STI Computer Services, Inc. 2700 Van Buren Ave, Eagleville PA 19403 800-487-9135 Fax: 610-650-9272

ChartMaker® Clinical

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

Added Features

- **Clinical Login –** In an effort to keep you apprised of various features and information pertaining to the ChartMaker® Medical Suite, the Clinical Login dialog has been updated to display feature and informational messages prior to logging in. See Figure 1.

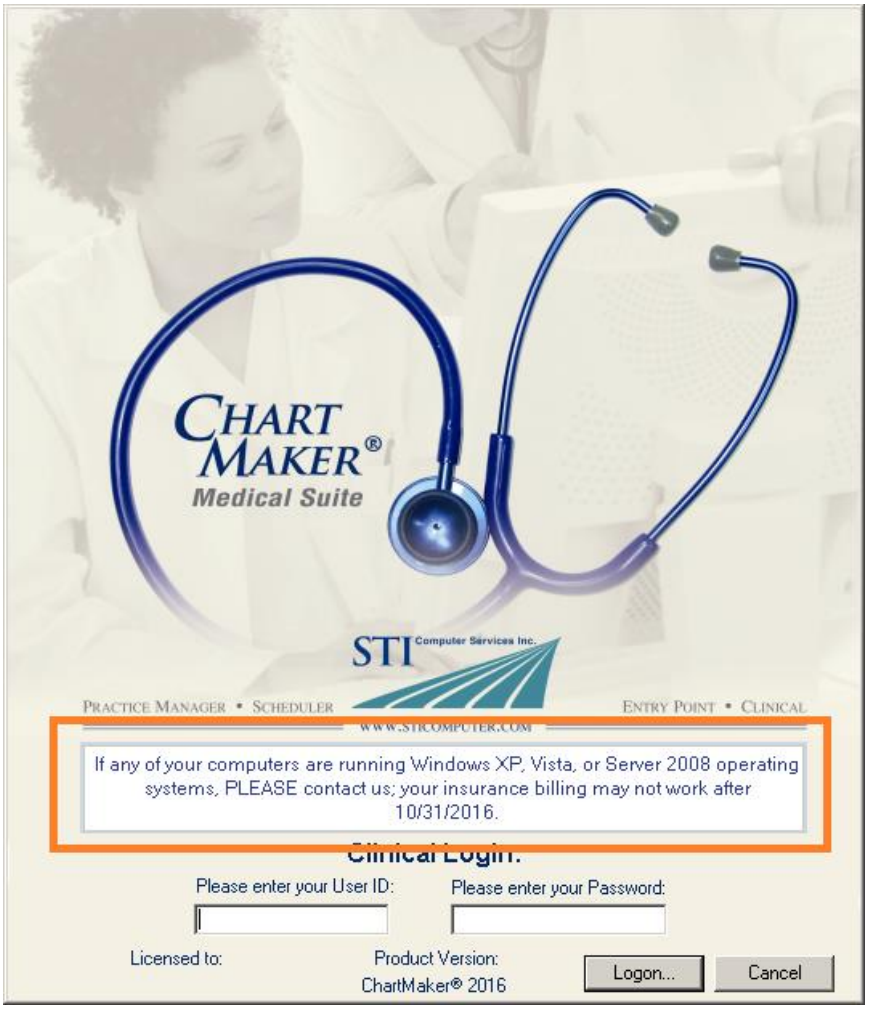
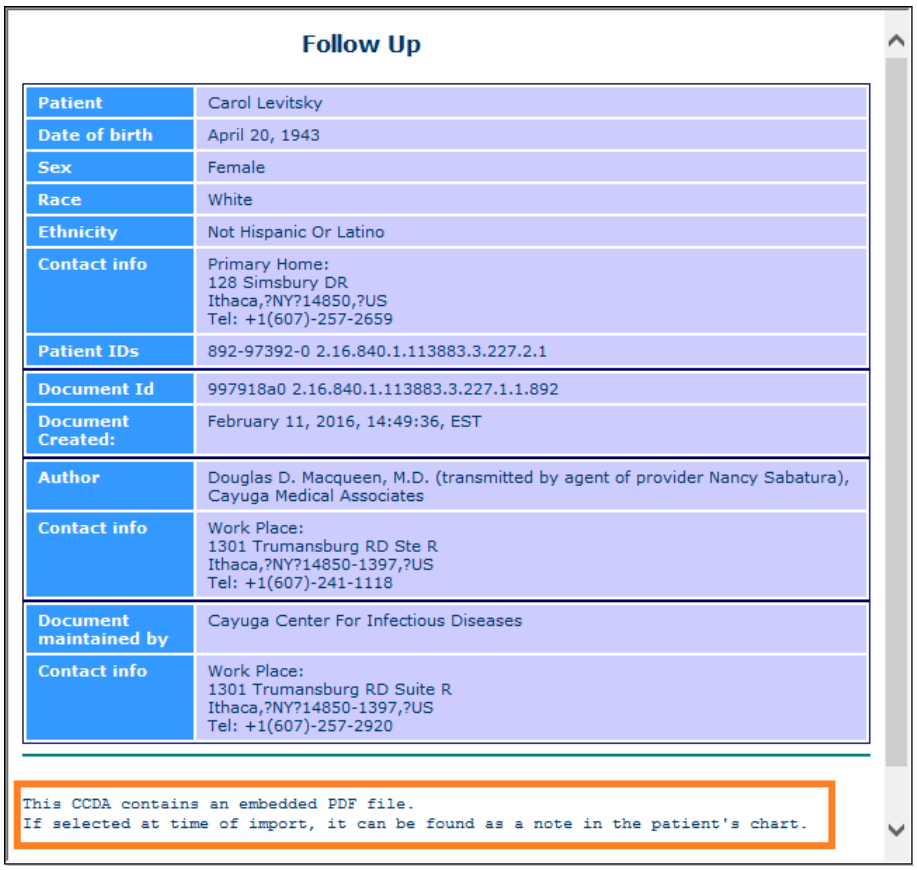


Figure 1 – Clinical Login

Added Features (continued)

- **Direct Message –** The system has been updated so that when importing a CCDA with an embedded PDF from a Direct Message, the PDF will be extracted from the import and an additional note will be created where the PDF will be an external attachment. When a CCDA is imported that has an embedded PDF, the system will generate a message indicating the presence of the embedded PDF, and if that was imported to the system treats that PDF as an additional note. See Figure 2.



Follow Up

Patient	Carol Levitsky
Date of birth	April 20, 1943
Sex	Female
Race	White
Ethnicity	Not Hispanic Or Latino
Contact info	Primary Home: 128 Simsbury DR Ithaca,?NY?14850,?US Tel: +1(607)-257-2659
Patient IDs	892-97392-0 2.16.840.1.113883.3.227.2.1
Document Id	997918a0 2.16.840.1.113883.3.227.1.1.892
Document Created:	February 11, 2016, 14:49:36, EST
Author	Douglas D. Macqueen, M.D. (transmitted by agent of provider Nancy Sabatura), Cayuga Medical Associates
Contact info	Work Place: 1301 Trumansburg RD Ste R Ithaca,?NY?14850-1397,?US Tel: +1(607)-241-1118
Document maintained by	Cayuga Center For Infectious Diseases
Contact info	Work Place: 1301 Trumansburg RD Suite R Ithaca,?NY?14850-1397,?US Tel: +1(607)-257-2920

This CCDA contains an embedded PDF file.
If selected at time of import, it can be found as a note in the patient's chart.

Figure 2 — Note Tab – Imported CCDA

To view the PDF that was embedded, you need to access the associated note that contains the PDF, and click the Open button. See Figure 3. You can also open the PDF via the patient's Organizer.

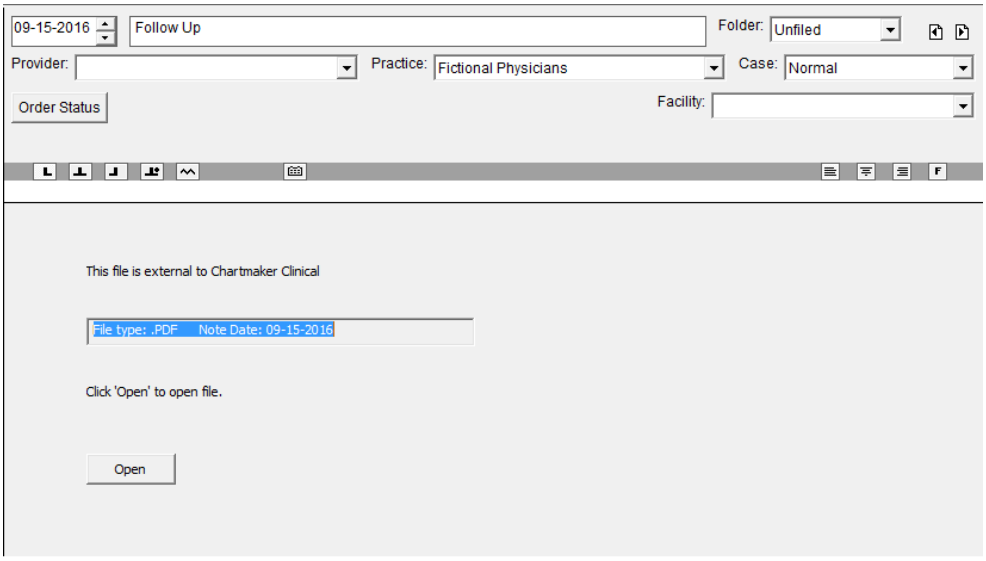


Figure 3 — Note Tab – External File – PDF

Added Features (continued)

- **ePA (Electronic Prior Authorization) –** The system has been updated so that when an ePA action has been completed, the applicable To-Do List messages associated with that ePA action will be removed for all users. In previous versions, only the user who completed the ePA action were having the ePA message removed.

