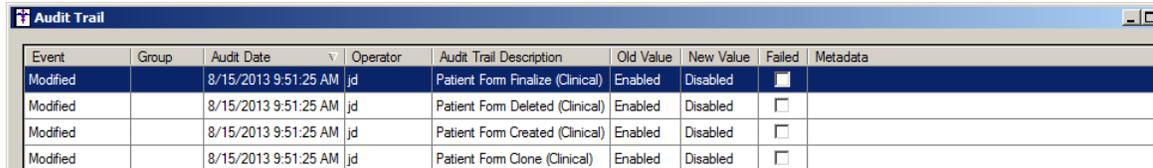


ChartMaker® Clinical

Added Features

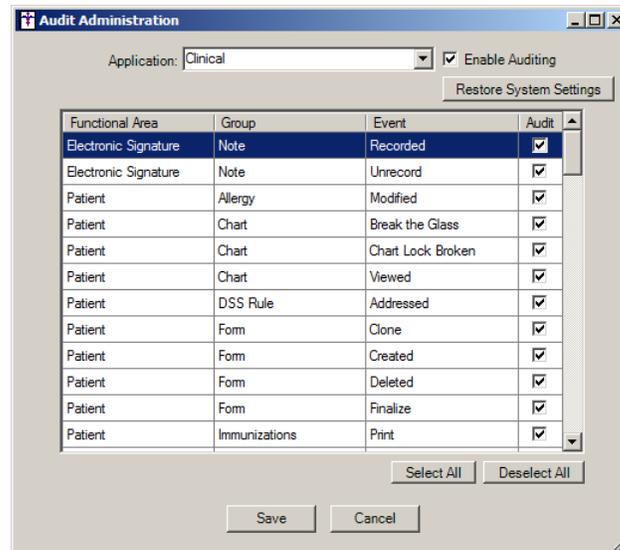
- **The Audit Trail** – The Audit Trail has been updated to track any modifications made to the Audit Administration area. See Figure 1. An Audit Event will be created for each modification once the Save button has clicked in the Audit Administration dialog.



| Event | Group | Audit Date | Operator | Audit Trail Description | Old Value | New Value | Failed | Metadata |
|----------|-------|----------------------|----------|----------------------------------|-----------|-----------|-------------------------------------|----------|
| Modified | | 8/15/2013 9:51:25 AM | jd | Patient Form Finalize (Clinical) | Enabled | Disabled | <input checked="" type="checkbox"/> | |
| Modified | | 8/15/2013 9:51:25 AM | jd | Patient Form Deleted (Clinical) | Enabled | Disabled | <input type="checkbox"/> | |
| Modified | | 8/15/2013 9:51:25 AM | jd | Patient Form Created (Clinical) | Enabled | Disabled | <input type="checkbox"/> | |
| Modified | | 8/15/2013 9:51:25 AM | jd | Patient Form Clone (Clinical) | Enabled | Disabled | <input type="checkbox"/> | |

Figure 1 – Audit Trail

- **The Audit Trail** – The Audit Administration dialog has been updated with a Restore System Settings button that allows you to revert the Audit system back to the system default setting (all audit options activated). See Figure 2. Do note, that when the Restore System Settings button is selected, that the system will only restore the settings for the selected Application. Likewise, you must click the Save button to activate the restore prior to selecting a different application in the Application field.



Application: Clinical Enable Auditing

Restore System Settings

| Functional Area | Group | Event | Audit |
|----------------------|---------------|-------------------|-------------------------------------|
| Electronic Signature | Note | Recorded | <input checked="" type="checkbox"/> |
| Electronic Signature | Note | Unrecord | <input checked="" type="checkbox"/> |
| Patient | Allergy | Modified | <input checked="" type="checkbox"/> |
| Patient | Chart | Break the Glass | <input checked="" type="checkbox"/> |
| Patient | Chart | Chart Lock Broken | <input checked="" type="checkbox"/> |
| Patient | Chart | Viewed | <input checked="" type="checkbox"/> |
| Patient | DSS Rule | Addressed | <input checked="" type="checkbox"/> |
| Patient | Form | Clone | <input checked="" type="checkbox"/> |
| Patient | Form | Created | <input checked="" type="checkbox"/> |
| Patient | Form | Deleted | <input checked="" type="checkbox"/> |
| Patient | Form | Finalize | <input checked="" type="checkbox"/> |
| Patient | Immunizations | Print | <input checked="" type="checkbox"/> |

Select All Deselect All

Save Cancel

Figure 2 – Audit Administration

- **Doctor's Orders & Procedures – Order Procedure** – The Order Procedure dialog has been updated with a SNOMED Selection section that allows you to map the procedure code and any applicable modifiers to a SNOMED code, or multiple SNOMED codes, if needed. See Figure 3.

SNOMED or SNOMED CT (**S**ystematized **N**omenclature of **M**edicine **C**linical **T**erms) is a terminology used to describe the care and treatment of patients. This terminology uses numeric codes to represent medical concepts (including symptoms, diseases, procedures, devices, and medicines), thereby eliminating the confusion that may result from the use of informal or local terms or phrases. The use of SNOMED CT codes to record clinical data is one of the certification criteria for Meaningful Use Stage 2, and allows for a consistent recording of clinical data with the aim of improving patient care.

