STC | iQ
Known Issues

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General Issues

Report Calculations Design

The following are known issues regarding the report calculations and design.

Current Design for Report Calculations

- Uses issue resolutions to count errors & warnings (the numerator for error and warning rates)

- Counts the number of times the HL7 code is present in the submitted HL7 messages (the denominator for all rates: success, error, and warning)

Design Workflow Limitations for Reports

1. PHC-Hub sends the data needed for the numerator and denominator for the necessary calculations (success, error, and warning rates).

2. There are inconsistencies in the process of how PHC-Hub is sending the data and how iQ is receiving that data. Think of it as a miscommunication between the two systems. PHC-Hub sends data and iQ is interpreting that data differently than the intention of the data being sent.

3. iQ is not considering all of the data that is being sent by PHC-Hub (mainly numerator counts), which affects what will be in the numerator and denominator for the calculations.

4. iQ does not calculate rates with the consideration that there are different "versions" of an HL7 data element. Let's take OBX-5 for example. For the denominator, iQ is not recognizing that OBX-5 may contain different types of values depending on what is populated in OBX-3. It also does not recognize that the denominator for an error rate for one "type" of OBX-5 should only contain that "type" of OBX-5. Instead, it is counting all types of OBX-5's to be in the denominator.

   a. So instead of: error in an OBX-5 that contains VFC Status / total OBX-5s that contain VFC Status.

   b. We're getting: error in an OBX-5 that contains VFC Status / total OBX-5s that contain VFC Status, vaccination funding source, VIS type & publication date, vaccine reaction, contraindication, etc.

5. In addition to point 4, PHC-Hub may be sending a list of more than one data element per error generated because a set of data elements contributed to the error. Taking OBX-5 again as an example, the value of this data element is dependent on OBX-3. The issue resolution looks at OBX-5, but PHC-Hub sends both OBX-3 and OBX-5 to iQ as the data elements that contributed to the

error. iQ will take the first data element listed that PHC-Hub sends with the error and counts the error against that first data element. In this example, iQ is counting errors for OBX-5 as errors for OBX-3; therefore there may be instances where OBX-5 shows 0% error rate. This is due to the error counting for OBX-3 instead.

6. For the numerator, PHC-Hub is sending any errors triggered for a component, field, or segment. Due to how some issue resolutions function, more than one error can be generated for one HL7 data element.

```
ERR||PID^^29||E||||patient death date is before vaccination date|
ERR||PID^^29||E||||patient death date is before patient date of birth|
```

When this happens, the numerator becomes 2, but the denominator remains as 1: Expected Error Rate: Over 100%.

What We Can Expect in the Data Output Based on Design Limitations

Over-reporting of Error Rates

If there is more than one issue resolution for a component, field, or segment, and those issue resolutions are triggered based on one component, field, or segment, then there may be 2 or more errors reported for one component, field, or segment. This would result in a possible over 100% error rate (i.e., 3 issues resolutions triggered for one HL7 location = 300% error rate). In this case, it is a many:1 ratio for **numerator** to **denominator**.

Underreporting of Error Rates

This would mainly apply to assumption #5 and #6. If more than one instance of a component, field, or segment is present in a message, only errors generated for the first instance will contribute to the numerator. The denominator will still contain the total number of instances of a component, field, or segment. (i.e., 3 OBX-5 are submitted in one message. One of them triggered an issue resolution. Error rate will be 1/3 = 33%). In this case it is a many:1 ratio for **denominator** to **numerator**.

Correct Error Rates

This would apply if there was an exact 1:1 ratio between number of errors generated from an issue resolution and HL7 location. Some HL7 data elements will comply with this.

No Error Rates

For any HL7 data elements with no issue resolutions, we can expect a 100% success rate and a 0% error and warning rate.

Issues Affecting Entire Application

The following are known general issues that affect all of the iQ application:

Production/Pre-Production toggle functionality does not work

State who use a single PHC-Hub environment for sending in Production/ Pre-Production data will be able to use this toggle but states who are using dual PHC-Hub environments will only be able to send in Production data.

iQ does not support facility-level security

State and Organization level filtering can only be completed at this time. Due to bugs with how the representative facility is being identified, facility level filtering will not be available in this release. This is scheduled to be fixed in the next release.

