
OpenESSENCE Quick Start Guide

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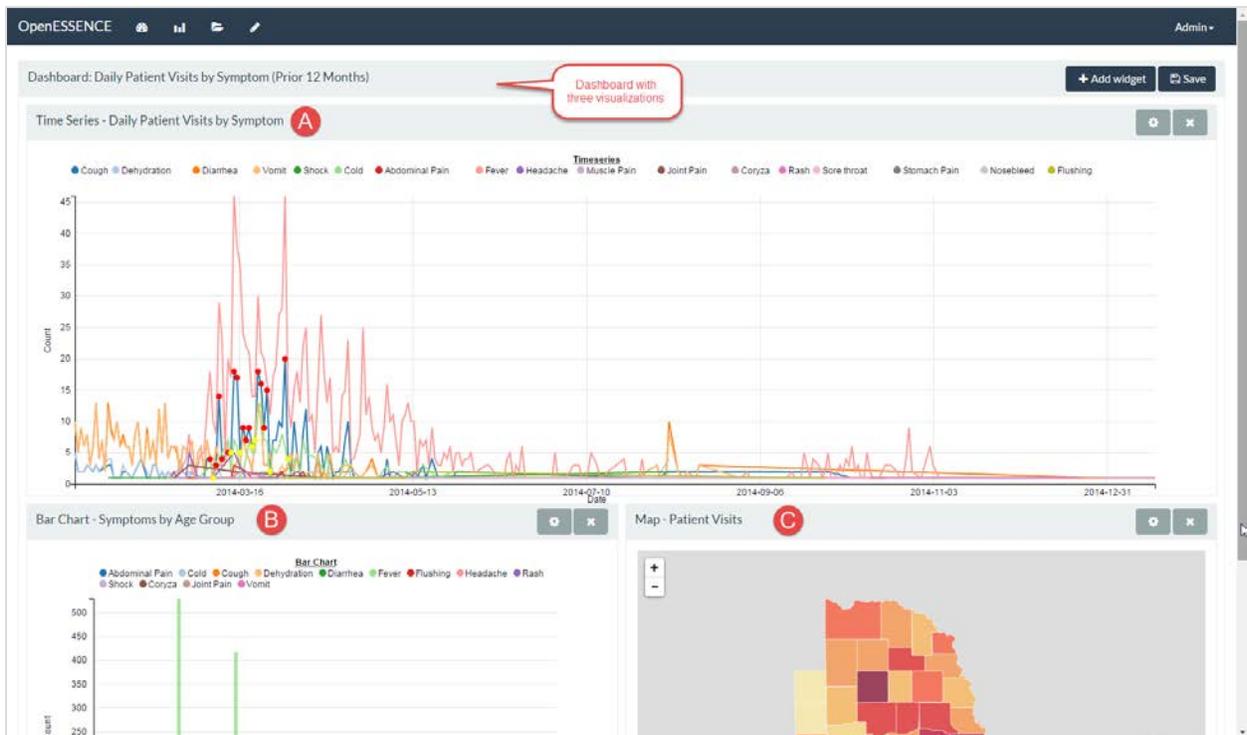
Introduction to Dashboards and Workbench

OpenESSENCE is the visualization and analysis tool in the SAGES suite of tools for electronic disease surveillance. This guide describes the Dashboard and Workbench feature in OpenESSENCE. The data shown in these screenshots is simulated and is for demonstration purposes only.

When you first log in to OpenESSENCE, you will see a customized user-configured dashboard. For the purposes of this guide, a dashboard has already been configured, but later in this guide, you will learn how to create a new dashboard. You will also learn about the Workbench feature that can be used to explore and analyze data using visualizations.

