive and time-efficient, the prompts automatically provide the clinical data entry and documentation without having to search for encounter forms or go to flowsheets to enter the information. Some examples of the CCCQE™ CDS/PSIA application include rapid prompting and documentation of:

- Smoking Status
- Smoking Cessation Discussed
- Smoking Stage
- Diabetes Complications
- Correct Treatment Deficiencies or Document Contraindications (examples: CHF-ACE inhibitors; Post-MI-beta blockers)

The CCCQE™ CDS/PSIA application resides in the CCCQE™ CPOE A&P encounter form (part of the CCCQE™ core forms) and is triggered when a problem is selected from the dropdown list. The following screenshots will serve as an example of the various types of decision support prompts and workflows made available with CCCQE™.

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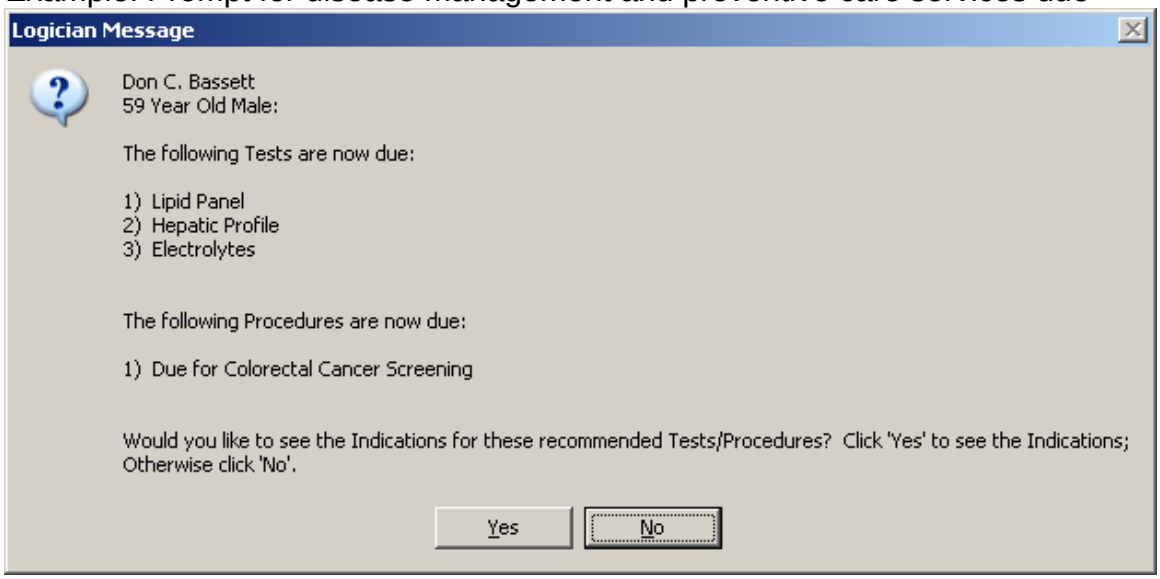
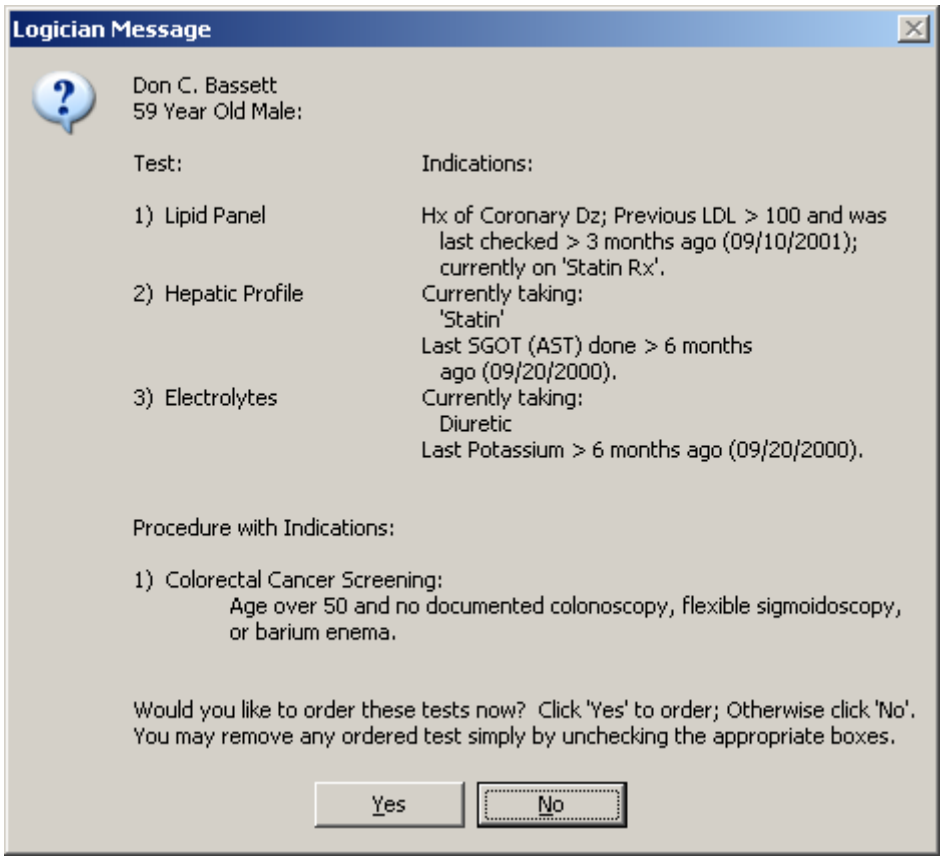
Automatic Pop-up Windows:

CDSS prompting may significantly impact the healthcare delivered to the patient. These pop-ups can be turned on/off based on specialty, job description, or provider preference.

Example: Prompt for disease management and preventive care services due



Clicking “Yes” displays the indications for the recommendations



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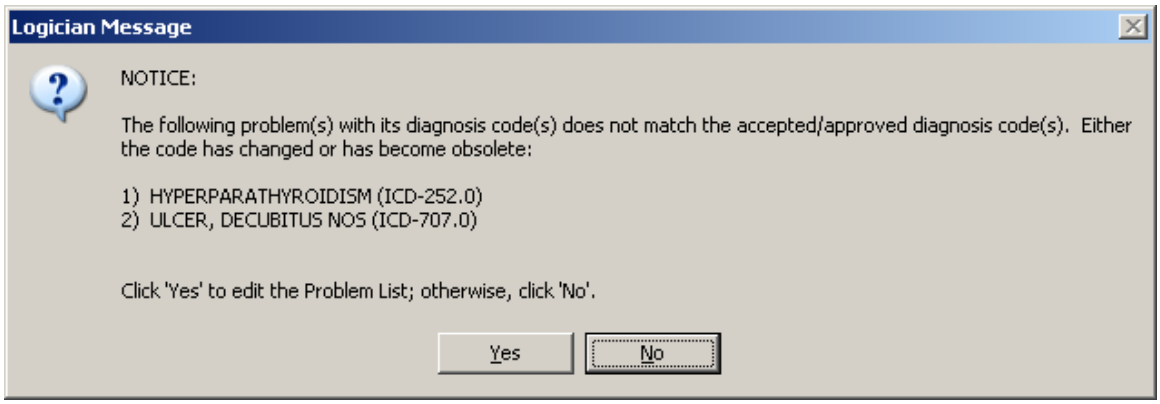
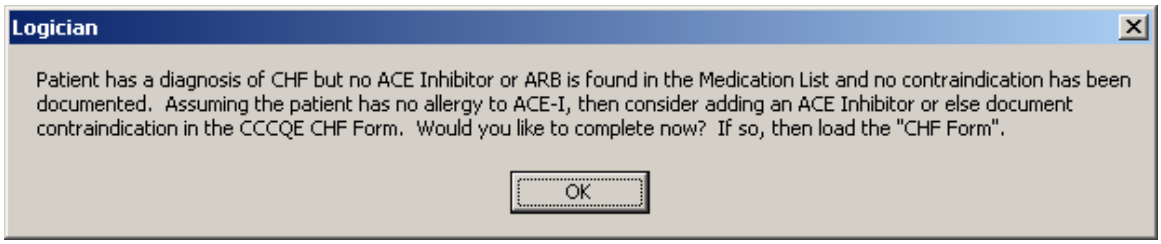
Example: Prompt alerting provider and/or staff that an outdated ICD-code appears on this patient's problem list. When Medicare (CMS) changes ICD-codes each quarter, failure to update the patient's problem list with the updated code can lead to non-payment.



