AN HQO INITIATIVE

ResidentsFirst
Advancing Quality in Ontario Long-Term Care Homes

HEALTH QUALITY ONTARIO
Quality Improvement Reporting & Analysis Platform
Residents First User Guide

Ontario
Health Quality Ontario

Contents

Common Acronyms used in QIRAP User Manual	
HQO	Health Quality Ontario
QIRAP	Quality Improvement Reporting & Analysis Platform
LTC	Long Term Care
PC	Primary Care
BP	bestPATH

Figure 1 - Common Acronyms

1. Introduction to QIRAP

The Quality Improvement Reporting and Analysis Platform (QIRAP) provides a single, integrated platform for reporting and analysis of quality improvement (QI) measures for Residents First, Advanced Access, Efficiency & Chronic Disease Management, and bestPATH initiatives. End users such as long-term care homes, primary care practices, hospitals and QI Coaches can enter data for measures through intuitive web pages, as well as use the reporting capability of the platform to view Run Charts for each measure. Administrators of the system are HQO representatives who have the ability to perform tasks such as: manage users and their roles, manage measures, and run numerous analysis reports.

2. User Access

2.1 Functionalities

The following table outlines the permissions that the data entry user and view only user has in the application:

User Access		
Functionality	**Data Entry**	**View Only**
Add data	X	
Edit data	X	
View data	X	X
Run reports	X	X

Figure 2 – User roles

3. QIRAP Interface at a Glance

3.1 Left Navigation Menu

The QIRAP user interface displays a fixed left navigation panel on the left-hand side of the page for easy access on each page of the application.

Please Note: depending on users' role and privileges, the left navigation menu may display different menu items.

3.1.1 Measures

Data Entry
The Data Entry interface is used by users to view or enter data points for measures.

View Report
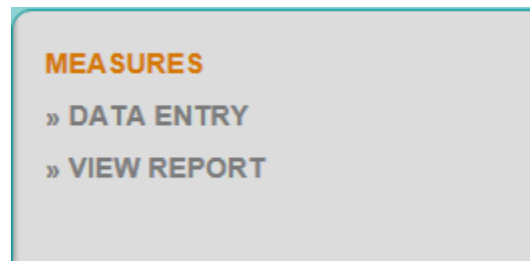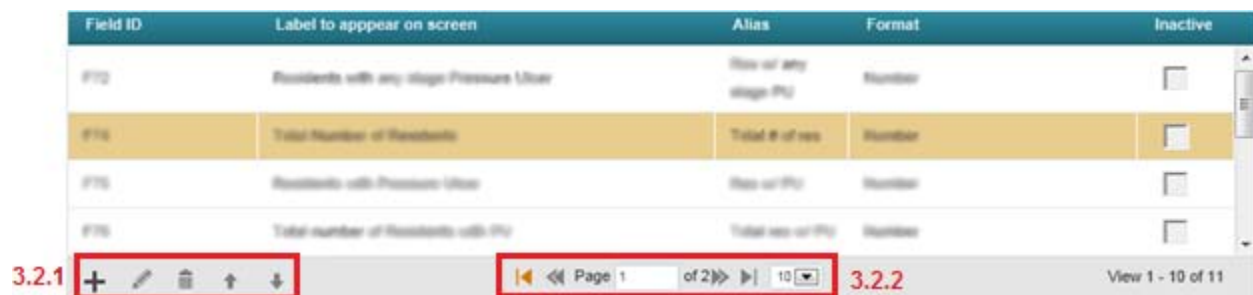The View Report interface is used by users to view Run Charts for measures.

Figure 3 - Left Navigation Menu – Measures

3.2 Table Grids

Table grids exist throughout the application allowing users to easily view data and perform tasks.

Figure 4 – Table Grids

3.2.1 Action Buttons
Action buttons are located in almost all of the grids within QIRAP. These buttons are features for users to perform various functions within the interface.

3.2.2 Pagination Bar
Pagination bar exists in all the grids. Select the left or right arrow to navigate pages, or select a value in the drop-down to display more fields within the grid at a time.

4. Data Entry

4.1 Select LTC Home

To View Topics and Associated Measures for a Selected LTC Home:

1. Click **Data Entry** from the navigation menu on the left panel
2. Select the LTC Home from the drop-down menu
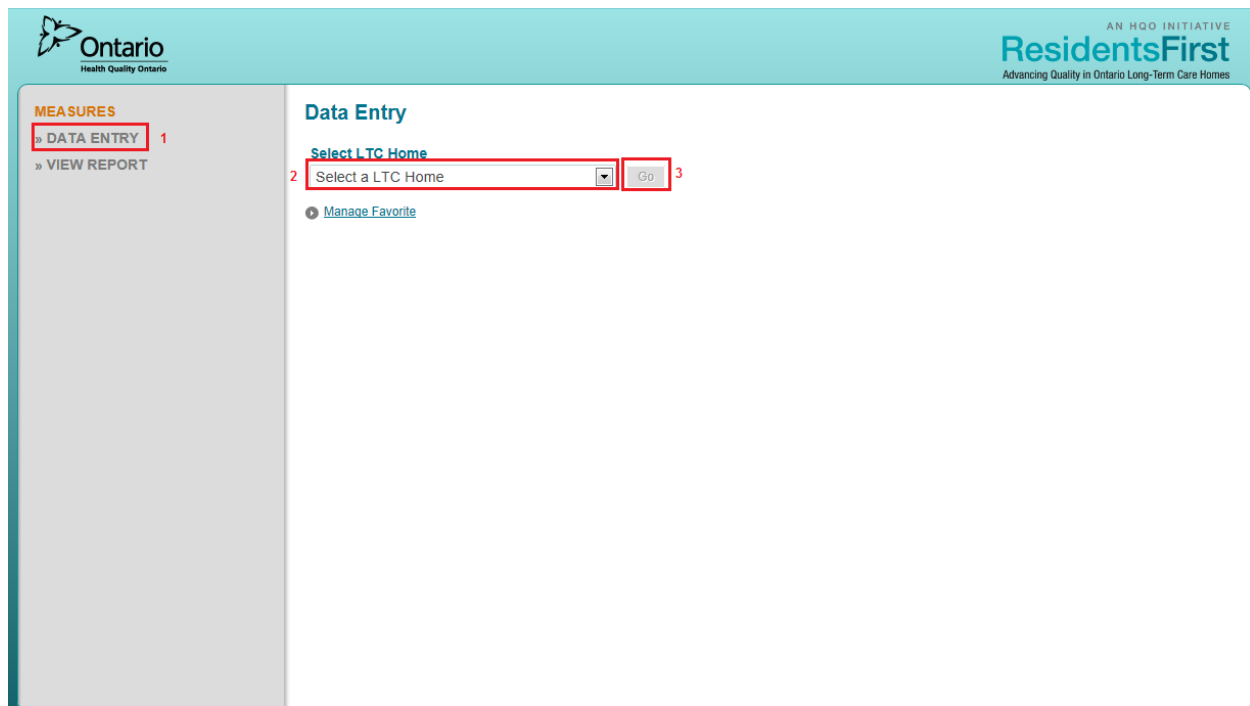3. Click **Go**