To add a SNOMED code to a procedure, highlight that procedure, and then click the Search button. In the Search List dialog you have the ability to search for the applicable SNOMED code. See Figure 4. You can select a particular Category, enter a few letters in the description field, as well as manipulate the Search Column and Search Type fields, to narrow your search. Once the applicable SNOMED code has been selected it will appear in the SNOMED column next to the procedure. You can then add additional codes for the procedure as needed. You can then repeat this process for any modifiers.

Added Features (continued)

Doctor's Orders & Procedures – Order Procedure (continued)

Once the various SNOMED codes have been attached to the procedure and modifiers, you can remove an attached SNOMED code, if needed, by highlighting the applicable code, and then clicking the Delete button. Once the SNOMED codes have been configured as desired, you have the ability to save these SNOMED codes as a default for that procedure and/or modifier by clicking the Save button. Any time that procedure or modifier is used in the future, the attached SNOMED codes will default.

When multiple SNOMED codes are available for a procedure or modifier you have the ability to decide which codes will be attached for this particular instance by checking, or unchecking, the corresponding Apply field, without disrupting the default setting for subsequent iterations of that procedure and/or modifier.

Any SNOMED codes attached to procedures and/or modifiers will be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.

| Item Description | Apply | SNOMED |
|----------------------------|-------------------------------------|------------------------------------|
| ELECTROPHORETIC TEST | <input checked="" type="checkbox"/> | Complication of medical care (...) |
| Mod 1: For medical reasons | <input checked="" type="checkbox"/> | Treatment changed (4455280...) |
| Mod 2: For system reasons | <input checked="" type="checkbox"/> | Complication of medical care (...) |
| | <input checked="" type="checkbox"/> | Uninsured medical expenses (...) |

Figure 3 – Order Procedure

| Description | SNOMED Code |
|--|--------------|
| Compliance behavior | 405078008 |
| Compliance behavior to prescribed diet | 440394007 |
| Compliance behavior to prescribed medication | 439914008 |
| Compliance care assessment | 410110000 |
| Compliance care education | 410111001 |
| Compliance care management | 410112008 |
| Compliance issues discussed with patient | 408377007 |
| Compliance with footwear | 250166001 |
| Compliance with footwear - finding | 364736008 |
| Compliance with suggested dental care | 110475006 |
| Compliant | 289172004 |
| Compliant behavior | 284664002 |
| Compliant character | 286728005 |
| Compliant with collection of peritoneal dialysate specimen | 581000124102 |

Figure 4 – Order Procedure – Search List

Added Features (continued)

- Health Portal Requests** – The Health Portal Requests dialog has been updated with a Health Portal Request Type that allows you to select the type of request (Eligibility Message, Outgoing Prescription Message, Rx History Message) you would like to view. See Figure 5. This lets you easily see the transaction status for specific types of Health Portal requests.

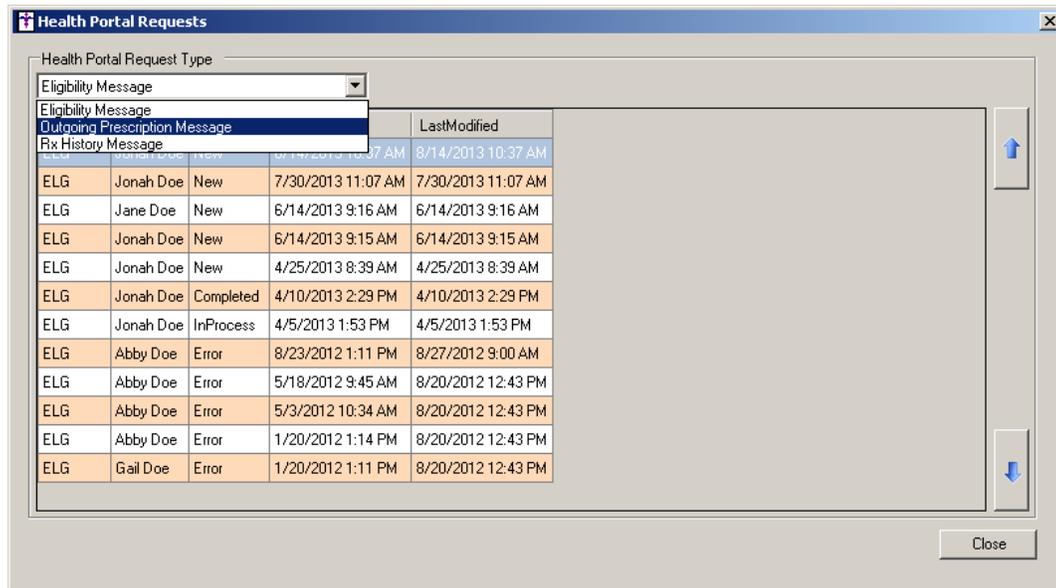


Figure 5 – Health Portal Requests

- History Tab – Smoking History** – The detail text for smoking history has been updated to meet CCHIT standards and provide consistent language throughout the system.
- The ID Tab – Patient – Consent** – The Consent dialog (HIE Consent in previous versions) has been updated with a Medication History Consent section that allows you to configure a patient’s consent for electronically accessing their medication history, via Surescripts network, stored in the databases of community pharmacies and pharmacy benefit managers. See Figure 6. Medication history will only be received for those patients that have given an affirmative (Yes) consent and are marked as such in the Consent dialog. Medication history will not be retrieved for those patients that have not given (No), or have not been asked and are marked as such in Consent dialog.