There is no time filter available

No time filter is required so the user will be able to query data by year only, which may result in some performance issues.

There is no Outstanding Action Items report on the landing page

iQ Landing page will not have 'Outstanding Action Items' Report. Ideally this report is supposed to show pending error and warning count and clicking on error/ warning bars of the graph would direct user to the action items report based on the selection

Data elements dependent on other data elements do not provide accurate calculations for error, warning and success rates

Data elements that are dependent on another data element (ex: the value of OBX-5 depends on the value of OBX-3) will not provide accurate calculations for error, warning, and success rates due to design flaws. Please refer to the general area of the release notes for a description of these design flaws.

"Null" displays instead of facility name

iQ is not correctly capturing the Representative Facility ID in order to know where the incoming data belongs, so we have opted to display "null" for the facility until this issue is resolved.

Performance indicator arrows are backwards

Due to a bug with how data performance is being calculated, the performance indicators in the table view will point downwards for increase in performance and will point upwards for decrease in performance

Performance indicator reads 0.0% instead of the number of message increase over the last period

Due to an implementation flaw, performance indicator for Organizations with most number of HL7 Message submissions will show 0% instead on actually returning the change in message submission count.

The submitted message is not counted when viewing the report after submitting a message that contains warnings

Occasionally, an HL7 message submitted with Warnings may not get picked up by iQ portal.

ImMTrax Only: There is a representative facility ID discrepancy

There is a discrepancy between when PHC-Hub is able to report the representative facility ID to iQ and when iQ can receive that information. Due to this discrepancy, this release of iQ will not be able to display data for the facilities that are part of one large interface.

An authentication error displays for reports after a user has been logged in to iQ for 20 minutes without displaying any activity such as running reports, clicking on features, etc.

The reports in iQ are being generated by a tool called Jaspersoft. This tool has a defined active period of 20 minutes. After 20 minutes, if the user has not remained active in iQ, Jaspersoft will log the user out from viewing the reports, but the user will still remain in iQ. This is a syncing issue between iQ and Jaspersoft. As long as the user remains active within iQ until they choose to logout of the application, this error will not display.

Landing Pages

The following are known issues regarding the landing pages:

The Milestone Tracker displays ORU and VXQ submitted messages as messages stuck in Issue Resolution

Due to a bug in implementation logic, Milestone Tracker in the Landing Page is including all message types instead of just VXU.

Reports

Action Item List

The following are known issues regarding the Action Items List:

User cannot see the list of completed/fixed items

When a user selects a patient record to be marked as fixed, that patient record does not appear in the completed list.

Marking an Action Item as Completed returns it back to the Due list

When a patient record is marked as fixed, it would normally be removed from the list as expected. Toggling the Completed list and then toggling back to the Due list displays the patient record that was marked as fixed. Basically, the patient record reappears in the Due list after toggling back and forth between Completed and Due. We recognize that this is a big usability issue as it affects the user's ability to know whether or not the already addressed a patient record if it keeps returning to the Due list even after being marked as fixed. This also affects Alert functionality.

Time for all Action Items appears as 12:00AM

The timestamp for the import date of the patient record in the Action Item list always displays 12:00AM.

The Action Item List has the incorrect number of Warnings for a record that has several Warnings

Warnings that are expected to be associated with a patient record may be missing.

DQA

The following are known issues regarding the Data Quality Assessment (DQA) tool:

The RXA count in the Patient Vaccination Information is incorrect in the DQA tool

Due to some logic inconsistencies between PHC-Hub and iQ, error rates for the RXA segment in the DQA are underreported. The numerator of the error rate contains error counts that are only considering vaccination RXA segments (expected functionality), while the denominator counts vaccination and contraindication RXA segments.

The previously selected criteria for DQA is reset when returning to DQA after navigating to a different report/page

Due to an implementation bug, users must re-select the filter criteria for the DQA report once they navigate back to the report from any other page in the application.