Figure 5 - Data Entry

The application will proceed to the Topics page, which displays each Topic within Residents First.

4.2 View Topics

Each Topic within Residents First will be displayed on the Topics page.

To View Measures Associated with Selected Topics:

1. Click on the **Arrow** icon next to a Topic to view the measures associated with that Topic.

Figure 6 - Data Entry - View Topics

2. Each measure will have three (3) action buttons next to it: Add Measure, View Chart, View All
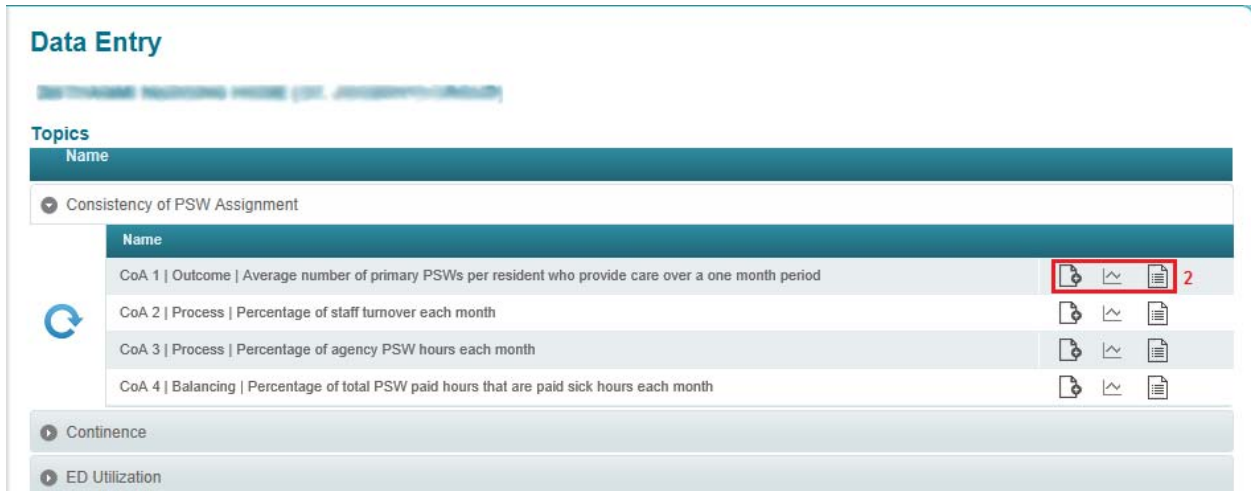

Figure 7 - Data Entry - View Topic - Expanded Measure View

4.2.1 Add Data Point

Users can enter data for quality improvement measures.

To Add Data for Selected Measure:

1. In the expanded measures view, click on the **Add** icon next to a measure to add a data point for the measure
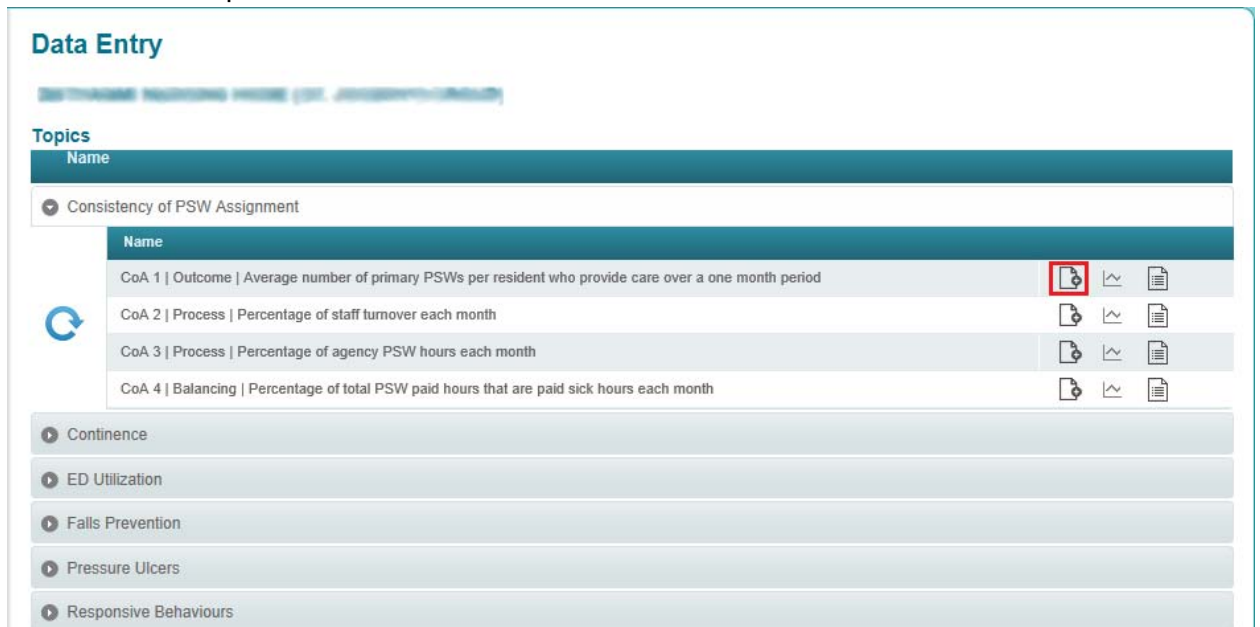

