



# ChartMaker® Clinical Release Notes

ChartMaker® 2016 (fv6.2.3)

\*\*\*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

- **Audit Trail** – The Audit Trail has been updated to track when user privilege information is modified in the system. See Figure 1. When a user privilege event occurs the Event column will display **Modified**; the Group column will display **User**; the Audit Trail Description will display **Privilege changed: [Privilege Modified]**; the Old Value and New Value will contain the applicable privilege settings; and the **User Name** will be listed in the Metadata column.

Event	Group	Audit Date	Operator	Audit Trail Description	Old Value	New Value	Failed	Metadata	Application	IP Ad
Modified	User	7/13/2017 3...	JD	Privilege changed: Patient Data...	Export	All	No	User Name=Alex Doe	Clinical	192.1
Modified	User	7/13/2017 3...	JD	Privilege changed: Drug Interact...	None	All	No	User Name=Alex Doe	Clinical	192.1
Modified	User	7/13/2017 3...	JD	Privilege changed: Break Chart ...	None	All	No	User Name=Alex Doe	Clinical	192.1
Modified	User	7/13/2017 3...	JD	Privilege changed: Lab Notificati...	Receive ALL lab...	Receive U...	No	User Name=Alex Doe	Clinical	192.1
Modified	User	7/13/2017 3...	JD	Privilege changed: Template Edi...	None	All	No	User Name=Alex Doe	Clinical	192.1

Filters

Audit Date From: 7/13/2017 Through: 7/13/2017 Operator: Failed:

Metadata	Search Type	Value
*		

Application: Event: Functional Area: Privileges

Verify Audit Trail Refresh Save to File Close

Figure 1 – Audit Trail

- **Direct Messaging** – The system has been updated to find, import, and reconcile CCDAs documents that were attached as files within the direct message.

## Added Features (continued)

- **Export Patient Data** – The system has been updated to include any applicable FDA validated implantable devices in the CCDA 2.1 document when exporting Continuity of Care Documents (CCDs) for patients.
- **Export Public Surveillance Data** – The system has been updated to create and export syndromic based public health surveillance information for electronic transmission for A03 (discharge), A04 (registration) and A08 (update) messages, in addition to the A01 (admission) messages. The data gathering process has also been updated to include any applicable ICD10, SNOMED codes, height, weight, smoking status, country code, county code, state code, chief complaints, and age information in the messages sent.
- **Faxing – Open Text Fax Appliance** – The system has been updated so whenever you access the Fax dialog when faxing a note or notes, all of the referring physicians in the **Patient referring physicians** tab will be defaulted into the **Selected recipients** column. Likewise, the **Patient referring physicians** tab has been updated with a select all button (>>) and a deselect all button (<<) to easily toggle all patient referring physicians to selected or to deselected as needed. See Figure 2. Do note the select all and deselect all buttons are only available in the Patient referring physicians tab.

