

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

- Export Patient Data – HIE Transition of Care / Clinical Summary** – The Export Patient Document dialog has been updated to send Clinical Summaries, when required, to applicable HIEs, instead of Transition of Care documents. When Document to Export is set to **HIE Transition of Care / Clinical Summary**, if the HIE selected in the HIE Selection section requires a Clinical Summary, then the Note Selection section will become enabled, allowing you to select the applicable note for the Clinical Summary. See Figure 1. In those cases, when an HIE requires a Clinical Summary, a note will need to be selected to continue the export process.

The screenshot shows the 'Export Patient Document' dialog box. The 'Patient List' table contains the following data:

Name	Account/Chart	DOB
Smith, John	10244	10/14/1955
Smith, Sally	NEW10003	

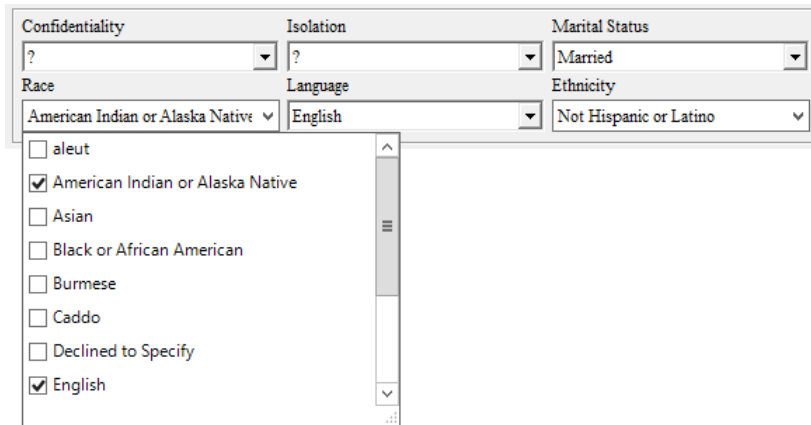
The 'Note Selection' section is highlighted with an orange box and contains the following fields:

- From: 11/14/2016
- To: 1/13/2017
- Note Selection: 01/10/2017 8:05:14 - GENERAL E&M

Figure 1 – Export Patient Data

Added Features (continued)

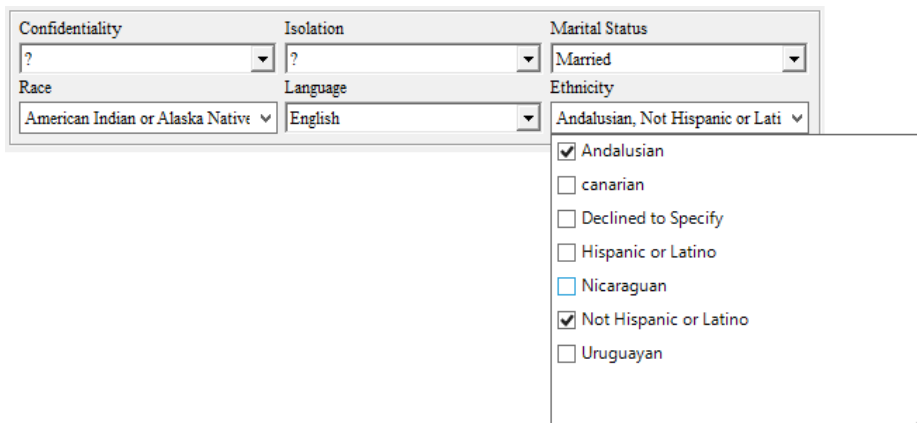
- **The ID Tab – Patient** – The **Race** field, in the Patient section, has been updated to allow you to select multiple race options for a patient. See Figure 2.



The screenshot shows a form with several fields: Confidentiality (dropdown with '?'), Isolation (dropdown with '?'), Marital Status (dropdown with 'Married'), Race (dropdown with 'American Indian or Alaska Native'), Language (dropdown with 'English'), and Ethnicity (dropdown with 'Not Hispanic or Latino'). The Race dropdown is expanded, showing a list of checkboxes for various race categories: aleut, American Indian or Alaska Native (checked), Asian, Black or African American, Burmese, Caddo, Declined to Specify, and English (checked).

Figure 2 – ID Tab – Patient – Race

- **The ID Tab – Patient** – The **Ethnicity** field, in the Patient section, has been updated to allow you to select multiple ethnicity options for a patient. See Figure 3.



The screenshot shows the same form as Figure 2, but with the Ethnicity dropdown expanded. The Ethnicity dropdown is set to 'Andalusian, Not Hispanic or Lati'. The expanded list shows checkboxes for: Andalusian (checked), canarian, Declined to Specify, Hispanic or Latino, Nicaraguan, Not Hispanic or Latino (checked), and Uruguayan.

