



STC | iQ 1.16.8.1

QUICK REFERENCE GUIDE

for State Users



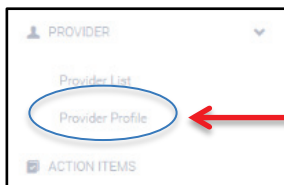
iQ Quick Reference Guide – Landing Page – State

The **State Landing Page** or home screen provides a high-level summary of the status of all interface projects and provides a starting point for quick and easy navigation to the iQ tools.

1. Sign into the STC single sign-on page.
2. **Healthcare Provider Count by Onboarding Stages** displays the number of providers who have been in each stage during the past 30 days.
3. **Records at Each Milestone** displays the total number of records that have passed through each milestone during the past 30 days.
4. **Onboarding Healthcare Provider Counts by HL7 Version** displays the total number of interfaces that are sending in each HL7 message format
5. **Onboarding Healthcare Provider Counts by MU Stages** displays the count of organizations that are in each stage of meaningful use during the past 30 days.
6. **Top Search Bar** is a global search function, which allows user to search for a specific organization or provider by name, VFC PIN, or IIS ID.

Once the desired organization/facility is entered, all reports are filtered by this selection until it is changed or removed.

7. Select **Provider** on the left-hand menu for a drop-down to select **Provider Profile**.



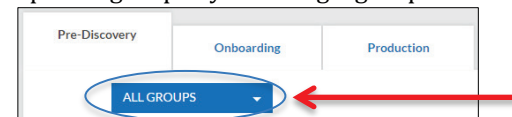
If an organization/facility is not entered into the global search bar, no data is displayed.

Once an organization/facility has been entered, user will be able to view the following tabs:

- **Profile:** Provider and contact information, user can assign a provider to specific group for onboarding
- **Documents:** any documents that have been uploaded for specified interface project will appear here, user can also upload documents for interface here
- **Interface Form:** contains a tab for some or all of the following information that is collected from the organization/provider:
 - Provider Info
 - EHR Info
 - EHR Docs
 - IIS Participation
 - MU & Status
 - Bi-Direction

Note: If a provider does not have an interface form associated to it, there will be a link to the interface form at the bottom of the **Profile** tab and no Interface Form tab will appear.

8. Select **Provider List**, located above **Provider Profile** in the left-hand menu, to view each of the **Groups**, including a list of providers that are currently in each group. User can search for providers that have been assigned to specific groups by selecting a group from the drop-down list.



Note: From the **Provider List** page, the user can re-assign stages by selecting the drop-down menu to the right of each provider's name and information.

9. Select **Action Items** from the left- hand menu to view the errors/warnings generated by data submission for the selected organization/provider. Select the desired filters to view an actionable list of errors and/or warnings, including specific information needed to identify the records that caused them.
10. Select **DQA** from the menu to use the data quality assessment tool. This tool allows the user to analyze the overall success rate of the messages, as well as the quality of individual data elements.
11. Select **Data Summary** to see an overview of what has happened to patient records at each milestone in the process from the EHR to the IIS. This data summary will include information about patient records as well as vaccination records, plus a highlight of the top 5 record errors and warnings, which link to the action items list.
12. Select **HL7 Transaction Log** to display the transaction details of an HL7 message as it moves through PHC-Hub to the IIS. This can be helpful when investigating or troubleshooting issues. The HL7 Transaction Log viewer opens in a new browser tab or window.
13. Select **Trends** on the menu to view the following:
 - **Data Quality** displays general statistics on the data quality of organizations/facilities in order to quickly evaluate the progression of data quality across the state and per provider.
 - **HL7 Location Quality** displays general statistics on the data quality of specific HL7 message locations, allowing for quick identification of which needs attention across all providers and for specific organizations/facilities.
 - **Data Volume** displays general statistics on the number of HL7 messages submitted monthly, and the organizations/facilities with the lowest and highest number of HL7 message submissions.
 - **Organization Status** displays statistics on the general status of organizations/facilities in data exchange with the IIS, allowing the state to monitor the number of organizations/facilities that are in different stages for reporting purposes.



14. To view the **Onboarding Panel** for the provider that is selected in the global search, select the **Onboarding** icon on the top right of the page.