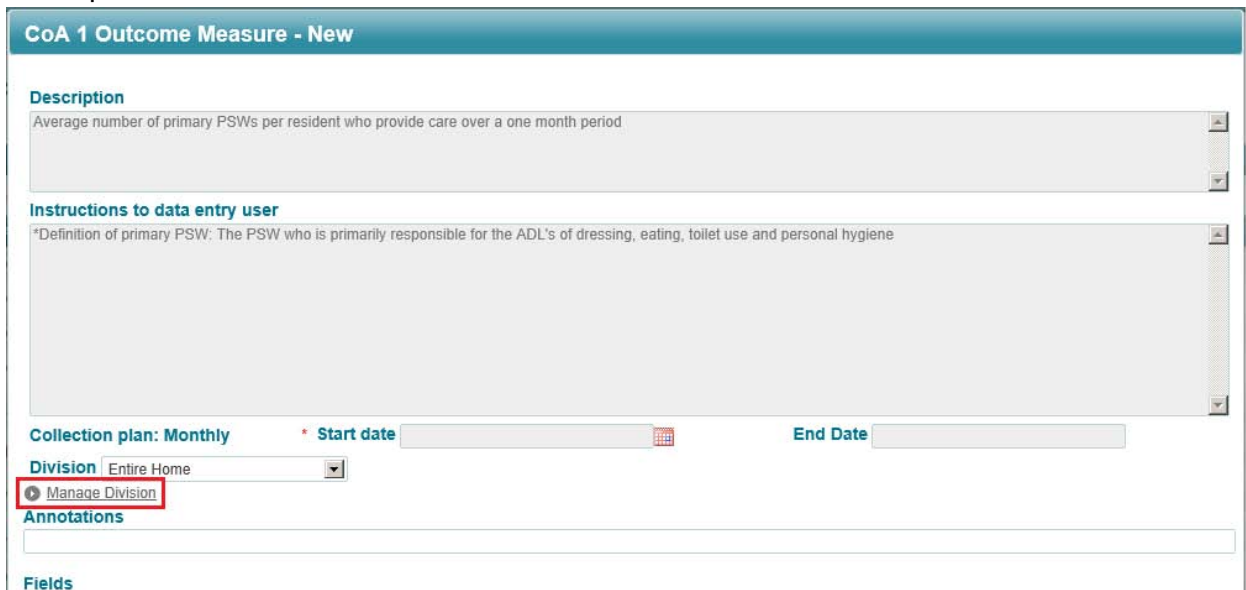**Figure 8 - Data Entry - Add Data Point**

2. The data entry screen will pop up for the selected measure
3. Click on the **Calendar Control** 🗓 Icon beside Start Date
4. Select a Start Date for the data point
   Note: An End Date will be auto-populated by the system.
5. Select the Division (Home Area) from the Division drop-down menu. The default Home Area is set to the Entire Home. To add data for a sub-section of the Home, users can manage the division by clicking on **Manage Division** (See 4.2.2 Manage Division [Home Area])
   *Note: The user can manage the division by clicking on **Manage Division**. (See 4.2.4 Manage Division to add, edit or delete a division).*
6. Enter Annotations, if any
7. Enter Field Values for the measure
   *Note: **A**sterisks (*) indicate mandatory fields*
8. Once the mandatory fields are filled out, any calculated values for the measure value will appear under Formulas
9. If you would like to add more data in the next step, click **Save & New** and repeat steps 3 to 7. Otherwise, proceed to step 10
10. Click **Save**

4.2.2   Manage Division (Home Area)

Users can add, edit or delete Divisions (Home Areas) by clicking Manage Division in the Data Entry page.

To Access Manage Division:

1. Within the Add Data Point pop-up, click **Manage Division** link under the Division drop-down menu

Figure 9 - Data Entry - Manage Division

2. The Manage Division section will expand to display all created Divisions (Home Areas)
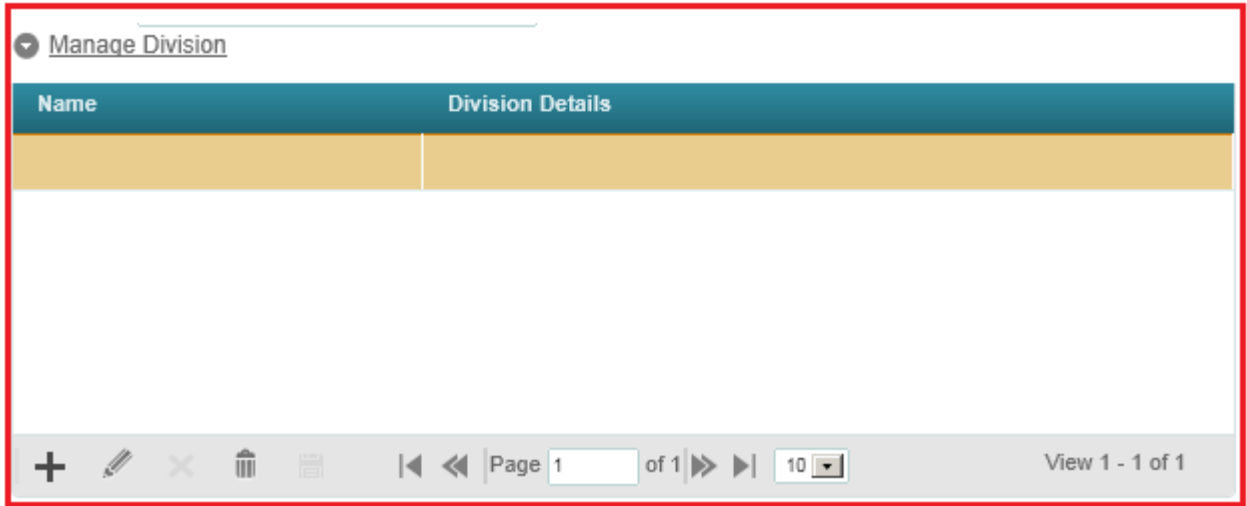