An error for RXA-5.1 is not counted when viewing the DQA after submitting a message with an error for RXA-5.1

Due to the design limitation as described in the general area for reports, the Issue Resolution for RXA-5.1 and RXA-5.4 only captures errors for RXA-5.1. Therefore, the DQA report does not show any errors for RXA-5.4 (0% error rate in the report). Also, iQ reports only capture one of the three issue resolutions errors (CVX, CPT and NDC) for RXA-5.1 and RXA-5.4. The denominator for the error rate is an aggregate of RXA-5.1 and 5.4, but the numerator only counts errors for RXA-5.1, causing an underestimate of an RXA-5.1 error rate.

An RXA-3 Error/Warning is displayed for Contraindication for DQA when an Error/Warning occurs for a Vaccination

RXA-3 issue resolution only captures errors for vaccination records, whereas the DQA report has it in the contraindication section. Therefore, errors for vaccination records appear in the contraindication section.

OBX-5 Successes, Errors and Warnings remain zero for Contraindication when the submitted HL7 message has OBX-5 for Vaccination and Contraindication

Due to the design limitations as described in the general area for reports, iQ cannot accommodate the different instances of OBX-5. For example, it cannot distinguish between an OBX-5 with "Funding Source" and an OBX-5 with "Contraindication." Even though a DQA report displays them on the user interface, the error and warning calculations provide results that are lower than expected values.

The Warning Rate percentage is not rounded up when a percentage is at .5%

Due to incorrect calculation logic, iQ reports round down the decimal values instead of rounding up when the decimal value is over .5.

A Milestone Message generates multiple Errors for a data element when multiple enabled issue resolutions are triggered for the same data element in one message

If an issue resolution for a data element generates more than one error for that data element, its error rate can potentially display over 100%, as it results in an error count of two or greater for a single instance of an incoming data element.

OBX-5 related Errors and Warnings provide the OBX-3.1 and OBX-5.1 values for HL7 Location in Milestone Messages instead of the field-level value of OBX-5

There is an erroneous assumption in the backend logic on how to calculate error percentages for OBX-5. This assumption only looks at OBX-3 for errors, rather than at OBX-5. This means that the numerator of the error percentage for OBX-5 will contain error counts for OBX-3, while the denominator will contain the number of occurrences

for OBX-5. Basically, the indicator being looked at in the numerator is not the same as the indicator being looked at in the denominator. It's like dividing apples over oranges to get the error rate for oranges.

JD CR 14b - Capture, process and validate Patient Birth Facility (PID-23) at Milestone 2

This is not a bug, but a lack in functionality. PHC-Hub currently does not have an issue resolution for PID-23 (Patient Birth Facility). The impact of this on the iQ reports is that there will be a 100% success rate and 0% error and warning rates displayed in the DQA for this HL7 data element.

JD CR 14b - Capture, process and validate Patient Ethnicity (PID-22) at Milestone 2

This is not a bug, but a lack in functionality. PHC-Hub currently does not have an issue resolution for PID-22 (Patient Ethnicity). The impact of this on the iQ reports is that there will be a 100% success rate and 0% error and warning rates displayed in the DQA for this HL7 data element.

JD CR 14b - Capture, process and validate Vaccination Amount (RXA-6) at Milestone 2

This is not a bug, but a lack in functionality. PHC-Hub currently does not have an issue resolution for RXA-6 (Vaccination Amount). The impact of this on the iQ reports is that there will be a 100% success rate and 0% error and warning rates displayed in the DQA for this HL7 data element.

The HL7 location filter in the DQA defines which data elements calculations display for, rather than defining which data elements display in the report

How the HL7 location selection checkbox will function for this release will be that it will display calculations only for the location selected; however, the entire DQA will still display. HL7 locations that are not selected will display 0% even if there is data present. The user will need to select the other HL7 locations in order to see data for those.

The Under 19 age filter does not function

The Under 19 age filter is not functional for this release.

The pie chart resulting from the drill-down in the DQA does not display data for reasons for error and warning

The pie chart that is displayed when the user clicks on the number of errors or warnings in the DQA does not show data split by each error or warning reason. Instead it shows the name of the data element.