- **Facesheet – Problem/Diagnosis List / Inactive Diagnosis List / Pre-Existing Diagnosis –** A new **SNOMED** field is now available in the context menu, accessed via the asterisk (*) button next to the diagnosis, to easily view any SNOMED code and description associated with that patient's diagnosis. See Figure 4.

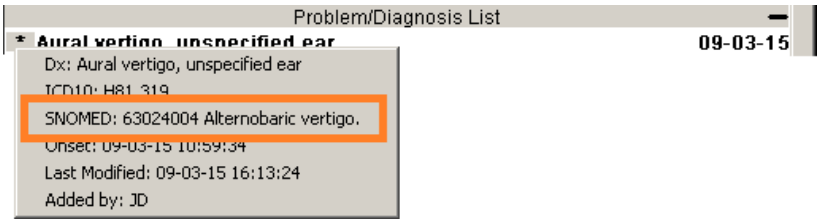


Figure 4 — Facesheet – Problem/Diagnosis List

- **The ID Tab – Patient –** The **Middle** field, in the **Patient** section of the **ID** tab, has been changed to the **Middle Name** field and has been updated to allow you to enter the patient's middle name, up to 25 characters. See Figure 5. In previous versions, this field only allowed you to enter the middle initial for the patient.

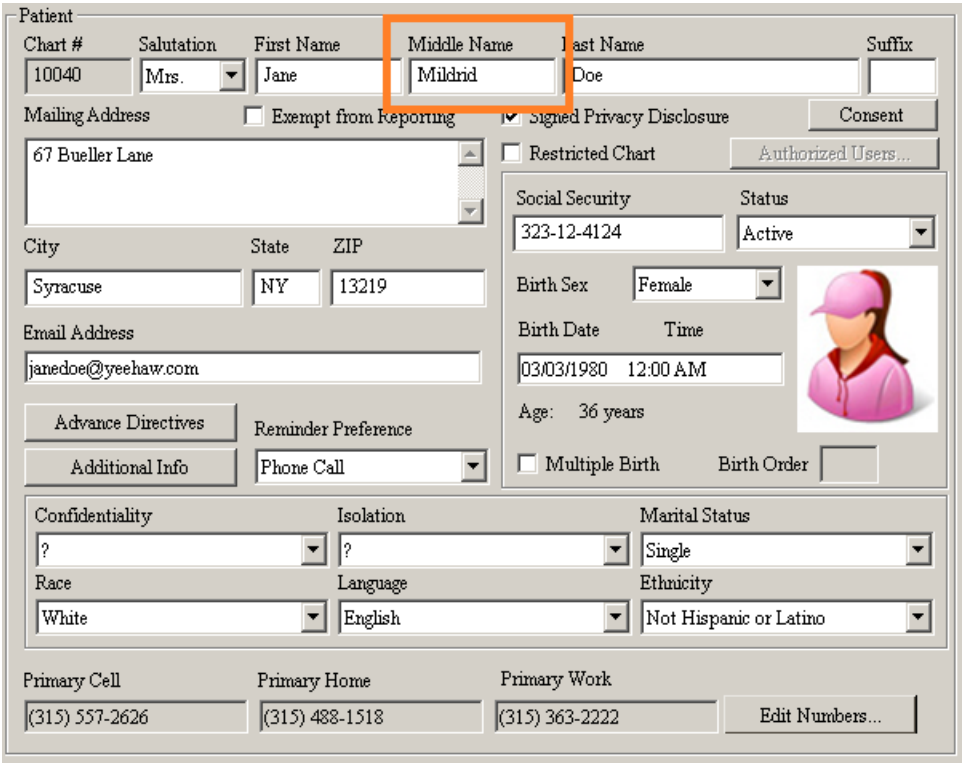


Figure 5 – ID Tab – Patient

- **The ID Tab – Patient –** The **Additional Patient Information** dialog (accessed via the **Additional Info** button in the Patient section of the ID tab), has been updated with options that allow you to configure the patient's **Sexual Orientation** and/or their **Gender Identity**. See Figure 6. When an option is selected for the patient's Sexual Orientation or Gender Identity it will be mapped to the applicable SNOMED code. Likewise, any information added or modified in these sections will be updated in the Audit Trail.

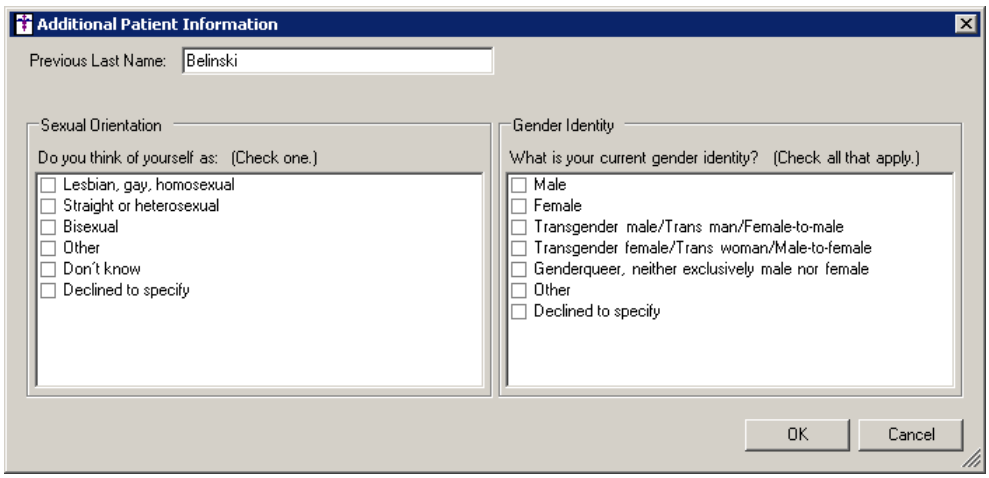


Figure 6 – Additional Patient Information

- **Lab Results – Results Grouping –** The system has been updated so that whenever multiple lab results are received for a patient from the same vendor and for the same collection date, the system will group these results together offering the ability to page through each result of the group, as well as the ability to sign these multiple results as a group.

  When you open a lab result that is part of a group (same patient, same lab vendor, and same collection date), the system will display a label that shows the number of the results you are currently viewing, as well as a Previous Result and Next Result button that allows you to easily page through all of the results. See Figure 7. When you are paging through the results any new lab results that have been imported and meet the vendor/collection date criteria automatically be added to the group.

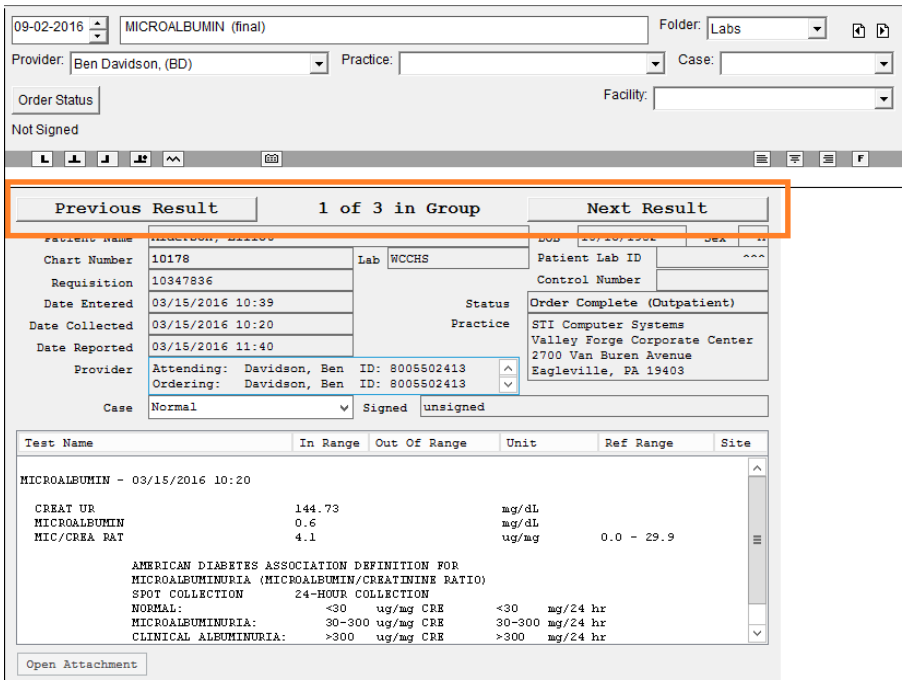


Figure 7 – Note Tab – Lab Result Group

Lab Results – Results Grouping (continued)

When you have finished viewing the various results and you go to sign a result (either by clicking the **Sign** button, or by clicking **Note** > **Sign**), a **Sign Multiple Results** dialog will appear allowing you to select any of the results in the group you wish to sign at this time. See Figure 8. Do note, for the results to appear active in this dialog and be able to be signed, you would have needed to review (read) each lab result. Any unread results will have an asterisk (*) beside them and cannot be signed. Once the applicable results have been selected, simply click the **Sign** button.