Clicking "Yes" opens the patient's Problem list to automatically make the correction at the time of service.

Example: Prompt alerting provider if patient with a particular condition is not on a certain class of medication shown to improve outcomes.



Other examples include post-MI patients not on aspirin or beta-blocker, patients at risk for ASCVD and LDL > 100 and not on statin, patients on methotrexate who are due for screening/monitoring labs.

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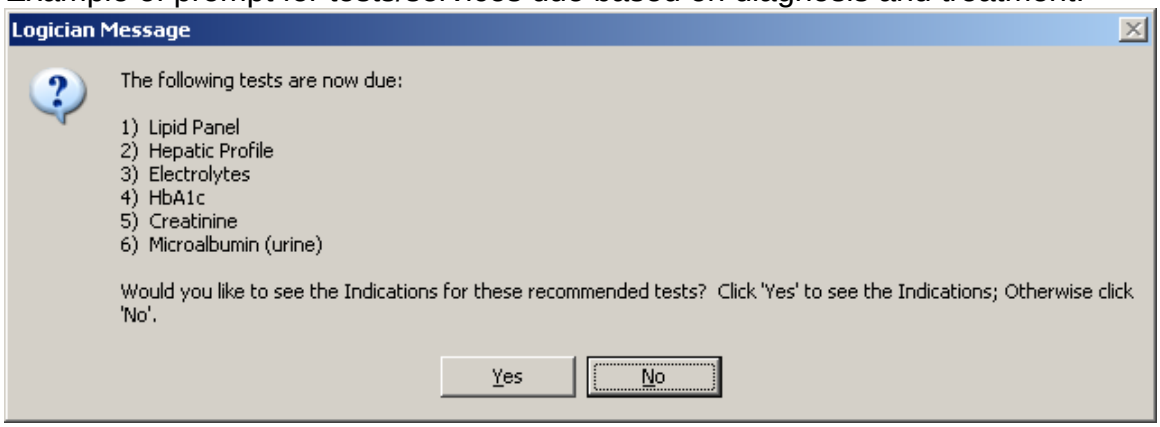
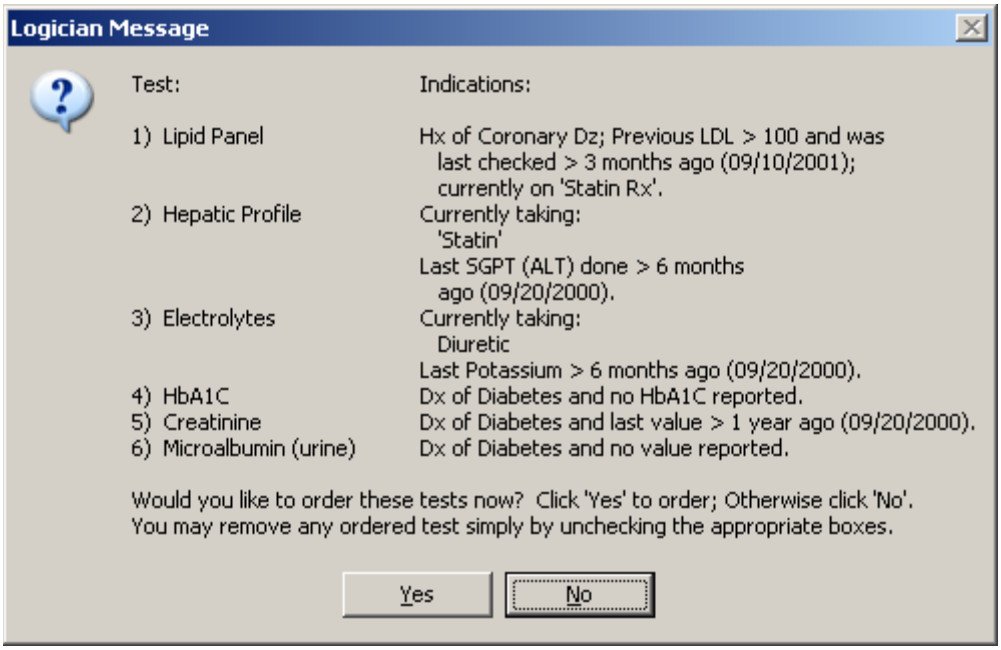
Example of prompt for tests/services due based on diagnosis and treatment:



Clicking “Yes” displays the indications



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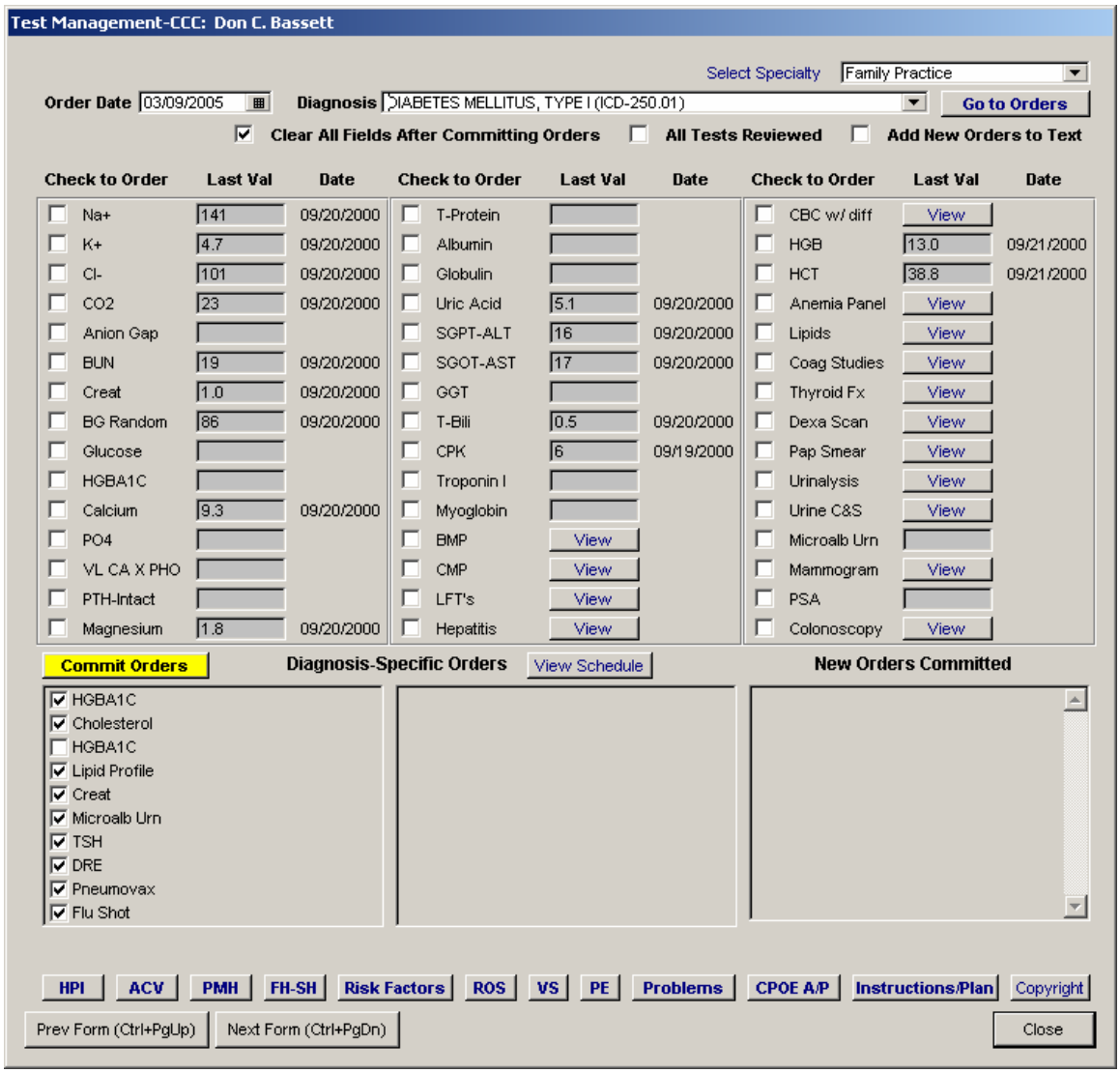
Embedded CDSS Prompts Within Encounter Forms