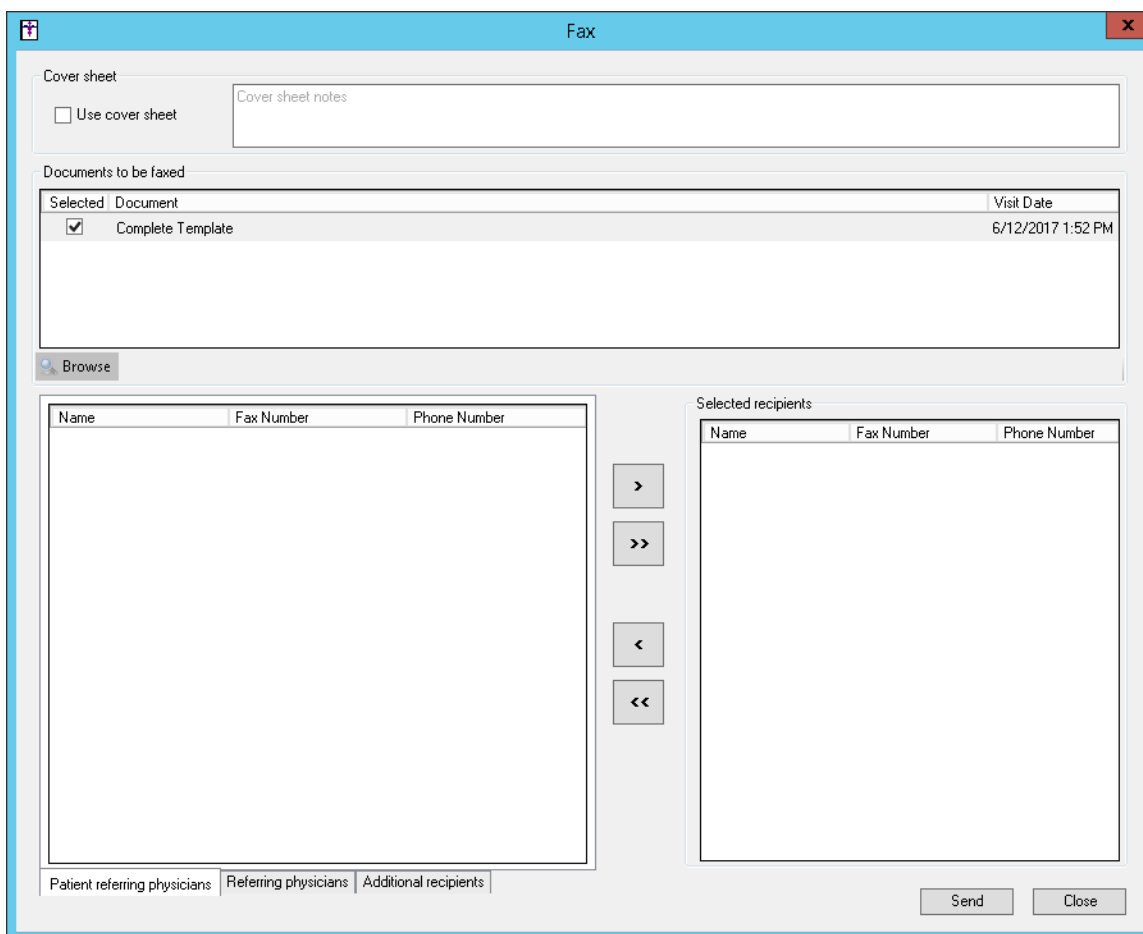


Figure 2 – Fax

- **Immunization Registry** – The system has been updated to download and display immunization forecast information, if available, when downloading immunization history information from a registry via the Registry Records dialog (**Chart > Registries > Immunization > View Registry Records**). Any applicable immunization forecast information will be displayed after the immunization history information.
- **Meaningful Use Dashboard – Stage 2 2017 – Objective** – The wording for objective #9, **Secure Messaging**, and the associated tool tip has been updated to read, "Use secure messaging to send a message to the patient (or patient-authorized representative) or in response to a secure message sent by the patient," to better reflect the measure.

## Added Features (continued)

- MIPS Dashboard** – The MIPS Dashboard (**Reports > MIPS Dashboard**) has been updated with the ability to print from each of the category areas (Quality, Advancing Care Information, and Improvement Activities), as well as from the main MIPS Dashboard via a **Print** button. The Print button will appear next to the Close button on the main MIPS Dashboard (see Figure 3), and next to the OK and Cancel buttons in each category area (see Figure 4).

When printing from the main **MIPS Dashboard**, you can print all categories if a configuration has been selected. When this document is printed from this area, only one header section will appear. Each category's weighted score will be shown with the total estimated MIPS score. Likewise, the printed document will also include all category printouts. If the STI Quality Reporting Registry option is selected for the Quality Reporting section of the MIPS Dashboard Configuration dialog, the Quality section will not be printed and the configuration option will be printed in the header. Similarly, if you are configured to be exempt from reporting ACI, the section will not print and a line will appear in the header with the configuration.