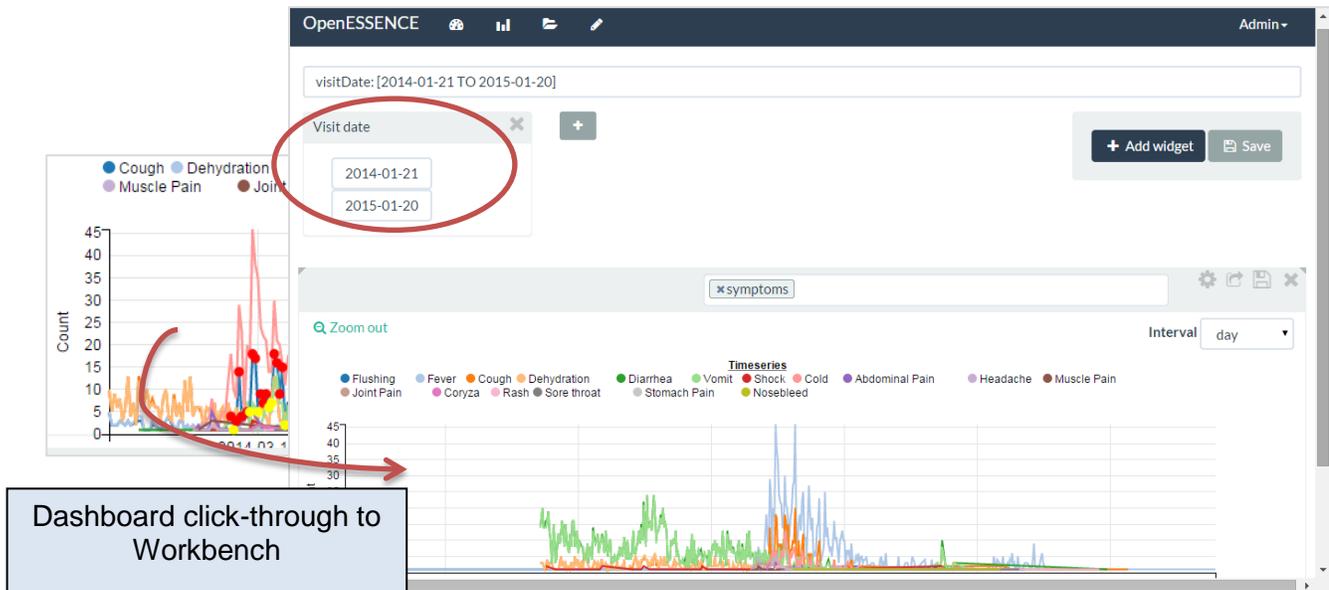
Dashboards

A dashboard is a collection of visualizations that enable “at-a-glance” situational analysis for the epidemiologist. A visualization is a set of filtered data presented in a graphical format such as time series, bar or pie chart, a map, or a table. The dashboard in our demonstration contains a time series showing patient counts by symptom for the last 12 months. It also contains a bar chart showing symptoms by age group, and a heat map of patient visits.