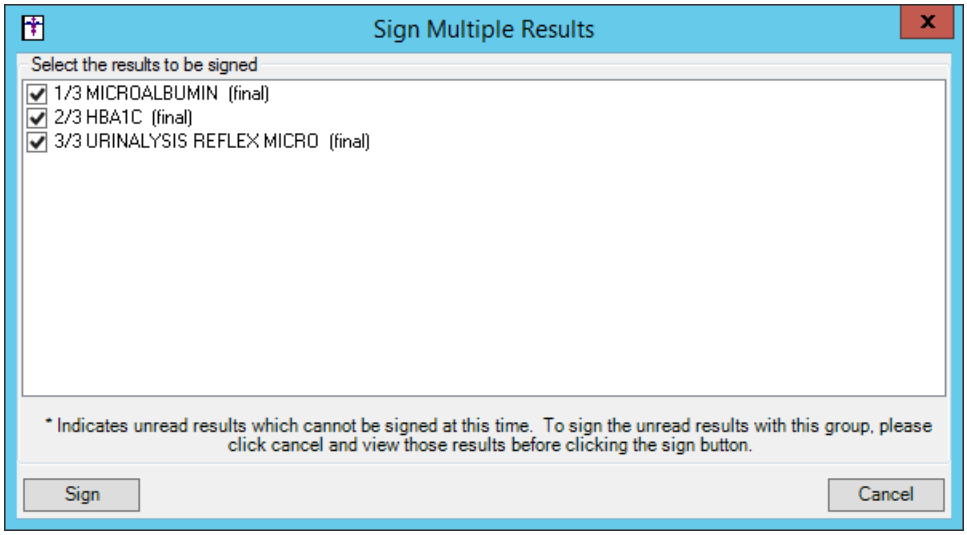


Figure 8 – Sign Multiple Results

- **Medication – Prescribe Medication –ePA –** The **Prescribe Medication** dialog has been updated so that when entering pre-existing medications for a patient, where the **Started** date for the medication is unchecked, the ePA functionality will be disabled and all ePA options will be removed from the **Prescribe Medication** dialog.

- **Medication – Prescribe Medication — ePA –** The **Prescribe Medication** dialog has been updated with an **Override?** button that allows you to forgo the ePA workflow for circumstances where the formulary information is indicating that ePA is required for the medication, but the user knows that this it is not truly required. See Figure 9.

  When the **Override?** button is clicked, the system will indicate that the **ePA is user-cancelled**, and an **Undo?** button will appear to cancel this action. See Figure 10. Once you click the **Next** button, you will proceed with the typical workflow for prescribing medications without a prior authorization, and the Confirm Prescription dialog will also indicate that the ePA is user-cancelled.

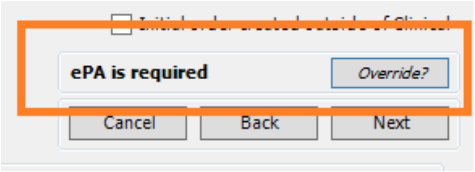


Figure 9 – Prescribe Medication – ePA is required

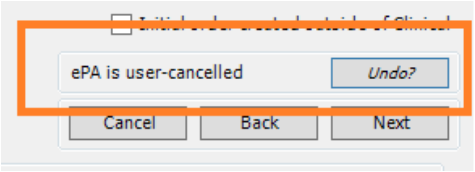


Figure 10 – Prescribe Medication – ePA is user-cancelled

- **Medication – Prescribe Medication — Patient Savings –** The **Prescribe Medication** dialog has been updated with a **Print patient prescription savings materials** option which allows you to decide whether or not to print any patient saving (ScriptGuide and eCopay) materials when prescribing or renewing medications. See Figure 11. This allows you to forgo printing these items when the patient is not in the office, typically when renewing and/or refilling medications. This option will default checked for all medications prescribed and renewed via a chart note. When prescribing and renewing medications via the patient's facesheet, this option will default, checked or unchecked, based on how the **Print prescription savings material when prescribing from the Facesheet** preference (**Edit** > **Preferences** > **Prescription**) is configured.

  When the **Print patient prescription savings materials** option is checked in the Prescribe Medication dialog, any applicable patient saving (ScriptGuide and eCopay) materials will print for the patient when available. When this option is unchecked, the system will not print any applicable patient saving materials.

  Do note that this field will appear checked or unchecked in the **Confirm Prescription** dialog based on how it is configured in the **Prescribe Medication** dialog. You *cannot* override this option in the **Confirm Prescription** dialog. Therefore, if you need to change this option when confirming the prescription, you must click the **<Revise** button and modify this option in the Prescribe Medication dialog.

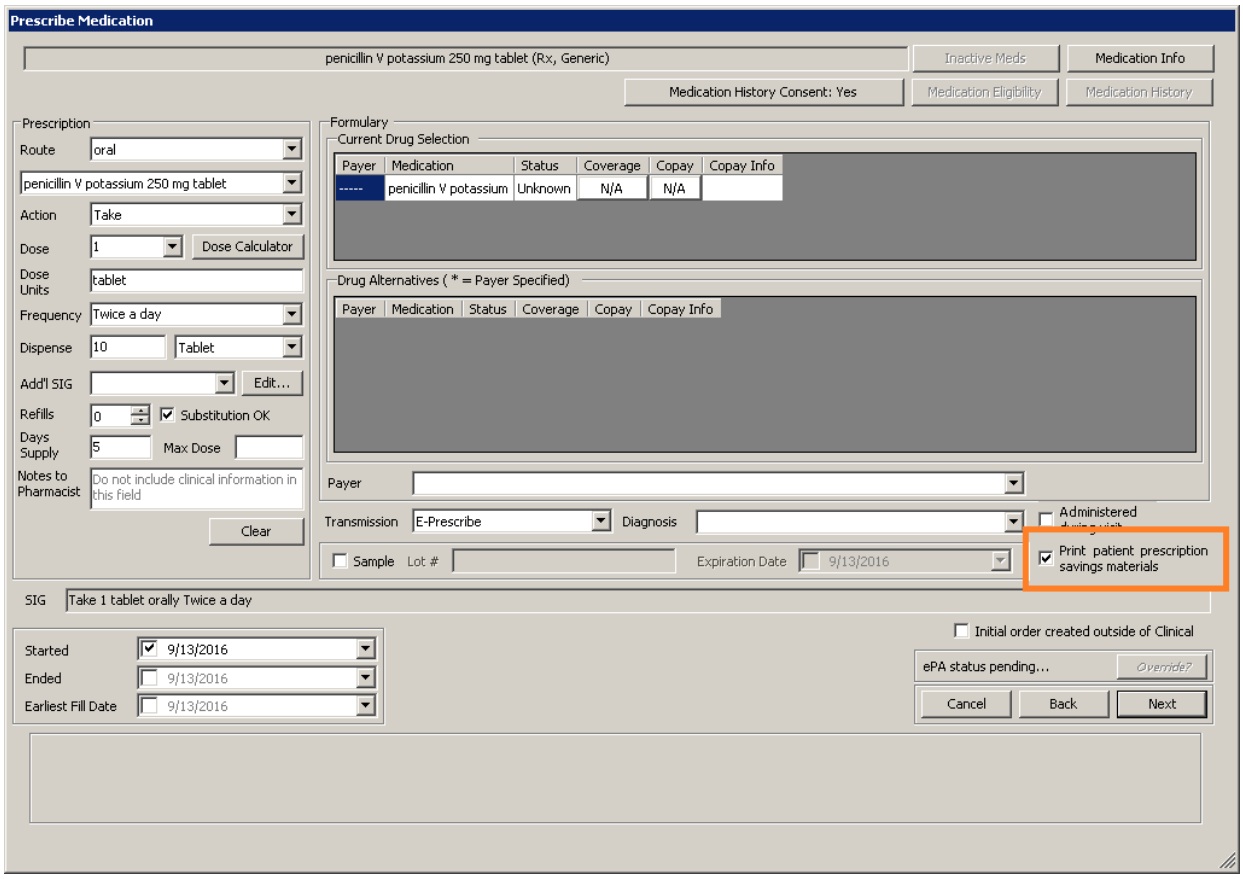


Figure 11 – Prescribe Medication

- **Medication – Confirm Prescription –ePA –** The **Confirm Prescription** dialog has been updated so that when a pre-existing medications was entered for a patient, where the **Started** date for the medication is unchecked in the **Prescribe Medication** dialog, the ePA functionality will be disabled and all ePA indicators will be removed from the **Confirm Prescription** dialog.

Added Features (continued)

- **Meaningful Use Stage 1/Stage 2 2016 – Meaningful Use Dashboard –** The Meaningful Use Dashboard has been updated with a **Stage 1 2016** and a **Stage 2 2016** option in the Stage field, thereby allowing you select and run queries specific to the changes reflected in these stages for 2016, and provide accurate statistics for applicable attestation requirements. See Figure 12.