Figure 10 - Data Entry - Manage Division

4.2.2.1   Add Division

To Add Division:

1. Click the **Add** ➕ icon within the Manage Division section to add a new Division (Home Area)
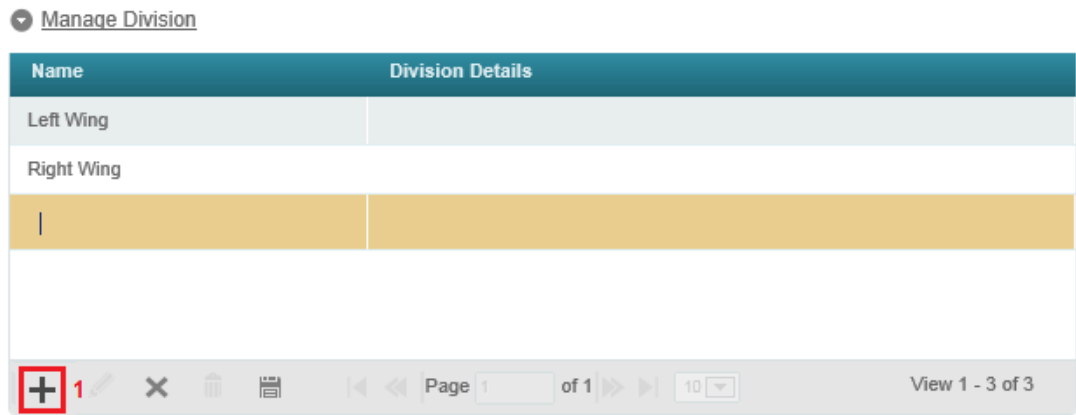

Figure 11 - Data Entry - Manage Division – Add Division

2. Click on the highlighted field to enter the Name of the Division (Home Area) (1) and the highlighted Division Details (2) to add any details pertaining to the Home Area.

Figure 12 - Data Entry - Manage Division - Add Name and Division Details

3. Click the **Save** 🖫 icon on the Manage Division grid

   Note: To cancel changes, click the ✖ *icon*

4.2.2.2   Edit Division

To Edit Division:

1. Within the Manage Division section, select a Division (Home Area)
2. Click the **Edit** ✎ icon to edit the selected division

Figure 13 - Data Entry - Manage Division – Edit Division

3. Edit Division Name (1) and Division Details (2) by clicking on the highlighted area. Click the **Save** 🖫 icon on the Manage Division grid

   Note: To cancel changes, click the ✖ *icon*

4.2.2.3   Delete Division

Note: If there are data points entered for a Division (Home Area), the Division (Home Area) cannot be deleted.

To Delete a Division (Home Area):

1. Within the Manage Division section, select a Division (Home Area) by clicking on it
2. Click the **Delete** 🗑 icon

Figure 14 - Data Entry - Manage Division - Delete Division
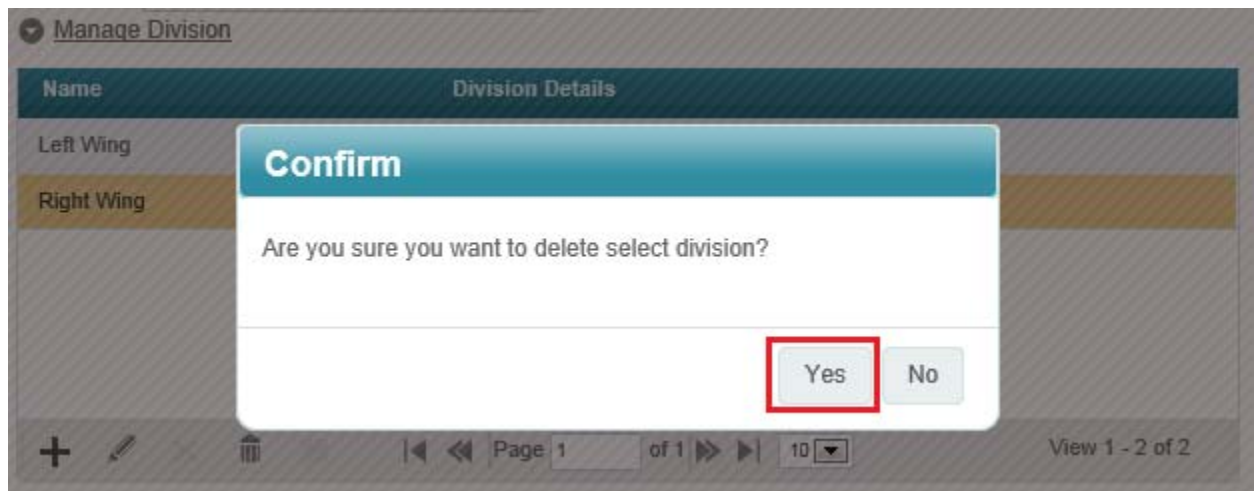
3. Click **Yes** to confirm delete

Figure 15 - Data Entry - Manage Division – Delete Division

4.2.3 Run Charts

Run Charts for measures can be viewed through either the Data Entry – View Topics page or through View Reports (See section 5.1)

To Access Run Charts:

1. Click on the Topic name to see associated measures

2. Click on the **Chart** 〜 icon to view Run Chart
   (The system loads the Run Chart report)

Figure 16 - Data Entry - Chart

3. A pop-up window containing a Run Chart for the selected measure is displayed, along with a data table below

Note: *The Run Chart and data table will be blank for measures with no data points. For more information on the Run Chart Reports, see section 4.2.5 Manage Favourites*

4.2.4   View All

Users can view all the data points that have been entered for a measure through the View All page. Data points can be added, edited, and/or viewed for the selected measure through the grid. Run Charts can also be viewed from here.

