

USING ESSENCE: MAKING A BASIC QUERY

Objective 1: User will be able to identify key components of ESSENCE dashboard.

Objective 2: User will know how to create a basic query using ESSENCE Syndromes.

Objective 3: User will know how to interpret the Times Series Graph generated by the query.

Objective 4: User will know best practices for saving queries to myESSENCE.

1. Starting on the ESSENCE Home Page, locate the toolbar at the top of the page and click **Query Portal**.
2. In the Query Wizard, select your data source, dates and syndrome.
 - 2a. Select your data source (county or hospital-based visit view):
 - **County health departments:** Emergency Room Data by Patient Location
 - o Select your **Region** (county)
 - **Hospitals:** ER Data by Hospital Location
 - o Select your **Hospital(s)**
 - 2b. Select your **Time Resolution**:
 - Use Weekly for ILI reports or other seasonal surveillance queries
 - 2c. Select your **dates**:
 - Select the appropriate start and end dates.
 - If not dates are selected, ESSENCE defaults to the previous 90 days.
 - 2d. Select the appropriate **syndrome**:

Choose from the 12 preset syndromes:

- Bot_like
- Exposure
- Fever
- GI
- Hemr_ill
- ILI
- Injury
- Neuro
- Rash
- Resp
- Shk_coma



NOTE

Basic queries search the 12 preset syndromes in ESSENCE.

Query Wizard

Datasource: **ER Data by Patient Location** Time Resolution: **Daily** Detector: **Regression/EWMA 1.2** Start Date: **04Feb14** End Date: **05May14**

As Percent Query:

Available Query Fields

- ER Data by Patient Location
 - Region
 - Zipcode
- Medical Grouping System
 - Syndrome
 - ChiefComplaints
- Triage Note System
 - Triage Note
 - Triage Note SubSyndrome
 - Triage Note Syndrome

Region

Select values for Region:

- Baker, OR
- Benton, OR
- Clackamas, OR
- Clatsop, OR
- Columbia, OR
- Coos, OR
- Crook, OR
- Curry, OR
- Deschutes, OR
- Douglas, OR

Reset Select

Selected Query Fields

- Geography System**
 - Region
- Medical Grouping System**
 - ESSENCESyndromes
- Triage Note System**
 - TNSyndromes

Table Builder Time Series Data Details Graph Builder Ove



TIP

When selecting Region (County) and Syndrome, make sure to click "Select" after each choice.

2a. Data Source

2b. Start and end dates

2b. Time Resolution

2a. Hospital

2c. Syndrome

The screenshot shows the 'Query Wizard' window. At the top, there are several dropdown menus: 'Datasource:' set to 'ER Data by Hospital Location', 'Time Resolution:' set to 'Daily', 'Detector:' set to 'Regression/EWMA 1.2', 'As Percent Query:' set to 'No Percentage Query', 'Start Date:' set to '07Jul15', and 'End Date:' set to '05Oct15'. Below these are three main panels. The left panel, 'Available Query Fields', lists various categories like 'Region of the Hospital', 'Hospital', 'Patient Location', 'Medical Grouping System', 'Syndrome', and 'Triage Note System'. The middle panel, 'Hospital', shows a list of hospital names with 'Asante Three Rivers Medical Center' selected. The right panel, 'Selected Query Fields', shows the 'Hospital' field selected under the 'Geography System' category. At the bottom, there are tabs for 'Table Builder', 'Time Series', 'Data Details', 'Graph Builder', 'Overview', 'Adv Qry', and 'Rese'.