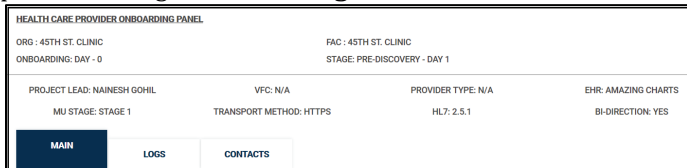
15. The **HealthCare Provider Onboarding Panel** displays all information that is pertinent to the interface project itself, including information about the organization, what stage the project is in, contacts associated with the project, and any notes or tasks attached to the project.
16. Select **Admin** on the menu to configure the settings for the iQ application. Settings are configurable for the following:
 - **DQA** – assign the state expectation rates and recommendations for fixing errors and warnings.
 - **Alerts** – configure settings to control when and how users are notified about alerts.
 - **Onboarding** – state users can select the onboarding stages, activate/deactivate waitlists and rankings, create organization groups and create standard task subjects.
 - **Reports Logo** – upload the state logo to brand iQ to show providers that it is an official state application.
 - **Interface Form** – standard interface form templates that can capture information needed at the beginning of onboarding so that an organization/facility’s readiness to onboard can be evaluated.
 - **Global Contacts** – state users have the ability to create and store a contacts list in the iQ application.

iQ Quick Reference Guide – Onboarding Panel – State

The **Health Care Provider Onboarding Panel** provides a space to complete common tasks to onboard a provider. The panel enables you to see pertinent information all in one location.

1. Sign into the STC single sign-on page.
2. The Health Care Provider Onboarding Panel can be accessed the following ways.
 - From the Search Bar > Search and select a provider > Click on the Onboarding icon  (far right, upper corner of the screen)
 - From the **Provider List** > Click on the Onboarding icon  (to the immediate left of the provider's name)

3. The top section of the **Onboarding Panel** displays pertinent information about the provider along with **Main, Logs, and Contact** tabs.







HEALTH CARE PROVIDER ONBOARDING PANEL

ORG : 45TH ST. CLINIC FAC: 45TH ST. CLINIC
 ONBOARDING: DAY - 0 STAGE: PRE-DISCOVERY - DAY 1

PROJECT LEAD: NAINESH GOHIL VFC: N/A PROVIDER TYPE: N/A EHR: AMAZING CHARTS
 MU STAGE: STAGE 1 TRANSPORT METHOD: HTTPS HL7: 2.5.1 BI-DIRECTION: YES

MAIN LOGS CONTACTS

4. **Main**
 - Displays **Stage and Rank**
 - Access to the quick links **Profile, Interface Form, and Documents.**
 - **Tasks** can be added by clicking on the **Add** icon  and the **Add Task** screen appears. Enter information and click **Submit.**
 - To edit a task, click in the text field and change the text as needed. To add additional lines in the text, press Shift+Enter on the keyboard at the location where you want to add the additional line(s). When finished editing the text, click anywhere outside of the text area; the information is automatically saved.
 - The task can be emailed to anyone on the contacts list by clicking on the email icon or deleted by clicking on the Delete icon .
 - The task can be marked **Completed** by checking the box to the left of the task.


- To search for a specific task in the list, enter a few characters of the search term in the **Search** field. The list of tasks narrows based on the search criteria.
- **Notes** can be added by clicking on the **NOTES** tab, and then the **Add** icon . The **Add Note** screen appears. Enter information and click **Submit.**
- The notes are added based on the onboarding stage. If necessary, the stage can be changed from the stage drop-down list underneath the Main tab header. 100 Notes can be added per phase for each provider.
- To edit a note, click in the text and change it. When finished editing the text, click anywhere outside of the text area; the information is automatically saved.
- To delete a note, click the Delete icon  on the top right side of the note.

5. **Logs** records the change details each time a provider's information is altered (i.e., a document was uploaded, the waitlist rank or stage was changed, etc.). To sort the columns, click the column header.