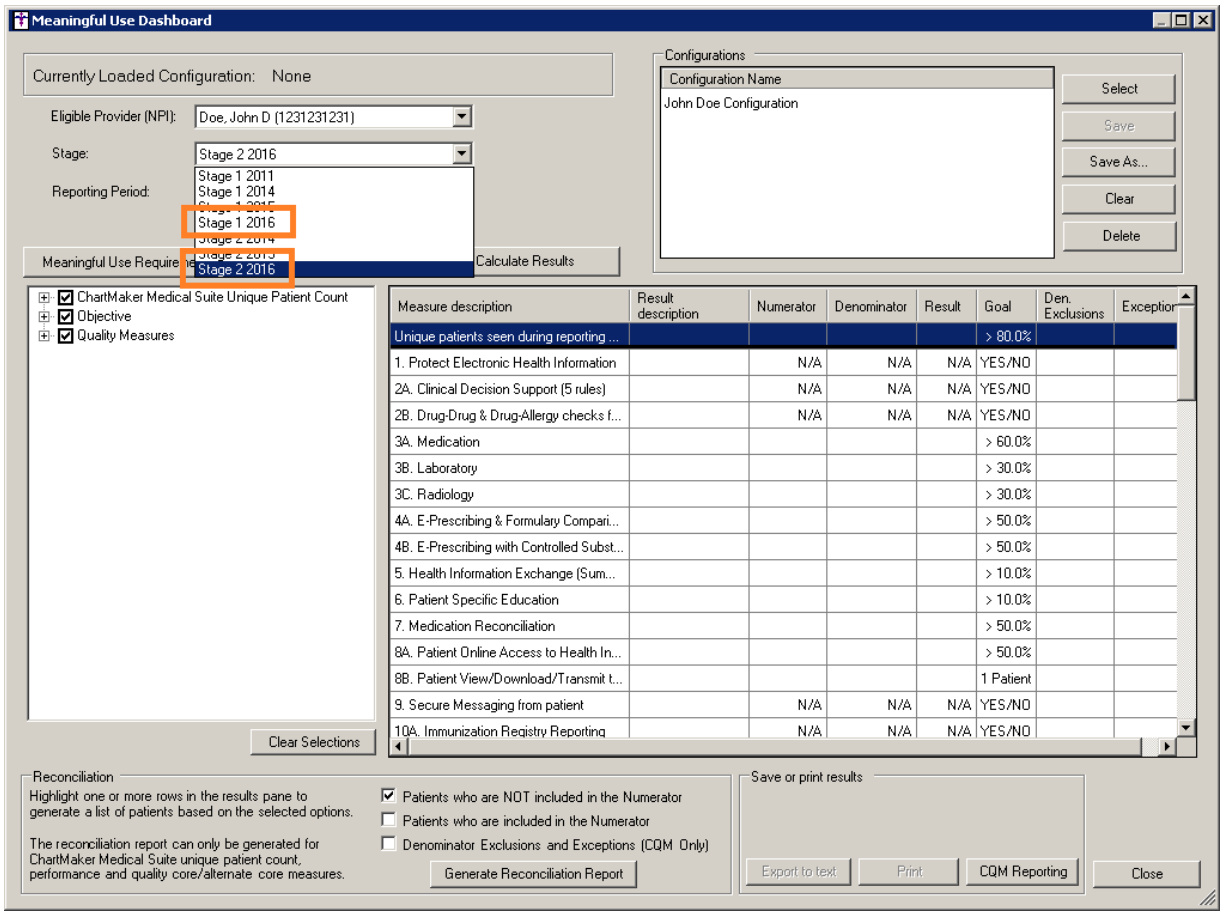


Figure 12 – Meaningful Use Dashboard

- **Meaningful Use Stage 1/Stage 2 2016 – Meaningful Use Requirements –** The Meaningful Use Requirements dialog, accessed via the Meaningful Use Requirements button in the Meaningful Use Dashboard, has been updated to reflect the new requirements for Stage 1 2016 and Stage 2 2016. See Figure 13.

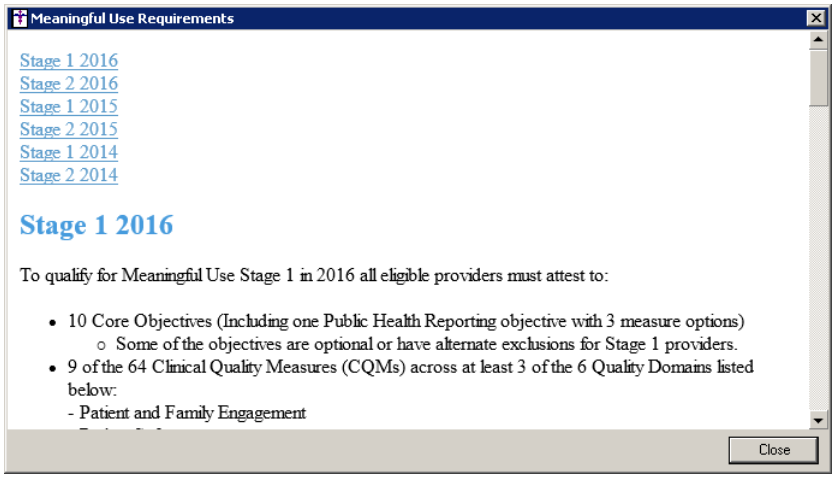


Figure 13 – Meaningful Use Requirements

- **Meaningful Use – Meaningful Use Requirements –** A new **CQM Import Dashboard** has been created (**Reports** > **Meaningful Use** > **CQM Import**) that allows you to import QRDA1 Category 1 files from outside sources, and then calculate the CQMs from that file for a selected Reporting Period. See Figure 14.

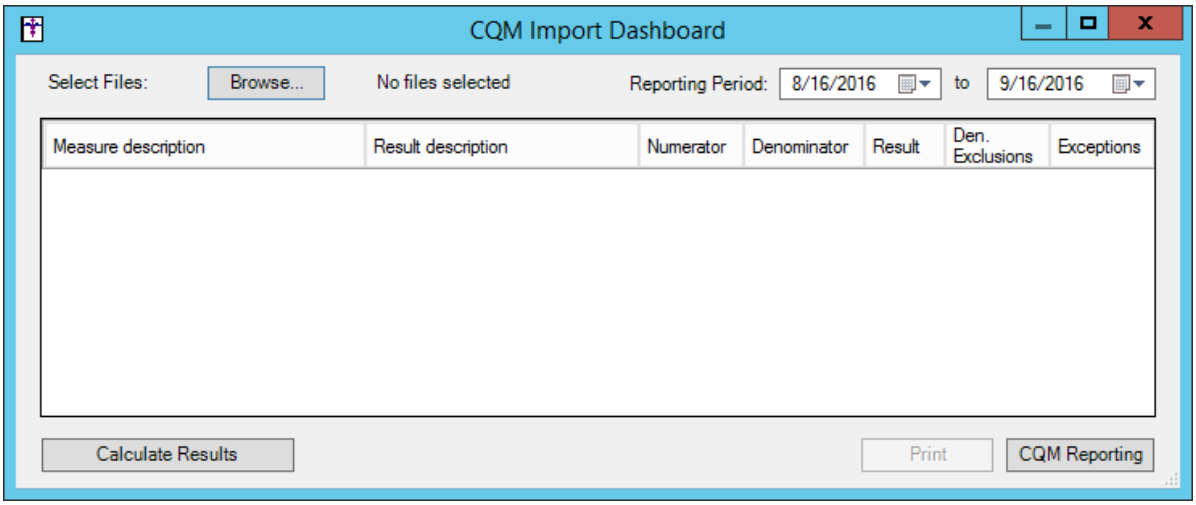


Figure 14 – Meaningful Use Requirements

After a file has been imported via the **Browse** button, you can select the applicable **Reporting Period**, click the **Calculate Results** button and the system will calculate the applicable CQM results (**Numerator**, **Denominator**, **Result %**, **Denominator Exclusions**, and **Exceptions**) contained have within the file for the selected reporting period. You then have the ability to **Print** those results, or click the **CQM Reporting** button to export the results to a QRDA file. See Figure 15.

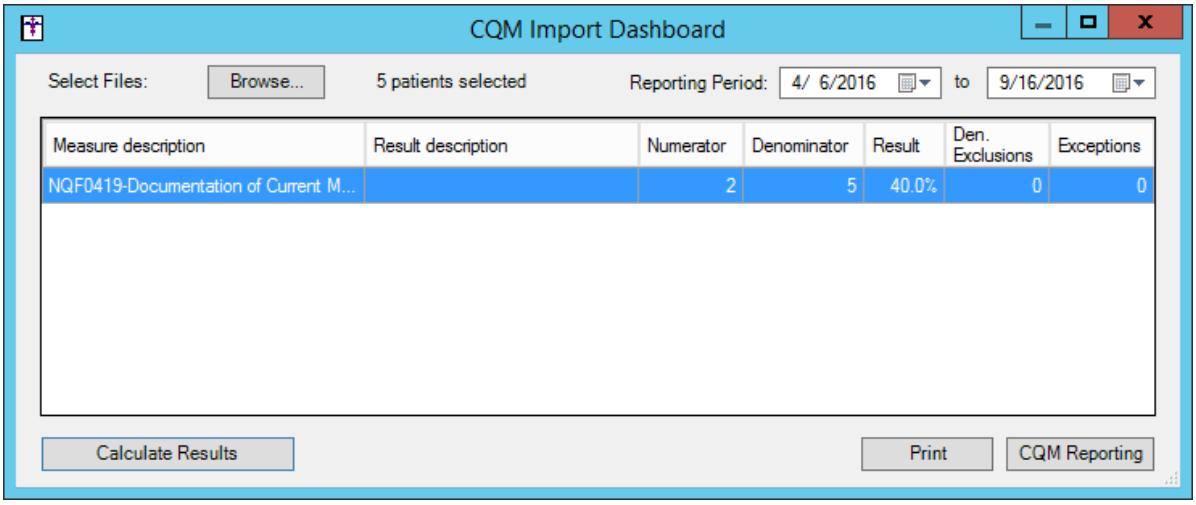


Figure 15 – Meaningful Use Requirements

Added Features (continued)

- **The Note Tab – Diagnosis –** The **ICD10 Search** in the **Diagnosis Search** dialog has been updated with an **ICD10 Code Set** field that allows you to toggle between the **Oct 1, 2014 – Sept 30 2016** code set, the **Oct 1, 2016 – Sept 30 2017** code set, or **All ICD10 Codes**. See Figure 16. This allows you to easily search for the applicable ICD10 codes that are active, as outlined by the CDC, for the applicable date ranges. When accessing the **Diagnosis Search** dialog when adding or editing a diagnosis in the chart note, the system will default to the code set based on the **Note Date** to ensure that the proper ICD codes for that date are selected.

