

DV07: Using R/Shiny to Create an Interactive-Visualization Patient Profile

This is a demonstration on an interactive application that we built using R/Shiny..

Goal

By leveraging current technology, we believe an interactive-visualization tool can improve the way we access, review and interact with data.

A Brief Overview of R/Shiny

- Shiny is an open source R framework that interacts with RStudio IDE.
- Shiny application can be deployed as a webpage or a standalone desktop.
- A basic Shiny app has two parts: a user interface (UI) and a server function.

Shiny Dashboard

Design: *navbarPage* dashboard

[Patient Profile using R/Shiny](#) [Demographics](#) [Vital Signs](#) [Adverse Events](#) [Laboratory](#) [Lab Plot Combining with AE Plot](#) [About](#)

Select Vital Sign data .sas7bdat format

[Browse...](#) No file selected

[Blood Pressure Data download](#)

[Vital Sign Plots](#) [Systolic Data Table](#) [Diastolic Data Table](#) [Report](#)

Dynamic Data Selection



Patient Profile using R/Shiny

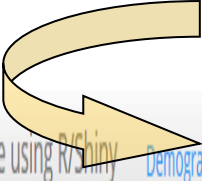
Demographics Vital Signs Adverse Events Laboratory

Select Demographics data .sas7bdat format

Browse... No file selected

< >

One Level of Interaction: Dynamic Data Selection



Patient Profile using R/Shiny

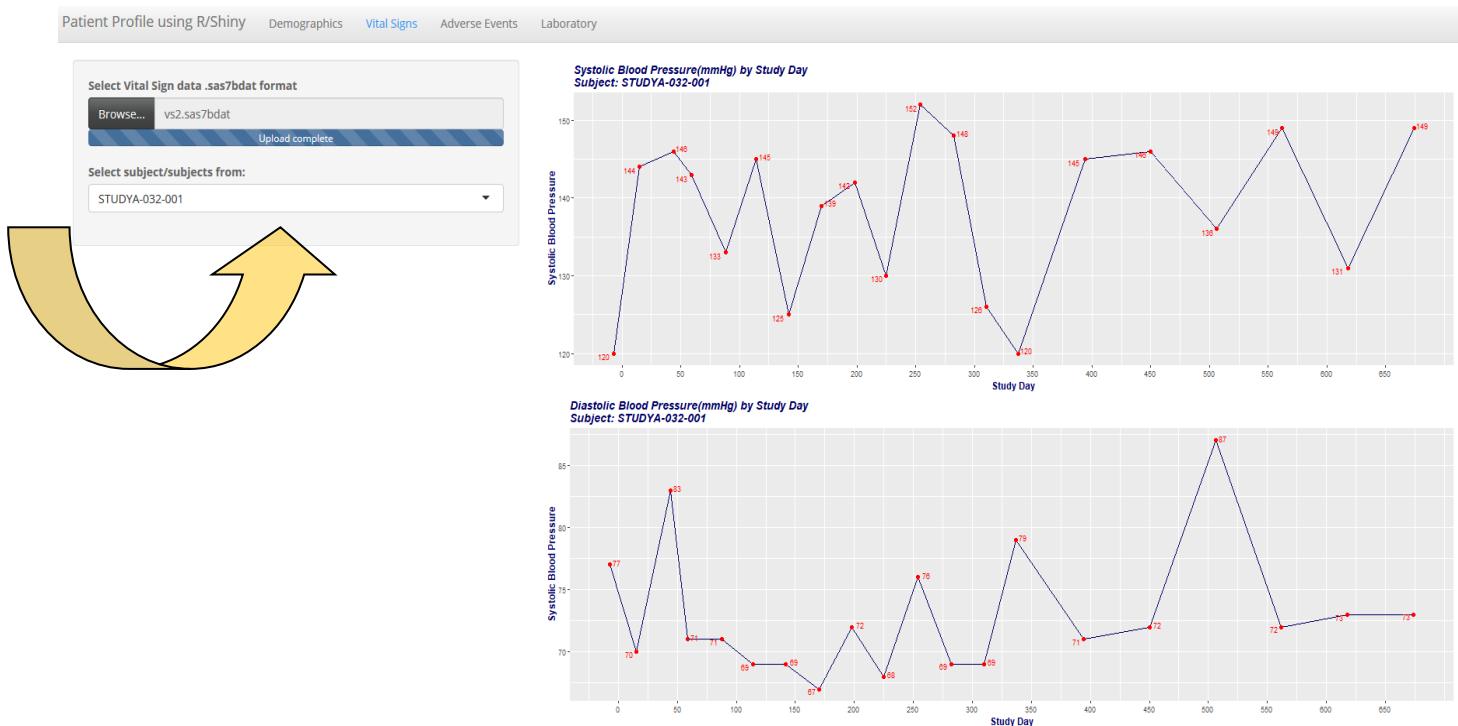
Demographics Vital Signs Adverse Events Laboratory

