



Compatible with
STC |  NE



STC | iQ

Organization/ Facility User QRG

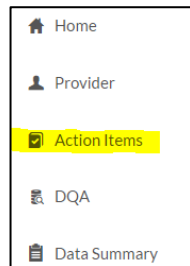
(v. April 2018)



Action Item List

The Action Item List displays actionable items, allowing the provider to create tasks to improve data quality. Included in the list are patient records containing HL7 data errors and warnings.

1. After logging on to the STC | iQ application, click the **Action Items** menu link.



2. On the Action Items List page, select whether to view messages by Error, Warning, or both (All).

3. Toggle the slider between Due and Fixed to view those Action Items.
4. To view action items due or fixed within a specific date/time range, click in the fields to enter the start/end dates and times.
5. When finished entering the search parameters, click **Search**.
6. The Action Items are displayed in the search results list. To narrow the search results, click in the Search Patient or MRN field and enter the first few characters of a patient name or MRN number.

The information displayed in the search results is as follows:

- **MRN** – Patient Medical Record Number
- **Patient** – Patient name
- **HL7 Field** – Location of error/warning in message
- **Issue** – Description of the error/warning
- **Type** – Identifies the issue as an error or a warning
- **Recommendation** – Action needed to fix the error/warning
- **Date/Time** – The date and time the error or warning was triggered
- **Fixed** – Select the checkbox once the issue has been fixed.

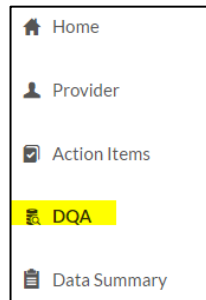
MRN	Patient	HL7 Field	Issue	Type	Recommendation	Date/Time	Fixed
11111111	Jane Smith	Obtain Last Name	Missing	Error	Obtain Last Name is Missing for Patient	05/01/2018 11:23AM	<input type="checkbox"/>
11111111	Robert Sanders	Patient Last Name	Missing	Error	Obtain Last Name is Missing for Patient	01/11/2018 10:45AM	<input checked="" type="checkbox"/>
11111111		Last Number	Wrong Last Number	Warning	Last Number Not Entered Correctly	01/11/2018 10:45AM	<input type="checkbox"/>
11111111	Jane Doe	Family Name	Missing	Warning	Obtain Family Name is Missing for Patient	01/10/2018 10:30AM	<input checked="" type="checkbox"/>
11111111	Karen Robinson	Obtain IDOB	Wrong Date	Error	Obtain IDOB is Entered Correctly	12/18/2018 10:45AM	<input type="checkbox"/>
11111111	Toby Smith	Last Number	Wrong Last Number	Warning	Last Number Not Entered Correctly	01/10/2018 11:15AM	<input type="checkbox"/>
11111111		Past Code	Missing	Warning	Obtain Past Code is Missing for Patient	01/10/2018 11:15AM	<input checked="" type="checkbox"/>
11111111	Marie Jones	Past Code	Missing	Warning	Obtain Past Code is Missing for Patient	01/10/2018 11:15AM	<input type="checkbox"/>

7. After correcting an issue, select the Fixed checkbox to mark it as resolved. Click **Submit** when finished correcting issues. 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 search parameters.

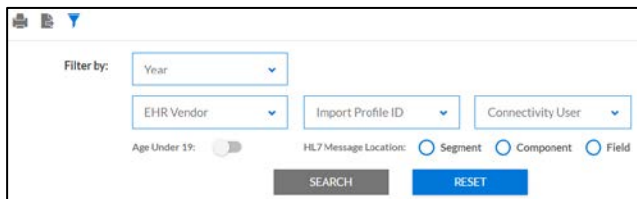
Data Quality Assessment (DQA) Tool - Provider

The DQA tool tracks data quality for each HL7 data element so that the submitted data can be evaluated. The DQA tool assists in ongoing monitoring and includes an Action Item List that provides recommendations for improving data quality.

1. After logging on to the STC | iQ application, click the **DQA** menu link.



2. On the Data Quality Assessment Tool page, select the search filters and click **Search**. As each option is selected from a drop-down list, additional drop-down lists may appear with additional options. Click **Reset** to clear the filters and start over.