Example: The new Test Management Form allows providers to review labs on one screen and, based on diagnosis, be alerted to labs/services due. With a single click, the provider can order appropriate tests/services.



Note the list box that automatically appears (lower left) with Diagnosis-Specific Orders. Clicking the “View Schedule” action button shows guideline indication.

NOTE: Many evidence-based guidelines come within the CCCQE™ application and are updated quarterly, but the latest release also allows sites to create their own protocols and recommendation alerts.

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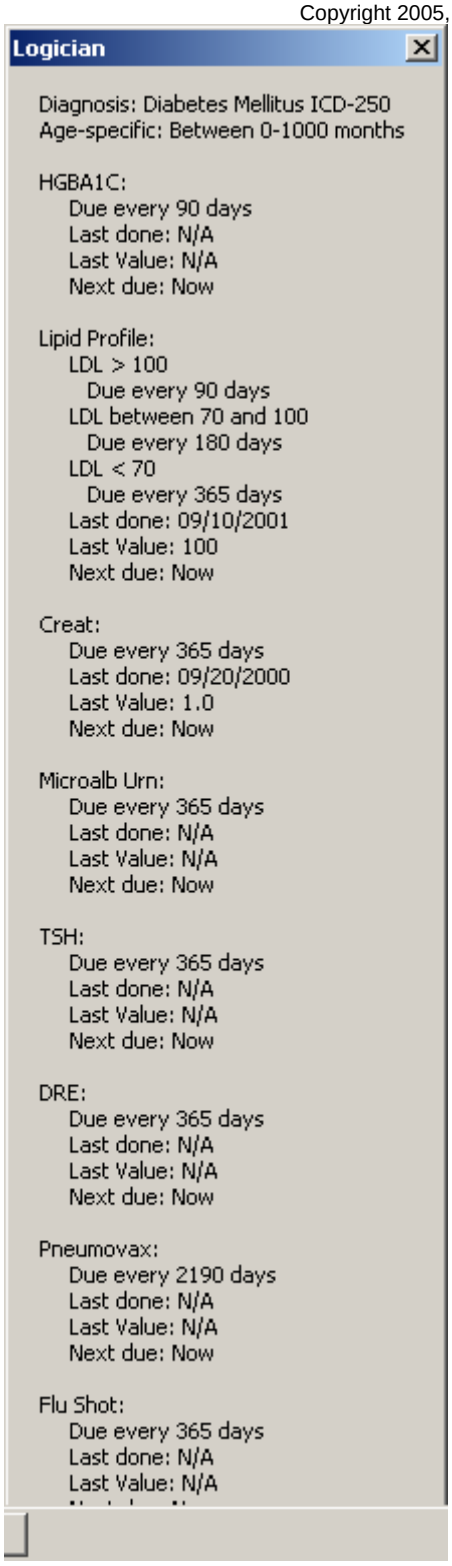

NOTE: Many evidence-based guidelines come within the CCCQE™ application and are updated quarterly, but the latest release also allows sites to create their own protocols and recommendation alerts.

Providers can also set prompts based on a range of lab results (see Lipid Profile).

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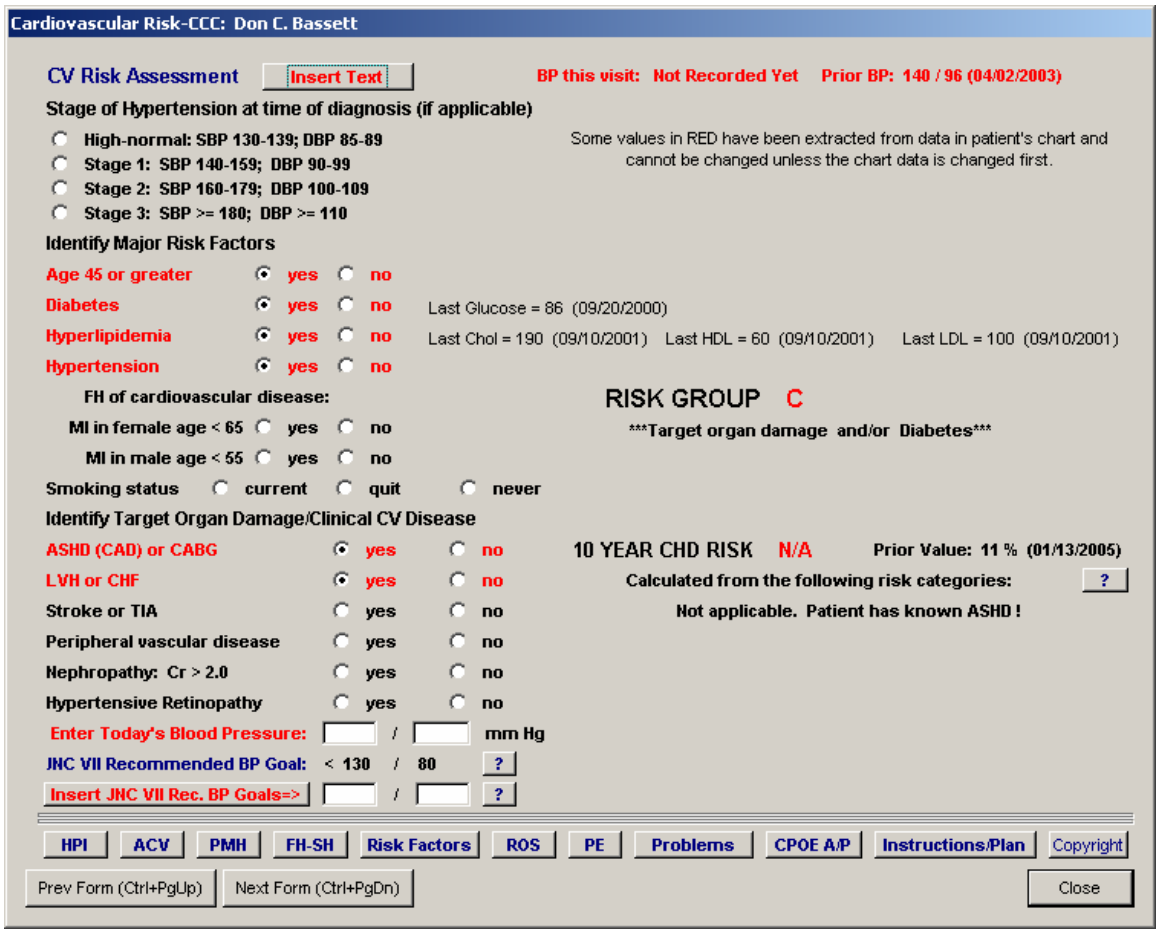
Example: Framingham Cardiovascular Risk Calculator NCEP Guidelines Encounter Form