Select Demographics data .sas7bdat format

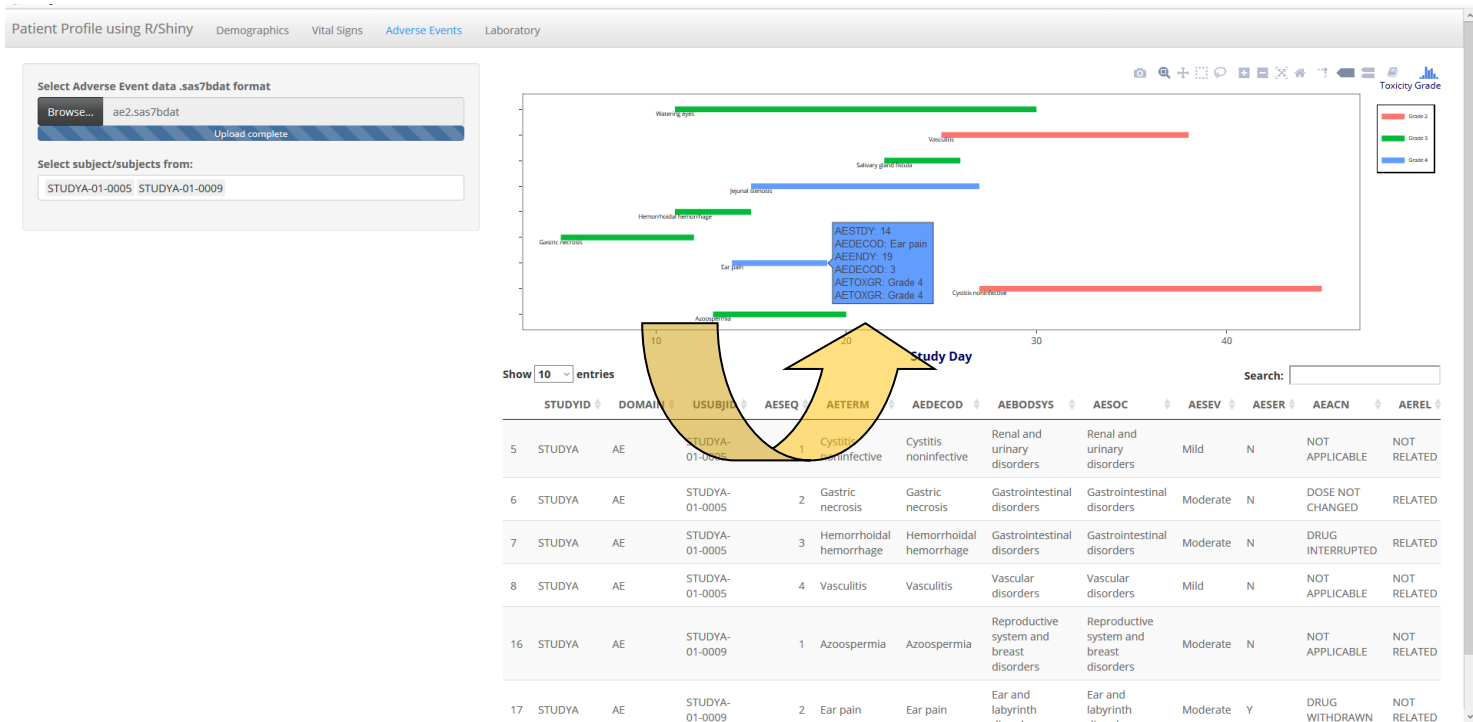
Browse... No file selected

< >

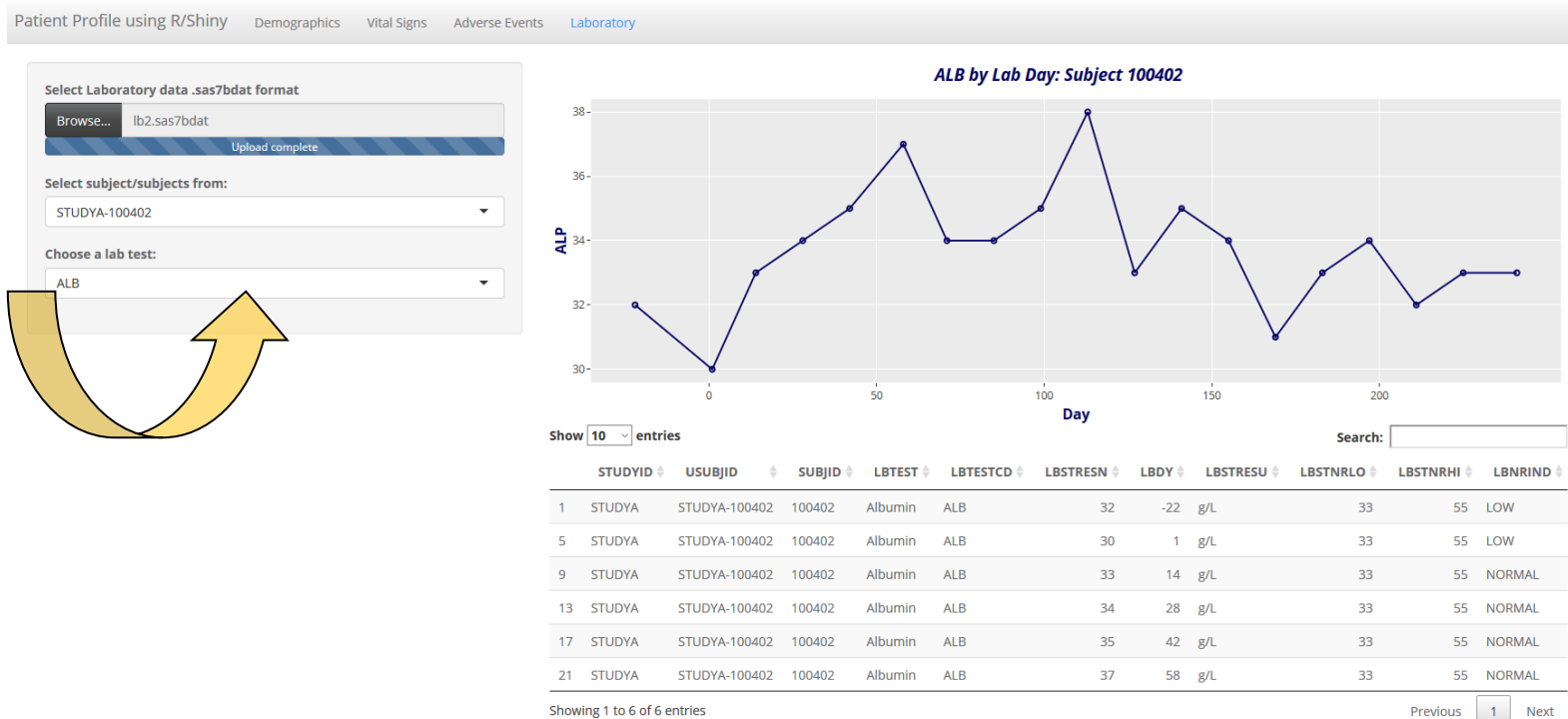
Two Levels of Interaction: Dynamic Data/Subject Selection and Graphic Display



Hover Effect



Three Levels of Interaction: Dynamic Data/Subject Selection and Lab Test



Interactively Download Data/Report or Plots

Patient Profile using R/Shiny Demographics [Vital Signs](#) Adverse Events Laboratory Lab Plot Combining with AE Plot About

Select Vital Sign data .sas7bdat format

Browse...

No file selected

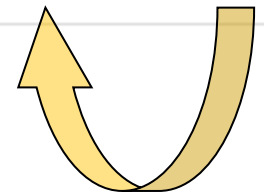
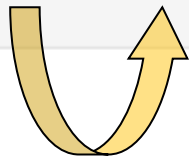
[Blood Pressure Data download](#)

Vital Sign Plots

[Systolic Data Table](#)

[Diastolic Data Table](#)

[Report](#)



Any questions?