Once consent has been configured as desired, you have the ability to configure a Date of Consent; and if consent was given (Yes), you can select a specific provider for whom consent was given, or you can select All Providers.

In addition, the two Yes options in the Consent dialog will be different based on the patient’s age. For patients 18 years and older the options will be: **Yes, consent given**, and **Yes, guardian/POA consent given**. For patients younger than 18 years the options will be: **Yes, parental/guardian consent given**, and **Yes, emancipated minor consent given**.

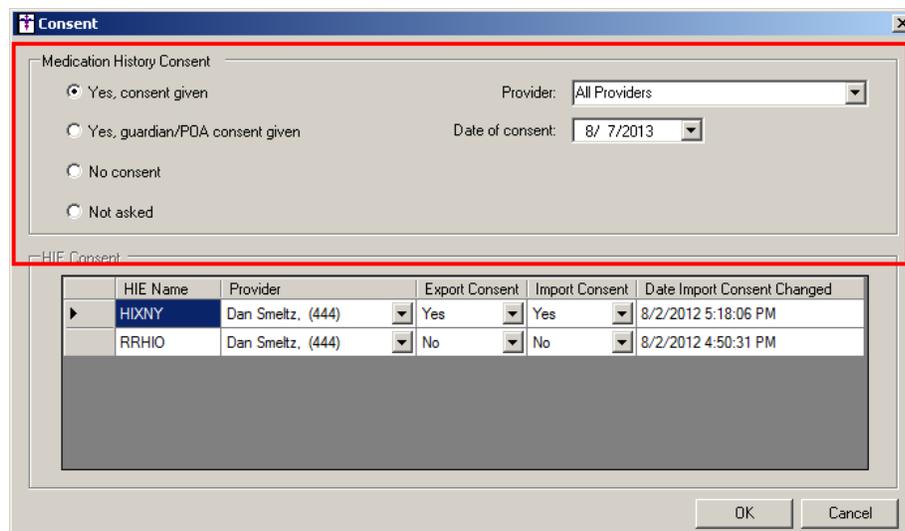


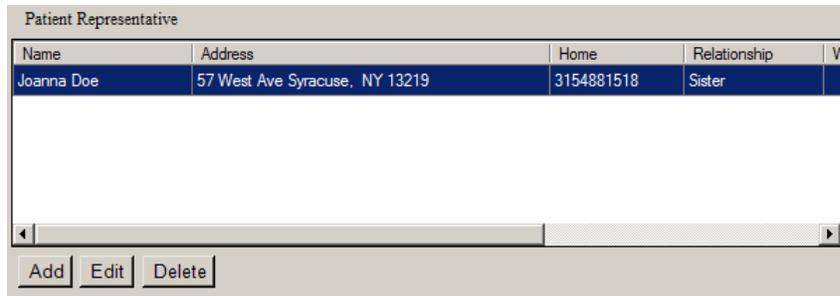
Figure 6 – Consent

Added Features (continued)

- **The ID Tab – Patient Representative** – The ID Tab has been updated with a Patient Representative section that allows you to configure a patient-authorized representative for the patient. See Figure 7. When a patient representative is added you have the ability to authorize them for patient portal. See Figure 8. An email address must be entered in the corresponding field for the patient representative to be authorized.

Once authorized and registered for patient portal, that patient representative will then have access to a clinical summary for each office visit; be able to view, download, add, modify, and/or transmit health information via the patient portal; as well as send health related messages to the provider. In other words, the patient representative will have full access to the patient's patient portal account, just as the patient does. Patient representatives can be added, edited, and deleted as needed.

Any patient representative activity regarding the patient's health information (i.e., viewing, downloading, or transmitting) be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.

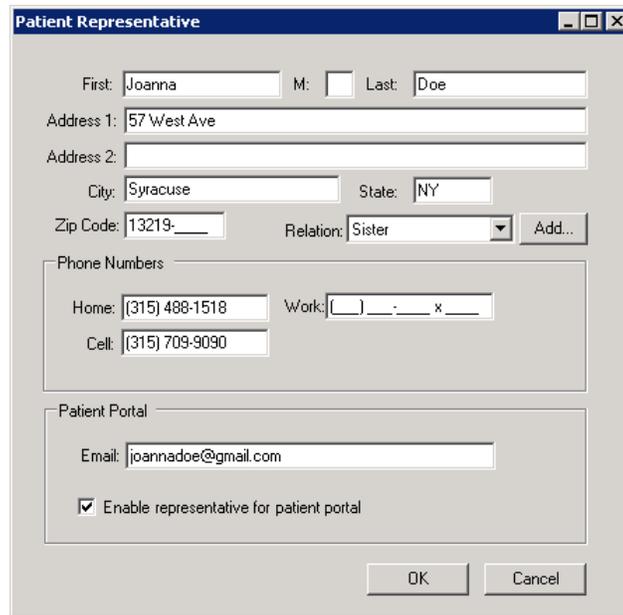


The screenshot shows a table titled "Patient Representative" with the following data:

| Name | Address | Home | Relationship | V |
|------------|--------------------------------|------------|--------------|---|
| Joanna Doe | 57 West Ave Syracuse, NY 13219 | 3154881518 | Sister | |

Below the table are three buttons: "Add", "Edit", and "Delete".

