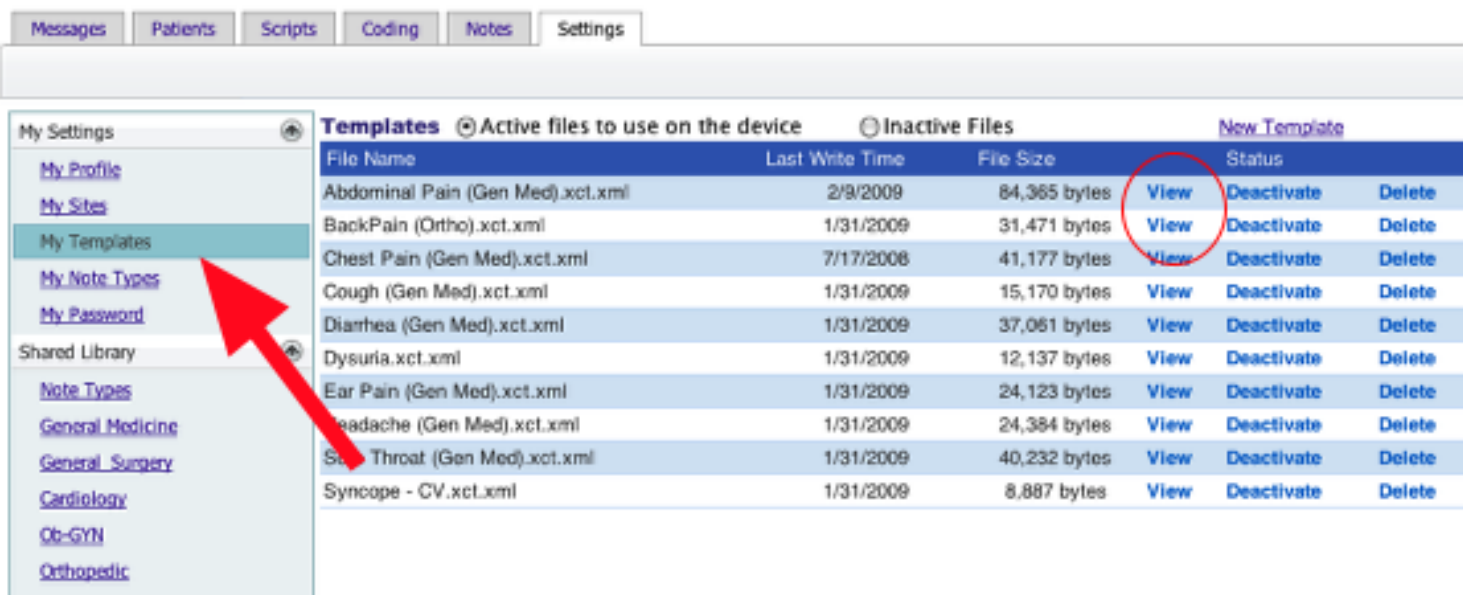


Introduction

In applications such as CareTools Inc. iChart, the content of the clinical template is not only critical in the examination process, but also reflects the clinician's style of practice and expertise as well as the format he or she commonly uses for documentation. The Template Tool (fig. 1) is an important companion utility for use with iChart in that it provides the health professional with the ability to edit preexisting templates or even create their very own templates tailored to their specific workflow and documentation needs. The Template Tool provides a platform for template development and testing via a desktop web browser on Mac or PC.

Selecting a Template to View/Modify



The screenshot displays the iChart interface with the 'Settings' tab selected. On the left, a sidebar menu shows 'My Templates' highlighted with a red arrow. The main content area is titled 'Templates' and is divided into 'Active files to use on the device' and 'Inactive Files'. A table lists various templates with columns for File Name, Last Write Time, File Size, View, Deactivate, and Delete. The 'View' links for each template are circled in red.

File Name	Last Write Time	File Size	View	Deactivate	Delete
Abdominal Pain (Gen Med).xct.xml	2/9/2009	84,365 bytes	View	Deactivate	Delete
BackPain (Ortho).xct.xml	1/31/2009	31,471 bytes	View	Deactivate	Delete
Chest Pain (Gen Med).xct.xml	7/17/2008	41,177 bytes	View	Deactivate	Delete
Cough (Gen Med).xct.xml	1/31/2009	15,170 bytes	View	Deactivate	Delete
Diarhea (Gen Med).xct.xml	1/31/2009	37,061 bytes	View	Deactivate	Delete
Dysuria.xct.xml	1/31/2009	12,137 bytes	View	Deactivate	Delete
Ear Pain (Gen Med).xct.xml	1/31/2009	24,123 bytes	View	Deactivate	Delete
Headache (Gen Med).xct.xml	1/31/2009	24,384 bytes	View	Deactivate	Delete
Sore Throat (Gen Med).xct.xml	1/31/2009	40,232 bytes	View	Deactivate	Delete
Syncope - CV.xct.xml	1/31/2009	8,887 bytes	View	Deactivate	Delete

Login to your iChart online user account, click the Settings Tab, then select a template from the "My Templates" list. You can also create a new template from scratch, or transfer an existing clinical template from the "Shared Template Library". Next Tap the View link for the template to modify.