TIP

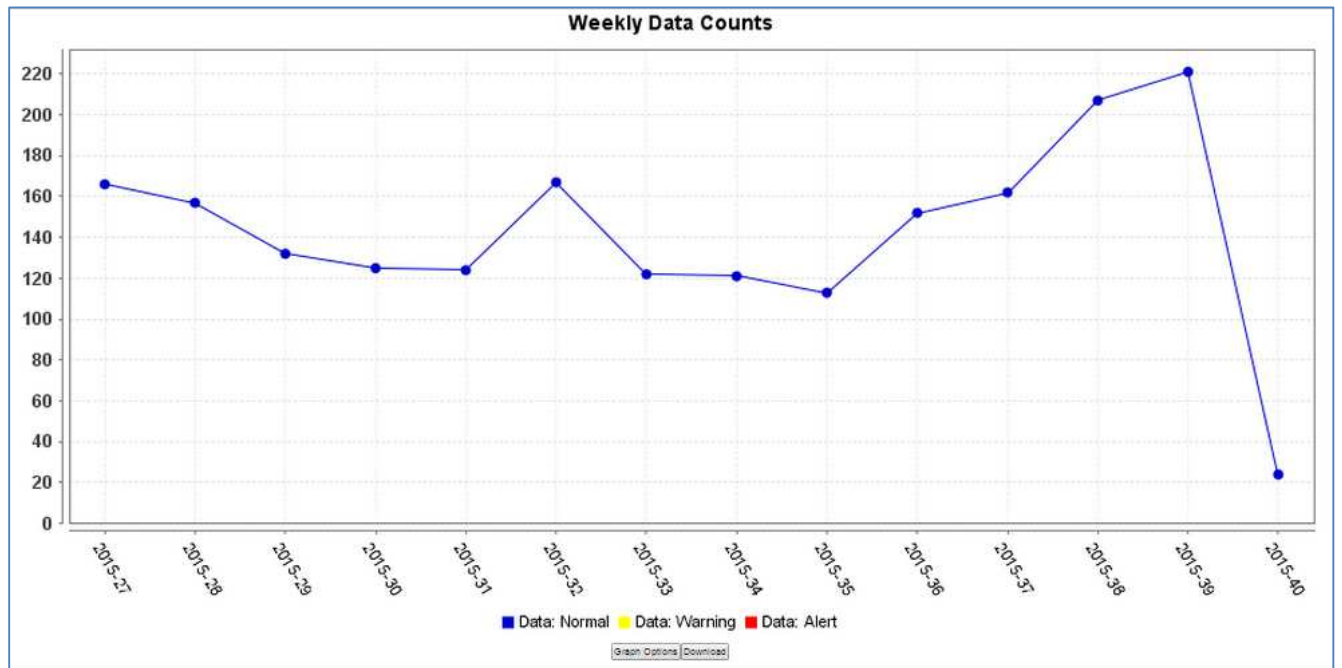
If looking at health systems, hold the Ctrl key down to select more than one hospital.

3. After you have chosen your variables, click on **Times Series**.

The screenshot displays the 'Query Wizard' interface. At the top, there are several configuration fields: 'Datasource' set to 'ER Data by Hospital Location', 'Time Resolution' set to 'Weekly', 'Detector' set to 'EWMA 1.2', 'As Percent Query' set to 'No Percentage Query', 'Start Date' set to '27' of '2015', and 'End Date' set to '40' of '2015'. Below these fields, the interface is divided into three main sections. On the left, 'Available Query Fields' lists various data sources, with 'Syndrome' selected under the 'Medical Grouping System'. The middle section, titled 'Syndrome', shows a list of values including 'Bot_like', 'Exposure', 'Fever', 'GI', 'Hemr_ill', 'ILI' (which is highlighted), 'Injury', 'Neuro', 'Other', and 'Rash'. On the right, 'Selected Query Fields' shows the hierarchy: 'Geography System' (Hospital), 'Medical Grouping System' (ESSENCESyndromes), 'Syndrome' (ILI), and 'Triage Note System' (TNSyndromes). At the bottom of the wizard, a row of tabs includes 'Table Builder', 'Time Series' (which is highlighted with an orange arrow), 'Data Details', 'Graph Builder', 'Overview', 'Adv Qry', and 'Reset'.

3. Time Series

The **Time Series Graph** displays the number of visits over time for the particular region (or hospital) and syndrome you selected.



Best Practices for Interpreting Time Series Graphs

The **Time Series** graph provides a graphical way of viewing recent visits over the timespan of interest. When analyzing the data, look for the following:

- Color of dots
 - Blue: Normal
 - Yellow: Warning
 - Red: Alert
- Baseline or expected number of visits for the period
- Sharp increases in number of visits
- Sustained increases in visits

To determine if unusual seasonal activity is occurring, compare the graph to the same time period for the previous year in ESSENCE or by using state data sources:

- [Oregon Norovirus Watch](#)
- [Oregon Flu Bites](#)

Note: For weekly views, keep in mind weeks in ESSENCE start on Sunday and end on Saturday. If running these queries during the middle of the week, know the current week's visit counts may not be complete.

4. Save Query. It's always a good idea to save your query.

4a. Type the name of your query

4b. Click **Add to myESSENCE**.

4c. Next, a pop-up box will appear and you will be prompted to decide the **Tab Name**.

- Click **Submit** when finished

4a. Query Name

4b. Add to myESSENCE

4c. Tab Name

4c. Submit



NOTE

To see all of your saved queries, go to **myESSENCE** from the home page and click on the tab you selected.

USING ESSENCE: MAKING A QUERY THAT SHOWS PROPORTIONS (NOT COUNTS)

Objective 1: User will know how to modify a basic query using ESSENCE Syndromes to create a query showing proportions instead of counts.

Objective 2: User will know how to interpret the Times Series Graph generated by the query.

Objective 3: User will know best practices for saving queries.