Figure 7 – ID Tab – Patient Representative



The screenshot shows a form titled "Patient Representative" with the following fields and options:

- First: Joanna M: Last: Doe
- Address 1: 57 West Ave
- Address 2:
- City: Syracuse State: NY
- Zip Code: 13219-____ Relation: Sister Add...
- Phone Numbers
 - Home: (315) 488-1518 Work: (____) ____-____ x ____
 - Cell: (315) 709-9090
- Patient Portal
 - Email: joannadoe@gmail.com
 - Enable representative for patient portal

Buttons: OK, Cancel

Figure 8 – Patient Representative

Added Features (continued)

- **Meaningful Use – Meaningful Use Dashboard** – The Meaningful Use Dashboard has been updated so that when printing a meaningful use report with performance and quality measure statistics together, the report will now print in landscape mode and will wrap the description to multiple lines when needed for applicable descriptions to provide an easily readable report.
- **Meaningful Use – Meaningful Use Dashboard – Reconciliation Report** – The Meaningful Use Reconciliation Report has been updated to include reconciliation information for CQMs (Clinical Quality Measures), thereby allowing you to better assess the quality measure results.
- **Meaningful Use Stage 2 – Meaningful Use Dashboard** – Various CQMs (NQF 0032 Cervical Cancer Screening, NQF-0034 Colorectal Cancer Screening, NQF-0043 Pneumonia Vaccination Status for Older Adults, and NQF-0059 Diabetes: Hemoglobin A1c Poor Control) within the Meaningful Use Dashboard have been updated to meet ARRA 2014 standards.
- **Medication History** – The Medication History dialog has been updated to include the patient name and date of birth, as well as the date and time this information was received from SureScripts, and the particular Provider (or All Providers) that consent was given to access the medication history. Likewise, a Print and Close button has been added to the Medication History dialog.
- **Medication History** – The system has been updated so that Medication History can only be queried for those patient's that have given proper consent and that consent has been configured within the system (in the ID tab or Prescribe Medication dialog).
- **Messaging** – The program has been updated so that when printing a Message from a patient's chart, the patient name will appear in the printout.
- **The Note Tab – Chief Complaint** – The program has been updated the ability to enter or dictate a patient's clinical complaint/reason for their visit into the chart note via the Chief Complaint button. See Figure 9. The new Chief Complaint button must be manually added to the applicable chart templates prior to use.



Figure 9 – Chief Complaint Button

Once the Chief Complain button has been clicked the Chief Complaint dialog will appear that allows you to enter or dictate the patient's clinical complaint or reason. See Figure 10.

When chief complaint information is entered in the chart note, the information will be included in the patient's Clinical Summary, and will also be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.

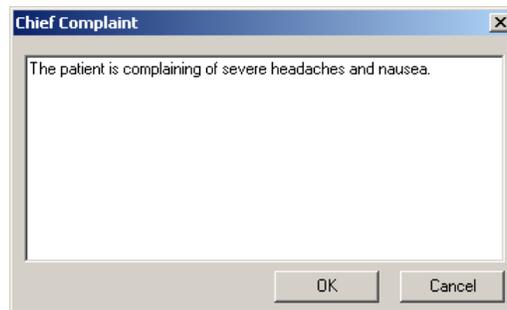


Figure 10 – Chief Complaint

Added Features (continued)

- **The Note Tab – Diagnosis** – The SNOMED section of the Add to Problem List, Note Diagnosis, and End Diagnosis dialogs have been updated with a new SNOMED control that allows you to easily search and delete attached SNOMED codes, save applicable codes as a default, as well as allowing you to select multiple SNOMED codes for a single diagnosis. See Figure 11. When multiple SNOMED codes are available you have the ability to decide which codes will be attached for this particular instance by checking, or unchecking, the corresponding Apply field without disrupting the default setting for subsequent iterations of that diagnosis.

Any SNOMED codes attached to the diagnosis will be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.

NOTE: SNOMED or SNOMED CT (**S**ystematized **N**omenclature of **M**edicine **C**linical **T**erms) is a terminology used to describe the care and treatment of patients. This terminology uses numeric codes to represent medical concepts (including symptoms, diseases, procedures, devices, and medicines), thereby eliminating the confusion that may result from the use of informal or local terms or phrases. The use of SNOMED CT codes to record clinical data is one of the certification criteria for Meaningful Use Stage 2, and allows for a consistent recording of clinical data with the aim of improving patient care.

The screenshot shows the 'Add to Problem List' dialog box. The 'Diagnosis' field is set to 'HYPERTENSION UNSPEC'. The 'CDC Status' is 'None - Not a case per CDC'. There are checkboxes for 'Work-up Planned' and 'Use Order Set'. The 'Diagnosis Status' section includes 'Onset' (08/15/2013 13:33:21) and checkboxes for 'Inactivate', 'Reactivate', and 'Resolve', each with a date field. The 'E&M Risk Level' section has checkboxes for 'Change' and 'Permanent'. The 'SNOMED Selection' section has a table with columns 'Item Description', 'Apply', and 'SNOMED'. The table contains two rows: 'HYPERTENSION UNSPEC' with 'Essential hypertension (59621000)' and 'Benign hypertension (10725009)'. Both 'Apply' checkboxes are checked. Below the table are buttons for 'User Defaults' (Save, Restore) and 'SNOMED' (Search, Delete). A 'Comments' text area is at the bottom, along with 'OK', 'Cancel', 'Do Another', and 'Help' buttons.