To View All Entered Data Point(s) for a Selected Measure:
1. Click on the Topic name to see the associated measures
2. Click on the **View All** 📄 icon

Figure 17 - Data Entry - View All

3. The View All page will display all data points entered for the measure (1). Users also have access to several action buttons (2) within this page, including: Add Data Point, Edit Data Point and View Chart.
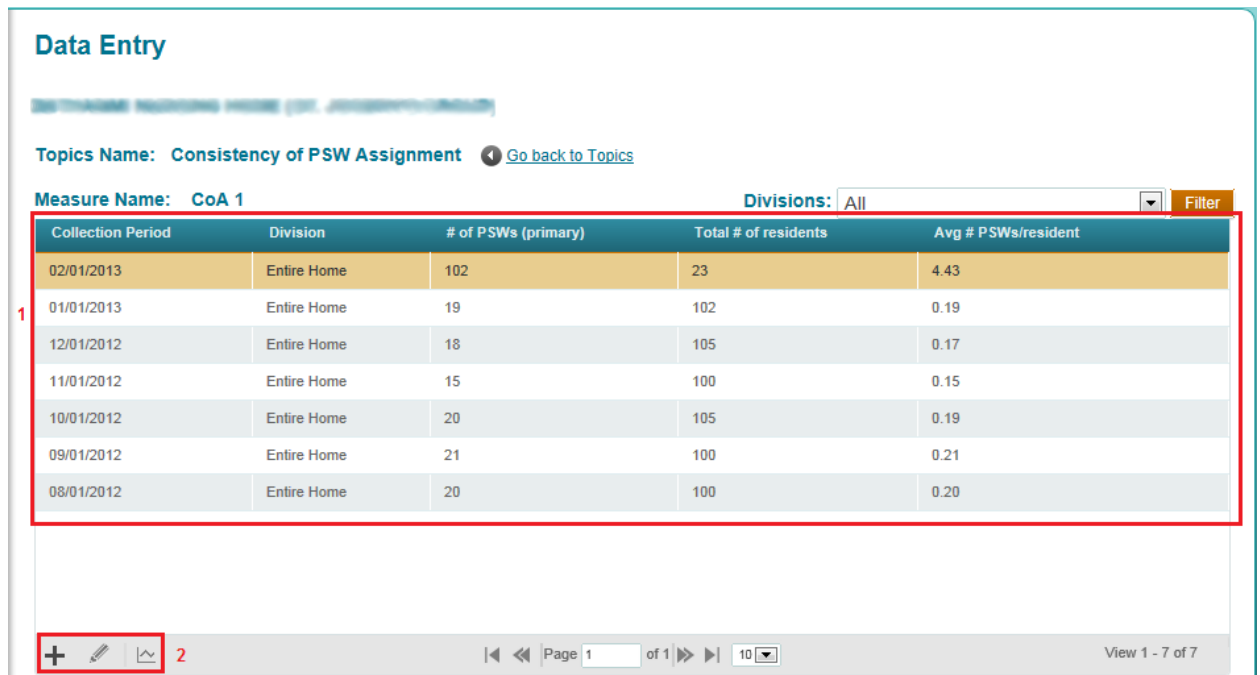

Figure 18 - Data Entry - View All Chart

4.2.4.1   Add Data Point for Measure

Users can enter data for measures for a selected LTC Home from the View All grid by clicking on the **Add** ✚ icon (*See 4.2.1 Add Data Point*)
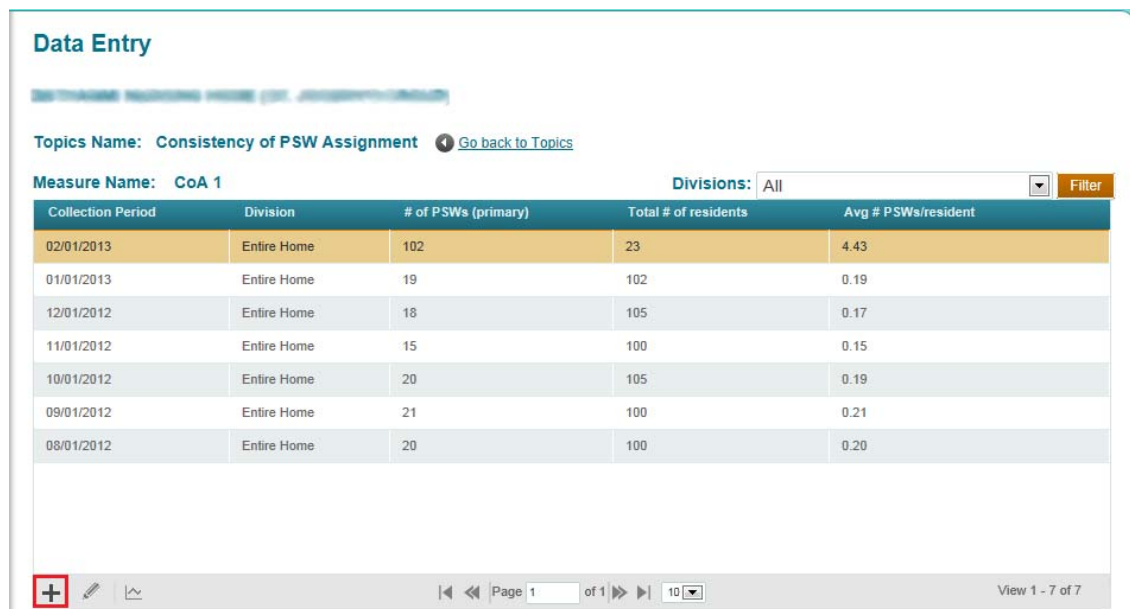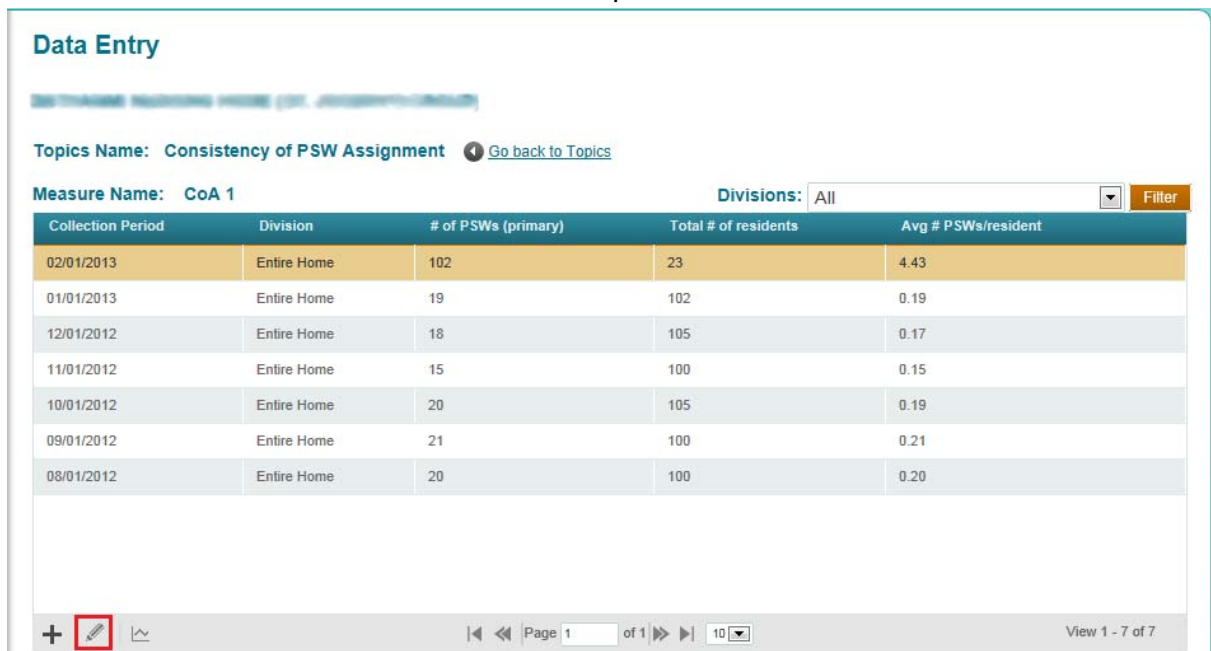