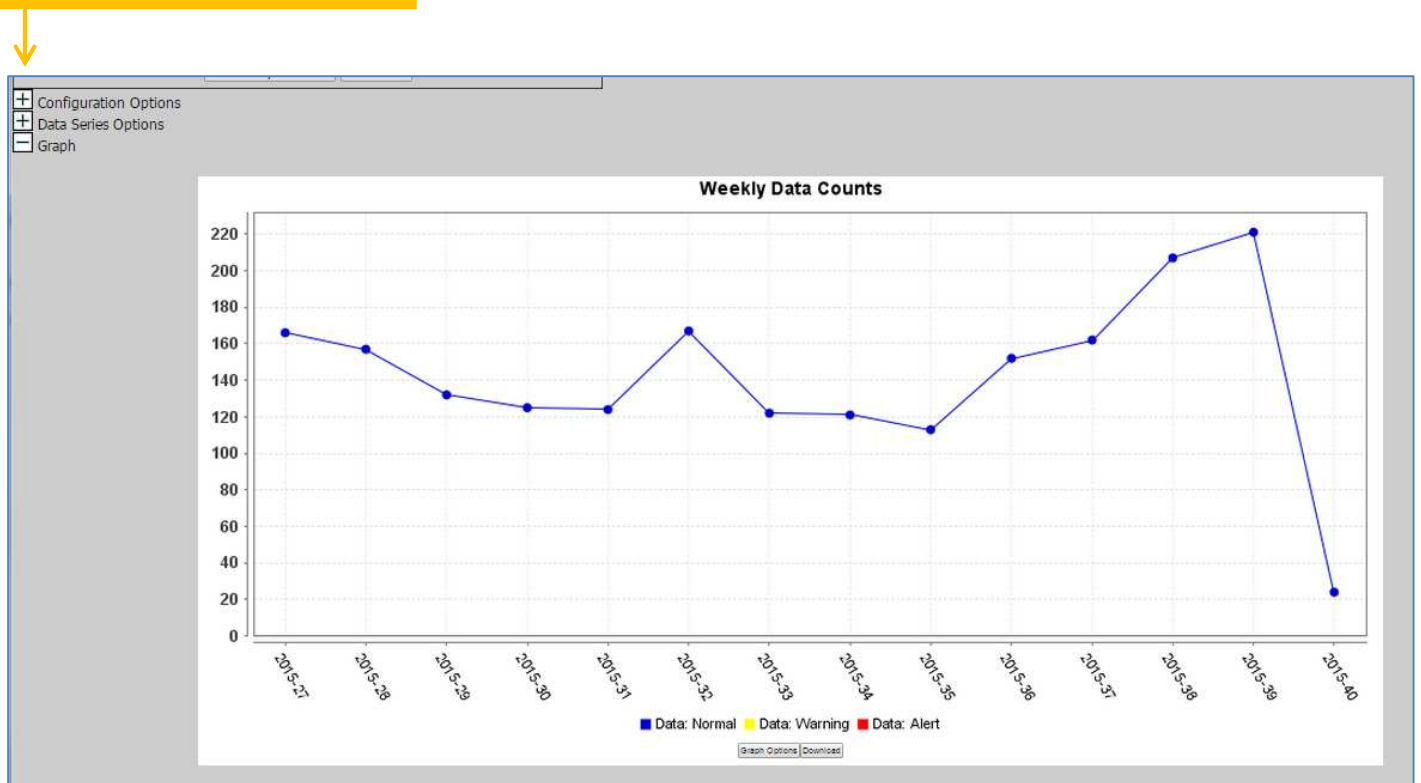
1. Start with creating a time series chart from a basic query (such as the ILI Syndrome query in the previous example).
2. Open **Configuration Options** and select a variable for **As Percent Query**
 - 2a. Click the plus sign () next to **Configuration Options** to view your initial query selections.
 - 2b. Confirm that your query options haven't defaulted to all visits statewide (this is a Fall 2015 bug).
 - 2c. Identify your main query variable (besides geography or hospital location)
 - E.g., Syndrome if you have selected a syndrome for your query or CC and DD if you have created a free text query.
 - 2d. Select a variable for **As Percent Query**
 - Select the same main variable you used for your query
 - 2e. After you have selected your variables, click on **Times Series**.



NOTE

You can select only one variable for As Percent Query. This variable will identify your numerator for your proportion query.