Figure 11 – Add to Problem List/SNOMED Mappings

- **The Note Tab – Numeric** – The program has been updated the ability to select whether a numeric value is a positive or negative finding for those numeric items that are configured with the Allow Positive/Negative Findings option. See Figure 12. Once the applicable option is selected, the finding (Positive Finding/Negative Finding) will be appended to the numeric value. When a positive finding is selected, the SNOMED Concept ID of 441773004 will be written to the database, and when a negative finding is selected, the SNOMED Concept ID of 442225006 will be written to the database. When positive/negative finding information is entered in the chart note, the information will be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.

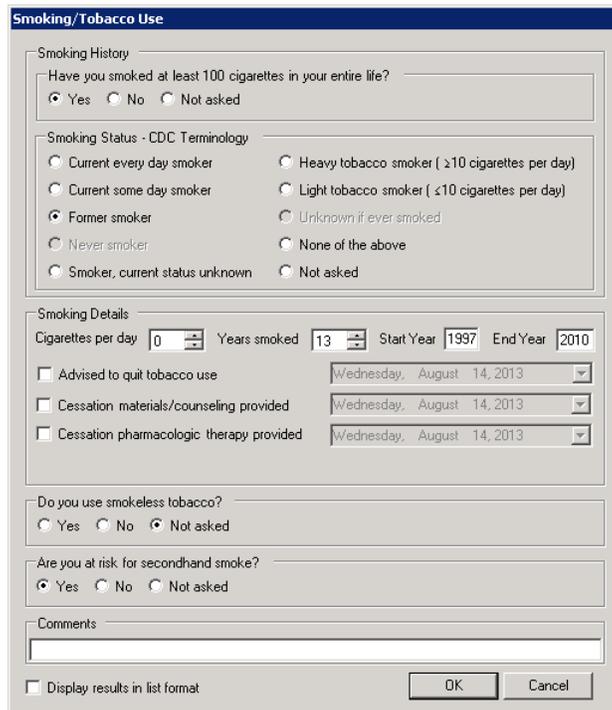
The screenshot shows a numeric input field for 'Total Protein' with the value '87'. A dialog box is open to the right, containing two radio buttons: 'Positive Finding' and 'Negative Finding'. Below the radio buttons are 'OK' and 'Cancel' buttons.

Figure 12 – Note – Numeric – Positive/Negative Finding

- **The Note Tab – Smoking History** – The outputted note text for the smoking history has been updated to meet CCHIT standards and provide consistent language throughout the system.

Added Features (continued)

- **The Note Tab – Smoking History** – The Smoking Details section of the Smoking/Tobacco Use dialog has been updated with a Start Year field and an End Year field that allows you enter the year when a patient started smoking and when they stopped smoking. See Figure 13. The End Year field only becomes accessible if the Former Smoker option is selected in the Smoking Status – CDC Terminology section.



The image shows a dialog box titled "Smoking/Tobacco Use". It is divided into several sections:

- Smoking History:** A question "Have you smoked at least 100 cigarettes in your entire life?" with radio buttons for "Yes", "No", and "Not asked".
- Smoking Status - CDC Terminology:** Radio buttons for "Current every day smoker", "Current some day smoker", "Former smoker", "Never smoker", "Smoker, current status unknown", "Heavy tobacco smoker (>10 cigarettes per day)", "Light tobacco smoker (<10 cigarettes per day)", "Unknown if ever smoked", and "None of the above".
- Smoking Details:** Fields for "Cigarettes per day" (0), "Years smoked" (13), "Start Year" (1997), and "End Year" (2010). Below are three checkboxes for "Advised to quit tobacco use", "Cessation materials/counseling provided", and "Cessation pharmacologic therapy provided", each with a date dropdown menu.
- Do you use smokeless tobacco?** Radio buttons for "Yes", "No", and "Not asked".
- Are you at risk for secondhand smoke?** Radio buttons for "Yes", "No", and "Not asked".
- Comments:** A text input field.
- Display results in list format:** A checkbox.
- Buttons:** "OK" and "Cancel".

Figure 13 – Smoking/Tobacco Use

- **Open Text Faxing Appliance** – The system has been updated with an Advanced preference (Edit > Preferences > Advanced) to support those areas where a 7-digit phone number (where the 3-digit area code is excluded) is required to place a local call within a certain area code. See Figure 14. In the Advanced preference area the preference should be configured as follows:

Category: **FAXING**

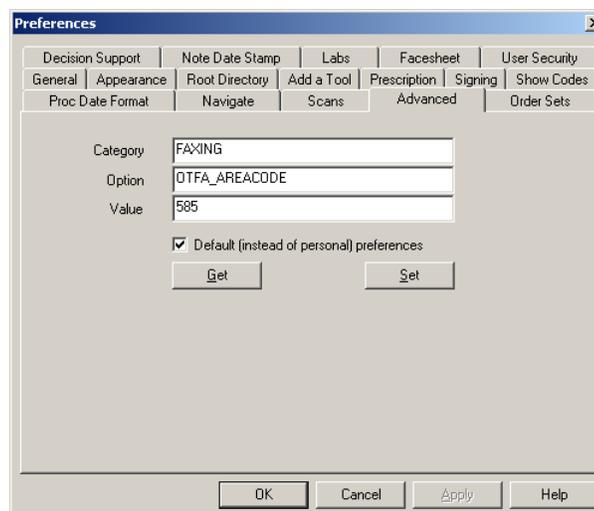
Option: **OTFA_AREACODE**

Value: **3-Digit Area Code where the Open Text Faxing Appliance is located**

Default (instead of personal) preferences option should be checked

Click **Set** button.