Figure 3 – ID Tab – Patient – Ethnicity

Added Features (continued)

- Meaningful Use Stage 2 2017 – Meaningful Use Dashboard** – The Meaningful Use Dashboard has been updated with a **Stage 2 2017** option in the Stage field, thereby allowing you to select and run queries specific to the changes reflected in this stage for 2017, and provide accurate statistics for applicable attestation requirements. See Figure 4. Do note that, for Stage 2 2017, this year (and every year) CMS has made changes to the requirements for some of the CQMs. In addition, five CQMs have been removed and are no longer available for reporting: **NQF 0036 – Use of Appropriate Medications for Asthma, NQF 0060 – Hemoglobin A1c Test for Pediatric Patients, NQF 0064 – Diabetes: Low Density Lipoprotein (LDL) Management, NQF 0075 Ischemic Vascular Disease (IVD): Complete Lipid Panel & LDL Control, and NQF 0403 – HIV/AIDS: Medical Visit.** Please be sure to check the CQMs you are reporting to determine if changes were made that may affect your reporting and make adjustments accordingly.

Currently Loaded Configuration: None

Eligible Provider (NPI): Doe, John D (1231231231)

Stage: Stage 2 2017

Reporting Period: 12/13/2016 to 1/13/2017

Configurations

Configuration Name
John Doe Configuration

Meaningful Use Requirements...

Calculate Results

Measure description	Result description	Numerator	Denominator	Result	Goal	Den. Exclusions	Exception
Unique patients seen during reporting ...					> 80.0%		
1. Protect Electronic Health Information		N/A	N/A	N/A	YES/NO		
2A. Clinical Decision Support (5 rules)		N/A	N/A	N/A	YES/NO		
2B. Drug-Drug & Drug-Allergy checks f...		N/A	N/A	N/A	YES/NO		
3A. Medication					> 60.0%		
3B. Laboratory					> 30.0%		
3C. Radiology					> 30.0%		
4A. E-Prescribing & Formulary Compari...					> 50.0%		
4B. E-Prescribing with Controlled Subst...					> 50.0%		
5. Health Information Exchange (Sum...					> 10.0%		
6. Patient Specific Education					> 10.0%		
7. Medication Reconciliation					> 50.0%		
8A. Patient Online Access to Health In...					> 50.0%		
8B. Patient View/Download/Transmit t...					1 Patient		
9. Secure Messaging from patient					> 5.0%		

Reconciliation

Highlight one or more rows in the results pane to generate a list of patients based on the selected options. The reconciliation report can only be generated for ChartMaker Medical Suite unique patient count, performance and quality core/alternate core measures.

Patients who are NOT included in the Numerator
 Patients who are included in the Numerator
 Denominator Exclusions and Exceptions (CQM Only)

Generate Reconciliation Report

Save or print results

Export to text Print CQM Reporting Close

Figure 4 – Meaningful Use Dashboard

Added Features (continued)

- **Medication – Rx Cancel** – The system has been updated with the ability to electronically send a cancel request for a prescription to applicable pharmacies. This allows you to cancel prescriptions where an adjustment in dosage is needed, or for medications that are not providing the desired efficacy, or for medications causing certain side-effects, or for similar reasons that require a cancellation of the current medication. A new **Cancel Prescription** option has been created and is accessed via context menu when clicking the asterisk (*) button next to the medication in the Medication List of the patient's facesheet. See Figure 5.

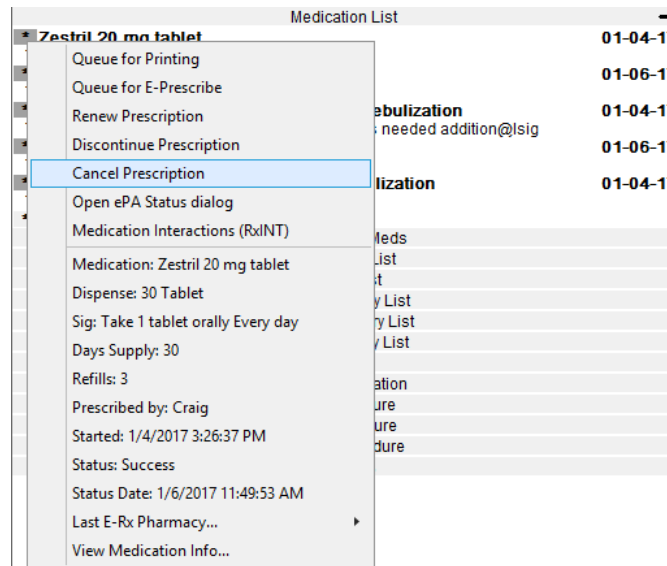


Figure 5 – Facesheet — Medication List — Medication Menu

Once the cancel request is initiated, a Cancel Prescription dialog will appear allowing you to review the medication information, the patient, prescriber, as well as select the applicable pharmacy, and send the cancellation request. See Figure 6. Do note that only pharmacies that have the Cancel service level will populate the Pharmacy field when canceling a prescription. You have the ability to view those excluded pharmacies via the **View excluded pharmacies** button. Likewise, you also have the ability to manage the patient's pharmacies, similar to when confirming prescriptions, via the **Manage patient pharmacies** button. After the information has been verified and a pharmacy has been selected, you can send the cancel request by clicking the **Send** button.