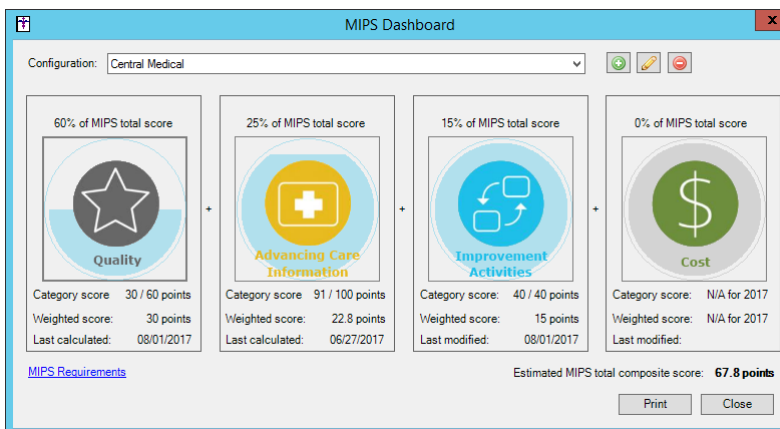


Figure 3 – MIPS Dashboard

When printing within a category area, the printed document will include a header at the top that will contain the Configuration name, Eligible clinicians (with NPI), and Performance period. Likewise, all category printed documents will contain the raw category score and the final weighted score.

When printing from the **Quality** category, the printed document will contain all selected measures, and data from the grid. Measures that are not included in the category score, and appear in gray in the Quality Measures dialog, will be separated and have a heading to denote that they are not included in the score.

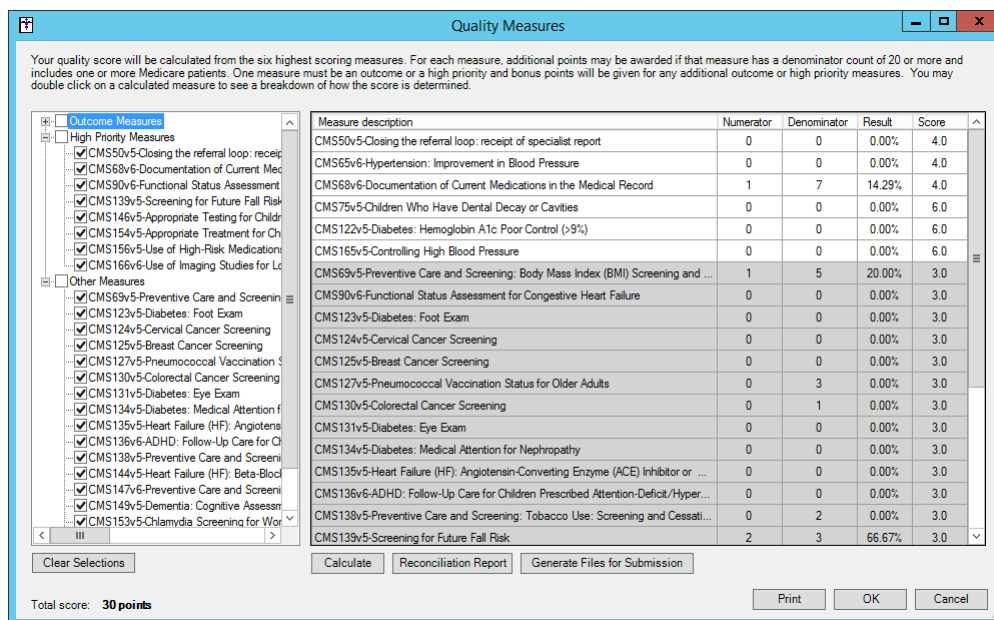


Figure 4 – MIPS Dashboard – Quality Measures

## Added Features (continued)

### MIPS Dashboard (continued)

When printing from the **Advancing Care Information** category area, the printed document will include Yes/No answers for the security analysis, controlled substances, immunization registry, and other public health or clinical data registry selections. Likewise, the printed document will be separated into Base Score, Performance Score, and Bonus Score sections like the Advancing Care Information dialog. See Figure 5. Both the Base Score measures and Performance Score measures will appear in the printed document along with their numeric results.