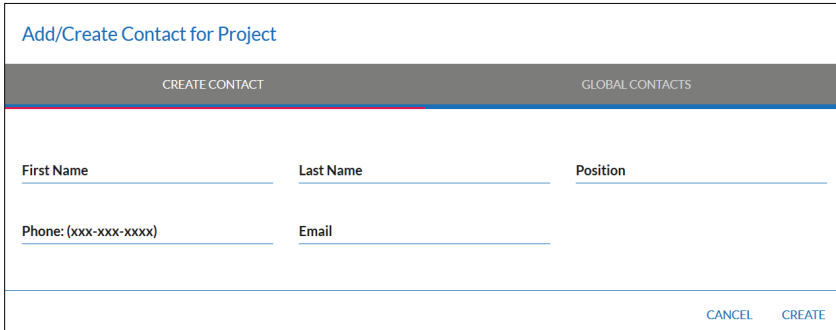


TIME	ACTION	STAGE	USER
06/19/2021 07:55	Edited project stage	pre-discovery	nainesh_regalant
08/19/2021 07:27	Uploaded file 'text.txt'	discovery	Pradeep

6. **Contacts**
 - The Contacts tab is where the State user can create and maintain a list of contacts related to the onboarding process of the specific provider.

- To add a new contact, click the Add icon . The Add/Create Contact for Project window pops-up. Click on the Create Contact tab, then enter the person's information (all fields are optional) and click **Create**.

Note: Contacts can also be added from Global Contacts by selecting the **GLOBAL CONTACTS** tab then checking the checkbox to the left of each contact to be added. Finally, click **ADD** at the lower, right-hand corner of the panel.



[Add/Create Contact for Project](#)

CREATE CONTACT GLOBAL CONTACTS

First Name Last Name Position

Phone: (xxx-xxx-xxxx) Email

CANCEL CREATE

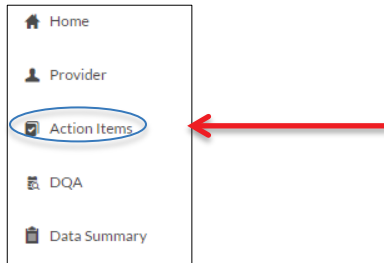


iQ Quick Reference Guide – Action Item List – State

The **Action Items List** allows the state user to review the action items of any interface that is in the pre-production or production phase, providing insight into how well providers are paying attention to their data quality. This gives the state user a starting point for a conversation with the provider regarding how to make adjustments and increase data quality.

1. Sign into the STC single sign-on page.
2. Enter the name of the facility or organization the user would like to view in the search bar. (provider name, VFC PIN or IIS ID can be entered)

3. Select **Action Items** on left hand menu.



4. Select radio buttons to **Filter** messages by Error, Warning, or All.

5. Toggle the slider to select action items that are **Due** or ones that have been **Fixed**.
6. Enter the start and end date and time and click the Search button.

7. Once submitted, the following information is displayed:

- **MRN** – patient medical record number
- **Patient** – patient name
- **HL7 field** – location of error/warning in message
- **Issue** – a description of the error/warning
- **Type** – identify the issue as error/warning
- **Recommendation** – action needed to fix to error/warning
- **Date/Time** – the error/warning triggered
- **Fixed** – checkbox that should be checked once the issue has been fixed

MRN	Patient	HL7 Field	Issue	Type	Recommendation	Date/Time	Fixed
12222333	Jason Todd	Patient Last Name	Missing	Error	Ensure Last Name is Entered for Patient	03/24/2016: 1:21PM	<input type="checkbox"/>
3267889	Rachel Sanders	Patient Last Name	Missing	Error	Ensure Last Name is Entered for Patient	01/17/2016: 5:45PM	<input checked="" type="checkbox"/>
		Lot Number	Wrong Lot Number	Warning	Lot Number Not Entered Correctly	01/17/2016: 5:45PM	<input type="checkbox"/>
9827454	John Doe	Facility Name	Missing	Warning	Ensure Facility Name is Entered for Patient	01/02/2016: 12:20PM	<input checked="" type="checkbox"/>
7896388	Kara Michaels	Patient DOB	Future Date	Error	Ensure DOB is Entered Correctly	12/18/2015: 3:47PM	<input type="checkbox"/>
77890367	Sally Smith	Lot Number	Wrong Lot Number	Warning	Lot Number Not Entered Correctly	12/12/2015: 7:15AM	<input type="checkbox"/>
		Race Code	Missing	Warning	Ensure Race Code is Selected for Patient	12/12/2015: 7:15AM	<input checked="" type="checkbox"/>
1448988	Martin Jones	Race Code	Missing	Warning	Ensure Race Code is Selected for Patient	10/01/2015: 5:34PM	<input type="checkbox"/>