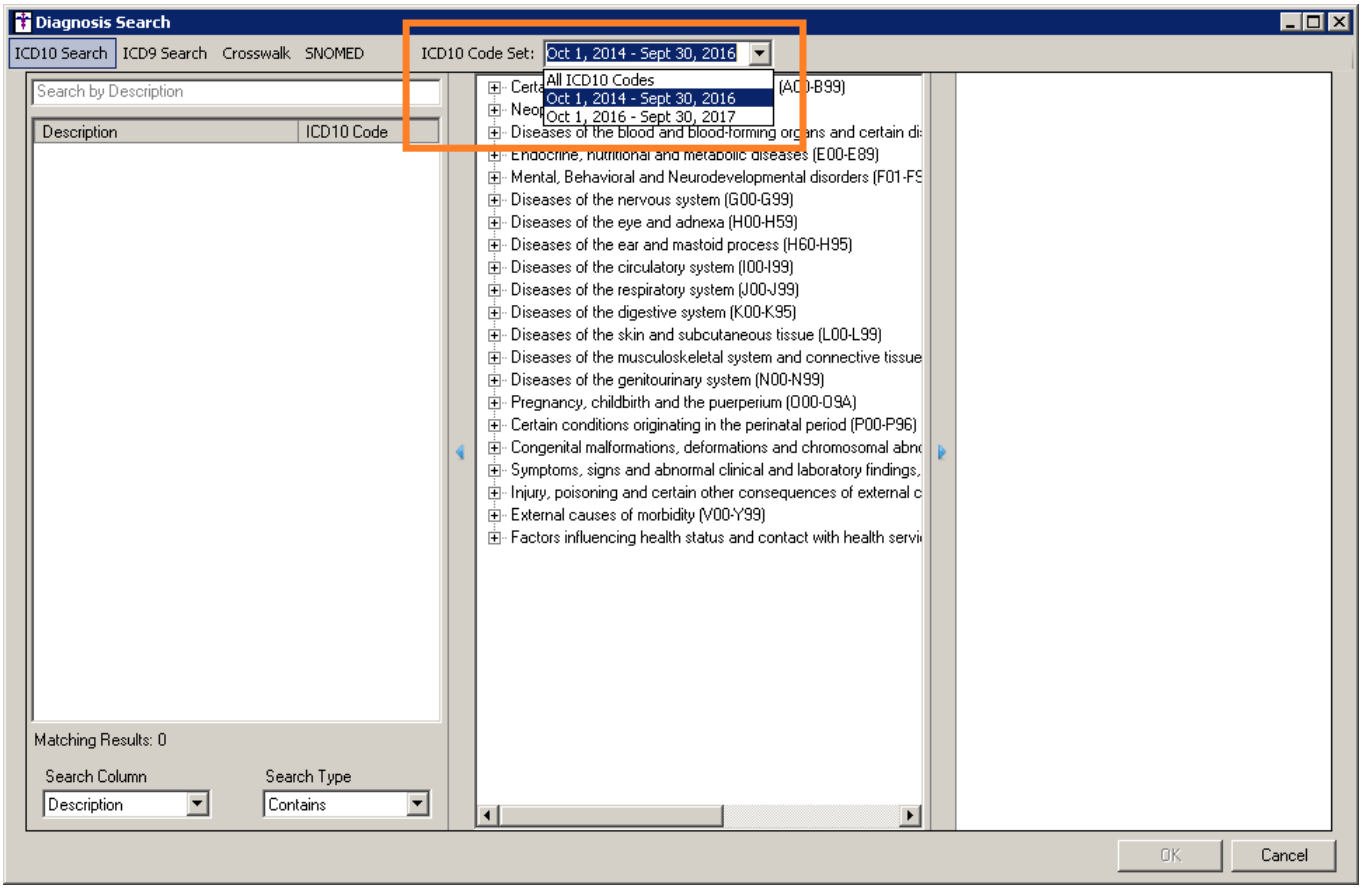


Figure 16 – The Note Tab – Diagnosis – Diagnosis Search

Added Features (continued)

- **The Note Tab – Immunizations –** The program has been updated so that the latest immunization codes from the CDC are being used when configuring immunization information.

- **The Note Tab – Immunizations –** The program has been updated to include MSH 4.1 and 4.3 segments to the immunization file when sending immunization information to MDIIS.

- **The Note Tab – Procedure Orders –** The Order Procedure dialog has been updated so that whenever a procedure designated with a type of **Lab** or **Test**, a **Print Specimen Label(s)** button will appear in the bottom right of the dialog that allows you to print specimen labels for that patient to a **DYMO Label Printer**. See Figure 17. The labels will contain the **Collection Date**, **Patient First and Last Name**, and their **Date of Birth**. You have the ability to print up to 9 copies of the label.

  This functionality is also available for any patient, whenever their chart is opened, via **Chart** > **Print Specimen Labels**.

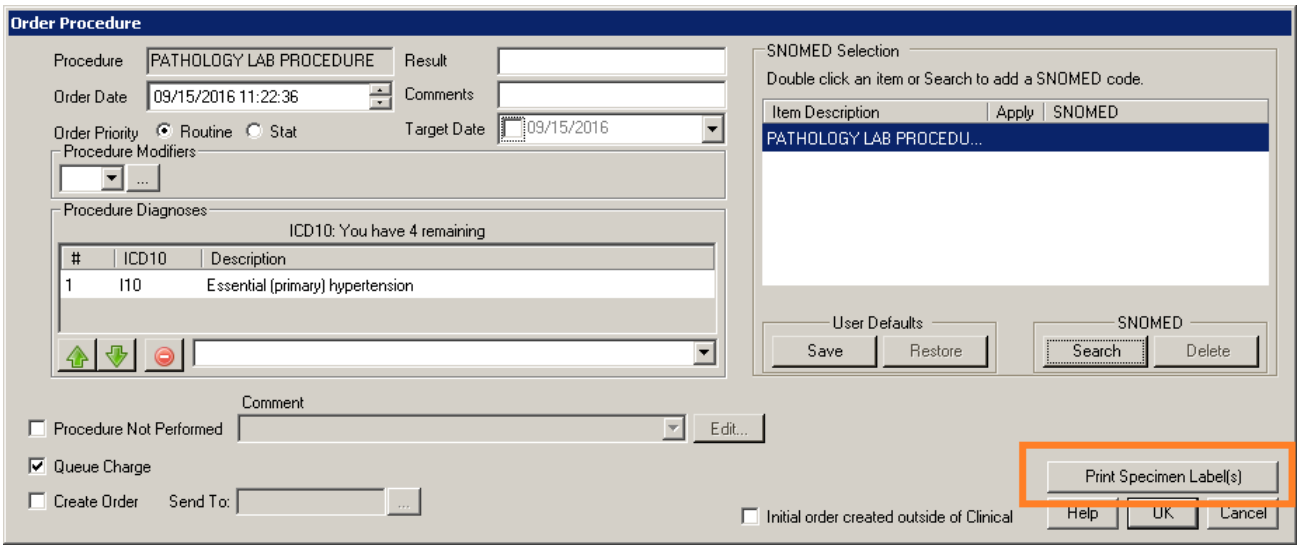


Figure 17 – Order Procedure

- **The Note Tab – Smoking History –** The Smoking/Tobacco Use dialog has been redesigned and updated with a new option to allow you to easily capture all of the smoking/tobacco use data needed to satisfy the 2015 version of the Clinical Quality Measure NQF 0028 for Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention. The new option is: **Tobacco use screening not performed due to limited life expectancy** which appears directly above the Comments field. See Figure 18. If this option is selected, all fields above will be disabled and set to Not Asked or unchecked.

  Likewise, the **Smoking History** label has changed to **Tobacco History**; the **Do you use smokeless tobacco?** and **Have you used smokeless products in the last 30 days?** sections are now below the **Smoking Status – CDC Terminology** section; and the **Smoking Details** section has been relabeled **Tobacco Details**, and a new **Smoking** section has been created within to delineate the smoking details (Cigarettes per day, Years smoked, Start Year, and End Year).