In the Clinical application, and the Open Text Faxing Appliance, a 10-digit phone numbers are still required. However, when the system faxes to an area code where the advanced preference is configured, the area code will be automatically excluded.



The image shows a "Preferences" dialog box with the "Advanced" tab selected. The "Advanced" tab is highlighted in the tab bar. The main area contains the following fields:

- Category: FAXING
- Option: OTFA_AREACODE
- Value: 585
- Default (instead of personal) preferences:
- Buttons: "Get" and "Set".

At the bottom of the dialog are buttons for "OK", "Cancel", "Apply", and "Help".

Figure 14 – Preferences – Advanced

Added Features (continued)

- **Preferences – General** – The General tab of the Preferences dialog has been updated with a new, Display a warning when a SNOMED code is not selected, preference option that can be set for individual users. See Figure 15. When the Display a warning when a SNOMED code is not selected preference is selected, a warning will be generated whenever a SNOMED code is not selected throughout the system for applicable chart items (diagnoses, procedures, numeric, etc.).

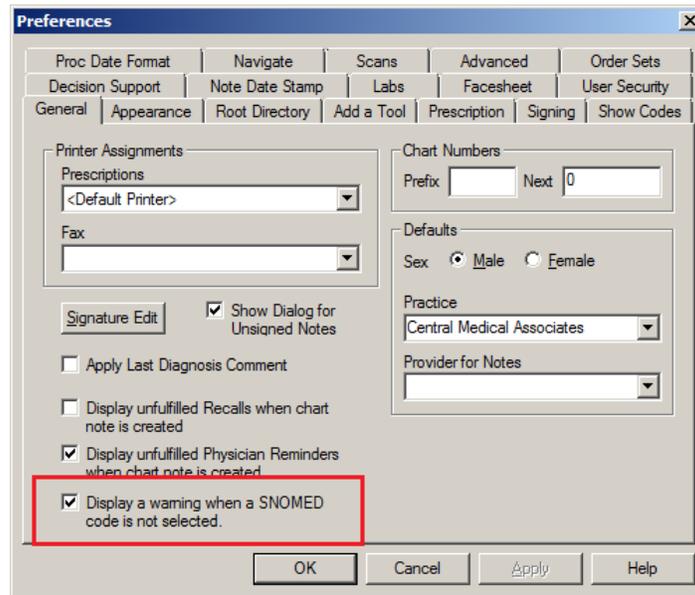


Figure 15 – Preferences – General

- **Prescribe – Prescribe Medication – Days Supply** – The Prescribe Medication dialog has been updated so that the Days Supply will automatically calculated whenever the Dose, Frequency, Dispense and Refills fields have been entered. See Figure 16. The calculation does not occur if a previously saved medication already had a Days Supply value, however, calculation resumes once one of the aforementioned fields are modified. Likewise, if you modify the Days Supply field then the field is not recalculated until the next time the Prescribe Medication dialog is accessed.
- **Prescribe – Prescribe Medication – Medication History Consent** – The Prescribe Medication dialog has been updated with a Medication History Consent button that displays the patient’s current level of consent (Not Asked, Yes, or No), and allows access to the Consent dialog to configure consent. See Figure 16.

In the Medication History Consent section of the Consent dialog you can configure a patient’s consent for electronically accessing their medication history, via Surescripts network, stored in the databases of community pharmacies and pharmacy benefit managers. See Figure 18. Once consent has been configured as desired, you have the ability to configure a Date of Consent; and if consent was given (Yes), you can select a specific provider for whom consent was given, or you can select All Providers.

In addition, the two Yes options in the Consent dialog will be different based on the patient’s age. For patients 18 years and older the options will be: **Yes, consent given**, and **Yes, guardian/POA consent given**. For patients younger than 18 years the options will be: **Yes, parental/guardian consent given**, and **Yes, emancipated minor consent given**.

In the HIE Consent section, you can configure the patient’s consent for importing and exporting data, as well as the Provider for whom consent is given for each applicable HIE. See Figure 17.

The Medication History Consent button will update whenever the consent has been modified. Likewise, an audit event will be tracked in the Audit Trail each time the information in the Consent dialog is modified.

Added Features (continued)

Prescribe – Prescribe Medication – Medication History Consent (continued)

Prescribe Medication

Zoloft 25 mg Tab (Rx, Brand) Inactive Meds Medication Info

sertraline Medication History Consent: Notasked Medication Eligibility Medication History

Prescription

Route: Oral

Zoloft 25 mg Tab

Action: Take

Dose: 1

Dose Units: tablet

Frequency: Every day

Dispense: 30 Tablet

Add'l SIG: Edit...