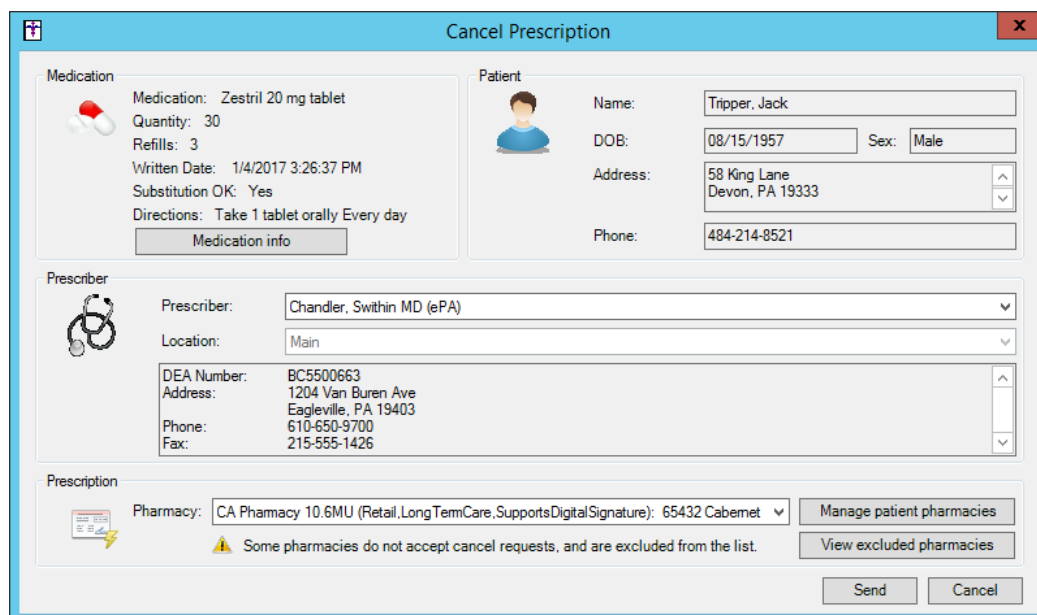


Figure 6 – Cancel Prescription

Added Features (continued)

Medication – Rx Cancel (continued)

The pharmacy will either approve or deny the request. Notification of the pharmacy response will come via a To-Do List message and any additional details, such as the reason why the request was denied, if any of the medication was dispensed, or any other applicable information provided by the pharmacy regarding the prescription. See Figure 7. Do note, however, when a prescription has been successfully canceled, you will need to manually discontinue the medication for the patient via their patient chart.

Date	From	Priority	Subject	RRR	Type	Patient	Start
01/10/2017		Normal	cp Procedure Checklist		Unsigned Note	Farrell, Asa	
01/10/2017		Normal	Electronic Prescription: Change Request		E-Prescription Result	Smith, John	
01/10/2017		Normal	Electronic Prescription: Change Request		E-Prescription Result	Smith, John	
01/11/2017		Normal	Electronic Prescription: Unmatched Change Request		Rx Unmatched	Unknown	
01/06/2017		Normal	GENERAL E&M		Unsigned Note	Farrell, Asa	
01/10/2017		Normal	GENERAL E&M		Unsigned Note	Smith, John	
01/10/2017		Normal	GENERAL E&M		Unsigned Note	Farrell, Asa	
01/11/2017		Normal	GENERAL E&M		Unsigned Note	Noland, Chuck	
01/04/2017	System	Normal	Prescription Cancel Request Approved - See Notes for Details		E-Prescription Cancel Response	Tripper, Jack	
01/04/2017	System	High	Prescription Cancel Request Denied		E-Prescription Cancel Response	Tripper, Jack	

Figure 7 – The To-Do List – Rx Cancel Request

- **Medication – Rx Change – General Change Request** – The system has been updated to electronically receive prescription change requests from pharmacies, and the ability to process and reply to those requests. When a pharmacy sends a prescription change request, a To-Do List message will populate the user's To-Do List with a Subject of **Electronic Prescription: Change Request**. See Figure 8.

Date	From	Priority	Subject	RRR	Type	Patient	Start
01/10/2017		Normal	cp Procedure Checklist		Unsigned Note	Farrell, Asa	
01/10/2017		Normal	Electronic Prescription: Change Request		E-Prescription Result	Smith, John	
01/10/2017		Normal	Electronic Prescription: Change Request		E-Prescription Result	Smith, John	
01/11/2017		Normal	Electronic Prescription: Unmatched Change Request		Rx Unmatched	Unknown	
01/06/2017		Normal	GENERAL E&M		Unsigned Note	Farrell, Asa	
01/10/2017		Normal	GENERAL E&M		Unsigned Note	Smith, John	
01/10/2017		Normal	GENERAL E&M		Unsigned Note	Farrell, Asa	
01/11/2017		Normal	GENERAL E&M		Unsigned Note	Noland, Chuck	
01/04/2017	System	Normal	Prescription Cancel Request Approved - See Notes for Details		E-Prescription Cancel Response	Tripper, Jack	
01/04/2017	System	High	Prescription Cancel Request Denied		E-Prescription Cancel Response	Tripper, Jack	

Figure 8 – The To-Do List – Rx Change Request

Added Features (continued)

Medication – Rx Change – General Change Request (continued)

If you view the message (by double-clicking the message, or highlighting it, and then clicking the **View** button), the patient's chart will open and any medications that have a change request will be highlighted and a **[CHANGE]** prefix will be attached to them in the Medication List of the patient's facesheet. See Figure 9.