The screenshot shows the 'Advancing Care Information' dialog box. It is divided into three main sections: Base Score, Performance Score, and Bonus Points.

**Base Score**  
To receive the base score of 50 points you must have performed a security risk analysis and have a numerator of 1 or more for the three measures below. You can also receive credit for the E-Prescribing measure if you have less than 100 in the denominator.

Performed a security risk analysis  
 Include controlled substances in the E-Prescribing measure

Measure description	Numerator	Denominator
E-Prescribing & Formulary Comparison	21	28
Health Information Exchange (Summary Of Care)	1	2
Patient Online Access to Health Information within 4 business days	1	5

**Performance Score**  
 Submitted data for immunization registry reporting (10 points)

Measure description	Result description	Numerator	Denominator	Result	Score
Health Information Exchange (Summary Of Care)	0 to 20 points	1	2	50%	10.0
Patient Online Access to Health Information within 4 business days	0 to 20 points	1	5	20%	4.0
Medication Reconciliation	0 to 10 points	0	1	0%	0.0
Patient Specific Education	0 to 10 points	0	5	0%	0.0
Patient View/Download/Transmit their Health Information	0 to 10 points	1	5	20%	2.0
Secure Messaging to patient	0 to 10 points	0	5	0%	0.0

**Bonus Points**  
You may receive 10 additional points for certain activities found in the Improvement Activities category.

Submitted data to one or more public health or clinical data registries (5 points)

50 points (base) + 26 points (performance) + 15 points (bonus) = **91 points**

Figure 5 – MIPS Dashboard – Advancing Care Information

When printing from the **Improvement Activities** category area, the header will also print the option selected, other than None, for the Improvement Activity Adjustments in the MIPS Dashboard Configuration dialog. See Figure 6. The printed document will include only the Yes answered activities with their corresponding weight, as well as whether they apply the ACI bonus.

The screenshot shows the 'Improvement Activities' dialog box. It has a header 'Improvement Activities' and a sub-header 'ACI Bonus High Weighted Medium Weighted'. Below this is a list of activities, each with a 'More info?' link and a dropdown menu for selection.

Activity	More info?	Selection
Provide 24/7 access to eligible clinicians or groups who have real-time access to patient's medical record	<a href="#">More info?</a>	Yes
Anticoagulant management improvements	<a href="#">More info?</a>	No
Glycemic management services	<a href="#">More info?</a>	No
Chronic care and preventative care management for empanelled patients	<a href="#">More info?</a>	No
Implementation of methodologies for improvements in longitudinal care management for high risk patients	<a href="#">More info?</a>	No
Implementation of episodic care management practice improvements	<a href="#">More info?</a>	No
Implementation of medication management practice improvements	<a href="#">More info?</a>	No
Implementation of use of specialist reports back to referring clinician or group to close referral loop	<a href="#">More info?</a>	No
Implementation of documentation improvements for practice/process improvements	<a href="#">More info?</a>	No
Implementation of practices/processes for developing regular individual care plans	<a href="#">More info?</a>	No
Practice improvements for bilateral exchange of patient information	<a href="#">More info?</a>	No
Use of certified EHR to capture patient reported outcomes	<a href="#">More info?</a>	No
Engagement of patients through implementation of improvements in patient portal	<a href="#">More info?</a>	No
Engagement of patients, family and caregivers in developing a plan of care	<a href="#">More info?</a>	No
Use of decision support and standardized treatment protocols	<a href="#">More info?</a>	No
Leveraging a QCDR to standardize processes for screening	<a href="#">More info?</a>	No

Total score: **40 points**

Figure 6 – MIPS Dashboard – Improvement Activities

## Added Features (continued)

- **The Note Tab – Implantable Device** – The Device Removed field in the Implantable Devices dialog has been updated so that when the Device Removed is set to **No**, the corresponding date fields will be disabled and grayed out. When the Device Removed is set to **Yes**, the corresponding date fields will become accessible allowing you to enter a removal date for the selected device. See Figure 7.