The Template Tool Screen

Template Filename	<input type="text" value="Cough (Gen Med)"/>	(file is auto-saved, changes are permanent)	Help
Template Name	<input type="text" value="Cough-GenMed"/>		
Template Symptom	<input type="text" value="cough"/>		
Template Specialty	<input type="text" value="General Medicine"/>		
Template Author	<input type="text" value="TGMD"/>		

Differential Dx List

viral URI#465.9

Add Edit Del Move

Section Key

Subj
careplan#465.9

Add Edit Del Move

Menu 1

Quality
(Severity
Duration)
Timing of Onset
Context at Onset
Aggravating Factors
Relieving Factors
(Assoc. Signs/Sx
Assoc Sx -Sputum)
Prior Hx

Add Edit Del Move

Menu 2

constant
intermittent
high pitched
barking-like
noisy
irritating
hacking
painful
other

Add Edit Del Move

Menu 2 Action

Substitution

Substitution Text
constant

Add Edit Del Move

Glue language

The quality of the sss is described as xxx.

Each template consists of several descriptors such as Filename, Name, Symptom, Specialty and Author. These should be unique and are used to list the template on the iChart application on the as seen in the image below. Using the same filename as an existing active template will replace the existing template, so be sure to rename the file as the first step if you want to keep the original template. All changes made using the template tool are automatically recorded and saved to file with each change. The user will not lose their changes if the web browser session times out or the browser is closed. Simply re-login and the template will be re-loaded.

Once a template has been modified it will be considered updated, as such the next sync will download the template onto the iPhone/iChart. To prevent this, users can rename an existing template, then deactivate it, to prevent downloading. Once complete the new template can be activated, and it will be downloaded at the next sync session.

If you create a new template via clicking the New Template link on the template list screen, a blank template form will be displayed and the resulting template once named will reside in the "Inactive Files"

list within the template list screen. Thus all new templates are stored as deactivated by default.

Template Descriptions within the iChart Application



Note the symptom is displayed in large text, with the underlying text displaying the template name followed by the specialty.

Template Tool Lists and Menus

Template Filename	<input type="text" value="Cough (Gen Med)"/>	(file is auto-saved, changes are permanent)	Help
Template Name	<input type="text" value="Cough-GenMed"/>	Differential Dx List	
Template Symptom	<input type="text" value="cough"/>	<input type="text" value="viral URI#465.9"/>	
Template Specialty	<input type="text" value="General Medicine"/>	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Del"/> <input type="button" value="Move"/>	
Template Author	<input type="text" value="TGMD"/>		

Section Key	Menu 1	Menu 2	Menu 2 Action
<input type="text" value="Subj"/> <input type="text" value="careplan#465.9"/>	<input type="text" value="Quality (Severity Duration) Timing of Onset Context at Onset Aggravating Factors Relieving Factors (Assoc. Signs/Sx Assoc Sx -Sputum) Prior Hx"/>	<input type="text" value="constant intermittent high pitched barking-like noisy irritating hacking painful other"/>	<input type="text" value="Substitution"/> <input type="text" value="Substitution Text constant"/>
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Del"/> <input type="button" value="Move"/>	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Del"/> <input type="button" value="Move"/>	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Del"/> <input type="button" value="Move"/>	<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Del"/> <input type="button" value="Move"/>

Glue language

The template tool allows the user to modify several lists. The first list holds a differential diagnosis list and an optional associated ICD9 code, separated by the '#' character.

The Section Key list represents the specific key words used to identify a note section. See the appendix for the list of supported section key words. A template will be active in all note sections where a matching section key is found. Most templates include at least the Subj keyword thus overriding the default menu provided in the Subjective and HPI note sections.

For each Section Key item the user can create a menu tree that consists of menu1, menu2 and optionally menu3. These menu items are modified via the button bars located below their list.

All Menu 1 list items are unique in that they contain a text field shown under the "Glue language" textbox. This is a sentence fragment that is used to "glue" together the one to many menu2 and menu3 selections. The "xxx" text is replaced by the menu 2 and menu3 selections which are joined by commas/"and" characters. The "sss" string is replaced by the template symptom as listed in the textbox at the top of the form. The "sss" is optional but every menu1 item must have an "xxx" or the resulting sentence will be omitted.

