We use a Bayesian hierarchical model framework to estimate epidemic severity which incorporates data from both ILINet and [healthtweets.org](http://healthtweets.org).  The data from [healthtweets.org](http://healthtweets.org) is mined from Twitter posts, and is provided 1 week earlier than ILINet data, allowing our predictions to benefit from the more recent data.  The hierarchical structure of our model allows ILINet and healthtweets data from previous years to inform the parameter

values used for epidemic severity prediction in the current year.  Our model fits the shape a normal pdf to the outbreak curve, and we use this shape to predict the outbreak weeks into the future.  Currently, [healthtweets.org](http://healthtweets.org) does not offer data at the regional scale, so our regional predictions are informed only by ILINet data.

Here's a citation for [healthtweets.org](http://healthtweets.org): Dredze, Mark, Renyuan Cheng, Michael J. Paul, and David Broniatowski. "HealthTweets. org: A Platform for Public Health Surveillance using Twitter." AAAI Workshop on the World Wide Web and Public Health Intelligence (W3PHI-2014), 2014.