  When the applicable options are selected in the Smoking/Tobacco Use dialog any applicable SNOMED and/or LOINC codes will be attached and used when calculating applicable Meaningful Use Quality Measures (NQF 0028).

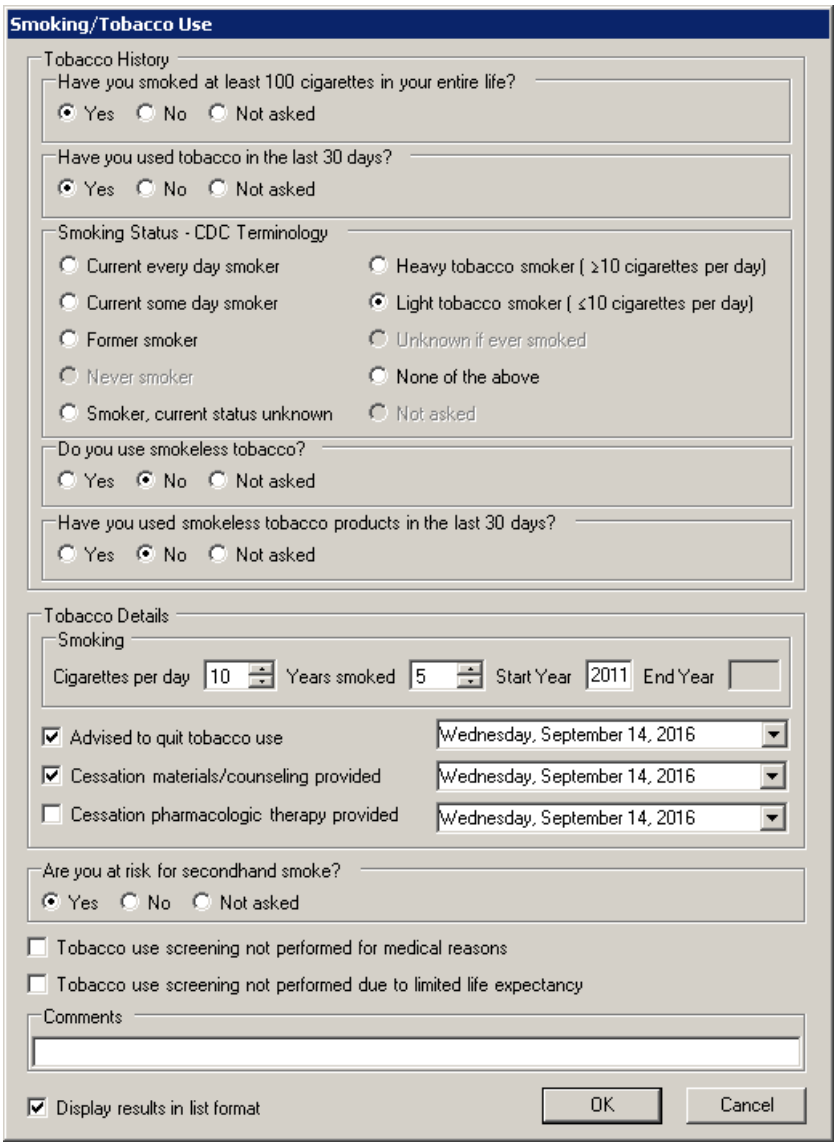


Figure 18 – Smoking/Tobacco Use

Added Features (continued)

- **The Note Tab – Vitals –** The **Vital Signs Entry** dialog has been updated with a **Pulse 2** field that allows you to easily capture a second heart rate for the patient in same note. See Figure 19. When applicable, the Pulse 2 field will be used to satisfy exclusion cases for the Clinical Quality Measure NQF 0083 for Heart Failure: Beta-Blocker Therapy for LVSD which requires two heart rates to be taken during a visit.

- **The Note Tab – Vitals –** The **Position** field, in the **Blood Pressure 1** and **Blood Pressure 2** sections of the **Vital Signs Entry** dialog, has been updated to allow only three options: **Sitting**, **Standing**, and **Lying**. The Edit button has been removed, and you can no longer create user-defined positions. See Figure 19. The field now defaults to the **Sitting** option. When the Position is configured, the selected option will be linked to the applicable SNOMED code and will be used to calculate any applicable cases for Clinical Quality Measure NQF TBD for Hypertension: Improvement in Blood Pressure. In addition, any legacy user-defined positions that were previously configured will be displayed when opening old chart notes for the patient.

- **The Note Tab – Vitals –** The **Height** section of the **Vital Signs Entry** dialog has been updated with a **Height gain/loss since** field that will calculate any changes in the patient's height and will display the date in which the height was last measured in parentheses. See Figure 19. This allows you to easily track any health changes affected by gain or loss of height.

- **The Note Tab – Vitals –** The **Length** section of the **Vital Signs Entry** dialog has been updated with a **Length gain/loss since** field that will calculate any changes in the patient's length and will display the date in which the height was last measured in parentheses. See Figure 19. This allows you to easily track any health changes affected by gain or loss of length.

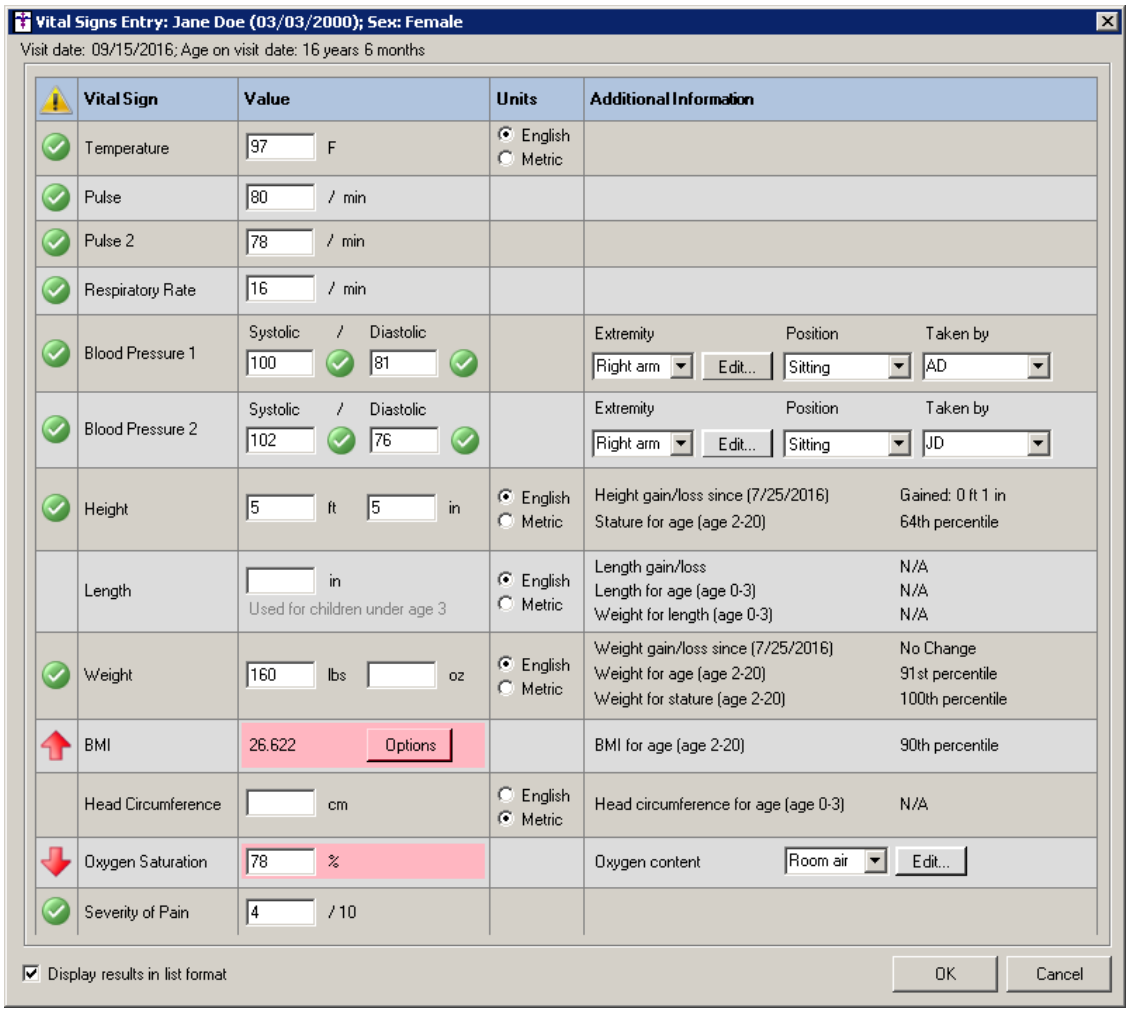


Figure 19 – Vital Signs Entry

- **The Note Tab – Vitals –** The **BMI** section of the **Vital Signs Entry** dialog has been updated with an **Options** button that allows access to a **BMI** dialog that allows you to configure additional follow-up options. See Figure 18. The BMI dialog has a **Status** section and a **Counseling** section. The options in the Counseling section (**Provided counseling for nutrition** and **Provided counseling for physical activity**) will always be active; however, the options in the Status section will be determined by whether or not the BMI was calculated for the patient. If it was calculated, the active option will be **Follow up plan documented**. See Figure 20. If the BMI was not calculated, the active options will be **BMI not done for medical or other reason** and **BMI refused by patient**. See Figure 21.