8. Upon correcting an issue, check the box to indicate that it has been resolved and then click **Submit**. After an action item is marked as fixed, it is added to the Fixed list and can be located by toggling the Due/Fixed slider to Fixed (and entering the correct date range).



iQ Quick Reference Guide – Data Quality Assessment (DQA) – State

The **DQA** tracks data quality of each HL7 data element so an evaluation of the data submitted can be completed. The DQA assists in ongoing monitoring and has an action item list that focuses on what needs to be done to maintain or improve data quality.

1. Sign into the STC single sign-on page.
2. Enter the name of the facility or organization the user would like to view in the search bar. (provider name, VFC PIN or IIS ID can be entered)

3. Select **DQA** from the navigation menu on the left.

4. Select filters to view data, you can **Filter by:**
 - Year
 - Time Frequency
 - Quarterly
 - Monthly
 - 10 Day Interval
 - Import Profile
 - EHR Vendor
 - HL7 Message Location
 - Segment
 - Fields
 - Components
 - All Ages or Under 19

5. The DQA is divided into **four sections:**

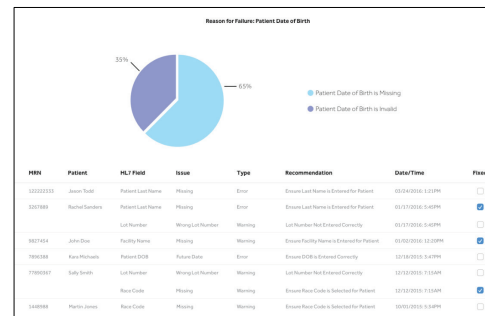
- Patient Information
- Patient Next of Kin Information
 - Patient Vaccination Information
 - Patient Contraindication/Example/History Information

6. Select the expansion icon and an assessment of each HL7 data element is listed.

HL7 Data Element	HL7 Code	Success Rate	State Expectation	Score	Errors	Warnings
Patient Information						
PATIENT PID (is eligible for VFC, but no guardian was submitted)	PID	500(100%)	100%	PASS	0(0%)	0(0%)
PATIENT DATE OF BIRTH	PID - 7	450(90%)	100%	FAIL	25(5%)	5(1%)
PATIENT ID	PID - 3.1	500(100%)	100%	PASS	0(0%)	0(0%)

Note: The user can Print the resulting list and Export the list to a file.

7. For each data element, if there were one or more errors or warnings, the number and percentage become links to the Reason for Failure graph for that item. Click the link to open the Reason for Failure graph and view the details. The Reason for Failure graph shows a pie chart with each type of error or warning displayed as a different color and the detailed information displayed below the graph. Users can also mark items that have been fixed.





iQ Quick Reference Guide – Data Summary - State

The **Data Summary** provides a high level, quick look at patient records as they are sent through the EHR system. The data presented closes the knowledge gap regarding how records submitted through the interface affect the IIS.

1. Sign into the STC single sign-on page.
2. Select **Data Summary** from the navigation menu on the left.
3. You can **Filter by**:
 - Year
 - Time Frequency (appears after a year is selected)
 - Quarter
 - Month
 - 10 Day Interval (only pre-defined intervals are available)
 - EHR Vendor
 - Import Profile ID
 - Connectivity User

Filter by:

4. The following charts display:
 - **HL7 MESSAGE MILESTONE TRACKER** – Displays the number of patient records accepted by the PHC-Hub application, the number not accepted by the IIS (rejected by PHC-Hub), and the number currently being processed.
 - **PATIENT RECORDS ACCEPTED BY IIS** – Of the number of patient records accepted by the IIS, this graph displays the number of patient records with Ambiguous IDs and the number of records needing Manual Deduplication.
 - **PATIENT RECORDS IN PROCESSING** – Of the number of patient records currently being processed, this graph displays the number of patient records in Ambiguous ID and the number in Manual Deduplication.

