Assessing Real-World Utility of Individualized Google Searches in the Early Detection of Suicidal Behaviors: Pilot Cohort Study

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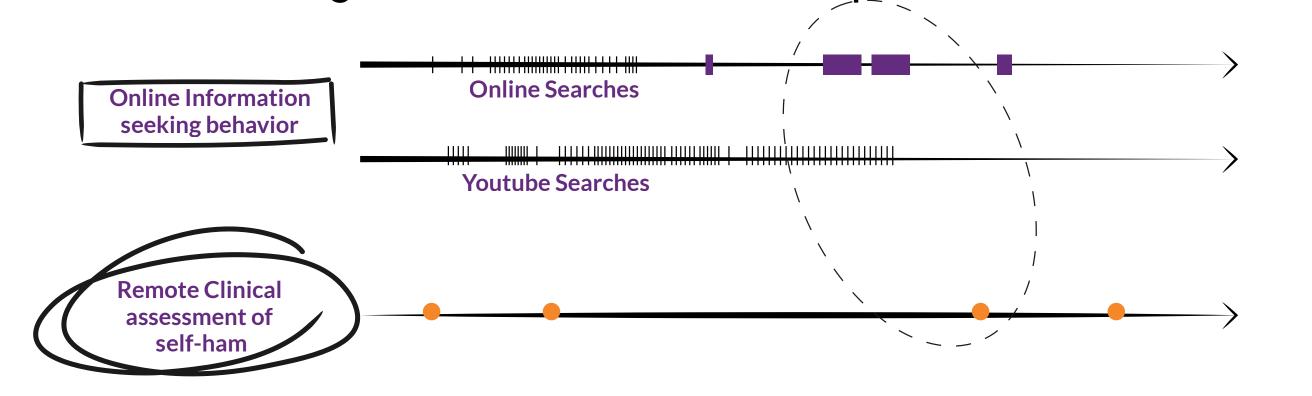
700,000 people die from suicide worldwide each year.

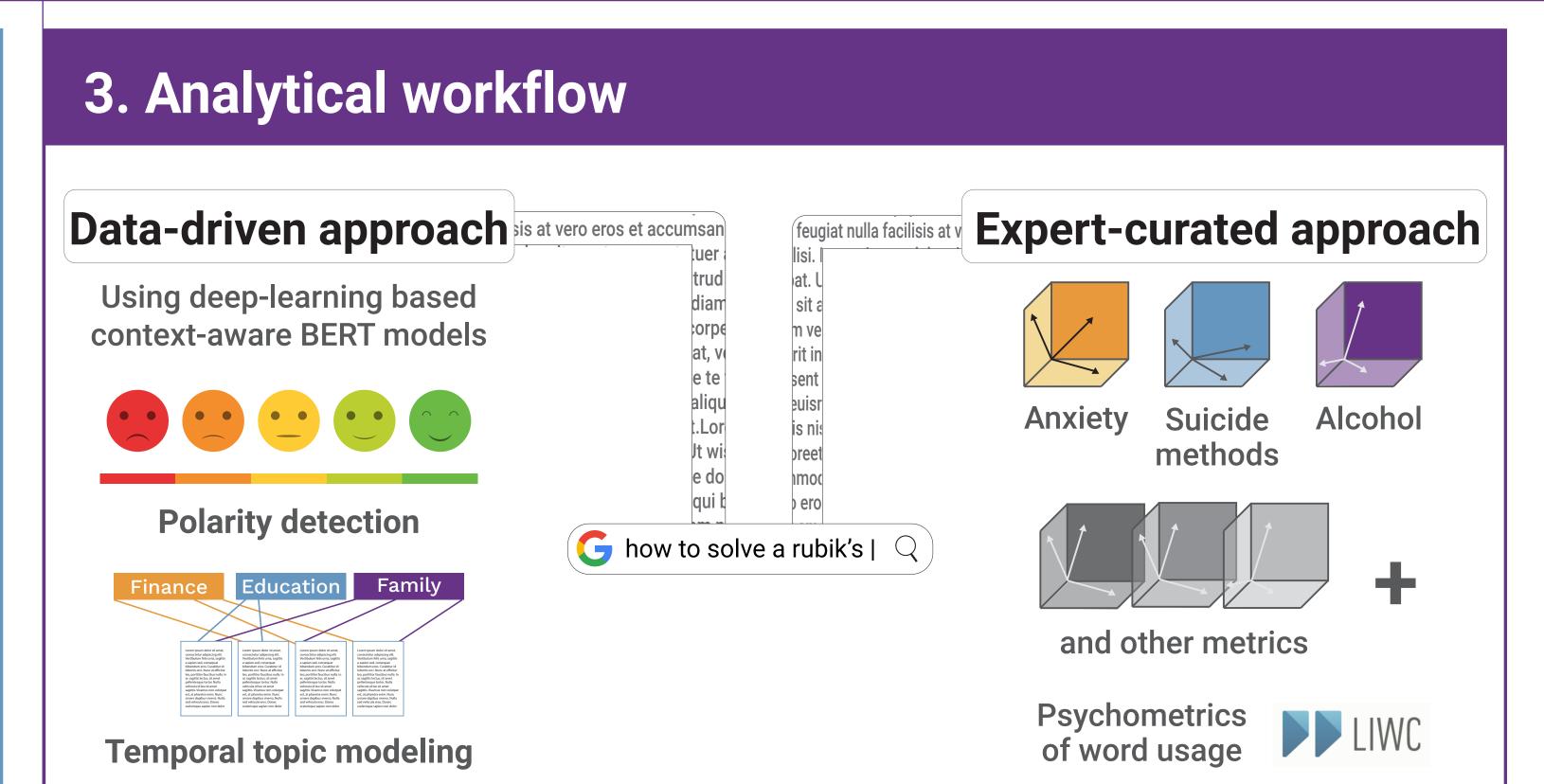
