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**Elinor L Velasquez\*** (elinor2015@gmail.com), 244 Fifth Ave., Suite E273, New York, NY 10001. *Preventative Analytics for Infectious Disease Pandemics*. Preliminary report.

An infectious disease pandemic is defined here to be an illness caused by an organism that infects many humans throughout the world. For illustrative purposes, we apply our novel definition of preventative analytics to the H1N1 2009 pandemic (flu) viral strain to measure the effectiveness of our novel platform of preventative analytics tools towards preventing a viral pandemic.

Previously, the emerging field of preventative analytics has been used in business and the IT sector to analyze data, showing time-dependent patterns, predicting a client's needs when used in business, producing alerts and estimating a scenario's noise. However, we enlarge this definition of preventative analytics to include an interactive component, creating a platform of computational tools based on preventative analytics, and inspecting their effectiveness in preventing a viral pandemic, as opposed to the traditional scientific methodology that typically analyzes the aftermath of a viral pandemic. The platform being presented follows a preventative analytics methodology, as well as a novel mathematical model describing the 2009 H1N1 2009 flu pandemic. (Received September 16, 2014)