- **VACCINATION RECORDS RECEIVED BY IIS** – Displays the number of unique vaccination records and the number of updates to vaccination records received and processed by the PHC-Hub application.
- **VACCINATION RECORDS ACCEPTED BY THE IIS** – Of the number of vaccination records accepted by the IIS, this graph displays the number of Administered and Historical vaccinations.
- **RECORD ERRORS RECEIVED BY PHC-HUB** – Of the records with errors received by PHC-Hub, this graph displays the number of vaccination level errors and the number of patient level errors.
- **TOP 5 RECORD ERRORS** – Displays the five most common record errors received.
- **TOP 5 RECORD WARNINGS** – Displays the five most common record warnings received.



iQ Quick Reference Guide – Trends Reports – State

Information within **Trends** provides the overall state quality success rate, a list of high/low performing organizations and vendors, least/highest data elements that error/warn by organization and EHR, and statistics on volume of HL7 messages submitted per provider across time so that users can access overall/aggregated IIS quality for reporting, bench marking, process, and performance improvement strategies. Project progression can be monitored by viewing onboarding and Meaningful Use stages.

1. Sign into the STC single sign-on page.

2. Select **Trends** from the navigation menu on the left. Then select **Data Quality**. You can **Filter by**:

- Year
- Time Frequency (appears after Year is selected, for some graphs)
 - Quarterly
 - Monthly
 - 10 Day Interval

3. **Data Quality**

- a. **Monthly Success Rate** displays the overall state quality (success rate) across time. It is calculated by $[\text{Count}(\text{successful HL7 message (only Milestone 4) transactions that month or day} / \text{Count}(\text{total HL7 message transactions received that month or day}) \#100]$. The user can click on bar to see **Daily Success Rate**.
- b. **Organizations with the lowest percentage of message with error** display the organizations with the lowest percentage of messages with errors.
- c. **Organizations with the highest percentage of messages with error** displays the organizations with the highest percentage of messages with errors.
- d. **EHR vendors with lowest percentage of messages with error** displays the EHR vendors with the 5 lowest percentage of messages with errors.
- e. **EHR vendors with highest percentage of messages with error** displays the EHR vendors with the 5 highest percentage of messages with errors.
Note: Toggle between graph and table view, in some graphs to view a drill down of the top or bottom organizations' performance details.

Performance is calculated by $[\text{Percent (Error/Warning) for selected time range} - \text{Percent (Error/Warning) for previous same time range}]$. Green up arrow is for positive value or red down arrow is for negative value.

SR#	Organization Name	Error%	Error Count	Warning %	Warning Count	HL7 Message Count	Performance
1	Organization 1	7	8	0	0	121	5% ↑
2	Organization 2	9	12	0	0	136	10% ↑
3	Organization 3	12	29	0	0	242	7% ↓
4	Organization 4	17	26	0	0	157	18% ↓
5	Organization 5	18	63	0	0	344	11% ↑
6	Organization 6	20	65	0	0	323	24% ↓
7	Organization 7	24	19	0	0	78	2% ↑
8	Organization 8	25	24	0	0	97	4% ↑

4. Select **HL7 Location Quality** from the navigation menu on the left below Trends. You can **Filter by**:

- Year
- Time Frequency (appears after Year is selected, for some graphs)
 - Quarter
 - Month
 - 10 Day Interval
- HL7 Message Location
 - Segment
 - Fields
 - Component
- EHR
- HL7 Data Element
 - a. **Top 10 HL7 Data Elements** graph displays the HL7 data elements, as defined by the filter, that have the most errors and warnings associated with them.
 - b. **Bottom 10 HL7 Data Elements** graph displays the HL7 data elements, as defined by the filter, that have the most errors and warnings associated with them.

Note: Toggle between Graph View and Table View to see the data in the different formats.