On average, it takes between 11 to 25 nonfatal attempts before a death by suicide occurs.

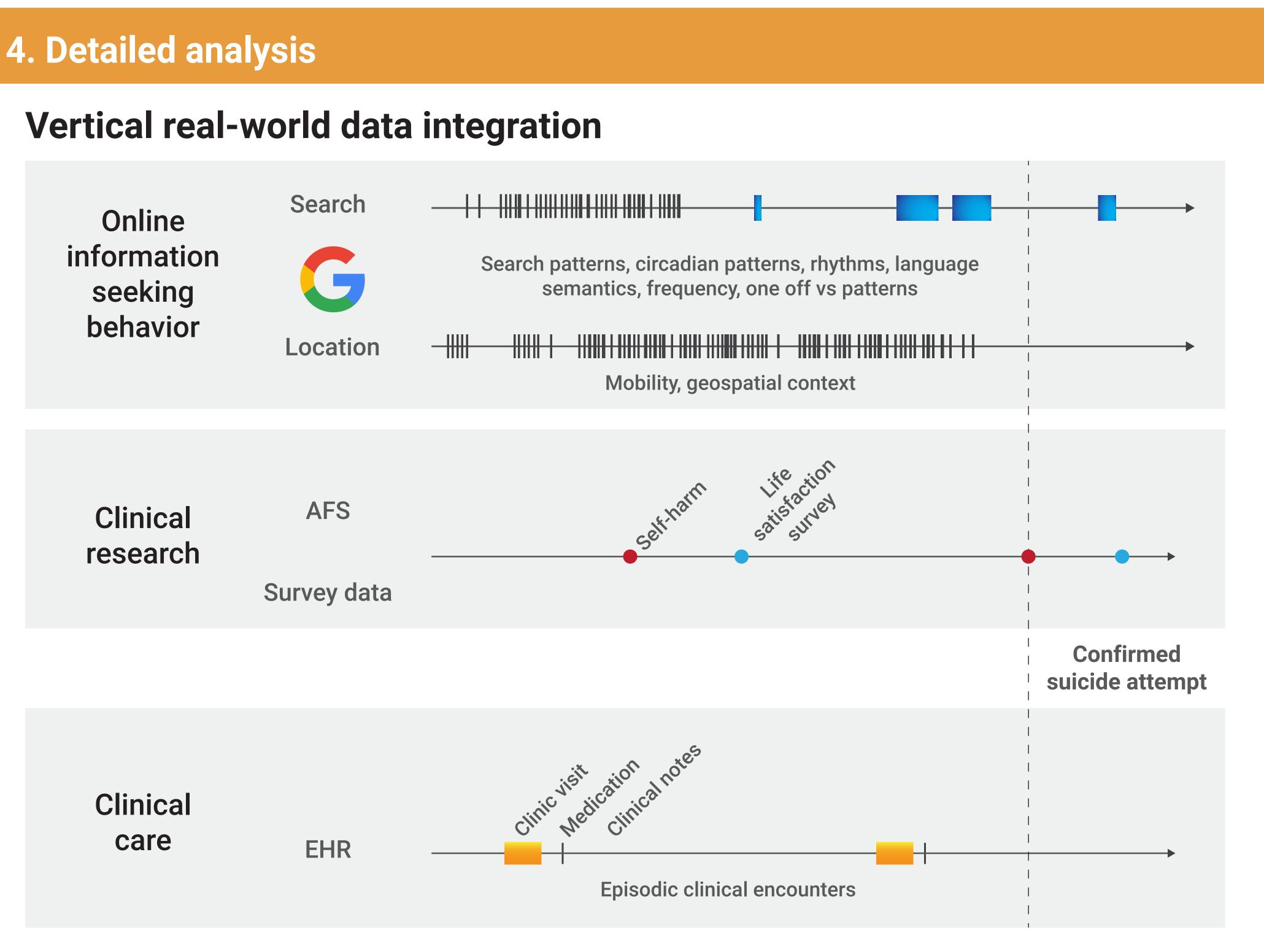
Despite **5U Years** of research, we know who is at risk but not when they are at the highest risk of suicide.

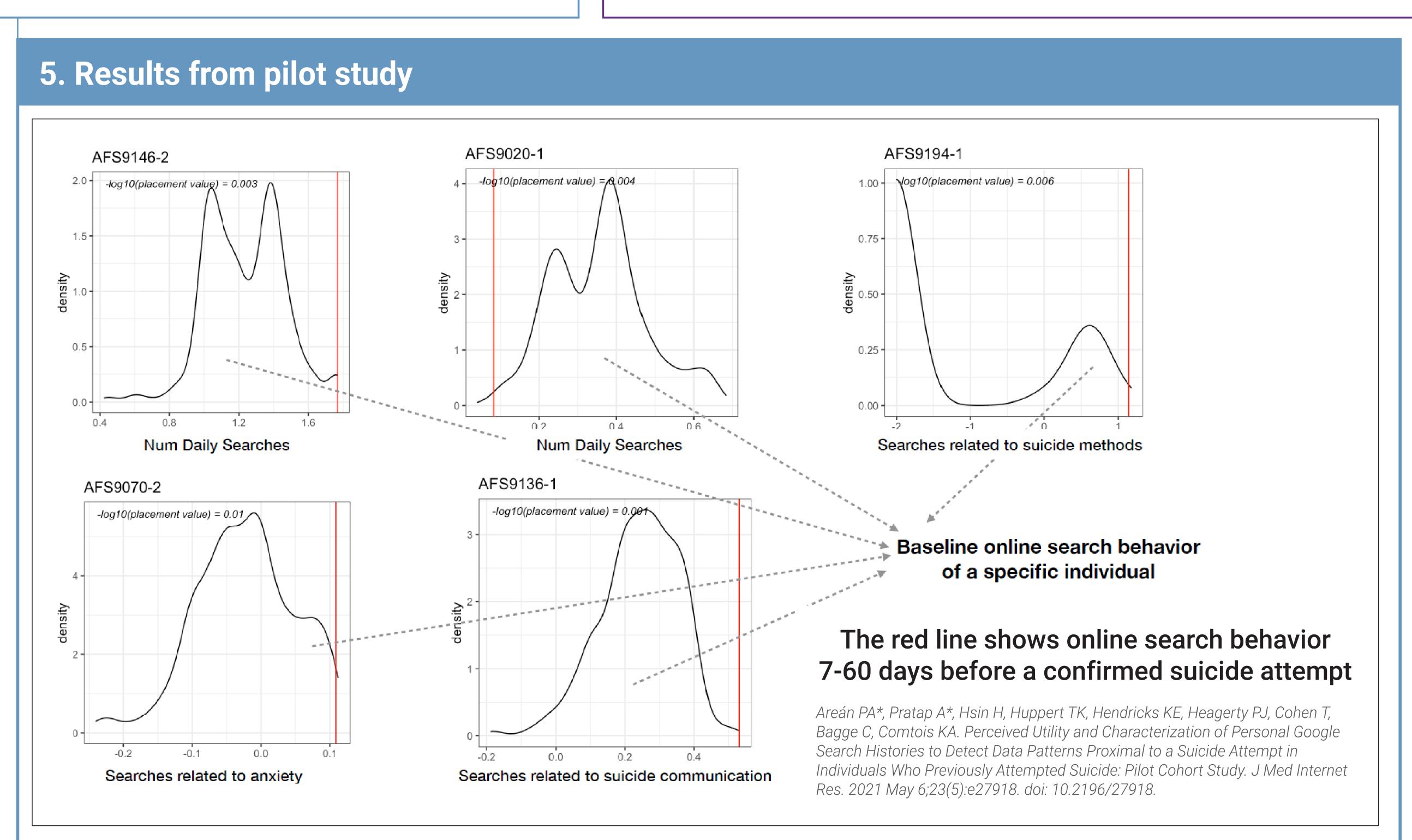
2. Our solution

Google processes over 8.5 billion searches per day, 7% of which are related to health. We may be able to use an individual's Google and YouTube data to predict when they are is at the highest risk of self-harm - by analyzing the online web searches along with a timeline of their past self-harm behavior.