Figure 19 - Data Entry - Add Data Point

4.2.4.2 Edit Data Point for Measure

Users can edit data points for measures for a selected LTC Home from the View All grid by clicking on the **Edit** ✎ icon.

To Edit Entered Data Point from View All Grid:

1. Select a data point by clicking on it
2. Click the **Edit** ✎ icon to edit selected data point

Figure 20 - Data Entry - Edit Data Point

3. The data entry pop-up window will be displayed, and any fields within the pop-up can be edited:
   a. Edit Start Date by clicking on the **Calendar Control** 🏢 Icon beside Start Date
   b. Edit Division (Home Area) from the drop-down menu
      Note: *The user can manage Division (Home Area) by clicking on **Manage Division** (See 4.2.4 Manage Division to add, edit, or delete division)*
   c. Edit Annotations
   d. Edit Field Values for a measure
   e. If user would like to add more data in the next step, click **Save & New** to add a new data point. Otherwise, proceed to step 4

Figure 21 - Data Entry - View All - Edit Data Point

4. Click **Save**

To Access Run Charts from View All:

1. Click on the **Chart** ⬚ icon on the View All page to view a Run Chart Report
   (The system loads the Run Chart Report)
2. Select parameters
3. A pop-up window containing a Run Chart for the selected measure is displayed, along with a data table below
   Note: *Run Chart and data table will be blank for measures with no data points. For more information on the Run Chart Reports, see section 5.1*

4.2.5 Manage Favourites

Users can manage favourite topics allowing easy access to selected topics for selected LTC Homes.

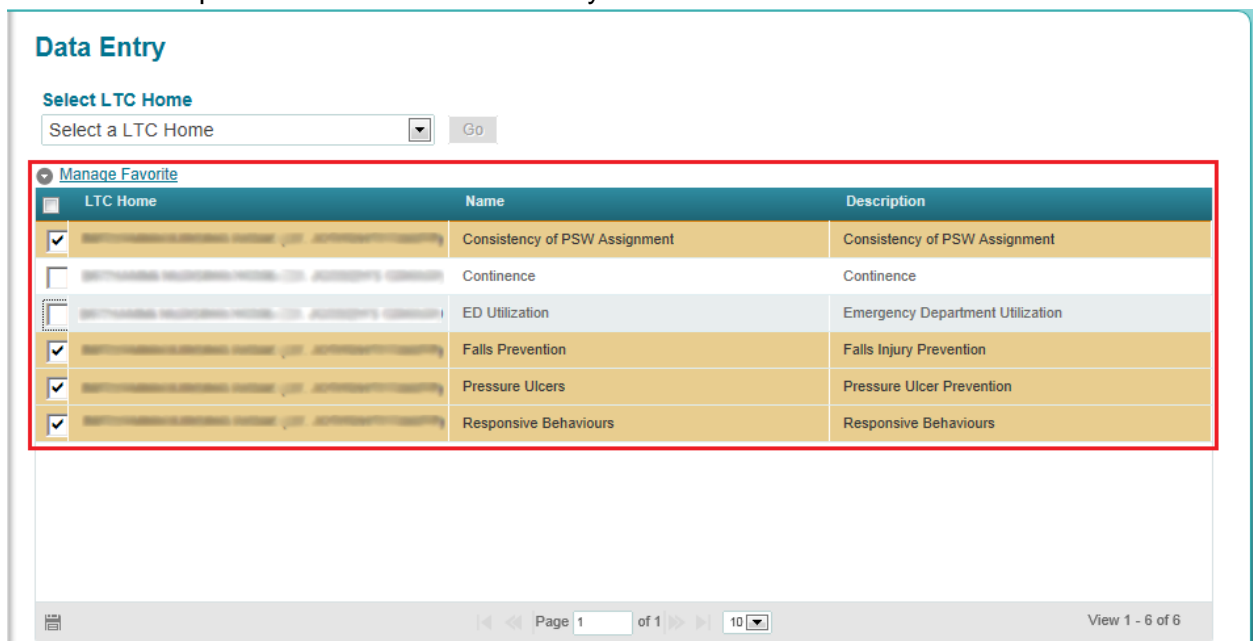*To Manage Favourites:*

1. Click **Data Entry** from the navigation menu on the left panel
2. Click the **Manage Favourite** link

Figure 22 - Data Entry - Manage Favourites

3. Check selected topics for LTC Home to be displayed for data entry
4. Uncheck topics to be hidden for data entry

Figure 23 - Data Entry - Manage Favourites

5. Click the **Save** 🖫 icon on the Manage Favourite grid

5. View Report

5.1 Viewing Reports

Users can access Run Charts for their associated LTC Home(s). A Run Chart is a graph that illustrates changes in quality over time. Measurements are taken at frequent points in time and connected with a line. This provides a graphical display of variation over time, and can help a QI team see if their changes have led to improvement.