Template Filename: (file is auto-saved, changes are permanent) [Help](#)
 Template Name:
 Template Symptom:
 Template Specialty:
 Template Author:

Differential Dx List

viral URI#465.9

Add Edit Del Move

Section Key

Subj
careplan#465.9

Add Edit Del Move

Menu 1

Quality
(Severity
Duration)
Timing of Onset
Context at Onset
Aggravating Factors
Relieving Factors
(Assoc. Signs/Sx
Assoc Sx -Sputum)
Prior Hx

Add Edit Del Move

Menu 2

constant
intermittent
high pitched
barking-like
noisy
irritating
hacking
painful
other

Add Edit Del Move

Menu 2 Action

Substitution

⋮

Edit Form

Menu 2 action

Substitution
Third Menu
Popup Keyboard (Replace)
Popup Keyboard (Prefix)
Popup Number pad (Replace)
Popup Number pad (Prefix)
Popup Date Picker (Replace)
Popup Date Picker (Prefix)

Save Cancel

Glue language

The quality of the sss is described as xxx.

Menu 2 is also unique in that it can trigger the display of a third menu or an input "widget" such as a popup keyboard, keypad or date picker. The selected widget data can then be used to prefix the menu 2 selection or replace the menu 2 selection in the resulting sentence fragment created. This menu 2 action is adjusted via the popup menu displayed per the above screen shot. The menu 2 action can be changed and the related popup title or menu 3 list can be adjusted via the provided button bar.

List Button Bar

Template Filename: Cough (Gen Med) (file is auto-saved, changes are permanent) [Help](#)

Template Name: Cough-GenMed

Template Symptom: cough

Template Specialty: General Medicine

Differential Dx List

viral URI#465.9

Add Edit Del Move

Menu 2

stant

intermittent

high pitched

barking-like

noisy

irritating

hacking

painful

other

Add Edit Del Move

Menu 2 Action

Popup Keyboard (Replace) ...

Popup Title

quality

Add Edit Del Move

Edit Form

Save Cancel

Severely

Duration)

Timing of Onset

Context at Onset

Aggravating Factors

Relieving Factors

(Assoc. Signs/Sx

Assoc Sx -Sputum)

Prior Hx

Add Edit Del Move

Glue language

The quality of the sss is described as xxx.

The list button bar is used to Add, Edit, Delete or Move a list item, and it's downstream menu items. Add will popup a dialog as displayed to allow the user to add a new list/menu item. Edit will popup the same dialog with the selected list/menu item ready for modification. Del will delete the selected menu item and it's downstream list/menu items. This cannot be "Undone" so use this feature carefully. To move the selected list/menu item and it's downstream lists/menus, first select a list item, then click the move button, next select the position/item that is desired in the same list. The item will then be moved to the new location in the list, the other items will be pushed down one line as a result.

Appendix - Supported section keywords

The below list of section keywords are supported by the system. Each keyword, if used within the "name" tag within a note type file will have a default menu that is presented if a template does not create an override menu. To create an override menu use the template editor and specify the keyword as the section name, within the section list. Note, be sure that the note type file or files, that your template is designed to support uses the section names in the "name" tag within the section definition.

If the note type file does not include a section description that contains a "name" tag that matches the section keyword, the template will not be active in that note type. Ex: A SOAP note type file contains several section descriptions including the Subj and Obj sections (as they include the <name>Subj</name> and <name>Obj</name> tags within their sections descriptions) thus a template that only overrides the Subj section will be active within the Subjective section of the SOAP note, and the Objective section of the note will refer to the system default Obj menu. If the same template also overrides the Chest section by adding the Chest keyword to the section list, the menu will not be active in the SOAP note, as the SOAP note has no Chest section. If however the user creates a new H & P note then and selects their template, the Chest section will be active as the H & P note does have a Chest section.

Abd
Addendum
Assmt
Careplan
Chest
Chest/Breast
Comments
Constitution
CV
D/C Instruct.
D/C Condition
ENMT
Exam Normal
Ext
Eyes
FH
Focused Concern
General
GI
GU
Head/Face
HEENT
Hosp. Course
HPI
Impression
Indication
Lymphatic
MedHx
Musc/Skel
Neck

Neuro
Nodes
Obj
Other_Exam
Performed By
Plan
PMH
PObH
GeneralProcedure
PSH
Psych
Recommend
Refer To
Referral Specialty
Referral Status
ReferringMD
Respiratory
ROS
SH
Skin
Studies
Subj
Tests
Procedure
PhoneDisc