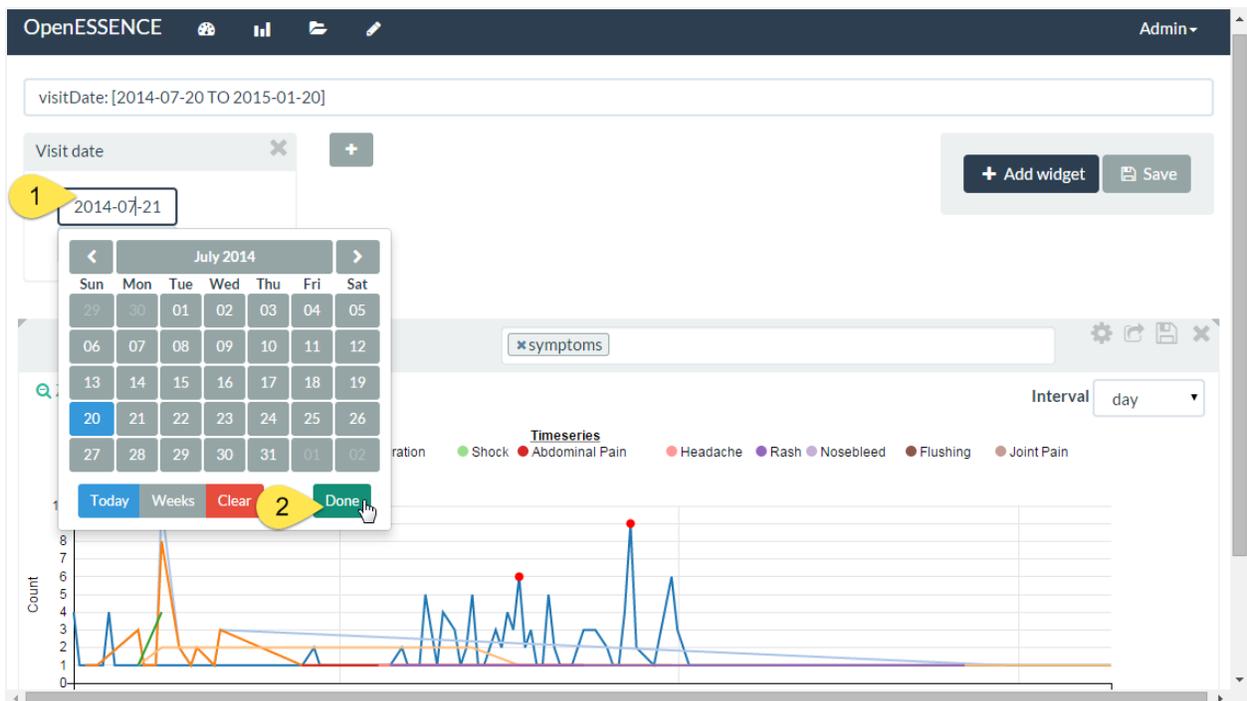
Dashboard Click-Through to Workbench

Suppose you want to do additional analysis of the time series in the dashboard. When you click anywhere on the time series, the time series now appears in workbench mode.