5.1.1 View Run Chart

To View a Run Chart:

1. Click **View Report** from the navigation menu on the left panel
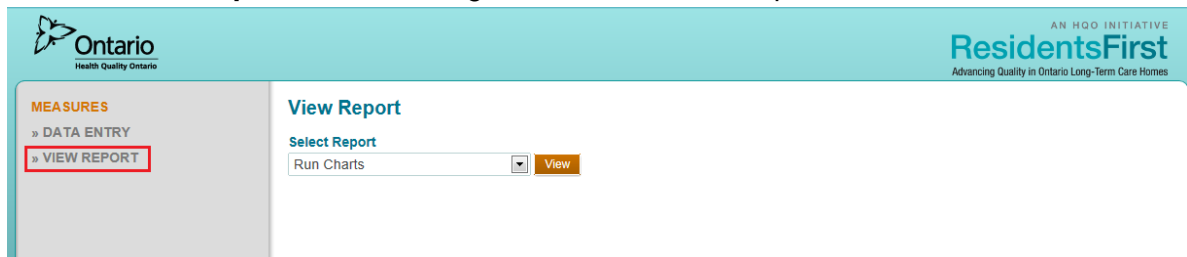
Figure 24 - View Report

2. Select the report from the drop-down menu
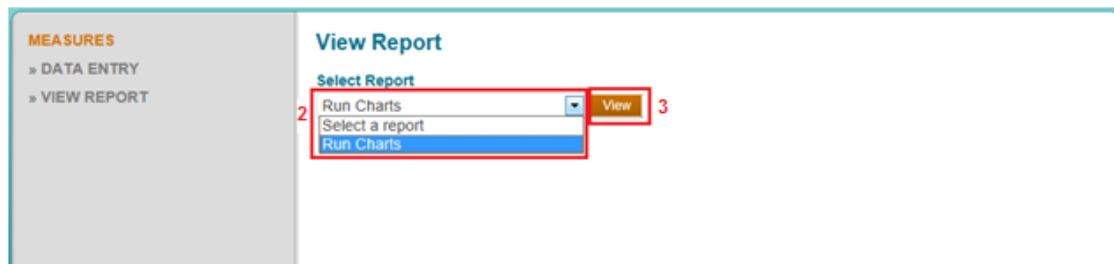3. Click **View** button

Figure 25 - View Report

4. A pop-up window will display the Reports page.
   Note: *If you receive a pop-up blocker message, select "Allow pop-ups for qirap.hqontario.ca"*
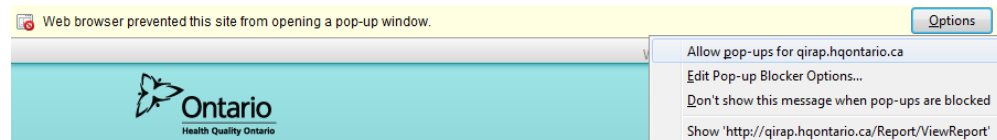

Figure 26 - View Report - Pop-up Blocker

5. Reports can be viewed for all measures with associated data points. The following Report Parameters are used to create a report:

Report Parameters:

- **Group (LTC Home)**: Users can select a LTC Home enrolled in Residents First that they are associated with from the Group drop-down menu.
- **Division**: Users have the ability to select a Division (Home Area) within the LTC Home or to view an aggregate
  Note: Aggregate chart will not display median, target or annotations.
- **Measure**: Users have the ability to select a measure to view on the Run Chart.
- **Field**: Users can select a field or formula from the selected measure to view on the Run Chart.
- **Show annotations**: Users have the ability to display or hide annotations entered from data entry.

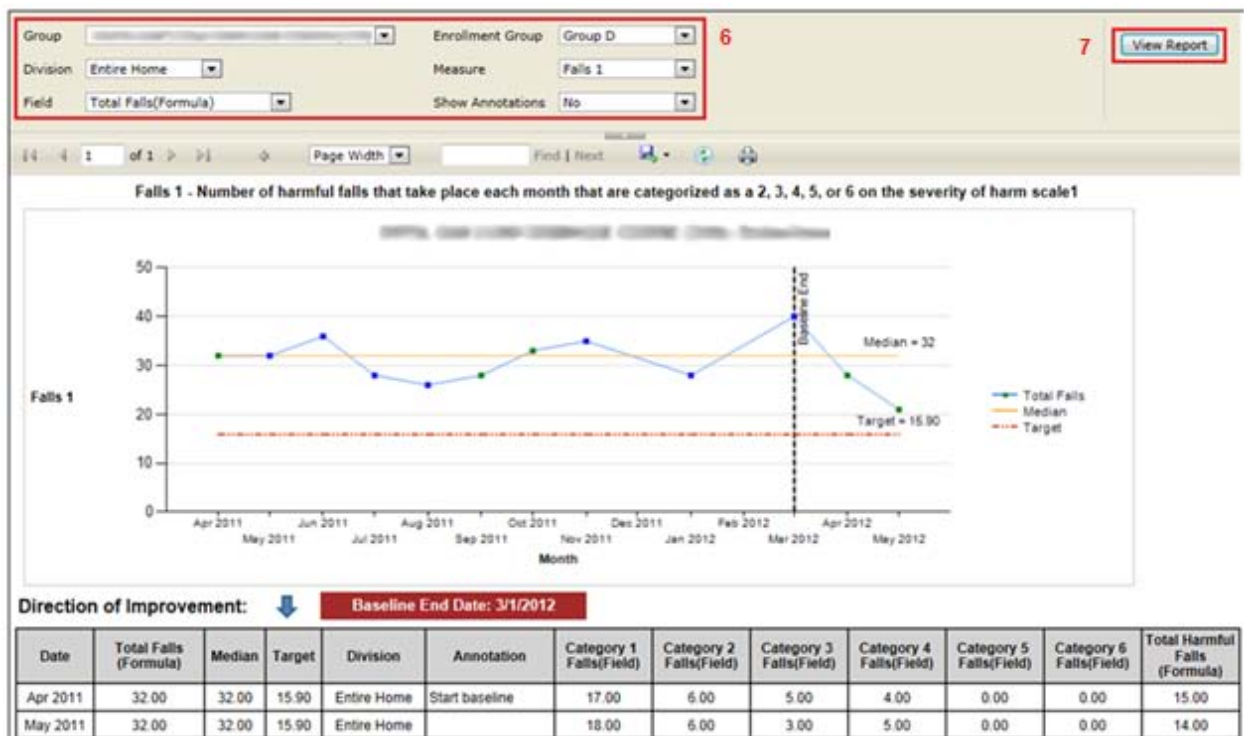6. Select Report Parameters
7. Click **View Report** button