The screenshot shows the 'Implantable Devices' dialog box. The 'Device List' on the left contains a table with columns 'FDA' and 'Name'. The 'Name' column lists: 'Cadaveric-donor/synthetic mineral bone graft', 'Cardiopulmonary bypass system filter, arterial blood line', '[Removed] Polyester suture', and 'Titanium Roads and screws' (which is selected). Below the list are 'Add' and 'Delete' buttons. The 'Device Information' section on the right has several input fields: 'FDA Device Name' (empty), 'User-defined Device Name' (filled with 'Titanium Roads and screws'), 'Device UDI' (empty), 'Device Identifier' (empty), 'Serial #' (filled with '45634563456'), 'Batch/Lot #' (empty), 'Manufacture Date' (calendar icon, filled with '7/11/2017'), 'Expiration Date' (calendar icon, filled with '7/11/2017'), and 'Distinct Identification Code' (empty). Below these is a 'Verify UDI with FDA' button. The 'Device Status' is a dropdown menu set to 'Active'. The 'Device Removed' field is a dropdown menu set to 'No', and its corresponding date fields (Month, Day, Year) are disabled and grayed out. The 'Implanted Date' field has date pickers for Month (10), Day (30), and Year (2010). At the bottom, there is a 'Display in list format' checkbox (checked) and 'OK' and 'Cancel' buttons. The status bar at the very bottom shows 'Ready'.

Figure 7 – Implantable Devices

- **The Note Tab – Order Procedure – Immunizations** – The program has been updated so that the latest immunization codes from the CDC are being used when configuring immunization information.
- **The Note Tab – Patient-Generated Health Data** – The system has been updated so that whenever a patient has a status of **Inactive** or **Deceased**, the Add Patient-Generated Health Data option, in the Note tab context menu, will be disabled and grayed out.
- **Patient-Generated Health Data** – The system has been updated so that whenever a patient has a status of **Inactive** or **Deceased**, the Patient-Generated Health Data option in the Chart menu, which provides access to the Patient-Generated Health Data dialog where you can add and maintain external links to a patient's health information, will be disabled and grayed out.

## Added Features (continued)

- **Scan Management** — The Scan Management dialog has been updated with a **Scan as Educational Materials** option that allows you to tag scanned documents for a patient as education materials. See Figure 8. Once the scanned documents tagged as educational materials have been brought into the chart, they can then be sent to the patient portal for the patient. Per MIPS 2018 and Meaningful Use Stage 3/ONC 2015 requirements providers will only receive credit for educational materials sent electronically to the patient via the patient portal. This option allows you to still receive credit for any hard-copy educational materials given to the patient during their visit.

In addition, the **Scan as Lab Result** and the **Scan as a Progress Note not created in Clinical** options have been removed since they are no longer needed. Likewise, the **Scan as...** options have been reordered alphabetically.