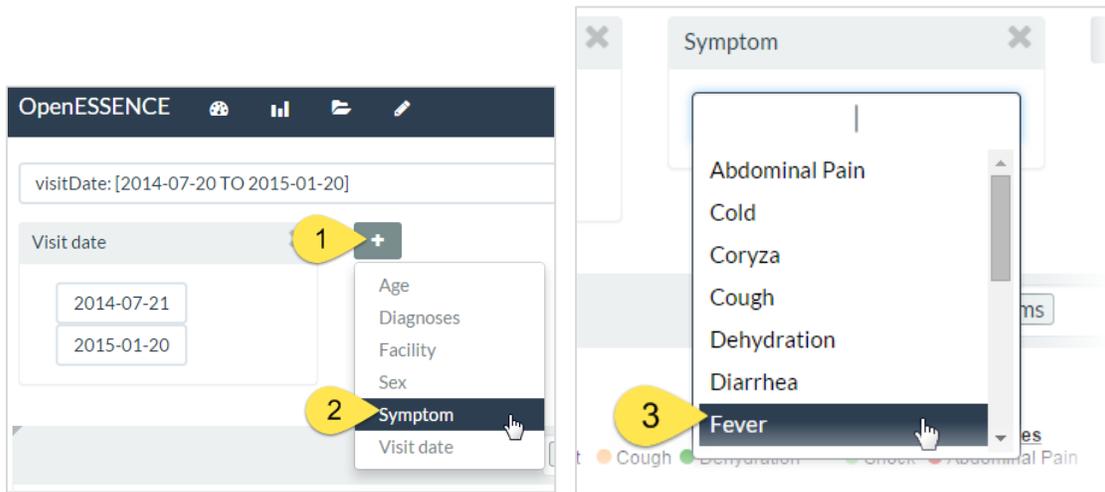


Applying Filters in a Workbench

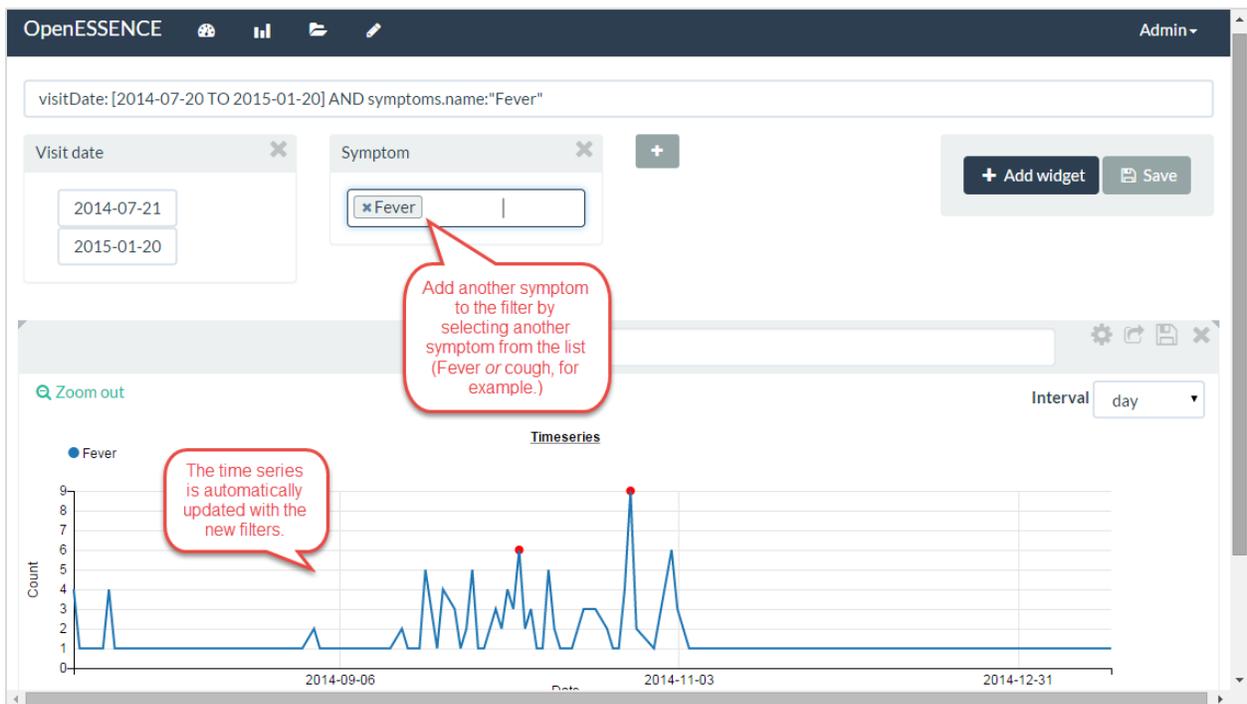
In the workbench, you can apply additional filters, and create new visualizations. Suppose you only want to see the last 6 months of data instead of the last 12 months that is currently displayed. You can change the date filter to show only the last 6 months.



Now suppose you only want to see visits in which fever was recorded as a symptom. You can apply a filter for fever by adding a Symptom filter and setting the filter to fever.