Refills: 3 Substitution OK

Days Supply: 120 Max Dose:

Notes to Pharmacist:

Save Notes

Dose Calculator Clear

Formulary

Current Drug Selection

| Payer | Medication | Status | Coverage | Copay | Copay Info |
|-------|------------|---------|----------|-------|------------|
| ----- | Zoloft | Unknown | N/A | N/A | |

Drug Alternatives (* = Payer Specified)

| Payer | Medication | Status | Coverage | Copay | Copay Info |
|-------|------------|--------|----------|-------|------------|
|-------|------------|--------|----------|-------|------------|

Payer:

Transmission: Hand prescription to patient Diagnosis:

Sample Lot #: Expiration Date: 8/12/2013

SIG: Take 1 tablet orally Every day

Started: 8/12/2013

Ended: 8/12/2013

Cancel Back Next

Figure 16 – Prescribe Medication

Consent

Medication History Consent

Yes, consent given Provider: All Providers

Yes, guardian/POA consent given Date of consent: 8/12/2013

No consent

Not asked

HIE Consent

| HIE Name | Provider | Export Consent | Import Consent | Date Import Consent Changed |
|----------|-------------------|----------------|----------------|-----------------------------|
| HIXNY | Dan Smeltz, (444) | Yes | Yes | 8/2/2012 5:18:06 PM |
| RRHIO | Dan Smeltz, (444) | No | No | 8/2/2012 4:50:31 PM |

OK Cancel

Figure 17 – Consent

Added Features (continued)

- System Tables – Codes – Language** – The Codes submenu in the System Tables menu has been updated to contain a Language option that allows access to the Language Table Maintenance dialog (Administration > Code Tables > Codes > Language). See Figure 18.

The Language Table Maintenance has been updated with a Standard Mapping field so that each language code can be mapped to the ISO 639-2 standard language codes. See Figure 19.

To meet Meaningful Use Stage 2 objective for providing accurate demographics, each preferred language code must be mapped to an ISO 639-2 standard code. While you have the ability to add user-defined language codes, each code added can be mapped to a specific ISO 639-2 Standard code to comply with the Meaningful Use Stage objective, and thereby be counted toward the applicable Meaningful Use objectives and/or quality measures.

Likewise, should a patient decline to provide a preferred language, you have the ability to indicate select the Patient Declined to Specify option. This allows you to record the response, unless capturing the information is prohibited by law, and indicate an appropriate demographic record for the Meaningful Use Stage 2 objective.

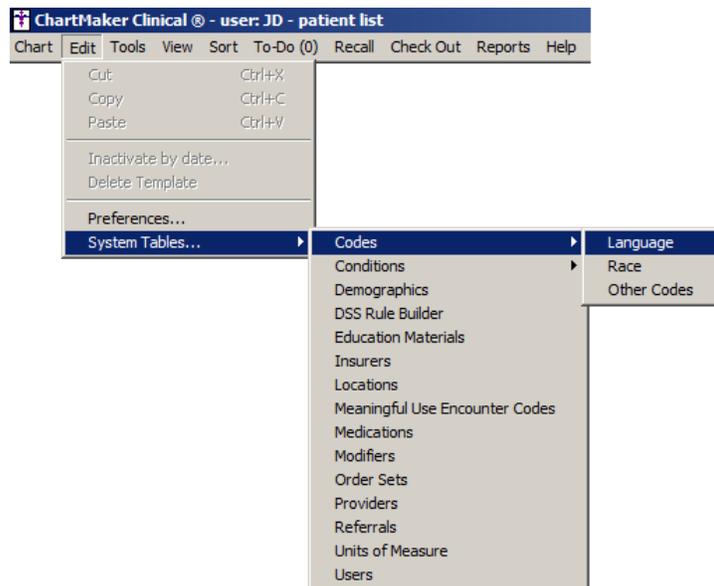


Figure 18 – System Tables > Codes > Language

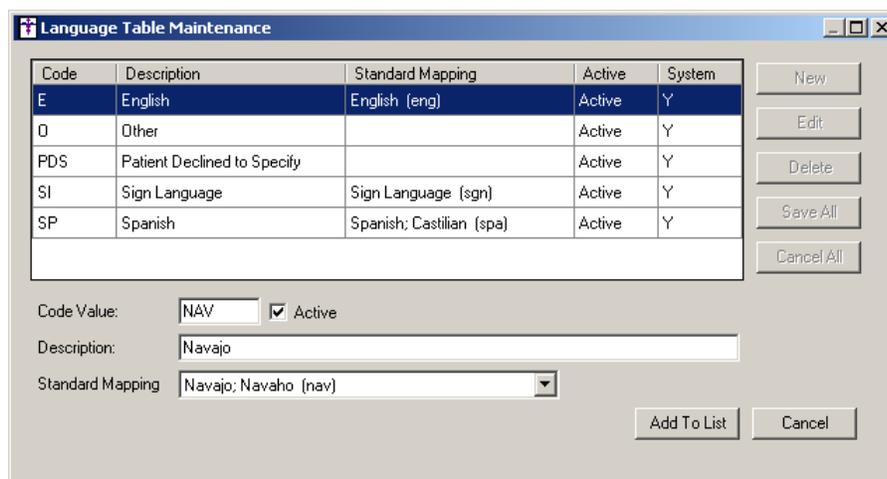


Figure 19 – Language Table Maintenance

Added Features (continued)

- System Tables – Codes – Race** – The Codes submenu in the System Tables menu has been updated to contain a Race option that allows access to the Race Table Maintenance dialog (Administration > Code Tables > Codes > Race). See Figure 20.

The Race Table Maintenance dialog has been updated with a Standard Mapping field so that each race code can be mapped to the OMB (Office of Management and Budget) race standard. See Figure 21. The OMB Standard Codes are: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White.

To meet Meaningful Use Stage 2 objective for providing accurate demographics, each race code must be mapped to an OMB standard code. While you have the ability to add additional race codes beyond the OMB Standard to better reflect your practice's patient population, each additional code added can be mapped to a specific OMB Standard code to comply with the Meaningful Use Stage objective, and thereby be counted toward the applicable Meaningful Use objectives and/or quality measures.