Data Elements	Error(%)	(#)with Errors	Warnings(%)	(#)with Warnings	Total(#)	Performance
Segment 1	18	63	0	0	350	5% ⬆️
Field 1	7	8	0	0	121	11% ⬆️
Field 2	33	2	0	0	6	2% ⬆️
Component 1	20	1	0	0	5	6% ⬆️
Component 2	33	2	0	0	6	21% ⬆️
Field 3	12	29	0	0	242	1% ⬆️

Note: Performance is calculated by [Percent(error/warning) for previous month - Percent(error/warning) for current month].

- c. **EHR Data Element Comparison** displays the HL7 data elements with the highest number of errors/warnings for the primary EHR vendor and allows the user to compare this information with up to five additional EHR vendors.
- d. **HL7 Data Element Success Rate** displays overall success rate for HL7 data element.

Note: Rate is calculated by [Count (successful HL7 segments, fields, and components that month /Count(total HL7 message fields/segments received that month)*100] for up to 5 data elements.

5. Data Volume

- a. **Monthly Message Tracker** displays the HL7 message volume by month. The user can click on a bar to see **Daily Message Tracker**.
- b. **Organizations with Lowest Number of HL7 Message Submissions** displays the bottom 5 organizations with the lowest number of HL7 message submissions.
- c. **Organizations with Highest Number of HL7 Message Submissions** displays the top 5 organizations with the highest number of HL7 message submissions.
- d. **Milestone Tracker** displays the number of HL7 messages at each milestone to highlight bottlenecks and determine the need for additional investigation and troubleshooting.

Note: Toggle between Graph View and Table View to see the data in the different formats.


6. Organization Status

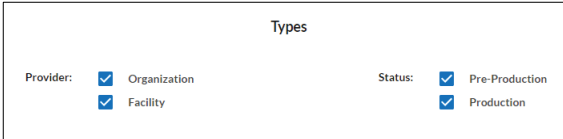
- a. **Healthcare Provider County by Onboarding Stage** displays the number of organizations/facilities at several onboarding stages, such as discovery, pre-discovery, testing, waitlisted not ready and waitlisted ready.
- b. **Healthcare Provider County by Meaningful Use Stage** displays the number of organizations/facilities at specific meaningful use stages: Stage 1, Stage 2, and Stage 3.
- c. **Healthcare Provider County by HL7 Version** displays the number of organizations/facilities that use each of the two HL7 version formats, version 2.3.1 and version 2.5.1.



iQ Quick Reference Guide – Admin Menu – State

Settings for the iQ application are configured in the **Admin** menu. The available links and pages may depend on the user’s access level and permissions.

1. Sign into the STC single sign-on page.
2. Select **Admin** from the navigation menu on the left
3. **DQA**
 - a. To add or edit a state expectation rate and recommendation, select the expansion icon  at the end of the desired DQA category. Select the edit icon to enter the expectation rate and recommendation.
 - b. For each **HL7 Data Element**:
 - **Recommendations** are entered for each state to communicate suggestions on how to fix the errors and warnings.
 - **State Expectation Rate** is the percentage rate against which the organization/facility’s data is evaluated.
4. **Alerts**
 - a. **Schedule**: each alert can be scheduled to go out **Daily**, **Weekly**, or **Monthly**.
 - b. **Types**: Select the appropriate **Provider** and **Status** type.



Types

Provider: Organization Facility

Status: Pre-Production Production
 - c. **Thresholds**: Enter the **Patient maximum error %** – maximum percentage rate of errors to use as the measure for sending alert notifications. For example if 5% is entered, the alert is sent whenever 5% or more patient records contain errors. Enter the **Patient maximum warning %** - maximum percentage rate of warnings to use as the measure for sending alert notifications. For example if 35% is entered, the alert is sent whenever 35% or more patient records contain warnings.

