

Tutorial 3: Clinical Service Redesign – LOS

Scenario: I need Australia-wide data to evaluate new clinical pathways and publish our length of stay (LOS) improvements for elective hip & knee surgery patients...

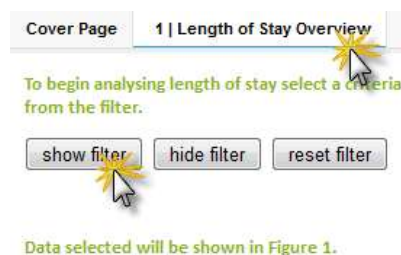
Welcome to the A-HED series tutorials.

In this tutorial, we'll be exploring data on elective hip and knee surgery length of stay.

First up I need to find the correct report to drill in to. In the modules tab, select “Operational Efficiency” then the module: “2.1 Length of Stay”.



This will open on the cover page which describes the methodology details and other related information. Now go to the first tab “Overview”. Then I reveal the filters by hitting “Show filter”.



In this example, deselect the earlier financial years 2010/11 and 2011/12 to focus on the last two financial years, 2012/13 and 2013/14.



Then under the organisation filter, deselect NZ and UK to focus on Australian data.

Organisation

Submission Frequency

- All organisations
 - Monthly only
 - Six-monthly only

Organisation

- All
 - AU
 - NZ
 - UK

Under the “Admission Details” filter I’ll de-selecting “Emergency” as I am only interested in seeing the details of planned or elective patients.

Admission Detail

Admission Method

- Emergency
- Planned

Same Day / Overnight

- Overnight admission
- Same day episode

Now, under the “DRG” filter we need to single out Hip and Knee replacement procedures. If you know the DRG codes you can type them in however you can also search by key words. For example, type in “knee”, hit enter, and while holding down the “control” key, select both of the knee replacement options (holding down the control key allows you to select multiple options).

DRG

AN-DRGs

knee

- (All) 622 values
- I04A-Knee Replacement W Catastrophi...
- I04B-Knee Replacement W/O Catastro...
- I18Z-Other Knee Procedures
- I29Z-Knee Reconstruction or Revision
- I32A-Knee Revision W Catastrophic CC
- I32B-Knee Revision W Severe CC

Then type in “Hip”, hit enter, and then with the “control” key still pressed, select both of the hip replacement options. Providing I push the control key when selecting these 2 options the knee replacement options I selected earlier will stay selected.

DRG

AN-DRGs

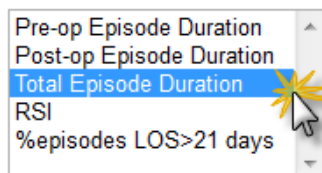
hip

- (All) 622 values
- I03A-Hip Replacement W Catastrophic ...
- I03B-Hip Replacement W/O Catastrophi...
- I08A-Other Hip and Femur Procedures ...
- I08B-Other Hip and Femur Procedures ...
- I21Z-Local Excision and Removal of Int...
- I23Z-Local Excision and Removal of Int...

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Now we need to select the measure to review, to the right of the filters. You can analyse the average length of stay for pre-operative, post operative or total episode duration. In this case select average length of stay for the “Total Episode Duration”.

Select the measure to review



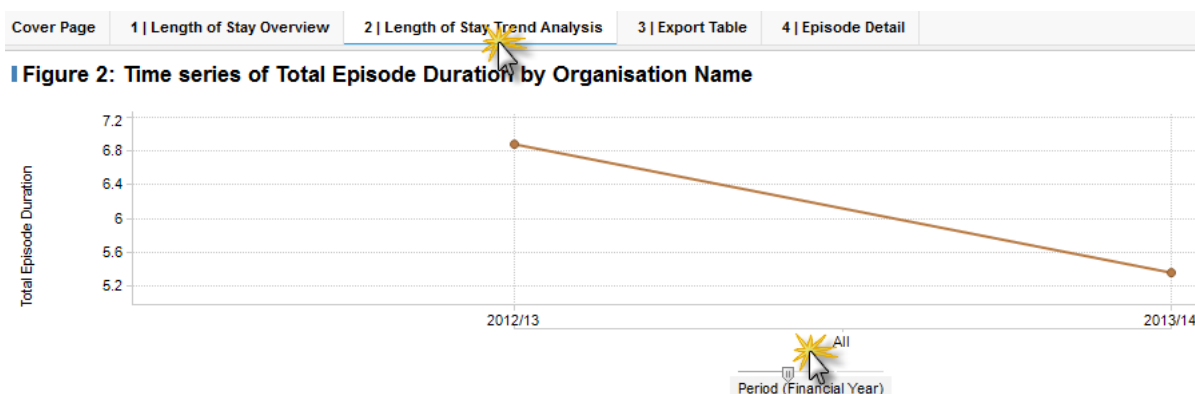
In table 1 you can see a list of organisations, you can use the control key on your keyboard to select multiple hospitals before moving to the next tab “LOS trend analysis”, however, in this case select the single organisation, “Vulcan”, which will turn blue.

Table 1: Overview

(Column Names)						
Organisation Name	Total Episodes	Avg. Pre-op LOS*	Avg. Post-op LOS*	Avg. Total LOS	Acute Episodes	RSI
Cougar	354	0.17	5.68	6.13	354	
Storm	1004	0.06	5.12	5.47	1004	
Vulcan	312	0.07	5.83	6.11	312	
Antares	228	0.09	5.68	5.97	228	
Eagle	281	0.23	5.38	5.83	281	

The selection you make in table 1 populates the time series chart, which can be found in this report on tab 2, “Length of Stay Trend Analysis”.

Figure 2 shows the trend over time for Length of Stay in Elective Hip and Knee Surgery Patients. There is a definite downward trend which becomes even more apparent if I adjust the period bar to show by financial year.



If you are publishing your findings, you have the ability to download this length of stay information for all Australian hospitals from A-HED, for example to calculate statistical significance.

Please have look at the other tutorials for more information on using A-HED, including how to drill into other reports for various scenarios.