The search filter options are as follows:

- Year
- Time Frequency
 - Quarterly
 - Monthly
 - 10-Day Interval
- Import Profile
- EHR Vendor
- Connectivity User
- All Ages or Under 19
 - HL7 Message Location
 - Segment
 - Component
 - Field

3. The DQA tool is divided into five sections:

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

Click the section header to expand the section. 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	456(92%)	100%	FAIL	1(2%)	1(2%)
PATIENT ID	PID-3.1	500(100%)	100%	PASS	0(0%)	0(0%)

4. Click the Print icon (🖨️) to print the list. Click the Export icon (📄) to export the list to a file.
5. For each data element, if there are one or more errors or warnings, the displayed number and percentage amount become links to the Reason for Failure graph for that item. Click a link to open the Reason for Failure graph and view the details. The graph shows a pie chart with each type of error or warning displayed as a different color, with the detailed information displayed below the graph. Users can mark items that have been fixed.



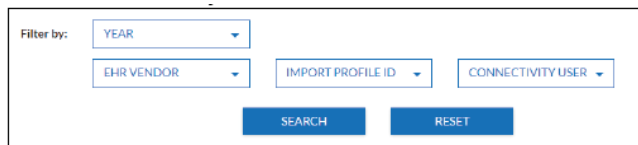
Data Summary - Provider

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

1. After logging on to the STC | iQ application, click the **Data Summary** menu link.
2. On the Patient Records Summary page that opens, enter the search criteria by using the filters.

The search filter options are as follows:

- Year
- Time Frequency
 - Quarterly
 - Monthly
 - 10-Day Interval
- EHR Vendor
- Import Profile ID
- Connectivity User



The screenshot shows a search filter interface with the following elements:

- A "Filter by:" label followed by a "YEAR" dropdown menu.
- An "EHR VENDOR" dropdown menu.
- An "IMPORT PROFILE ID" dropdown menu.
- A "CONNECTIVITY USER" dropdown menu.
- A blue "SEARCH" button.
- A blue "RESET" button.

3. Click **Search**. The following charts then 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 that have ambiguous IDs, as well as 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 records in Ambiguous ID and the number in Manual Deduplication
- **VACCINATION RECORDS RECEIVED BY THE 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 received by PHC-Hub that have errors, 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

Trend Reports - Provider

The Trend Reports provide a general summary of data quality for specific HL7 message locations, giving the provider the ability to quickly drill down to the data specifics of any graph. The provider can compare the success rates of up to five data elements. These graphs provide a better understanding of the data elements that are of greatest concern, and can aid in the implementation of a process improvement strategy for providers to increase data quality.

After logging on to the STC | iQ application, click the **Trends** category in the menu. The menu displays the links to the three available trend reports:

- Data Quality
- Data Element Quality
- Data Volume

Click the menu link to access the related trend report. Each of the reports is detailed below.

Data Quality

Click this menu link to access and run the Data Quality Progress trend report, which shows the **Monthly Success Rate** information.

The Monthly Success Rate displays the provider's overall quality (success rate) across time. It is calculated by $[\text{Count}(\text{successful HL7 message (only Milestone 4) transactions that month or day}) / \text{Count}(\text{total HL7 message transactions received that month or day}) * 100]$. Click on a bar to see the **Daily Success Rate** information.

Data Element Quality

Click this menu link to access and run the Data Element Quality trend report, which shows the **Top 10 HL7 Data Elements**, the **Bottom 10 HL7 Data Elements**, and the overall **HL7 Data Element Success Rate**.

Enter the search filter parameters and click **Search**. The available filters are:

- Year
- Time Frequency
 - Quarterly
 - Monthly
 - 10-Day Interval
- HL7 Message Location
 - Segment
 - Component
 - Field

The **Top 10 HL7 Data Elements** graph displays the HL7 data elements, as defined by the filter, that have the fewest errors and warnings associated with them.

The **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.

Data Elements	Error(%)	(#)with Errors	Warnings(%)	(#)with Warnings	Total(#)	Performance
Segment 1	18	65	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	10	28	0	0	242	2% ↓

NOTE: For some of the graphs, you can toggle between the Graph View and Table View to see the data in different formats. Also, performance is calculated by $[\text{Percent}(\text{error/warning}) \text{ for previous month} - \text{Percent}(\text{error/warning}) \text{ for current month}]$.

The **HL7 Data Element Success Rate** graph displays the overall success rate for HL7 data elements. The rate is calculated by $[\text{Count}(\text{successful HL7 segments, fields, and components that month}) / \text{Count}(\text{total HL7 message fields/segments received that month}) * 100]$ for up to 5 data elements.

Data Volume

Click this menu link to access and run the Data Volume Statistics trend report, which shows the **Monthly Message Tracker** and the **Milestone Tracker**.

The **Monthly Message Tracker** displays the HL7 message volume by month. Click on a bar to see the **Daily Message Tracker**.

The **Milestone Tracker** displays the number of HL7 messages at each milestone to highlight bottlenecks and determine the need for additional investigation and troubleshooting.