2a. Configuration Options



2d. Select As Percent Query

2b. Confirm your query options haven't changed

Query Wizard

Datasource: ER Data by Hospital Location | Time Resolution: Weekly | Detector: EWMA 1.2 | As Percent Query: Syndrome | Start Date: 27/2015 | End Date: 40/2015

Available Query Fields

- ER Data by Hospital Location
 - Geography System
 - Region of the Hospital
 - Hospital
 - Patient Location
 - Patient HPP Region
 - Facility HPP Region
 - Medical Grouping System
 - ChiefComplaintSubSyndromes
 - Syndrome**
 - ChiefComplaints
 - Triage Note System
 - Triage Note
 - Triage Note SubSyndrome
 - Triage Note Syndrome

Syndrome

Select values for Syndrome:

- Bot_like
- Exposure
- Fever
- GI
- Hemr_ill
- ILI**
- Injury
- Neuro
- Other
- Rash

Selected Query Fields

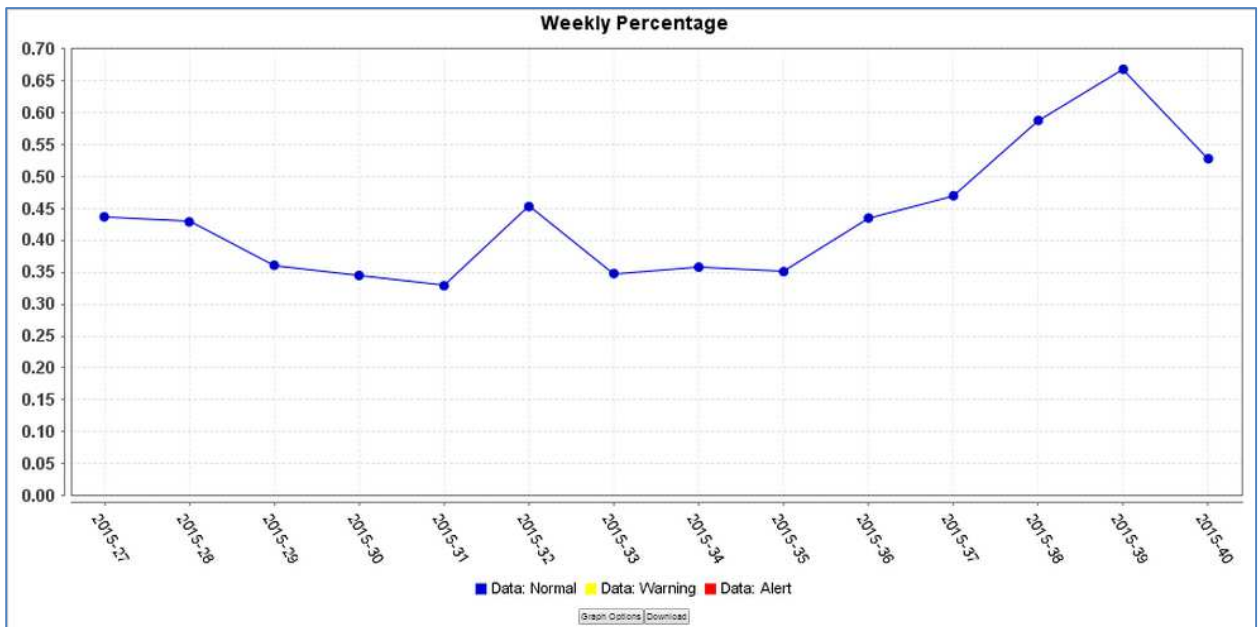
- Geography System**
 - Hospital
- Medical Grouping System**
 - ESSENCEsyndromes
- Syndrome**
 - ILI

Table Builder | **Time Series** | Data Details | Graph Builder | Overview | Adv Qry | Rese

2c. Review your main query variable

2e. Time Series

The **Time Series Graph** displays the number of visits matching your query out of total visits for your region or hospital.



Best Practices for Analyzing Proportion Time Series Graphs

As Percent Query will show proportion (or percentage) of all ED visits in your selected region or hospital which match your query out of total. Consider the y-axis has changed from number of visits to proportion of visits, but the interpretation of the color of the dots is the same for count and proportion queries.

A sample interpretation (for the above chart) might be:

Over the last 90 days, the proportion of ILI-related visits out of total ED visits statewide has been below 1% of total visits (ranging from 0.3%-0.65%). Starting on week 36 (9/6), the proportion of these visits has been increasing, although these increases are not statistically significant.

To determine if unusual seasonal activity is occurring, compare the graph to the same time period for the previous year in ESSENCE or by using state data sources:

- [Oregon Norovirus Watch](#)
- [Oregon Flu Bites](#)

5. Save Query. It's always a good idea to save your query.

4a. Type the name of your query

4b. Click **Add to myESSENCE**.

4c. Next, a pop-up box will appear and you will be prompted to decide the **Tab Name**.

- Click **Submit** when finished

4a. Query Name

4b. Add to myESSENCE

4c. Tab Name

4c. Submit



NOTE

To see all of your saved queries, go to **myESSENCE** from the home page and click on the tab you selected.