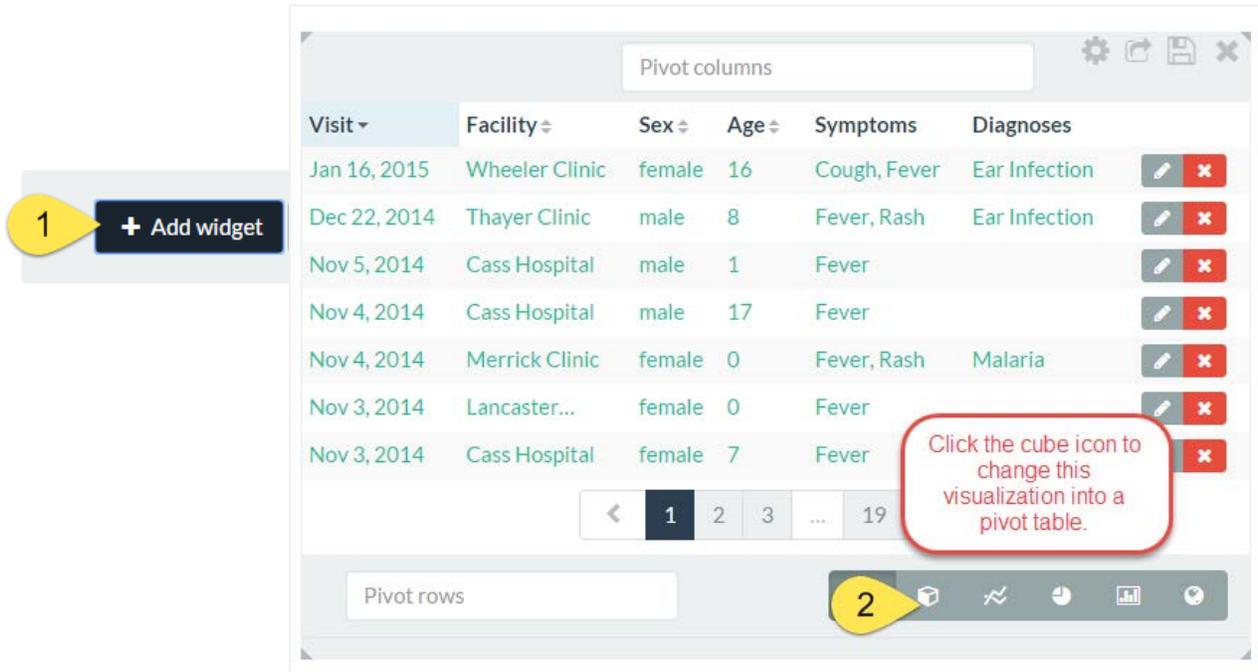


The new filters are automatically applied to the time series. You can add another symptom to the Symptom filter by clicking in the field and selecting another symptom from the list. Or, you can add another filter (such as age or sex) by clicking the plus sign.



Adding a New Visualization to a Workbench (Pivot Table)

Now, suppose you want to see this filtered data as a pivot table grouped by age. Start by adding a new visualization. The default visualization (a table) appears on the workbench. Click the pivot table “cube” icon.



Now we can pivot the data by age and symptom. We see the counts for symptom (containing fever) by age group.

		patient.age						Totals
		[0 TO 1]	[1 TO 5]	[5 TO 12]	[12 TO 18]	[18 TO 45]	[45 TO 65]	
symptoms	patient.age							
Cough,Fever					1			1
Fever		10	47	27	5	8	2	99
Fever,Abdominal Pain			1	3	1			5
Fever,Abdominal Pain,Vomit				1				1
Fever,Cough		1	3					4
Fever,Headache			1	2	2	2		7
Fever,Headache,Rash						1		1
Fever,Joint Pain,Flushing				1				1
Fever,Nosebleed			1					1

Exporting a Visualization to a PNG File

Another useful option in the workbench is the ability to save a visualization to a PNG file, which can be used in other documents or reports.

1

Image Export

Title
Timeseries

X-Axis Label
Date

Y-Axis Label
Count

X Size
553

Y Size
308

Notes

H4 H5 P B I U ☰

visitDate: [2014-07-20 TO 2015-01-20] AND symptoms.name: "Fever"

Enter your notes here...

2

Export to PNG Cancel

Timeseries

Count

Date

visitDate: [2014-07-20 TO 2015-01-20] AND symptoms.name: "Fever"

Enter your notes here...