5. **Onboarding**
 - a. **Select Onboarding Stages**
 - The four required stages are **Pre-Discovery**, **Waitlisted Ready**, **Waitlisted Not Ready**, and **Production**.
 - One or more of the optional stages can be selected. To add a stage, select it in the list. A checkmark is placed in the checkbox and the checkbox turns blue. To remove a stage from the process, select it again. The checkmark is removed from the box.
 - b. **Activate/Deactivate Waitlist and Ranking**
 - Allows user to identify the organization/facility as part of the waitlist ranking functionality.
 - Allows user to assign a score to an organization/facility based on their interface profile answers and assigns a rank according to that score.
 - To use this functionality, move the slider to the **On** position. To turnoff, move the slider to the **Off** position.
 - c. **Create Organization Groups**
 - Organization groups can be created for easier tracking during the onboarding process, such as creating a group based on the EHR used by multiple organizations and facilities.
 - To add an organization group name, click the **Add a group** field and type the name of the group then click the plus icon.
 - d. **Standard Tasks**
 - **Standard Tasks** are tasks that are available on the Healthcare Provider Onboarding Panel onboarding panel. To add a standard task to the Task Subject drop-down list on the Healthcare Provider Onboarding Panel, select it. The checkbox turns blue when a task subject has been selected. To remove a standard task from the Task Subject drop-down list, select it again. The checkmark is removed from the checkbox. To edit the text of a standard task, click in the text and edit it. The changes are automatically saved.

- **State-Specific Task Subject** can also be added. To add a task click in the field labeled **Add a task subject**, type the name of the task, and then click the plus icon. To delete a task, click the **Delete (-)** icon.

e. **Email Settings**

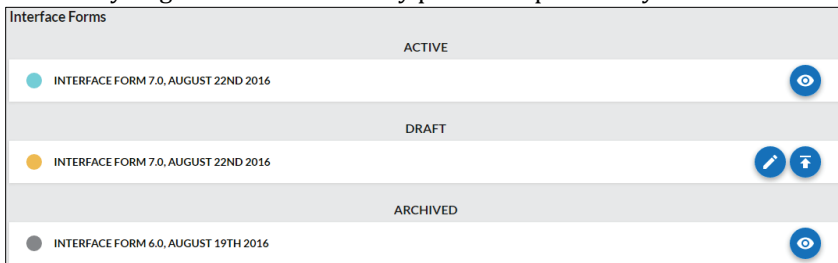
- When a State user assigns an interface form to a provider, an email is sent to that provider to let them know. That email is configured in the Email Settings section.
- To configure the email, enter the email subject in the SUBJECT field and enter the body of the message in the BODY field. Click Save Email Template when finished entering the email content.

Note: Don't forget to include the URL for the application login page and your contact information in the body of the message.

6. **Reports Logo** - To upload a logo on the Reports Logo page, either click the button labeled Click or Drag to Upload Files, or drag and drop the image file into the box on the page. Once the image appears in the box, click the Upload button. Once the file is uploaded, the logo displays below the box on the page.



7. **Interface Form**

- The interface forms can capture the information needed in onboarding so that an organization/facility's readiness to onboard can be evaluated.
- The interface forms are divided into three sections:
 - **Active** – interface form currently being used
 - **Draft** – interface forms currently being built
 - **Archived** – interface forms no longer in use, but are saved because they might have been used by providers previously.




- To create a new interface form, click the Create New button. A blank interface form opens with the separate sections listed as tabs:
 - Provider Info
 - EHR Info

- EHR Docs
- IIS Participation
- MU & Status
- Bi-Direction

- Since some of the information is required, only optional components are displayed on the tabs. Drag and Drop is used to place components onto the form.
- Drag and drop a question category from the left side of the tab section onto the Drop Questions Here area on the page, which changes color once the component is selected. Once the question category is moved to the form, it is removed from the list of question categories.
- If a question is required, select the **Required** option. If a question is to be viewed only by the State, select **State Only** option.
- Click the Save icon  to save as a draft, Click the Publish icon  to make the form Active and ready for use.

8. **Global Contacts**

- Providers have the ability to create and store a contacts list for use throughout the application.
- To add a new contact, click the round blue button. The **Create Contact** window appears. Enter the applicable information and click **CREATE**.
- To edit a contact, click on the edit icon  in the Edit/Delete column for that contact. On the Edit Contact window that pops up, edit the information as necessary. Click Update when finished.
- To delete a contact, locate the contact in the list, then click the Delete icon. The contact is deleted from the Global Contacts List page and can no longer be added to individual provider onboarding pages.
- To send an email to the contact, check the box next to the name and hit the Send Email button that appears once a contact is selected. The contact's e-mail address auto-populates in your default email application.