Likewise, given the fact that the collection of race information has the potential to be sensitive matter and those patients may be unwilling or uncomfortable responding to the request, you have the ability to indicate select the Patient Declined to Specify option. This allows you to record the response, unless capturing the information is prohibited by law, and indicate an appropriate demographic record for the Meaningful Use Stage 2 objective.

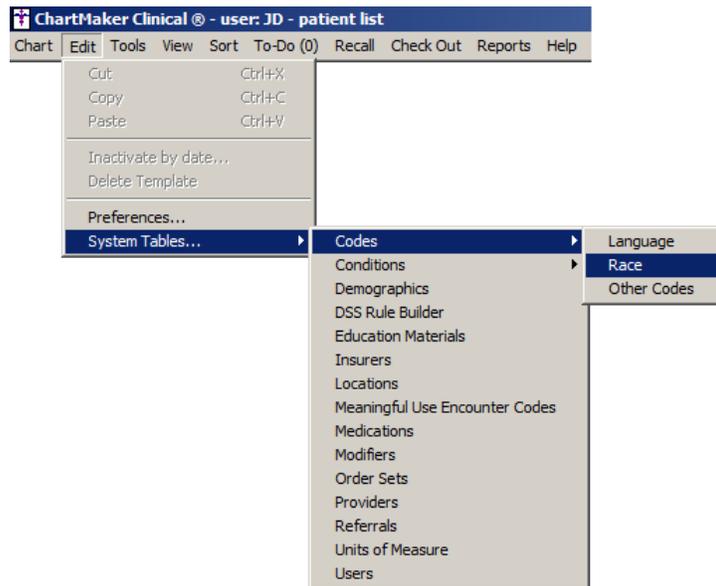


Figure 20 – System Tables > Codes > Race

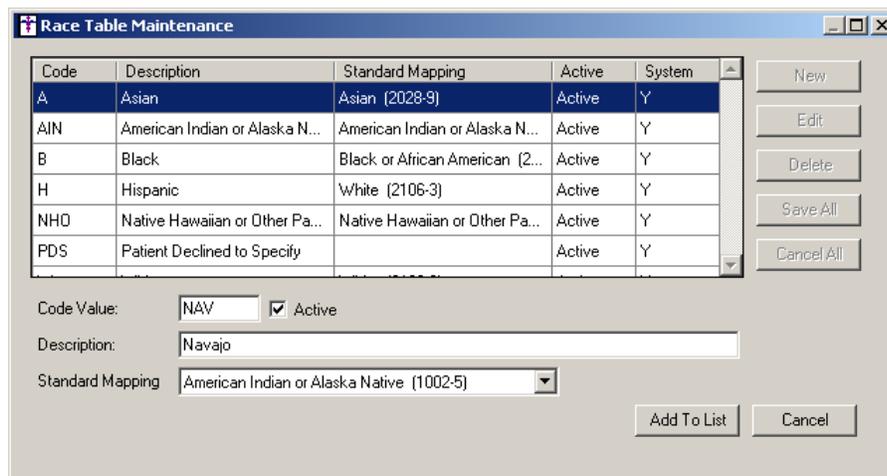


Figure 21 – Race Table Maintenance

Added Features (continued)

- **Template Editing – Checklist – Finding Check List Properties** – The Finding Check List Properties dialog has been updated with an Include As field that allows you to select the type of data the checklist will be used for. See Figure 22. When an item is selected in the Include As field, the applicable check list information will then populate the patient's Clinical Summary for the type selected. For example, if the Chief Complaint option is selected in this field, information selected in the checklist will then populate in the designated area of the patient's Clinical Summary, and will also be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures. Do note that in version 4.7 of Clinical, only the Chief Complaint option is fully functional; all other options in the Include As drop-down list (Clinical Instructions, Cognitive Status, Functional Status, and Goals) will be available in later versions of Clinical.

Figure 22 – Finding Check List Properties

- **Template Editing – Chief Complaint** – The Template Editor has been updated with the ability to add a Chief Complaint button to a template. The Chief Complaint button allows you access to the Chief Complaint dialog in a chart note where you can enter a free-text or dictation description of the patient's clinical complaint/reason for the visit. When chief complaint information is entered in the chart note, the information will be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.
- **Template Editing – Numeric – Numeric Field Properties** – The Numeric Field Properties dialog has been updated with an Allow Positive/Negative Findings checkbox option that that allows you to further define the numeric with a positive or negative finding in the chart note. See Figure 23. A pop-up dialog will appear after a value is configured for the corresponding numeric in the chart note, allowing you to manually select whether the result is a positive or negative finding. When a positive finding is selected, the SNOMED Concept ID of 441773004 will be written to the database, and when a negative finding is selected, the SNOMED Concept ID of 442225006 will be written to the database. When positive/negative finding information is entered in the chart note, the information will be tracked and counted towards the applicable Meaningful Use objectives and/or quality measures.

Figure 23 – Finding Check List Properties

Addendum

SureScripts® E-Prescribing Best Practice Guidelines

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

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

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

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

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

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

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

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

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

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

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

Category III—Prescription Common Mistakes

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

(1) Incorrect or incorrectly formatted SIG

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category III—Prescription Common Mistakes (continued)

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category III—Prescription Common Mistakes (continued)

(2) Incomplete SIG

The following examples indicate incomplete SIG:

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

Category III—Prescription Common Mistakes (continued)

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

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

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