The screenshot shows a list of patient data sections. The Medication List section is expanded, showing two entries with change requests:

- * **[CHANGE] - levalbuterol 1.25 mg/3 mL solution for nebuliza** 01-10-17
Take 1 vial, nebulizer (ml) puff(s) Every 4 hours as needed addition@lsig
- * **[CHANGE] - Zestril 20 mg tablet** 01-10-17
Take 1 tablet orally Every day

Below the medication list are sections for Pre-Existing Meds, Misc. Note List, Allergy List, Patient History List, Surgical History List, Family History List, Recalls, Patient Annotation, Lab Procedure, Test Procedure, Image Procedure, and Referrals.

Figure 9 – The Facesheet – Medication List – Change Request

A new **Process Change Request** option has been created and is accessed via context menu when clicking the asterisk (*) button next to the medication in the Medication List of the patient's facesheet. See Figure 10.

The screenshot shows the context menu for the medication entry in Figure 9. The menu items are:

- Queue for Printing
- Queue for E-Prescribe
- Renew Prescription
- Discontinue Prescription
- Cancel Prescription
- Process Change Request** (highlighted)
- Open ePA Status dialog
- Medication Interactions (RxINT)

Below the menu, the medication details are displayed:

- Medication: levalbuterol 1.25 mg/3 mL solution for nebulization
- Dispense: 3 Vial
- Refills: 2
- Prescribed by: Craig
- Started: 1/10/2017 8:06:04 AM
- Status: Change Request
- Status Date: 1/10/2017 8:16:11 AM
- Last E-Rx Pharmacy...
- View Medication Info...

Figure 10 – The Facesheet – Medication List – Process Change Request

Added Features (continued)

Medication – Rx Change – General Change Request (continued)

Once the change response is initiated, a General Change Response dialog will appear that allows you toggle between the original prescribed medication (indicated by a **[Original Medication]** prefix) and the requested changes. See Figure 11. In the General Change Response dialog, you can view the medication information, prescriber information, Patient demographics, pharmacy information, as well as options for approving, denying, providing a denial reason, and adding any applicable comments.

NOTE: When processing a change request, a Prior Authorization Change Response dialog will appear for those change requests where a prior authorization was not received. For details on this type of Rx Change see the next entry below.

General Change Response

Select a medication from the dropdown below. Changes from the originally prescribed medication will be highlighted.

Medication Requested

[Original Medication] Zestril 20 mg tablet

Reason: The patient's pharmacy has requested a change to this prescription.

Quantity: 30 tablet Days Supply: 30 Substitution: Yes

Directions: Take 1 tablet orally Every day Notes To Pharmacist:

Diagnosis:

Written Date: 01/10/2017 Effective Date: 1/12/2017 Refills: 3 Medication info

Prescriber

Prescriber: Davidson, Ben I
Location: From Change Request
DEA Number: AB1234567
Address: 2700 Van Buren Avenue, !
Eagleville, PA 19403
Phone: 610-650-9700
Fax: 610-555-5556

Patient

Name: Smith, John
DOB: 10/14/1955 Sex: Male
Address: 15 High Street
Wayne, PA 19087
Phone: 484-787-5410

Pharmacy

Name: CA Pharmacy 10.6MU
Address: 65432 Cabemet Turn
Sonoma CA, 95476
Phone: 7075157071
Fax: 7075157072

Denied

Denial Reason:

Response

Written Date: 01/12/2017
Comments:

Ready to sign

Approve Deny Cancel

Figure 11 – Rx Change – General Change Response (Original Medication)

Added Features (continued)

Medication – Rx Change – General Change Request (continued)

After you toggle the medication in the initial medication drop-down list, any changes will be highlighted in the applicable fields where changes are taking place. See Figure 12. If the actual medication is different from the original medication prescribed, then the medication itself will become highlighted.

You have the ability to add or modify the **Quantity, Days Supply, Substitution, Directions, Notes to Pharmacist, Diagnosis, Effective Date,** and **Refills** for the medication, as well as viewing medication information via the **Medication info** button.

You can then **Approve** or **Deny** the change request by clicking the corresponding button. When denying a change request you must select a **Denial Reason** or enter a **Comment** as to why the request is being denied.

Do note, that when a change response involves a controlled substance, the various EPCS warnings and signing protocols will be activated, similar to electronically prescribing a controlled substance. You will be required to check the **Ready to sign** option, insert the IdenTrust USB token, as well as enter your token passcode prior to being able to approve the request.

