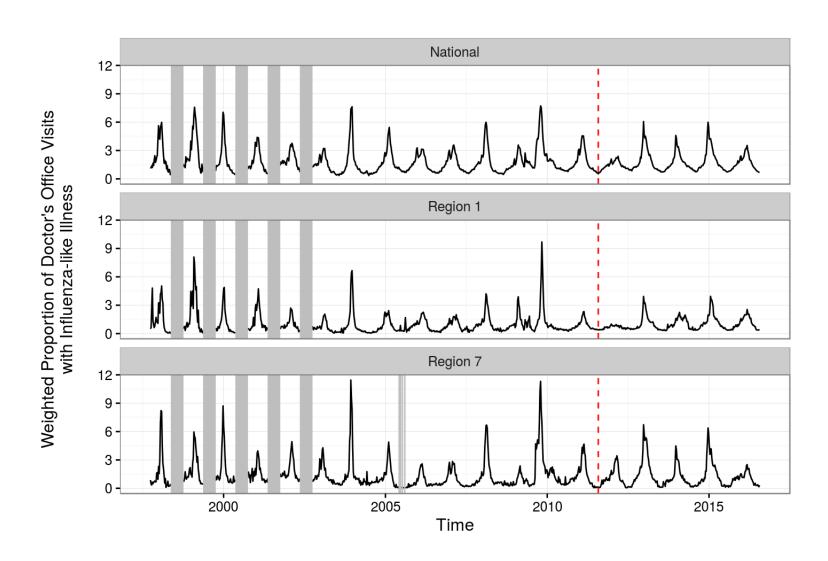
Model Averaging for Probabilistic Time Series Forecasts

Evan Ray, Nick Reich Department of Biostatistics and Epidemiology University of Massachusetts, Amherst http://reichlab.io

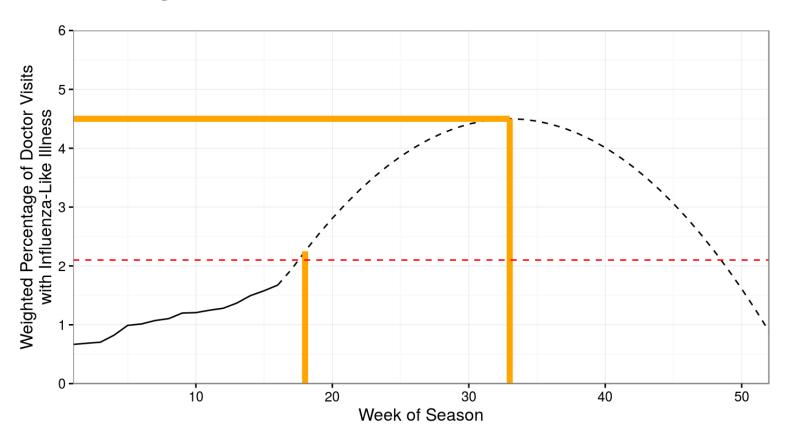
August 1, 2017

Flu Data

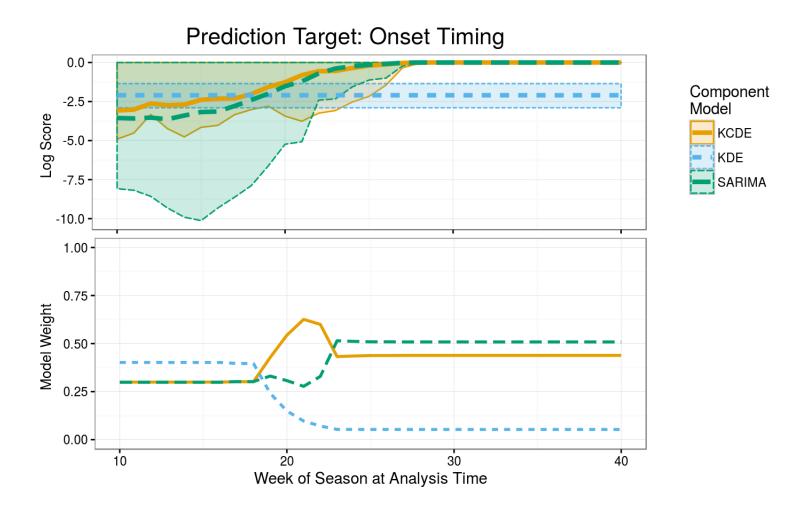


Goal: Predictive Distributions for 3 Targets

- 1. Peak Incidence
- 2. Peak Timing
- 3. Onset Timing



Relative Performance Varies



Evaluation/Results

"Public health actions informed by forecasts that later prove to be inaccurate can have negative consequences, including the loss of credibility, wasted and misdirected resources, and, in the worst case, increases in morbidity or mortality."

- Biggerstaff et al. BMC Infectious Diseases 2016; 16(1):357.

We're looking for two things:

- 1. Good overall performance
- 2. Consistency