Automatically extracts risk factors from the database and calculates the patient's 10-year risk of heart disease.

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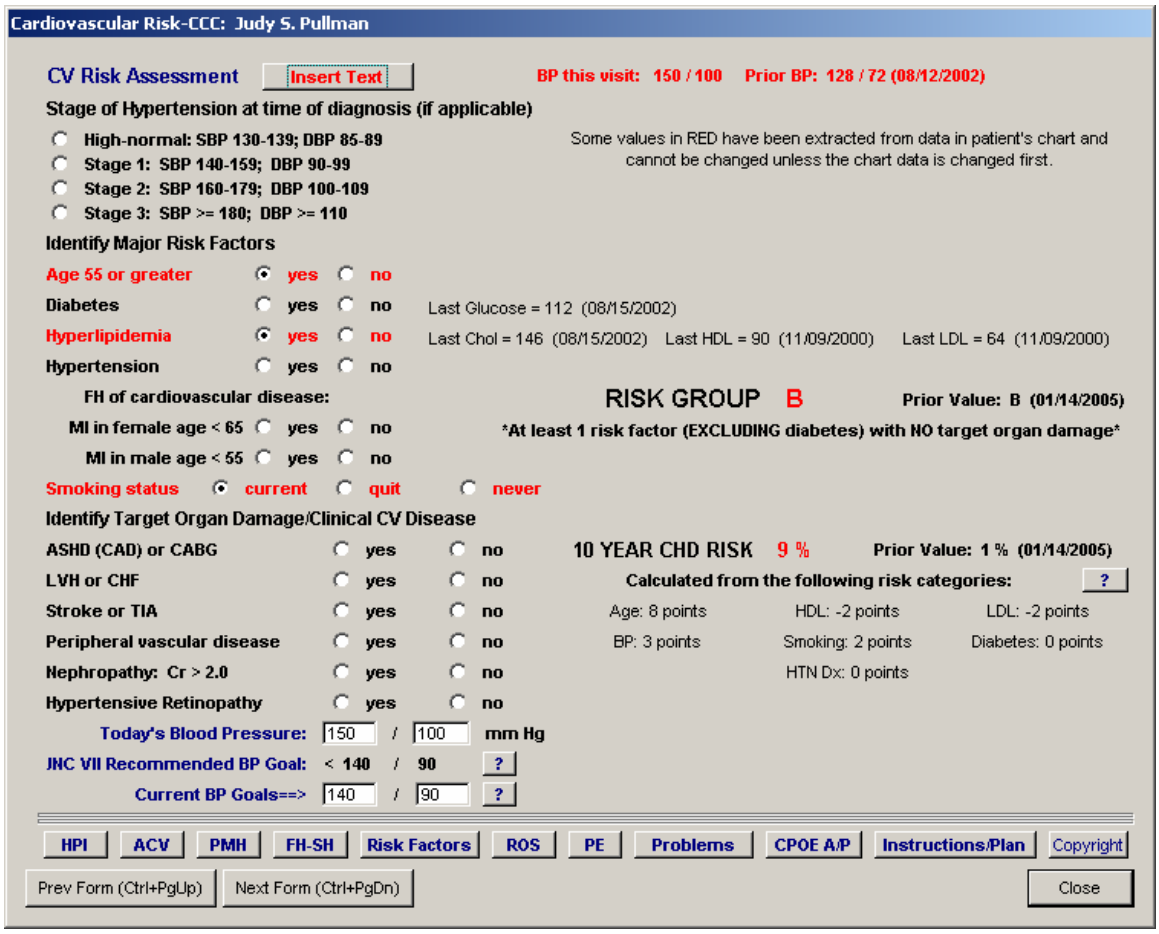
Example: Framingham Cardiovascular Risk Calculator Guidelines Encounter Form