Once the request has been approved or denied, the response will then be sent to the pharmacy. If the change request was approved, the system will automatically discontinue the original medication and generate a new medication drug log comprised of the changes, while also updating the patient's facesheet. Likewise, applicable changes will be made in the History tab and the Audit Trail.

General Change Response

Select a medication from the dropdown below. Changes from the originally prescribed medication will be highlighted.

Medication Requested: lisinopril 10 mg tablet

Reason:

Quantity: 30 tablets Days Supply: 30 Substitution: Yes

Directions: Take one tablet daily for 30 days. Notes To Pharmacist:

Diagnosis:

Written Date: 09/01/2016 Effective Date: 1/10/2017 Refills: 3 Medication info

Prescriber: Davidson, Ben I Location: From Change Request

DEA Number: AB1234567 Address: 2700 Van Buren Avenue, Eagleville, PA 19403 Phone: 610-650-9700 Fax: 610-555-5556

Patient: Smith, John DOB: 10/14/1955 Sex: Male Address: 15 High Street Wayne, PA 19087 Phone: 484-787-5410

Pharmacy: CA Pharmacy 10.6MU Address: 65432 Cabernet Turn Sonoma CA, 95476 Phone: 7075157071 Fax: 7075157072

Denied: Denial Reason:

Response: Written Date: 01/10/2017 Comments:

Ready to sign Approve Deny Cancel

Figure 12 – Rx Change – General Change Response (Medication Change)

Added Features (continued)

- **Medication – Rx Change – Prior Authorization Change Request** – When a pharmacy sends a change request where a prior authorization was not received, the system will generate a to-list message similar to a general change request, and you will process the change request in a similar manner (clicking the asterisk (*) button next to the medication in the Medication List of the patient's facesheet, and then clicking **Process Change Request**). However, instead of General Change Response dialog, a Prior Authorization Change Request dialog will appear. See Figure 13.

In the Prior Authorization Change Response dialog, you can view the medication information, pharmacy information, prescriber information, patient demographics, as well as options for approving, denying, adding an approval number, providing a denial reason, and adding any applicable comments.

You can then **Approve** or **Deny** the change request by clicking the corresponding button. When denying a change request you must select a **Denial Reason** or enter a **Comment** as to why the request is being denied.

Once the request has been approved or denied, the response will then be sent to the pharmacy.

Prior Authorization Change Response

Medication

Name: levalbuterol 1.25 mg/3 mL solution for nebulization
Quantity: 3 Vial
Days Supply:
Directions: Take 1 vial, nebulizer (ml) puff(s) Every 4 hours as needed addition@lsig
Refills: 2
Substitutions: Yes

Pharmacy

Name: CA Pharmacy 10.6MU
Address: 65432 Cabemet Tum
Sonoma CA, 95476
Phone: 7075157071
Fax: 7075157072

Prescriber

Prescriber: Davidson, Ben !
Location: From Change Request
DEA Number: AB1234567
Address: 2700 Van Buren Avenue, !
Eagleville, PA 19403
Phone: 610-650-9700
Fax: 610-555-5556

Patient

Name: Smith, John
DOB: 10/14/1955 Sex: Male
Address: 15 High Street
Wayne, PA 19087
Phone: 484-787-5410

Approved

If the payer requires an approval number, you may enter it below

Approval #: 14213242321A

Denied

Denial Reason:

Response

Written Date: 01/10/2017
Comment: Some comment, if applicable.

Approve Deny Cancel

Figure 13 – Rx Change – Prior Authorization Change Request

Added Features (continued)

- Medication – Rx Change – Unmatched Change Request** – The system has been updated to process an unmatched change request that is sent from a pharmacy. When a pharmacy sends a prescription change request, and the system is unable to match that request to an existing patient, a To-Do List message will populate the user's To-Do List with a Subject of **Electronic Prescription: Unmatched Change Request**. See Figure 14.

Date	From	Priority	Subject	RRR	Type	Patient	Start
01/10/2017		Normal	cp Procedure Checklist		Unsigned Note	Farrell, Asa	
01/10/2017		Normal	Electronic Prescription: Change Request		E-Prescription Result	Smith, John	
01/10/2017		Normal	Electronic Prescription: Change Request		E-Prescription Result	Smith, John	
01/11/2017		Normal	Electronic Prescription: Unmatched Change Request		Rx Unmatched	Unknown	
01/06/2017		Normal	GENERAL E&M		Unsigned Note	Farrell, Asa	
01/10/2017		Normal	GENERAL E&M		Unsigned Note	Smith, John	
01/10/2017		Normal	GENERAL E&M		Unsigned Note	Farrell, Asa	
01/11/2017		Normal	GENERAL E&M		Unsigned Note	Noland, Chuck	
01/04/2017	System	Normal	Prescription Cancel Request Approved - See Notes for Details		E-Prescription Cancel Response	Tripper, Jack	
01/04/2017	System	High	Prescription Cancel Request Denied		E-Prescription Cancel Response	Tripper, Jack	

Figure 14 – The To-Do List – Rx Unmatched Change Request

If you view the message (by double-clicking the message, or highlighting it, and then clicking the **View** button), a Match Change Request dialog will appear allowing you to deny the request, or to match that request with an existing patient. See Figure 15. In the Change Request Information section of the Match Change Request dialog, the patient, medication, pharmacy, and prescriber will be listed for the unmatched patient sent from the pharmacy.

