**Overview**

This webapp combines and integrates multiple socioeconomic and medical datasets using big data analytics, in order to provide a lightweight, scalable platform for drawing inferences related to medical care, sociology, and economy in the United States.

**Layout**

Operation of the exploratory dashboard is done primarily through the manipulation of various ‘tiles’. Each tile represents either a chart or a widget, and can be moved around the screen to suit the user’s preference. To move a tile, simply click-and-drag (if on a PC), or touch to drag-and-drop (if on a touch-enabled device). Upon starting the webapp, there are only 5 tiles on the screen, as well as 1 additional tile to display the title. These 5 tiles can then be further manipulated to create additional tiles.

**Chart Creation**

To create a new chart, start by clicking the ’Add’ tile in order to trigger the chart creation wizard. A dialogue box will then pop up asking to select the primary, filterable variable (usually the independent variable you will be investigating). Simply select a data source, then a variable derived from that source, and click ‘Continue’. A dialog box will then present a list of compatible chart types based on your previously selected option. Select your desired chart type, and proceed through the rest of the customized wizard to complete the tile

**Chart Manipulation**

All charts in the dashboard come included with Crossfilter and Dc integration, allowing for a variety of interesting data filtrations and manipulations. To filter a specific variable, click/tap on a specific portion or range of a chart. For example, to filter for females on a pie chart showing gender distributions, simply select the ‘Female’ slice of the pie chart. When a filter is applied to a specific chart, all other charts will reflect that filter i.e. applying the aforementioned ‘Female’ filter will cause all other charts to reflect data for females only