Changes to the State Expectation Rate are not reflected in the DQA report

Changes to the State Expectation Rate for the DQA Report are not displaying even after the nightly refresh of data

On the DQA Admin page, an additional category titled "Unspecified" is present

An additional category titled "Unspecified" is displaying in the DQA Admin page. This additional category has bumped the list of data elements into categories that do not make sense. For example, configurations the user can perform to Patient Information can be found under the Next of Kin category and configurations the user can perform to Next of Kin data elements can be found under the Vaccination Information category. The Vaccination Information category is present, but does not have all data elements listed. For this release, the user will not be able to configure all of the Vaccination data elements for the DQA and Action Item list.

The new RXA-18 issue resolution is considering RXA-20

Due to an implementation flaw in PHC-Hub, the DQA will not show accurate calculations for the RXA-18 field. The "is missing" issue resolution type for RXA-18 is not considering the content of RXA-20, which defines whether or not RXA-18 should be populated. This may cause the error rate for RXA-18 to be overreported as it will be counting false errors where RXA-18 should not error if missing.

The DQA does not list VIS barcode as a CoreIIS data element

Since Publication Date and VIS Barcode have a common issue resolution in PHC-Hub, these two instances of OBX-5 are combined in DQA Report as one: the VIS publication date.

The denominator count is not incremented when an Error is received for a data element whose segment is missing

Due to the design limitation and how PHC-Hub issue resolutions work, iQ does not count data elements if their parent segment is missing, but errors may be generated for those data elements if their issue resolution is set to error for "is missing". Due to this, the DQA Report may generate higher than error and warning rates.

Filter for < 19 years is missing in the DQA for Provider view

In this release, Providers will not have an option to filter DQA Report by patients below 19 years of age.

On the DQA report, when the number of success messages is zero, the Success Rate displays as N/A

In the case of a 0% success rate, N/A displays instead of 0%.

The HL7_DQA_Ele_Rfrnc Dimension table is missing values that are in Issue Resolution for PHC-Hub

Due to a miscommunication between iQ and PHC-Hub, error counts for issue resolutions PID-11.6 (when Invalid), PID-25 (Birth Order and Birth Indicator are inconsistent), OBX-5 (errors for Effective Date/Expiration Date), OBX-14 (if before the Patient's Date of Birth) will return error and warning count as 0.

Data Summary

The following are known issues regarding the Data Summary report page:

Tooltip on Patient Records in Processing report are not present

Tooltips are not present in the graph that defines what Ambiguous ID and Manual Deduplication are

The graph for Patient Records Received by the IIS is mistitled

The graph for "Patient Records Received by IIS" is mistitled to display "Patient Records Received by PHC-Hub".

The Patient Records in Processing graph displays more than one count for Ambiguous ID when a message is flagged for Ambiguous ID and contains more than one Contraindication/Vaccination

Due to a flaw in implementation logic, Patient Records in Processing Report may show more than expected count for patient records for these stages.

Patient Records Received by PHC-Hub displays incorrect numbers

Due to an implementation bug, Patient Records Received by PHC-Hub will show all the types of messages instead of only showing VXU messages

Patient Records Submitted by PHC-Hub graph displays incorrect counts

Due to a flaw in implementation logic, Patient records submitted by PHC-Hub report will reproduce more than expected number of HL7 records.

Patient Records Accepted by IIS displays incorrect numbers for New Patient records

Due to a bug in implementation logic, this report will generate more than expected number of patient records for new patient records

Patient Records Accepted in IIS graph displays incorrect numbers for Updated Patient records

Due to a bug in implementation logic, this report will generate more than expected number of patient records for updated patient records.

Data Quality Dashboard

The following are known issues regarding the Data Quality dashboard page:

Ranking in the table view for organizations with the highest percentage of messages with errors is in reverse order

The user will see the list of organizations with highest percentage of messages with error sorted by organizations with the lowest percentage of error messages

The table view for EHR Vendors with the lowest percentage of messages with errors only displays 12 rows of data

When the user goes to view the table for EHR Vendors with lowest percentage of messages with errors, they will not be able to see the complete list of EHR Vendors and organizations/facilities that use them. Only the first 12 rows of that list will display.