As when processing a General Change Request, or a Prior Authorization Change Request, you have the ability to deny this request by selecting a Denial Reason, or entering a Comment, and then clicking the **Deny Request** button.

To match this information to an existing patient in the system, you can search for the patient in the Select Patient field, highlight the applicable patient in the list, and then in the Select Patient Medication section, highlight that patient's medication that you want to match the request to, and then click **Match** button.

Once the unmatched change request has been matched to an existing patient, you can access the patient's chart and the medication will be highlighted and a **[CHANGE]** prefix will be attached in the patient's facesheet. You can process the change request in a similar manner as a general change request or prior authorization change request outlined above.

Figure 15 – The Facesheet – Medication List – Change Request

Added Features (continued)

- **The Note Tab – Immunizations** – The program has been updated to include the Facility Site ID in the ORC.3 segment of the immunization file when sending immunization information to Philadelphia KIDS immunization registry.
- **The Note Tab – Smoking History** – The Smoking/Tobacco Use dialog has been updated to display the **Tobacco use screening not performed due to limited life expectancy** option if the date of the chart note is before 01/01/2017. See Figure 16. This allows 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. However, if the date of the chart note is 01/01/2017 or later, the **Tobacco use screening not performed due to limited life expectancy** option will *not* be displayed, as it is no longer applies to the 2016 version of the Clinical Quality Measure NQF 0028 for Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention. See Figure 17.

Smoking/Tobacco Use

Tobacco History

Have you smoked at least 100 cigarettes in your entire life? Yes No Not asked

Have you used tobacco in the last 30 days? Yes No Not asked

Smoking Status - CDC Terminology

Current every day smoker Heavy tobacco smoker (≥10 cigarettes per day)

Current some day smoker Light tobacco smoker (≤10 cigarettes per day)

Former smoker Unknown if ever smoked

Never smoker None of the above

Smoker, current status unknown Not asked

Do you use smokeless tobacco? Yes No Not asked

Have you used smokeless tobacco products in the last 30 days? Yes No Not asked

Tobacco Details

Smoking

Cigarettes per day Years smoked Start Year End Year

Advised to quit tobacco use

Cessation materials/counseling provided

Cessation pharmacologic therapy provided

Are you at risk for secondhand smoke? Yes No Not asked

Tobacco use screening not performed for medical reasons

Tobacco use screening not performed due to limited life expectancy

Comments

Display results in list format

Figure 16 – Smoking/Tobacco Use
(Chart Note Date Prior to 01/01/2017)

Smoking/Tobacco Use

Tobacco History

Have you smoked at least 100 cigarettes in your entire life? Yes No Not asked

Have you used tobacco in the last 30 days? Yes No Not asked

Smoking Status - CDC Terminology

Current every day smoker Heavy tobacco smoker (≥10 cigarettes per day)

Current some day smoker Light tobacco smoker (≤10 cigarettes per day)

Former smoker Unknown if ever smoked

Never smoker None of the above

Smoker, current status unknown Not asked

Do you use smokeless tobacco? Yes No Not asked

Have you used smokeless tobacco products in the last 30 days? Yes No Not asked

Tobacco Details

Smoking

Cigarettes per day Years smoked Start Year End Year

Advised to quit tobacco use

Cessation materials/counseling provided

Cessation pharmacologic therapy provided

Are you at risk for secondhand smoke? Yes No Not asked

Tobacco use screening not performed for medical reasons

Comments

Display results in list format

Figure 17 – Smoking/Tobacco Use
(Chart Note Date of 01/01/2017, or after)

Added Features (continued)

- **The Note Tab – Vitals** – Due to changes between the 2015 version and the 2016 version of the Clinical Quality Measure NQF 0421 for Preventative Care and Screening: BMI Screening and Followup, the **BMI** section of the **Vital Signs Entry** dialog has been updated to calculate the BMI correctly based on the chart note date. If the date of the charge note is before 01/01/2017, the system will calculate overweight/underweight based on the 2015 version's ranges. If the date of the chart note is 01/01/2017 or later, the system will calculate overweight/underweight based on the 2016 version's ranges

In addition, the **Status** section options in the Options dialog, accessed via the **Options** button, has also been updated to adhere to the differences between the 2015 version and the 2016 version of the Clinical Quality Measure NQF 0421 for Preventative Care and Screening: BMI Screening and Followup. If the date of the chart note is before 01/01/2017, and the BMI was calculated in the Vitals dialog for the patient, the active option will be **Follow up plan documented**. See Figure 18. Likewise, if the date of the chart note is before 01/01/2017, and the BMI was not calculated in the Vitals dialog, the active options will be **BMI not done for medical or other reason** and **BMI refused by patient**. See Figure 19.

