Pre-analysis Plan.

November 26, 2018

Using a Synthetic Control to Examine the Efficacy of the 2016 California Vaccine Policy on Vaccine Coverage.

Study Objective.

Goal of the study and question of interest.

Method: The Synthetic Control Approach

The synthetic control method,

Variable selection

Cross-validation

Sensitivity analysis

Data and Outcomes

Vaccine Coverage data from the CDC

Available variables

Sensitivity and Stability Analysis

References

Was great to chat today! I have attached an example of a pre-analysis plan, which is probably more detailed than is necessary. Once the model is refit with the new modifications we discussed, including one average lag variable and new forward selection method, I think it will be important to include the following:  
  
- study objective and hypothesis   
- statistical method (1-2 sentences) and variable selection methodology/cross-validation (2-5 sentences). Plots of cross-validation.    
- variables included in model  
- primary and secondary outcomes   
- definition of significance (placebo testing)   
- sensitivity analyses, stability analyses  
  
We can then circulate the statistical analysis plan to Kristin and others for input, and generate the first round of results! Awesome work!   
  
Best,