Delphi-Stat Forecasting Methodology EW43 Update

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Changes to Delphi-Stat Methodology

Mixing coefficients between methods: a set of weights for each of the forecasting methods is determined for each epi week, metric (MAE or log score), and target, but are tied across areas (nation + 10 HHS regions); thus, any method will receive the same weight in all areas (for the same epi week, metric, and target). For distributional forecasts, the weight assigned to the uniform distribution is increased by approximately 2.5% (based on the rule of three), and weight taken away evenly from all methods to make the weights again sum to 1.

New method added to ensemble: direct target density estimation: uses the same weighted kernel density estimation approach as two existing methods to directly forecast each of the targets without constructing, rather than constructing a distribution of flu curves and extracting the target values from these curves. Adjustments to the output are made so that all predicted possible values are integers when appropriate and lie in the correct range.