  When the options in BMI dialog are selected the system will link the selected options to the applicable SNOMED and LOINC codes and will be used to calculate any applicable Meaningful Use Clinical Quality Measures (NQF 0421 for Preventative Care and Screening: BMI Screening and Followup and NQF 0024 for Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents). Likewise, the information configured will be tracked in the History tab and Audit Trail.

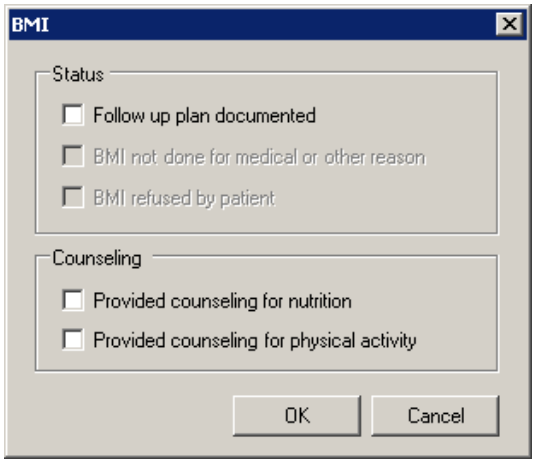


Figure 20 – BMI (Calculated)

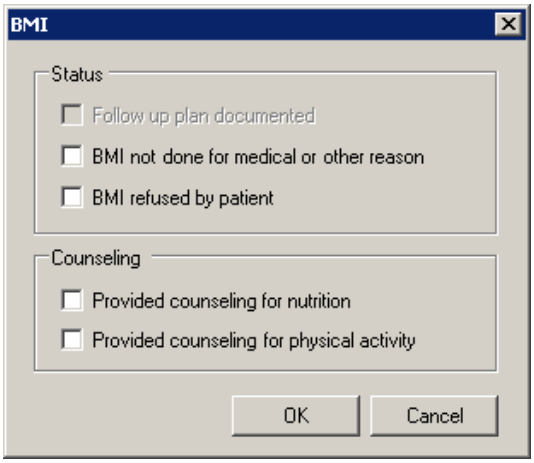


Figure 21 – BMI (Not Calculated)

- **Preferences – General —** The **Patient Savings Printer** field, in the **General** tab of the **Preferences** dialog, has been renamed to the **Patient Prescription Savings Printer** to better describe and provide naming consistency for the printer preference you are configuring. See Figure 22.

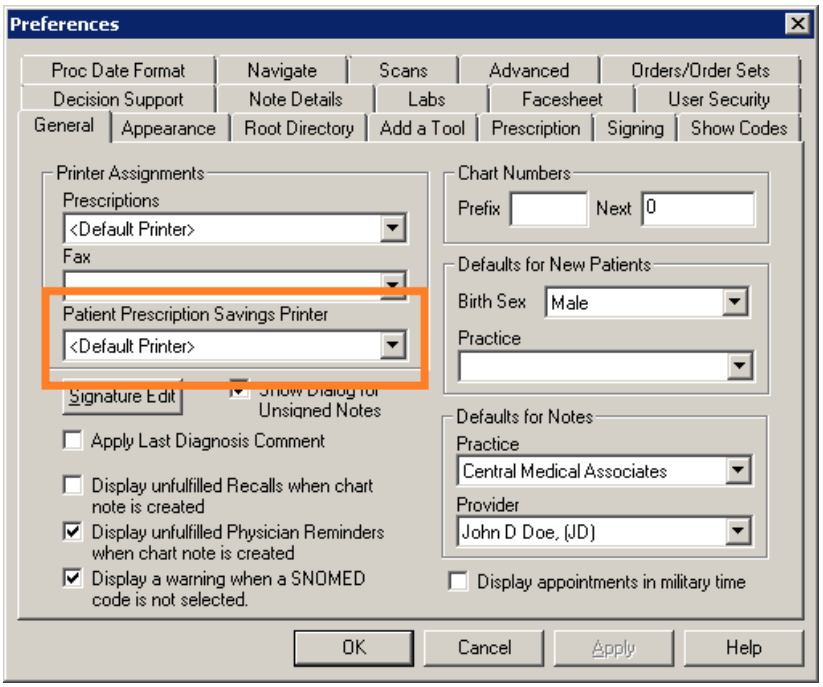


Figure 22 – Preferences – General

Likewise, the **Set Patient Prescription Savings Printer** dialog, which appears when a user, that is a prescriber, and whose **Patient Prescription Savings Printer** is not configured, logs into Clinical, has also been updated to better clarify the option and to offer updated selection options. See Figure 23.

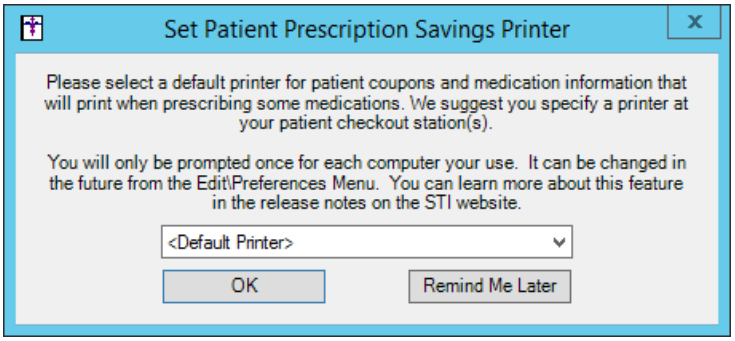


Figure 23 – Set Patient Prescription Savings Printer

- **Preferences – Prescription —** The **Printing** section of the **General** tab in the **Preferences** dialog has been updated with a **Print prescription savings material when prescribing from the Facesheet** option that allows you to configure how the **Print patient prescription savings materials** option in the **Prescribe Medication** dialog will default when prescribing or renewing medications via the patient's facesheet. See Figure 24. This allows you to choose not to print applicable patient saving (ScriptGuide and eCopay) materials when prescribing and renewing medications via the facesheet when the patient is not present.

  When the **Print prescription savings material when prescribing from the Facesheet** option is checked, the **Print patient prescription savings materials** option in the Prescribe Medication dialog will default as checked when prescribing and renewing medications via the patient's facesheet. When this option is unchecked, the **Print patient prescription savings materials** option will default unchecked when prescribing and renewing medications via the patient's facesheet. You have the ability to override this option on an individual basis in the Prescribe Medication dialog.

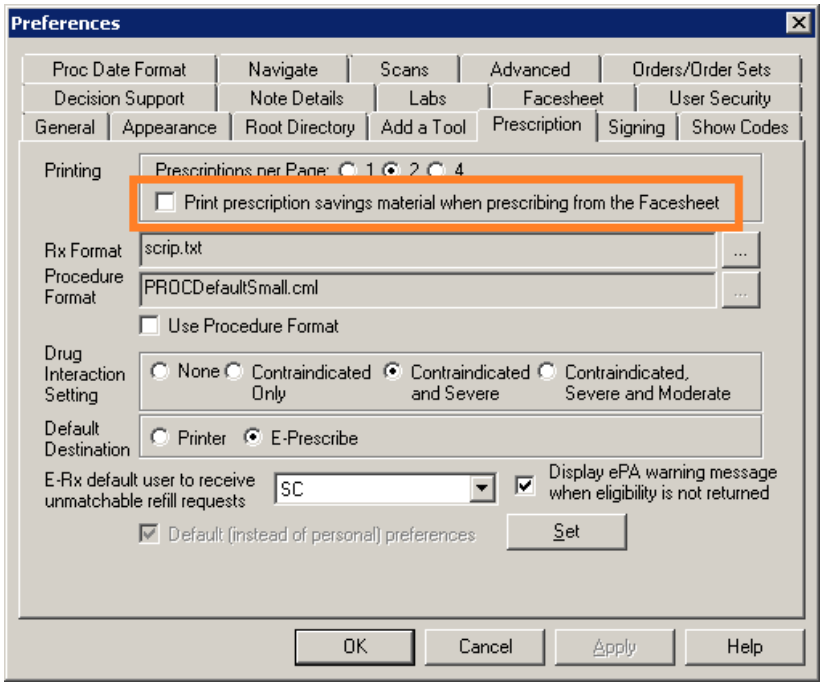


Figure 24 – Preferences — Prescription

- **Preferences – Signing —** The **Signing** tab in the **Preferences** dialog has been updated with **Result Signing** section that contains the **Confirm Signing Labs** preference from previous versions, and a new **Allow Group Signing of Results** preference. See Figure 25. When the Allow Group Signing of Results preference is active, the system will allow you the ability to sign multiple lab results for a patient when the results are from the same vendor and for same collection date. If this preference is unchecked, then lab results from the same vendor and collection date will have to be signed individually for a patient.