However, if the date of the chart note is 01/01/2017 or later, and the BMI was calculated in the Vitals dialog, the active options will be **Follow up plan documented**, **Follow up plan not done for medical or other reason**, and **Referral not done for medical or other reason**. See Figure 20. Likewise, if the date of the chart note is 01/01/2017 or later, and the BMI was not calculated in the Vitals dialog, the active option will be **BMI refused by patient**. See Figure 21.

When the options in Options 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 Measure NQF 0421 for Preventative Care and Screening: BMI Screening and Followup. Likewise, the information configured will be tracked in the History tab and Audit Trail.

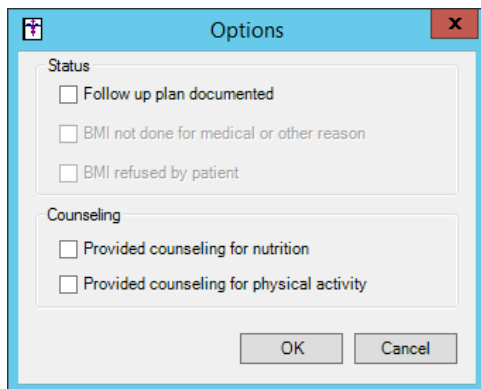


Figure 18 – Options (With BMI Prior to 01/01/2017)

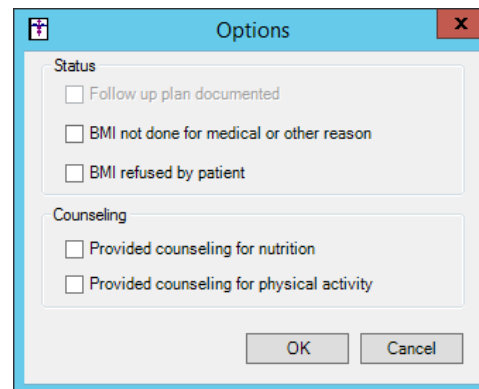


Figure 19 –Options (Without BMI Prior to 01/01/2017)

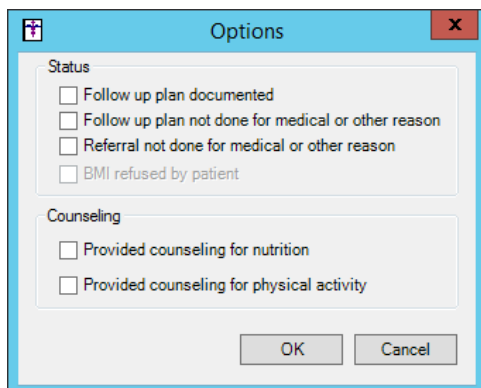


Figure 20 – Options (With BMI 01/01/2017 or later)

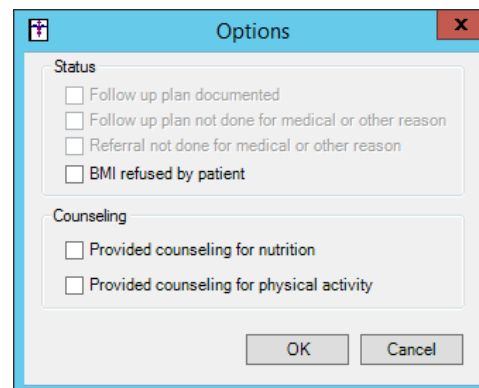


Figure 21 –Options (Without BMI Prior 01/01/2017 or later)

Added Features (continued)

- System Tables – Codes – Ethnicity** – The system has been updated to allow you to add and maintain Ethnicity codes via the Ethnicity Table Maintenance dialog (accessed via **Edit > System Tables > Codes > Ethnicity**). See Figure 22. When adding a new code, you have the ability to provide a **Code Value**, **Description**, and linking that code to **Standard Mapping** option. When editing, you can modify the Description or Standard Mapping option for the code you are editing. The system will automatically update the particular ethnicity with a Top Level code, or parent ethnicity category, based on the CDC code set. The Standard Mapping and Top Level codes will be included, as applicable, when exporting documentation for immunizations and CDAs.

Code	Description	Standard Mapping	Top Level	Active	System
1	Hispanic or Latino	Hispanic or Latino (2135-2)	Hispanic or Latino (2135-2)	Active	Y
2	Not Hispanic or Latino	Not Hispanic or Latino (2186-5)	Not Hispanic or Latino (2186-5)	Active	Y
3	Declined to Specify			Active	Y
And	Andalusian	Andalusian (2138-6)	Hispanic or Latino (2135-2)	Active	N
can	canarian	Canarian (2145-1)	Hispanic or Latino (2135-2)	Active	N
Ni	Nicaraguan	Nicaraguan (2159-2)	Hispanic or Latino (2135-2)	Active	N
uru	Uruguayan	Uruguayan (2173-3)	Hispanic or Latino (2135-2)	Active	N

Code Value: Active

Description:

Standard Mapping:

Figure 22 – System Tables – Codes – Ethnicity

- System Tables – Codes – Race** – The Race Table Maintenance dialog (accessed via **Edit > System Tables > Codes > Race**) has been updated with a new **Top Level** column. See Figure 23. When entering or editing a particular Race code, you will be required to select a Standard Mapping option for the code you are entering or editing. The system will automatically update the particular race with a Top Level code, or parent race category based on the CDC code set. The Standard Mapping and Top Level codes will be included, as applicable, when exporting documentation for immunizations and CDAs.

