

Abstract: Leveraging Twitter as an Epidemiologic Tool to Understand Health Behaviors, Y1

Using Twitter data has revolutionized understanding of public health events such as influenza outbreaks. For this project, we will gather a team of public health and computer science researchers to leverage this power of Twitter as an epidemiologic tool to better understand health behaviors. First, we will gather a targeted sample of Twitter messages (â€œtweetsâ€?) related to behavioral health (e.g., substance use) and examine them in-depth. Then, we will use this information to create specialized machine learning algorithms that can automatically categorize future Twitter data. Finally, we will use statistical methods to examine changes over time, and in different contexts and geographic locations. These activities will dramatically improve our ability to understand behavioral health and to examine the use of Twitter as a novel epidemiologic research tool in this area.