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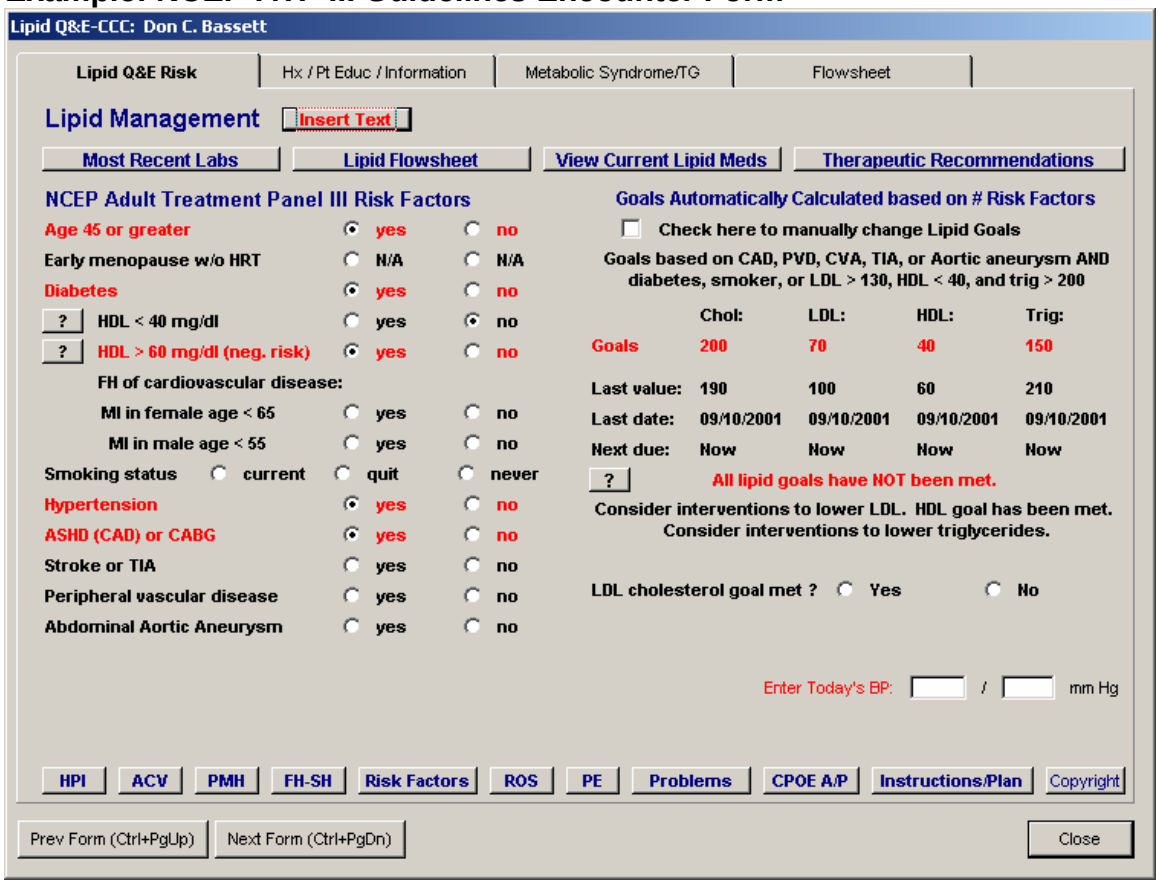
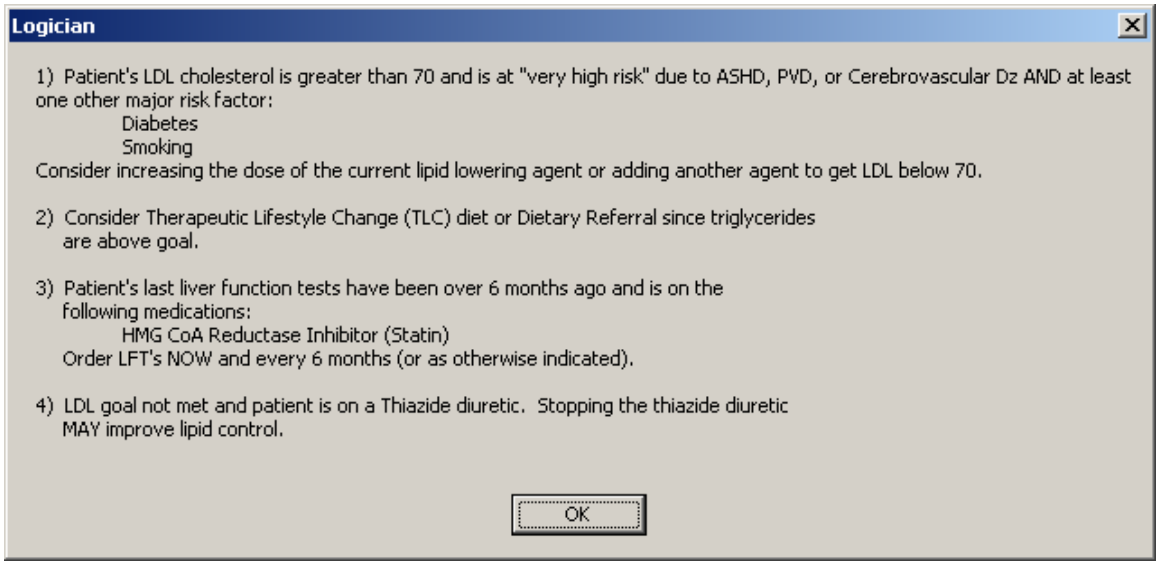
Example: NCEP-ATP III Guidelines Encounter Form



Clicking the “Therapeutic Recommendations” action button returns patient-specific recommendations.



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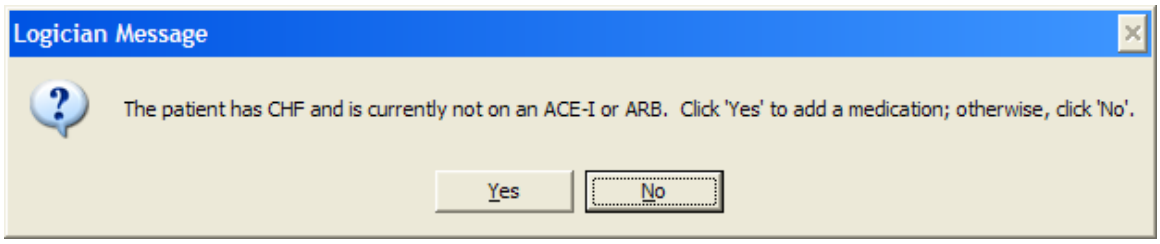
CDSS / PSIA Embedded within the CPOE A&P-CCC Form

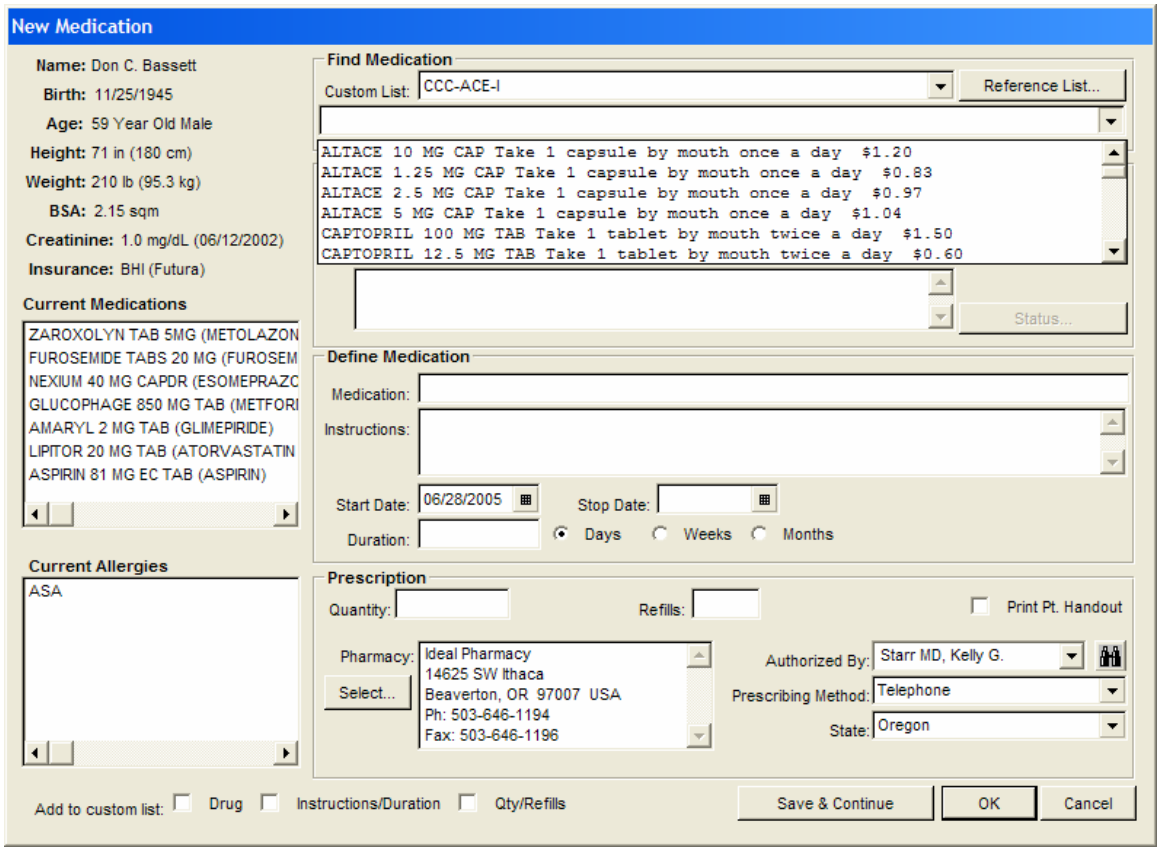
With the release of CCCQE™ Version 8.3, CCC has provided sites with the ability to embed workflow-friendly clinical decision support within the CPOE A&P-CCC form.

When programmed, a series of dynamic clinical decision support prompts will automatically appear, allowing the provider to take action or to document why action was not necessary.