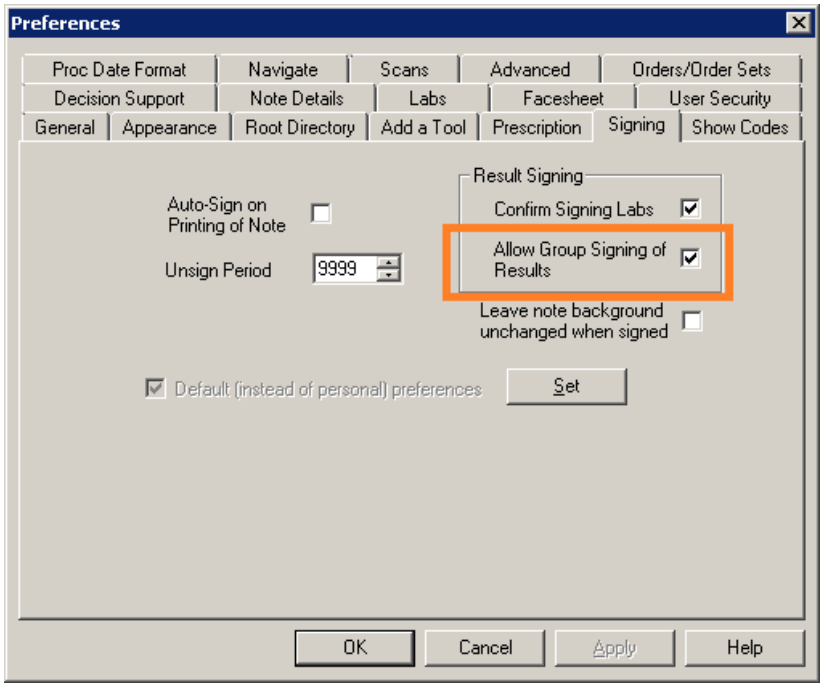


Figure 25 – Preferences — Signing

- **System Tables – Diagnosis Search –** The **ICD10 Search** in the **Diagnosis Search** dialog has been updated with an **ICD10 Code Set** field that allows you to toggle between the **Oct 1, 2014 – Sept 30 2016** code set, the **Oct 1, 2016 – Sept 30 2017** code set, or **All ICD10 Codes**. See Figure 26. This allows you to easily search for the applicable ICD10 codes that are active, as outlined by the CDC, for the applicable date ranges. When accessing the **Diagnosis Search** dialog via the **Edit** > **System Tables** menu, the system will default to the code set based on the current day's date.

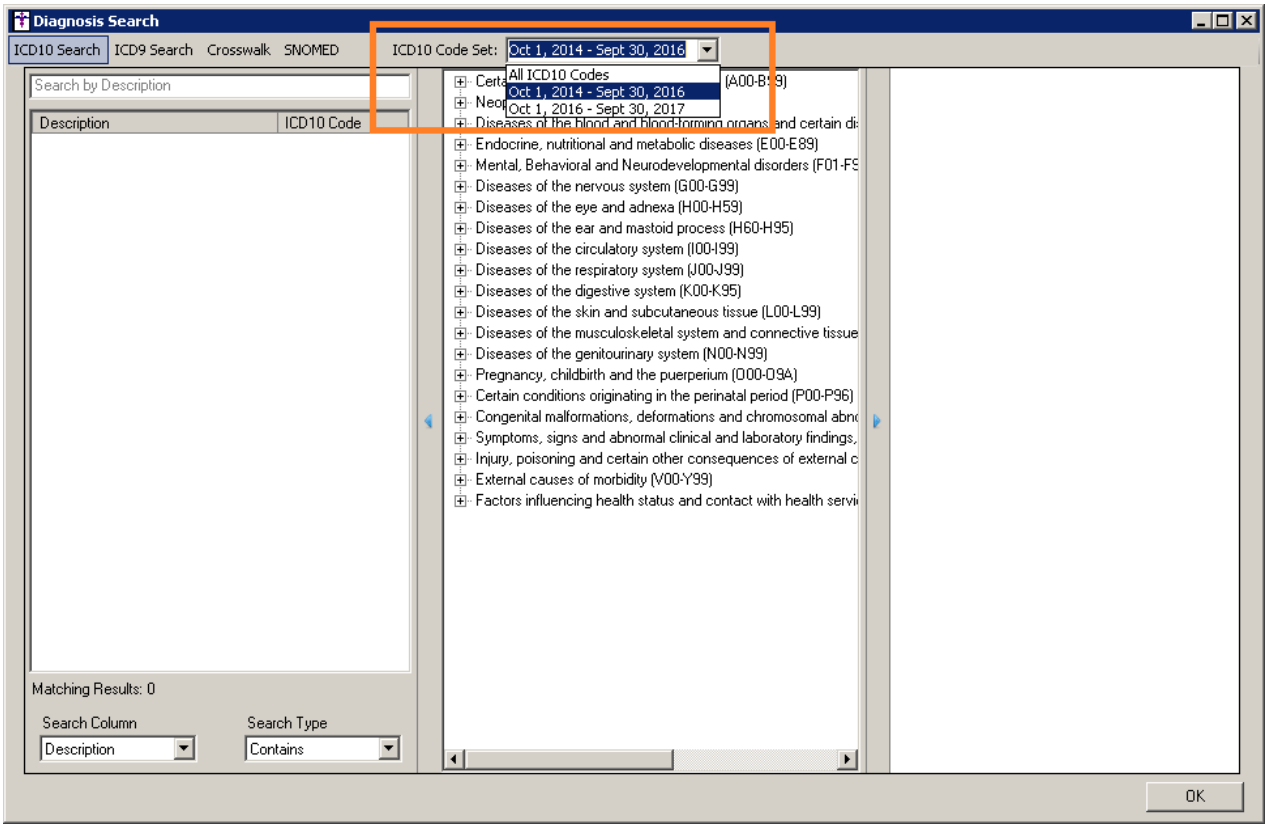


Figure 26 – System Tables — Diagnosis Search

Addendum

SureScripts® E-Prescribing Best Practice Guidelines

Below are best practices that have been developed to assist in the construction of complete, non-contradictory, and clear patient directions:

Ensure that Directions are complete and accurate

- All information in the Sig must be accurate, complete, and include all the required components written in the following order: action, dose, dose units, route, frequency, and finally auxiliary information.
    - The exception to this syntax is Sigs which simply state "Take/Use as Directed/Instructed as per manufacturer labeling."
- Information within the Sig must not conflict with itself

Example: *Use "**Take 1 tablet by mouth** daily" instead of just "Daily."*

Always qualify "…as Directed" with a source

- Statements such as "Take as directed" and "Use as instructed" should only be used when followed by a source that clearly dictates to the patient where or from whom they can obtain the specific directions.
- If a Sig builder tool is used, ensure that prescribers enter the specific source of the instruction after selecting the "Take/Use as directed/instructed" option before they can proceed with finalizing the e-prescription.

*Example: Use "Use as instructed **per instructions on package**" instead of "Use as instructed."*

Always qualify "PRN (as needed)" with an indication

- The use of "PRN" (i.e. "as needed") should only be used in conjunction with an indication.
- For all other non-PRN directions, inclusion of an indication is also recommended; alternatively, there is also a designated structured field for Diagnosis, in which ICD-10 codes may be used to communicate the appropriate diagnosis or indication relevant for the prescribed product
- If a Sig builder tool is used, ensure that the Sig builder tool requires prescribers to enter the specific indication or conditions for PRN use if the prescriber selects a "PRN" frequency

*Example: Use "Take 1 tablet by mouth every 4 hours as needed **for mild to moderate pain**" instead of "Take 1 tablet by mouth every 4 hours as needed."*

Always specify the Duration of Therapy for Acute Treatments

- Duration of therapy should **only** be specified for medications for acute treatments with a defined length of therapy, e.g., antibiotics.

Avoid Abbreviations, Acronyms or Symbols

- ISMP (Institute for Safe Medication Practices) provides the complete list of *Error-Prone Abbreviations, Symbols, and Dose Designations* that should never be used in a prescription
- If the use of Latin abbreviations is desired, the system should include the ability to expand Latin abbreviations into plain English text via keystroke accelerators. The expanded text form of the Sig should be displayed to the prescriber to ensure correct transition from abbreviations to full text

Example: *Use "**Instill 1 drop into both eyes once daily**" instead of "1 gtt ou qd."*

Never Truncate or Split Directions between multiple fields

- If the patient directions are being transmitted exceeds the 140-character limit, it should be communicated by other means, e.g. as a fax or printed handout
- Sig information should **not** be written into the Notes field if it exceeds the 140-character limit.

Send only Patient Directions (Sig) within the Directions field

- The Sig should not contain information for which another designated field exists in the SCRIPT standard (e.g. the Sig should never include the quantity, drug name, NDC or RxCUI values, or Notes to pharmacists, etc.)

*Example: Use "**Take 1 tablet by mouth once daily**" instead of "Take 1 tablet by mouth once daily. Dispense #30, 3 Refills, Thank you."*

Do not include Clinical or Prescription Information in the Notes field.

- The Notes field be used to contain information related to, but not part of the prescription. While clinical and prescription information should appear in the designated fields for these data elements, not in the Notes field.

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

(1) Guidelines that apply to name, strength, dosage form, and quantity of drug prescribed as well as the directions for use (the "Sig")

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

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

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

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

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

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

(3) Proper use of the Notes field (referred to as "free text" in the NCPDP SCRIPT Standard).

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

(4) Refills authorized, if any

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

(5) Other items unique to electronic prescribing.

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

Category III—Prescription Common Mistakes

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

(1) Incorrect or incorrectly formatted SIG

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

Category III—Prescription Common Mistakes (continued)

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

Category III—Prescription Common Mistakes (continued)

(2) Incomplete SIG

The following examples indicate incomplete SIG:

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

Category III—Prescription Common Mistakes (continued)

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

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

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