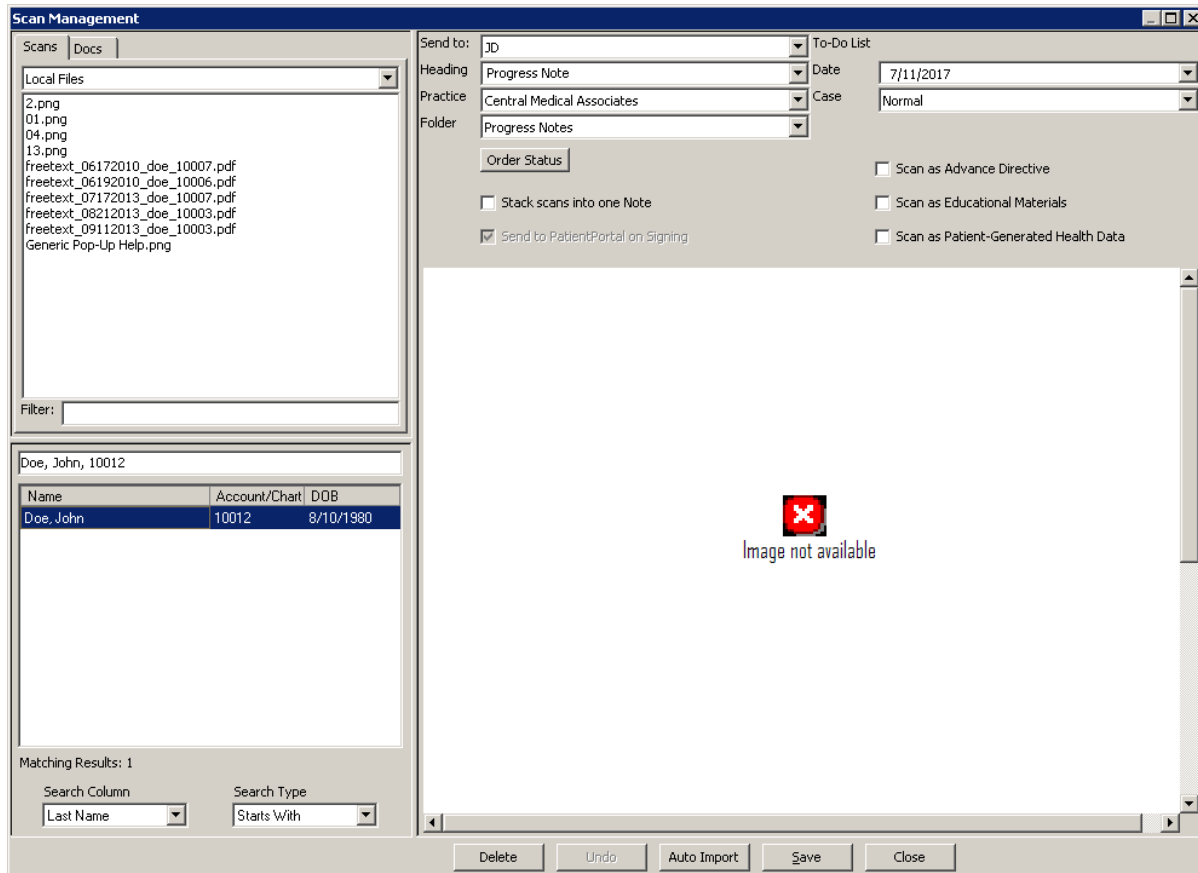


Figure 8 – Scan Management

## Added Features (continued)

- **System Tables – DSS Rule Builder** — The Rule Builder dialog has been updated with two new system-level data points: **DOB** and **DOB\_Unknown**. These new data points allow you to configure decision support rules based on date of birth for patients. See Figure 9. When using the DOB\_Unknown data point, decision support alerts will be triggered when the patient does not have a date of birth entered. When using the DOB data point, decision support alerts will be triggered based on how the rule is configured. You can create rules that look for a certain range of dates of birth as the example in Figure x ( $DOB \geq \#01/01/1980\#$  and  $DOB \leq \#12/31/1980\#$ ), where alerts will be triggered for anyone born in 1980. Do note, when entering dates in the rule, they need to have a # symbol on either side to indicate to the system that a date is being used.

The screenshot shows the 'Rule Builder' dialog box with the 'Rules' tab selected. The 'Data Points' tab is also visible. The 'Choose an option' section has 'New' selected. The 'Rule Name' is 'DOB1980', 'Rule Type' is 'Decision Support', and the 'Description' is 'For patients that were born in 1980'. The 'Bibliographic Information' button is present. The 'Rules and Data Points', 'Rules', and 'Data Points' radio buttons are shown, with 'Data Points' selected. The 'Logic' and 'Math' dropdowns are empty. The 'Rule Logic' text area contains the expression:  $DOB \geq \#01/01/1980\#$  and  $DOB \leq \#12/31/1980\#$ . The 'Reset' and 'Validate' buttons are at the bottom of the logic section. The 'Active Rule' checkbox is checked. The 'Rule Testing' section has a 'Chart#' field and a 'Test' button. The 'Copy Rule' and 'Delete Rule' buttons are at the bottom left, and 'Save' and 'Close' buttons are at the bottom right.