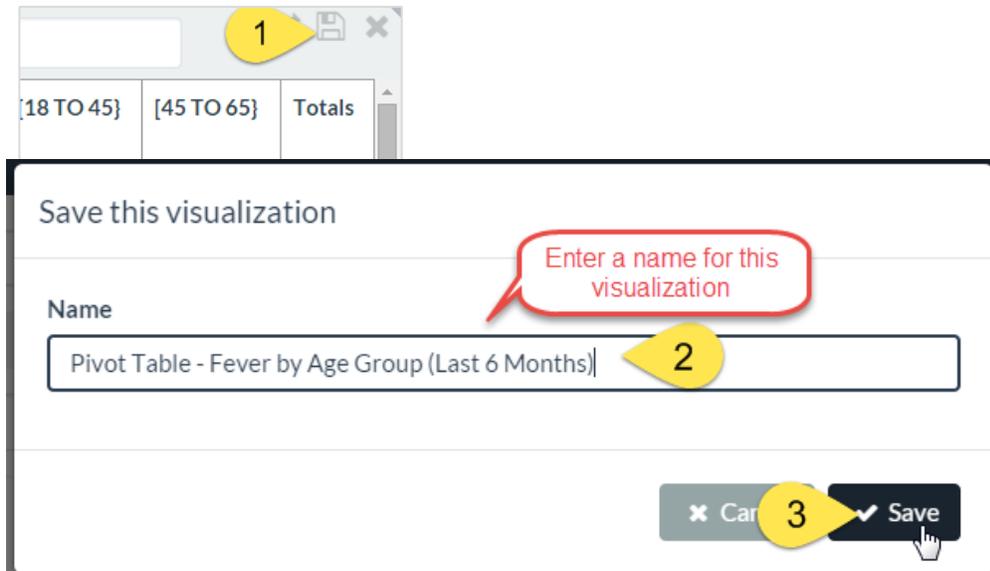
Enter notes that you want to include in the exported visualization.

Scroll down and click Export to PNG

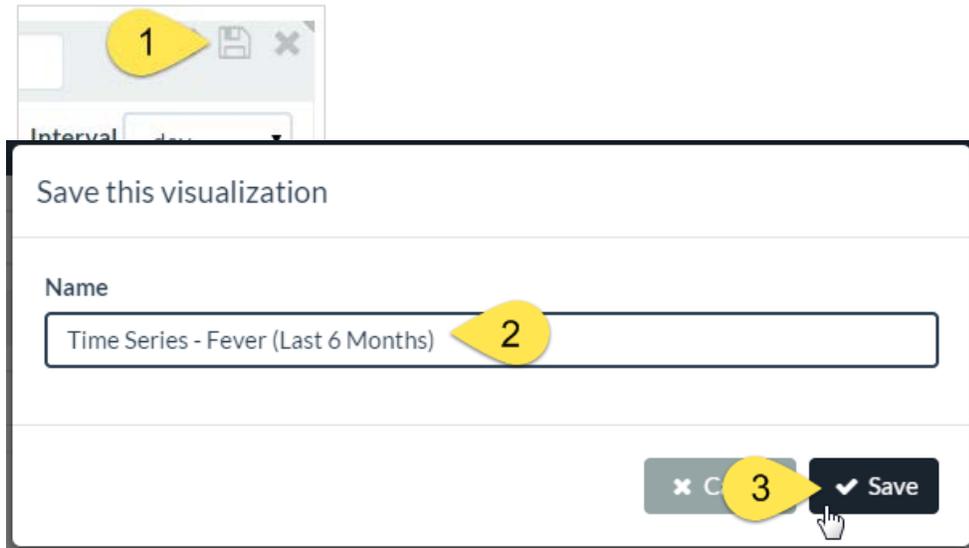
Edit title, axis labels, and scale if desired.