Code	Description	Standard Mapping	Top Level	Active	System
1	Hispanic or Latino	Hispanic or Latino (2135-2)	Hispanic or Latino (2135-2)	Active	Y
2	Not Hispanic or Latino	Not Hispanic or Latino (2186-5)	Not Hispanic or Latino (2186-5)	Active	Y
3	Declined to Specify			Active	Y
And	Andalusian	Andalusian (2138-6)	Hispanic or Latino (2135-2)	Active	N
can	canarian	Canarian (2145-1)	Hispanic or Latino (2135-2)	Active	N
Ni	Nicaraguan	Nicaraguan (2159-2)	Hispanic or Latino (2135-2)	Active	N
uru	Uruguayan	Uruguayan (2173-3)	Hispanic or Latino (2135-2)	Active	N

Code Value: Active

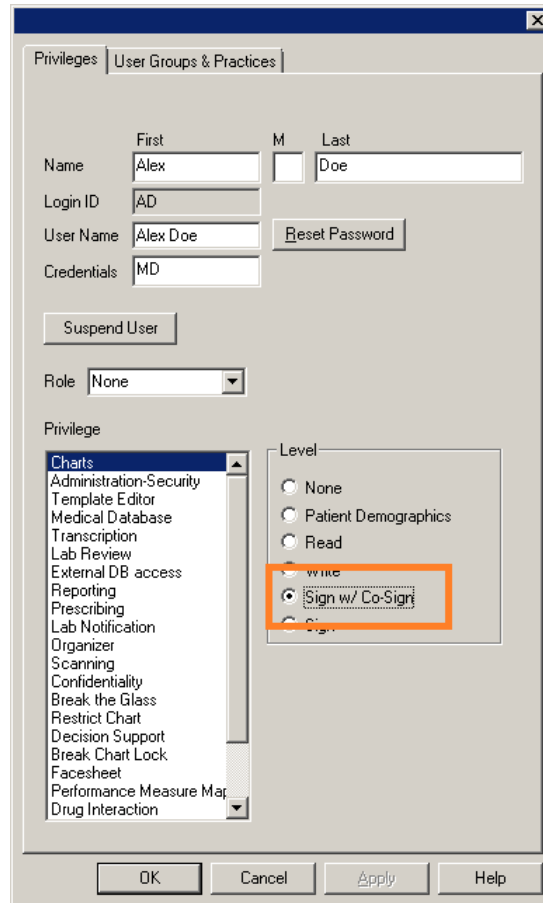
Description:

Standard Mapping:

Figure 23 – System Tables – Codes – Race

Added Features (continued)

- **System Tables – Users – Privileges** – The system has been updated so those users with the Charts privilege of Sign w/Co-Sign are now able to annotate signed chart notes. See Figure 24. Whenever a user with this privilege annotates a chart, their cosigner is notified of this annotation via a To-Do List message; and when the cosigner accesses the message the applicable chart will open for the cosigner to view the annotation.



The screenshot shows a dialog box titled "Privileges" with a sub-tab "User Groups & Practices". It contains the following fields and controls:

- Name: First (Alex), M (), Last (Doe)
- Login ID: AD
- User Name: Alex Doe, with a "Reset Password" button
- Credentials: MD
- Suspend User button
- Role: None (dropdown)
- Privilege list: Charts (selected), Administration-Security, Template Editor, Medical Database, Transcription, Lab Review, External DB access, Reporting, Prescribing, Lab Notification, Organizer, Scanning, Confidentiality, Break the Glass, Restrict Chart, Decision Support, Break Chart Lock, Facesheet, Performance Measure Map, Drug Interaction
- Level selection: None, Patient Demographics, Read, Sign w/ Co-Sign (highlighted with an orange box), Sign

Buttons at the bottom: OK, Cancel, Apply, Help.

Figure 24 – System Tables – User – Privileges

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.

SureScripts® E-Prescribing Best Practice Guidelines (continued)

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

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

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

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

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

SureScripts® E-Prescribing Best Practice Guidelines (continued)

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

- The instruction “take as directed” is rarely appropriate and should be avoided by prescribers.
 - Such an instruction assumes an understanding on the part of the patient that may not exist, and even if it does, will very likely be short lived.
 - Using the term “take as directed” provides little information upon which the pharmacist can base their counseling of the patient.
- (3) Proper use of the Notes field (referred to as “free text” in the NCPDP SCRIPT Standard).
- Prescription information that has a designated, standardized data field should not be placed in the Notes field.
 - For example, neither the drug name, strength nor quantity should be placed in the Notes field because there are specific fields in the NCPDP SCRIPT Standard for these data elements. This is important because if this information isn’t placed in the fields in which pharmacy personnel are trained to look for it, it might be missed.
 - 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:

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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