The table view for EHR Vendors with the highest percentage of messages with errors only displays 12 rows of data

When the user goes to view the table for EHR Vendors with highest percentage of messages with errors, they will not be able to see the complete list of EHR Vendors and organizations/facilities that use them. Only the first 12 rows of that list will display.

Ranking in the table view for EHR vendors with the highest percentage of messages with errors is in reverse order

The user will see the list of EHR vendors with highest percentage of messages with error sorted by EHR vendors with the lowest percentage of error messages

Monthly Success Rate considers MS3 messages as Successes

The calculation for the monthly success rate is counting patient records that are queued in Ambiguous ID and Manual Deduplication as successes. This will cause an over-reporting of successes in this report. The expected data output should only consider patient records that are in Milestone 4: Saved in IIS.

HL7 Quality Dashboard

The following are known issues regarding the HL7 Quality Dashboard page:

The description used for the data elements in the Top 10 and Bottom 10 HL7 Data Elements reports do not match the values that are expected when comparing them to the data wireframes

The label for the x-axis in the Top 10 and Bottom 10 HL7 Data Elements graphs does not match the Data Element descriptions as listed in the DQA report. This may cause some confusion for the end user, since the labels for data elements are inconsistent between these two reports.

The tooltip for the Top 10 and Bottom 10 HL7 Data Elements does not contain the HL7 message location for the data element, making it difficult to determine which data element is on the graph

The Top 10 and Bottom 10 HL7 Data Elements reports will not have tool tips that display the HL7 code when the mouse is hovered over the bars.

The line graph reports do not emphasize data points if they overlap

In reports, overlapping of multiple data points may result in one of the data points blocking data points that have the same value. Similar scenario can occur if we have overlapping data points at corresponding locations across graph, which may result in overlapping trend lines. As a workaround, the user can de-select each data point by clicking on the legend that represents that data point below the graph. This will make it easier to see the data point the user is interested in and be able to click on it to view the drill down.

Tooltips not showing expected information on HL7 EHR Quality field comparison

Tooltips in EHR Comparison report will not show data element related information such as error count and performance.

HL7 Data Element Success Rate report displays every selected data element from the drop-down menu, irrespective of the HL7 location selected. (The filter for HL7 location is misplaced and not functional.)

The HL7 data element drop down for the HL7 Data Element Success Rate graph will list all HL7 data elements including ones that are not part of the DQA report. The user will see data elements that do not relate to immunization HL7 messages, such as Abnormal Flag and Billing Category. In addition, the HL7 location filter (segment, field, and component) is not functional and is misplaced in the order of filters for this graph.

The HL7 Data Element drop-down for the HL7 Location Quality Over Time graph contains an "Unspecified" value

The HL7 data element list from the drop down will show 'Unspecified' as one of the data elements. The "Unspecified" represents a code error that occurred when iQ was attempting to gather data for a data element. If that attempt failed, then it is classified as "unspecified".

The table view for the Top 10 and Bottom 10 HL7 Data Elements only displays the first 13 data elements in the HL7 Location Quality dashboard

The table view for Top/ Bottom 10 HL7 Data Elements Report will only show Top/ Bottom 13 data elements with most/ least error rates respectively rather than the entire list of data elements.

Data Volume Dashboard

The following are known issues regarding the Data Volume dashboard page:

The Milestone Tracker selection criteria contains drop-downs for Message Types and Sub-Message Types

Due to a bug in implementation logic, Milestone Tracker in Data Volume will count all the types of messages when it should only be counting VXU messages.

On Data Volume for the Provider view, the Sub-Message type only displays ORU messages when selecting Message type as "Updates"

Due to an error in functionality of the filters, message sub type drop down will only have an option to select ORU messages when Message Type is selected as 'Updates'. User will not be able to select VXU messages from the drop down. However, the user will be able to see VXU messages only if no message type filters are selected.

Not all of the message subtype options are listed in the message subtype filter on the Data Volume dashboard

Only options available for users to select will be ORU from updates and VXQs from queries message types.

The Monthly Message Tracker in Data Volume does not count all of the Message types submitted

Due to an implementation bug, Monthly Message Tracker in Data Volume Dashboard appears to exclude VXQ message types.