Example of ACE-I/ARB Usage in Patients with CHF



Clicking “Yes” brings provider to custom medication list for ACE-Inhibitors.



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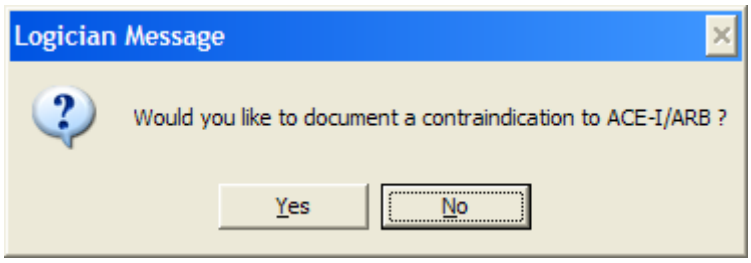
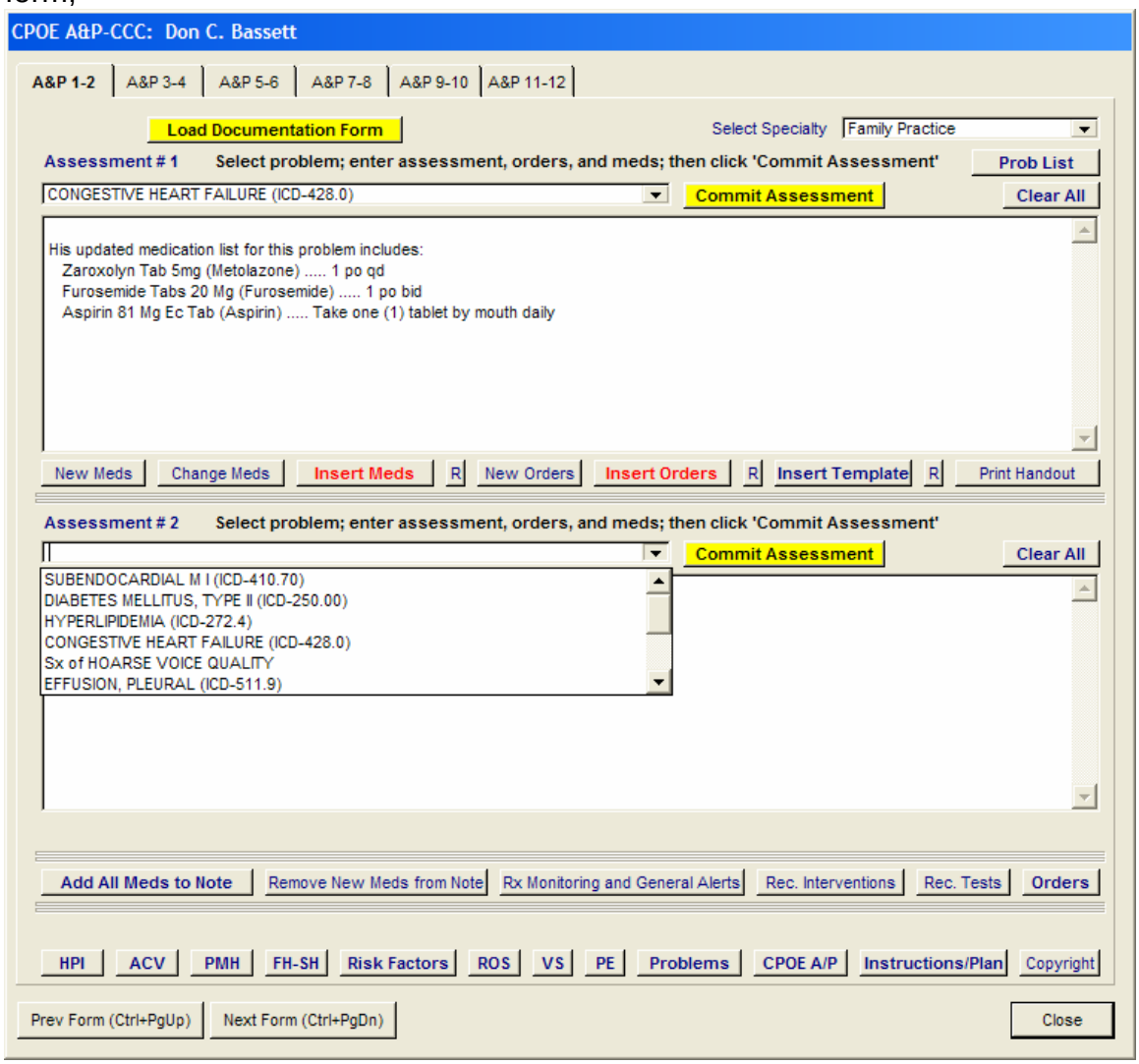
Clicking “No’ returns:



The provider can ignore the prompt and click “No” or else click “Yes”, which will allow the contraindication to be documented using the CDSS Contraindication-CCC form (or any other form the site may have developed).

Example of Beta-blocker Usage Post-MI CDSS
Note: The CHF Medications for the patient automatically appear in the assessment field for CHF (as do all problem/medication class designated problems).

When the provider selects Subendocardial MI from the dropdown list on the CPOE A&P form,



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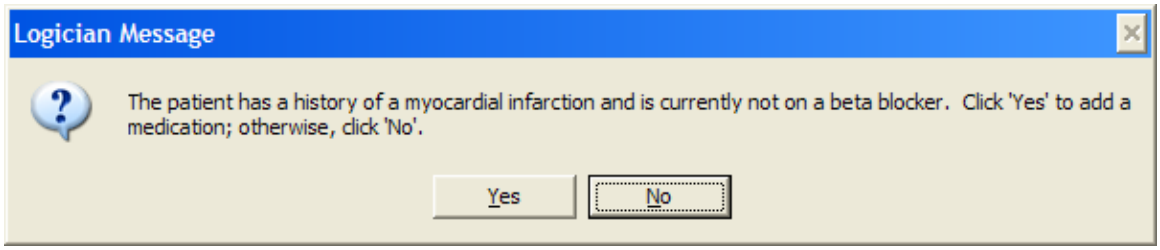
The following prompt appears:



Clicking “Yes” opens the Beta-blocker custom medication list. If the provider orders a beta-blocker, it will automatically appear in the assessment field for the problem Subendocardial MI.

Clicking “No” will prompt the provider to document the contraindication (see below). Documenting the contraindication will prevent the prompt from reappearing on subsequent visits in addition to providing structured documentation of the specific contraindication.