Figure 27 - View Report – Parameters

The Run Chart displays according to the selected parameters, along with the data table.
Note: Reports with a large dataset may have multiple pages. The pagination bar can be used to navigate through the report.
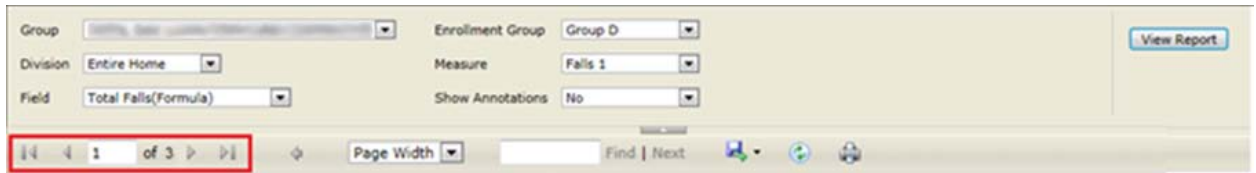
Figure 28 - View Report - Pagination

Run Chart Features:

Run Charts can display the following features:
- **Median**: a horizontal line across the graph, which represents the median value of the baseline data
- **Target**: a horizontal line across the graph indicating the target of the QI team
- **Annotations**: comments associated with the data points to provide details such as when improvement ideas were tested
- **Direction of Improvement**: An arrow indicating the direction of improved quality is displayed underneath the chart
- **Baseline**: Baseline end date is represented by a vertical line on the Run Chart, and the baseline date is stated underneath the chart

Significant improvement in the QI data can be detected through two (2) tests on a Run Chart:
- Six (6) or more consecutive points above or below the median
- Six (6) consecutive points moving upward or downward

The following markers are used on the Run Charts:

- [■]: An annotation exists for the data point, which is displayed when you scroll over the point on the graph
- [▲]: Six (6) or more consecutive points above or below the median (Run Chart rule)
- [◆]: Six (6) or more consecutive points moving upward or downward (Run Chart rule)
- [✹]: Both Run Chart rules are achieved

5.1.2 Print Report

To Print Report:

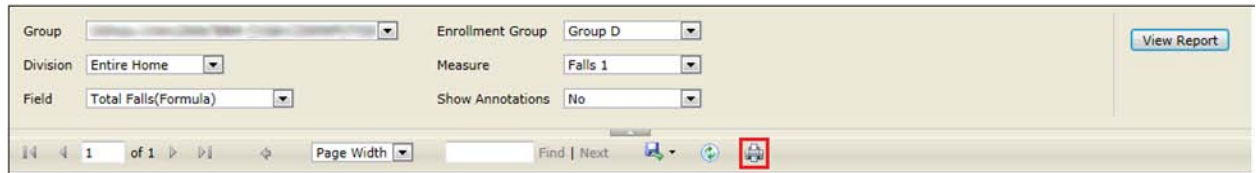1. Click on the **Print** 🖶 icon underneath the Report Parameters to print the Run Chart and data table.

Figure 29 - View Report - Print Report

5.1.3 Export Report

To Export Report:

1. Click on the **Export** 💾▾ icon underneath the Report Parameters to export the Run Chart and data table into a variety of formats (Available formats include: XML file with report data, CSV – comma delimited, PDF, MHTML – web archive, Excel, TIFF file, Word).
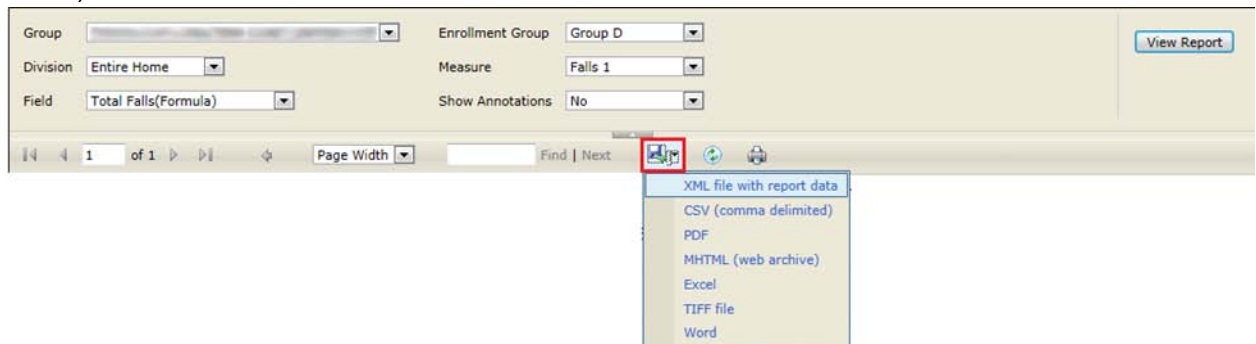

Figure 30 - View Report - Export Report

6. Exiting QIRAP

A **Close Window** button is located at the top right corner of the page. ***Please Note:*** *Closing QIRAP does not log you out of the Health Quality Ontario website.*

To Exit QIRAP:

1. Click **Close Window** button

Figure 31 - Exiting QIRAP