Organization Status Dashboard

The following is a known issue regarding the Organization Status dashboard page:

Onboarding stages do not appear in progressive order

On the graph for number of organizations in onboarding, the onboarding stages will appear in alphabetical order instead of their progressive order.

Transaction Log Viewer

The following are known issues regarding the HL7 Transaction Log viewer:

No differentiation exists between administered and historical vaccination records

Transaction Log Viewer will provide list of both administered and historical vaccination records without differentiating between them

ImMTrax "Problem" records have inaccurate statuses

imMTrax issue only: iQ and Transaction Log Viewer will not be able to report accurate status for imMTrax 'Problem' Records.

A transaction is considered PASS for Issue Resolution Validation, but does not generate any other Milestones

There have been instances where messages will pass issue resolution validation, but no further transactions have been recorded for these messages.

A Contraindication is provided as a blank lot number and generates a separate record when viewed

There is no differentiation between contraindication and vaccinations. If a contraindication is submitted in a patient record, that contraindication will generate as a separate patient record just like what is occurring with vaccinations. For example, if a patient record contains 4 vaccinations and one contraindication, 5 separate patient records containing each vaccination and the contraindication will be listed in the transaction log viewer.

Dates are not formatted correctly

Transaction Log Viewer is following a date format of DD-MM-YY rather than MM-DD-YY.

HL7 messages without a patient DOB generate a Milestone 1 and Milestone 2 FAIL message that does not contain CoreIISElements for Milestone 1

Occasionally a Milestone 1 failure message might generate a Milestone 2 fail message as well.

Records cannot be filtered by time within a date

The only time range available for filter purposes will be the date. User will not be able to filter records based on time period within the date.

Production and pre-production data are not differentiated

Transaction Log Viewer will not be able to distinguish Production data from Pre-Production Data and will show an aggregate data of both the environments in this release.

The ODS does not process any records if a Milestone 1 record without a Connection ID exists in the ODS.Milestone_Dump table

User will not be able to view an HL7 message in the Transaction Log Viewer which came into PHC-Hub without a connection ID.

When Issue Resolution Validation fails, the details are not displayed

Transaction Log Viewer will not be able to identify which data element and issue resolution caused the message to fail at Milestone 2.

Default date range is incorrect

Default date range for Transaction Log Viewer will be previous day-current day. User will be able to change date range at will.

Milestone 0 and Milestone 1 failures are not displayed

Transaction Log Viewer will not be able to record HL7 messages that failed at Milestone 0 in this release.

Data cannot be filtered based on facility

As of this release, Transaction Log Viewer will not be able to filter data based on Facilities. We are aware that this has been an issue since the April release of this application.

Record shows a Milestone 3 pass even if it fails Milestone 2

In some cases, Transaction Log Viewer might show a record as Milestone 3 pass even if it failed at Milestone 2.

Onboarding Module

Onboarding Administration

The following are known issues regarding the Onboarding administration page:

State-Specific Tasks section title is confusing

The title for this section is confusing. For this release, this section can only be used to add task headers. User will not have an option to add task description for State Specific Tasks under this section. User will need to add task description on the onboarding panel. See the user guide for more information on this.

Cannot create a distribution list from contacts

In this release, users will not have an option to create distribution lists for contacts. As a workaround, the user can select multiple contacts for e-mail purposes.

Provider List

The following is a known issue regarding the Provider List page:

Onboarding stage tabs are collapsed by default

By default, provider list section will have the onboarding stage tabs as closed which can be opened by clicking on them.

Onboarding Panel

The following are known issues regarding the Onboarding panel:

Header fields for each provider are not configurable

Header fields visible on the onboarding panel for each of the providers will not be dynamically configurable. They will be static fields providing general information about the provider getting onboarded. The information will be extracted by what is entered in the provider's interface form. Refer to the user guide for more details.

Tasks cannot be emailed to users on the contacts list

State Users will not have the option of e-mailing the tasks to providers.

Interface Form

The following is a known issue regarding the interface form:

Cannot export provider search results to CSV

In this release, the feature allowing the user to export information entered in a provider's interface form will not be present.