Saving Visualizations from the Workbench and Creating a New Dashboard

Suppose you want to now save these two visualizations as a new dashboard. To do that, you save each of the visualizations from the workbench, and then add them to a new dashboard.



Repeat this process for the time series visualization.



Now select New Dashboard from the Dashboard menu. Click Add Widget and select a visualization to add to the dashboard. Add the other visualization.

1

2

New dashboard

Open dashboard

Manage dashboards

Recent dashboards

Dashboard: Daily Patient Visits by Symptom (Prior 12 Months)

Admin

3 + Add widget Save

Add widget

Visualization

3

Bar Chart - Symptoms by Age Group

Map - Patient Visits

4 Pivot Table - Fever by Age Group (Last 6 Months)

Time Series - Daily Patient Visits by Symptom

Time Series - Fever (Last 6 months)

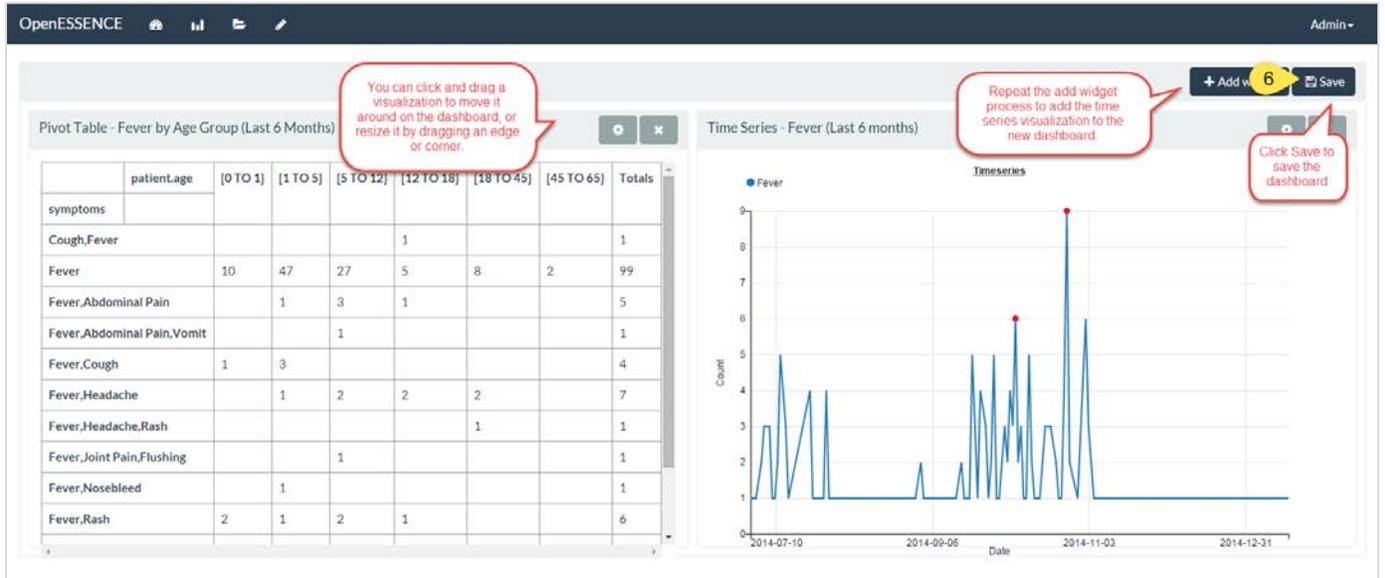
Add widget

Visualization

Pivot Table - Fever by Age Group (Last 6 Months)

5 x Cancel Add

Click and drag the visualizations to move or resize them to the way you prefer to see them. Then click Save to save the dashboard.



The screenshot shows the "Dashboard" configuration form. It includes fields for "Name" and "Description", and "Cancel" and "Save" buttons.

Callouts in the image provide the following instructions:

- "Enter a name and description for the new dashboard and click Save."

The new dashboard now appears on the Dashboard dropdown menu.