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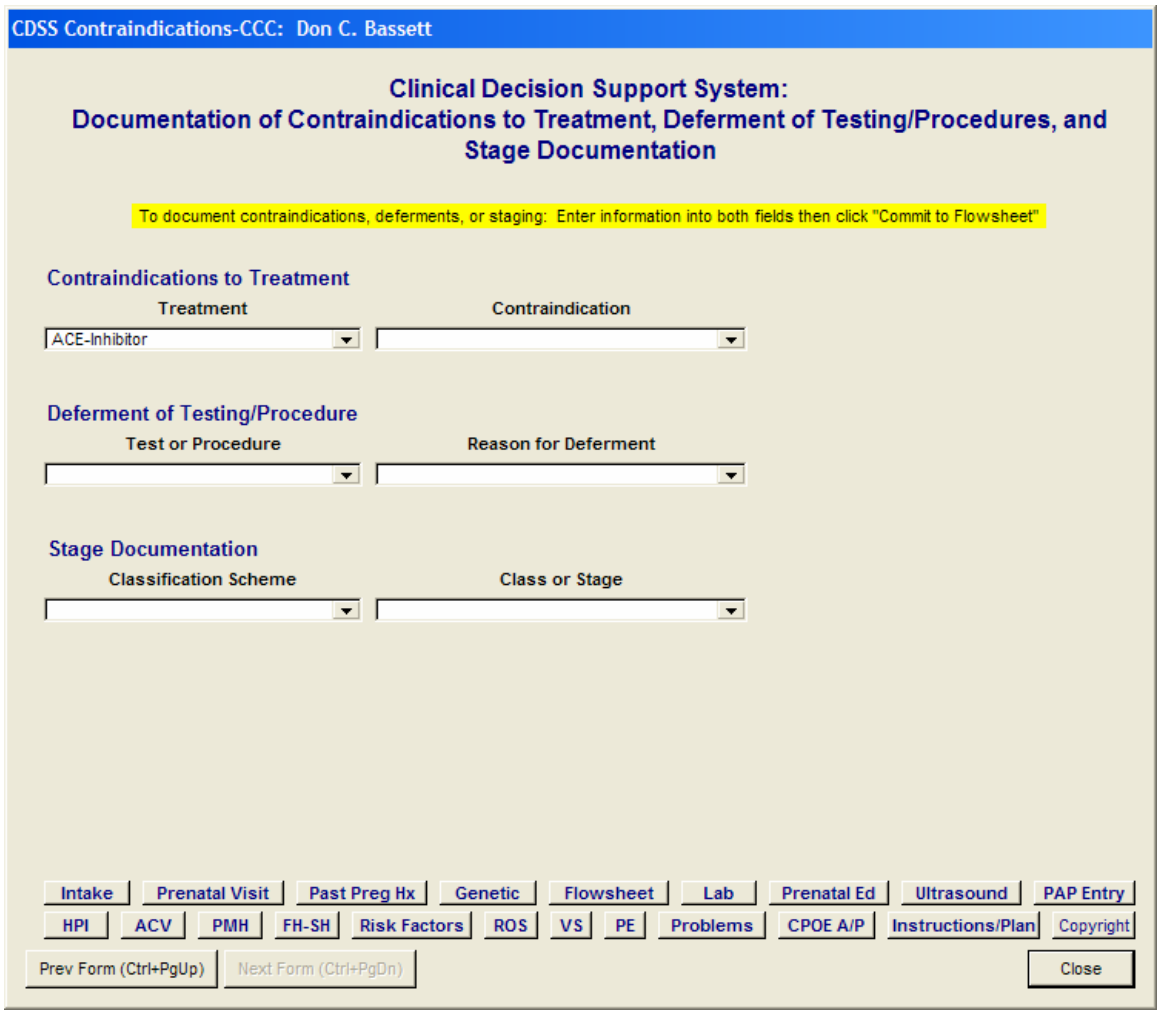
CDSS Contraindications Form:

The CDSS Contraindications form allows the provider to document contraindications to treatment, diagnostics, or to document a variety of staging values, all from the same form. This form can be customized by specialty.



Select the Treatment, Test/Procedure, or Staging to be documented.

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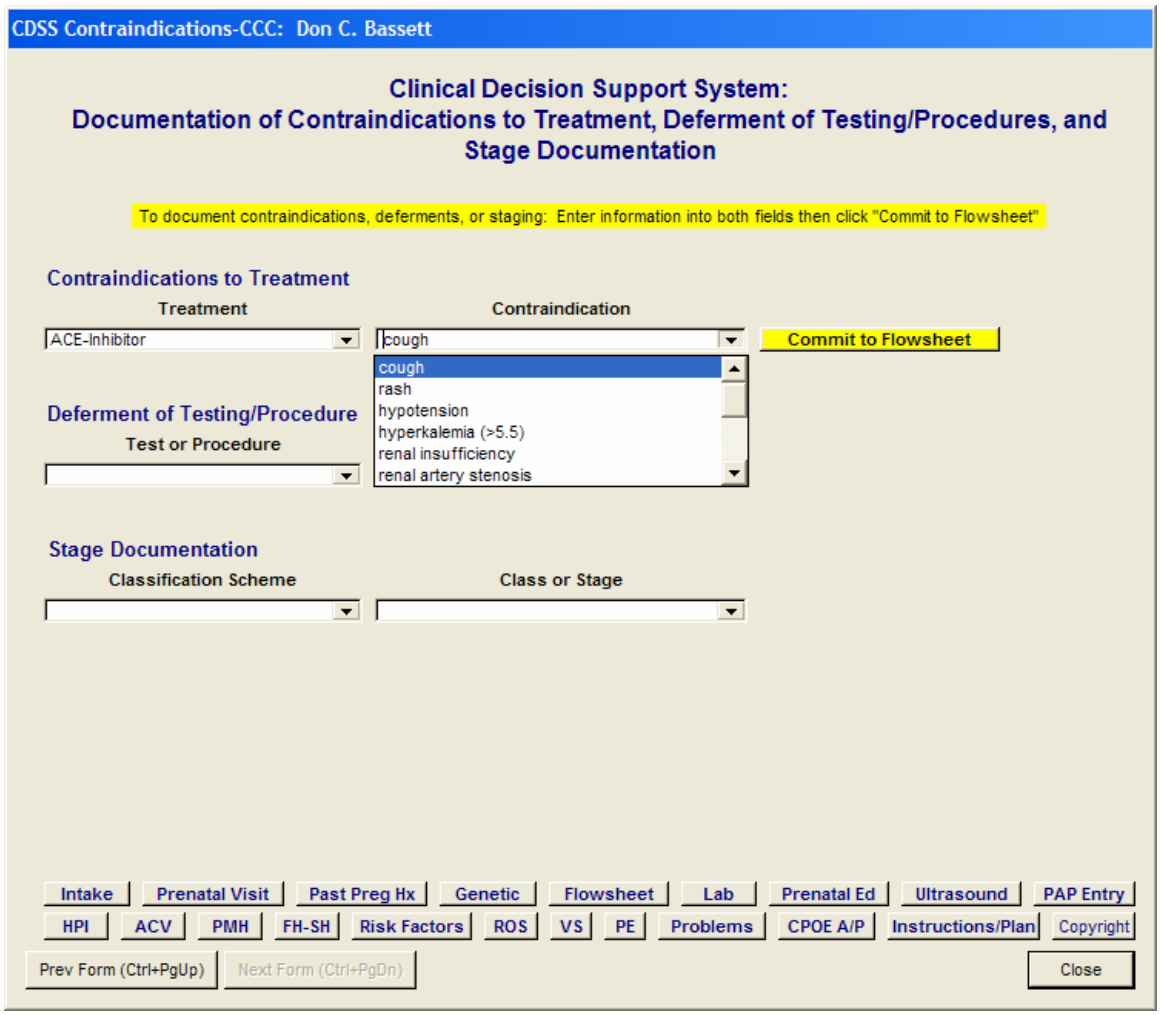
Example: Contraindication to Treatment



Select the contraindication (or stage), then click the “Commit to Flowsheet” action button. Note: more than one contraindication may be documented at one time using the same form/update.