Figure 9 – Rule Builder – Rules

## Added Features (continued)

- **System Tables – DSS Rule Builder** — The Rule Builder dialog has been updated with twenty-three (23) new system-level data points for ethnicity, gender identity, language, and sexual orientation: **Ethnicity**, **Ethnicity\_DeclinedToSpecify**, **Ethnicity\_HispanicOrLatino**, **Ethnicity\_NotHispanicOrLatino**, **GenderIdentity\_ChooseNotToDisclose**, **GenderIdentity\_FemaleToMale**, **GenderIdentity\_Genderqueer**, **GenderIdentity\_IdentifiesAsFemale**, **GenderIdentity\_IdentifiesAsMale**, **GenderIdentity\_MaleToFemale**, **GenderIdentity\_OtherGenderCategory**, **Language**, **Language\_DeclinedToSpecify**, **Language\_English**, **Language\_Other**, **Language\_SignLanguage**, **Language\_Spanish**, **SexualOrientation\_Bisexual**, **SexualOrientation\_ChooseNotToDisclose**, **SexualOrientation\_DontKnow**, **SexualOrientation\_LesbianGayHomosexual**, **SexualOrientation\_SomethingElse**, and **SexualOrientation\_StraightHetrosexual**. These new data points allow you to configure decision support rules based on ethnicity, gender identity, language, and sexual orientation for patients. See Figure 10. When using these data points, *except **Ethnicity** and **Language***, decision support alerts will be triggered when the patient has that parameter set for ethnicity, gender identity, language, or sexual orientation. For example, if a rule contains **GenderIdentity\_ChooseNotToDisclose**, a decision support alert will be triggered for those patients that have the **Choose not to disclose** option checked for Gender Identity.

When using the Ethnicity and Language data points, decision support alerts will be triggered based on how the rule is configured. You can create rules that look for a specific ethnicity or language as the example in Figure 10 (Ethnicity = 'can' and Language = 'chk'), where alerts will be triggered for those patients that has an ethnicity of Canadian, and a preferred language of Cherokee, (as well as a gender identity and sexual orientation of chose not to specify). Do note, when configuring rules to trigger on certain ethnicities or languages, the value in quotes should be the **Code** value used when these codes are created in Ethnicity Table Maintenance dialog (**Edit > System Tables > Codes > Ethnicity**) and Language Table Maintenance dialog (**Edit > System Tables > Codes > Language**).

The screenshot shows the 'Rule Builder' dialog box with the 'Rules' tab selected. The 'Choose an option' section has 'New' selected. The 'Rule Name' is 'EthnicityLanguageGenderSexOrientation' and the 'Rule Type' is 'Decision Support'. The 'Description' is 'Example of new ethnicity, language, gender identity, and sexual orientation data points.' The 'Rules and Data Points' section has 'Data Points' selected. The 'Rule Logic' is 'Ethnicity = 'can' and GenderIdentity\_ChooseNotToDisclose and Language = 'chk' and SexualOrientation\_ChooseNotToDisclose'. The 'Active Rule' checkbox is checked. The 'Rule Testing' section has a 'Chart#' field and a 'Test' button. The 'Save' and 'Close' buttons are at the bottom right.

Figure 10 – Rule Builder – Rules



## 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 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.
  - 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 <b>1 aerosol</b> 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 <b>2 aerosol</b> 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 <b>2 puffs puff(s)</b> 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 <b>1 cream</b> (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 ( <b>hard, soft, etc.</b> ) orally Three times a day	<b>prn as directed</b>	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 ( <b>hard, soft, etc.</b> ) orally Daily	<b>Name Brand Medically Nec.</b>	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 <b>capsule</b>	Take 1 capsule ( <b>hard, soft, etc.</b> ) 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: <b>Oral Tablet</b>

## 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 <b>dose, route and frequency</b> of the prescribed medication
Coumadin 4 mg tablet	Take 2 tablet orally as directed	SIG should include the <b>dose, route and frequency</b> of the prescribed medication
Zithromax Z-Pak 250 mg tablet	Take 1 tablet orally As Directed	SIG should include the <b>dose, route and frequency</b> 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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