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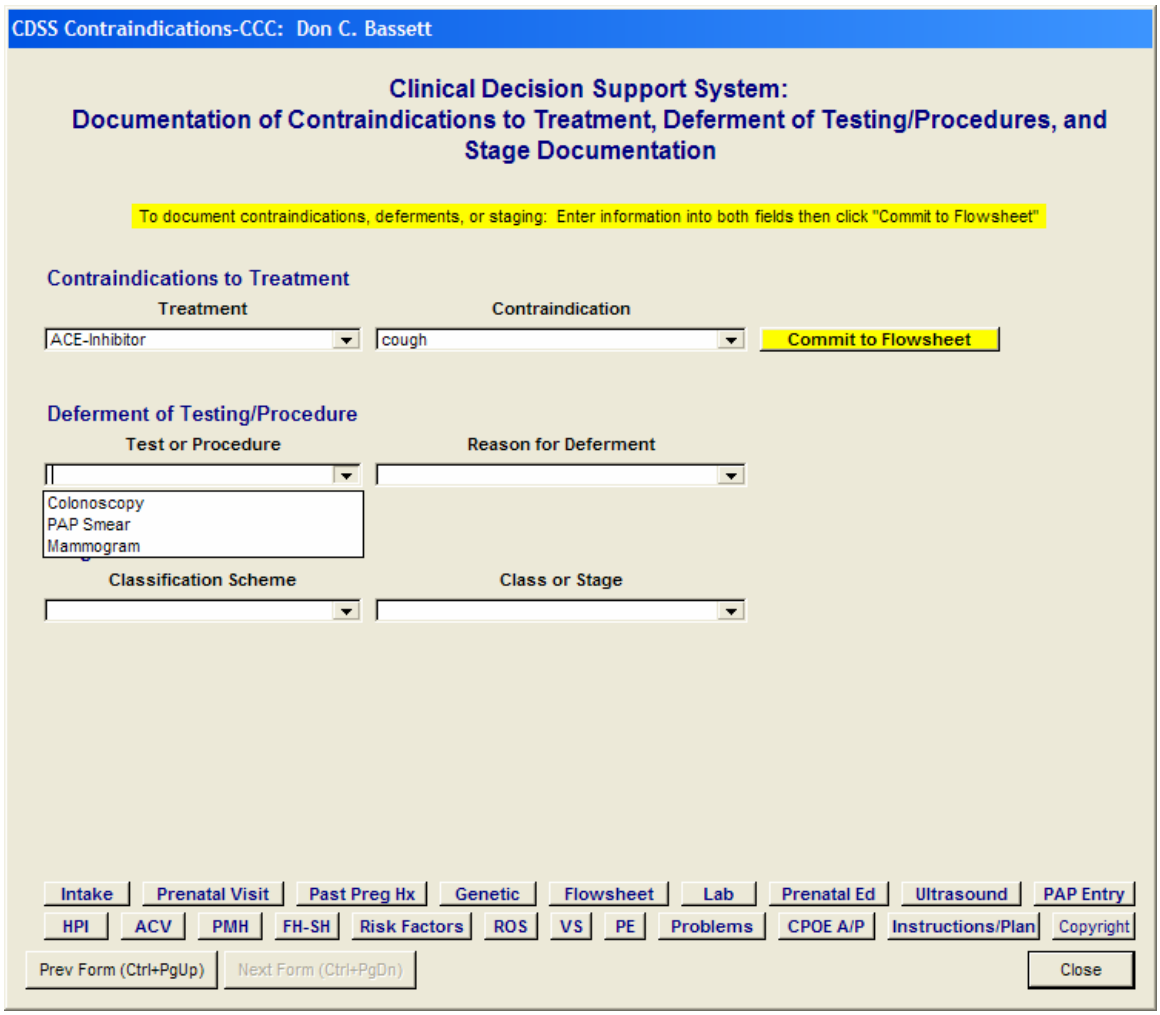
Example: Contraindication to a Test or Procedure



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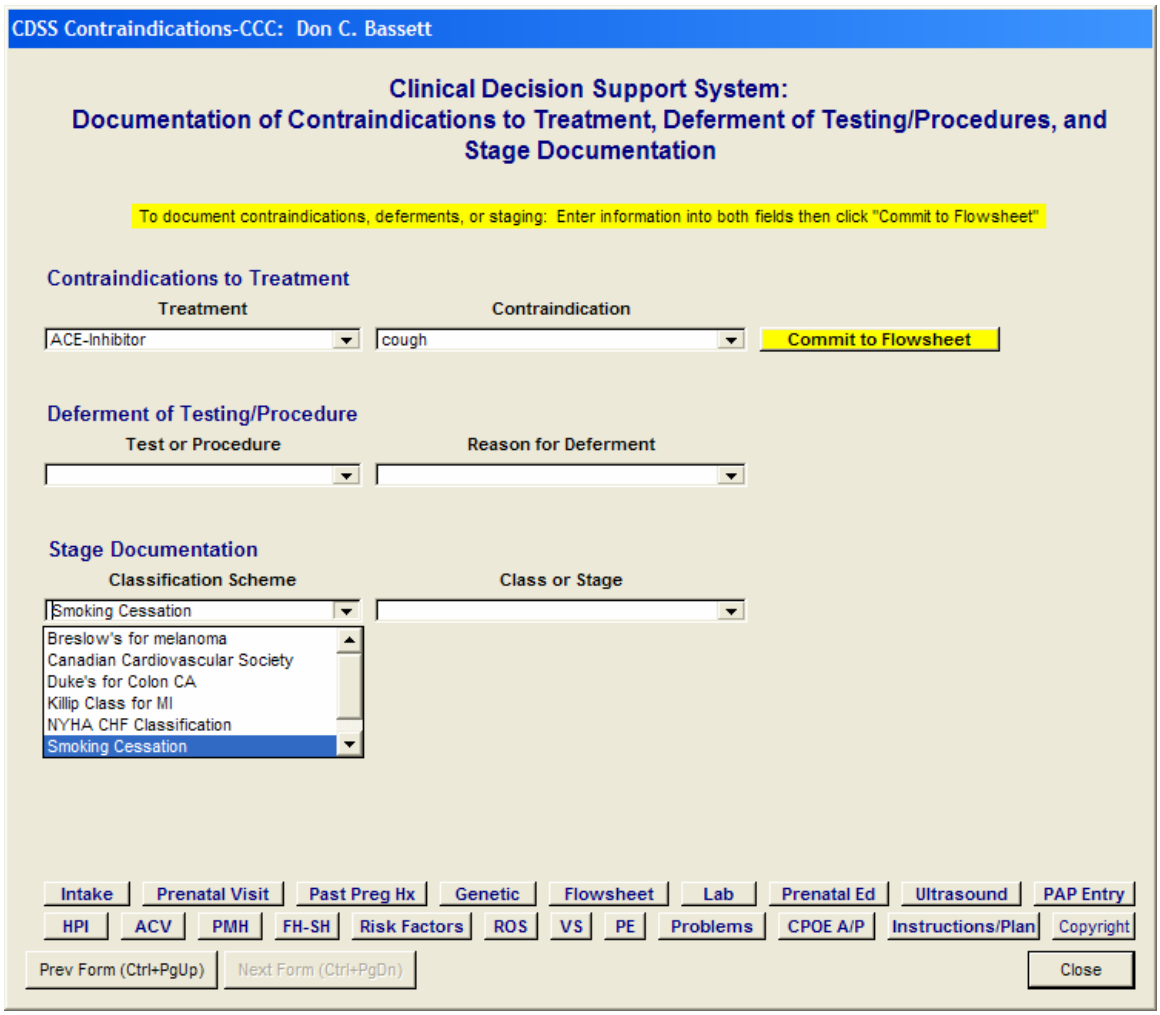
Example: Staging Documentation



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