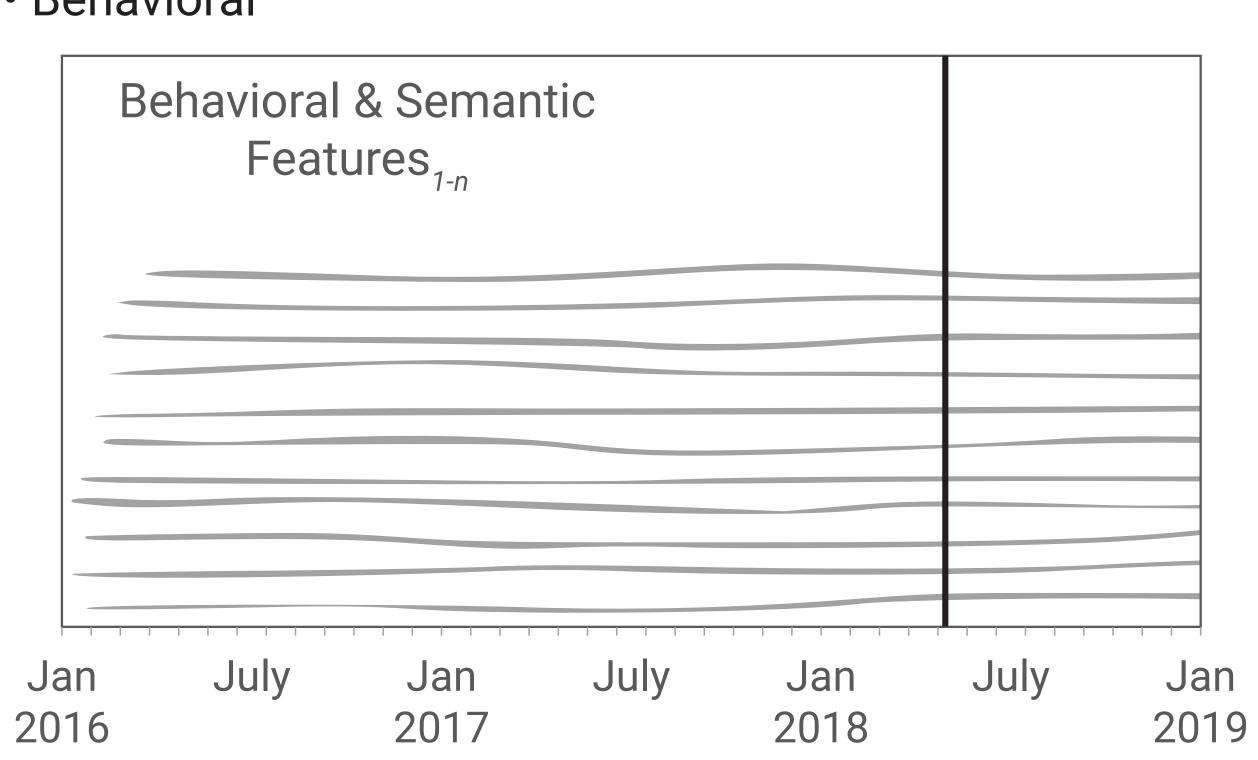


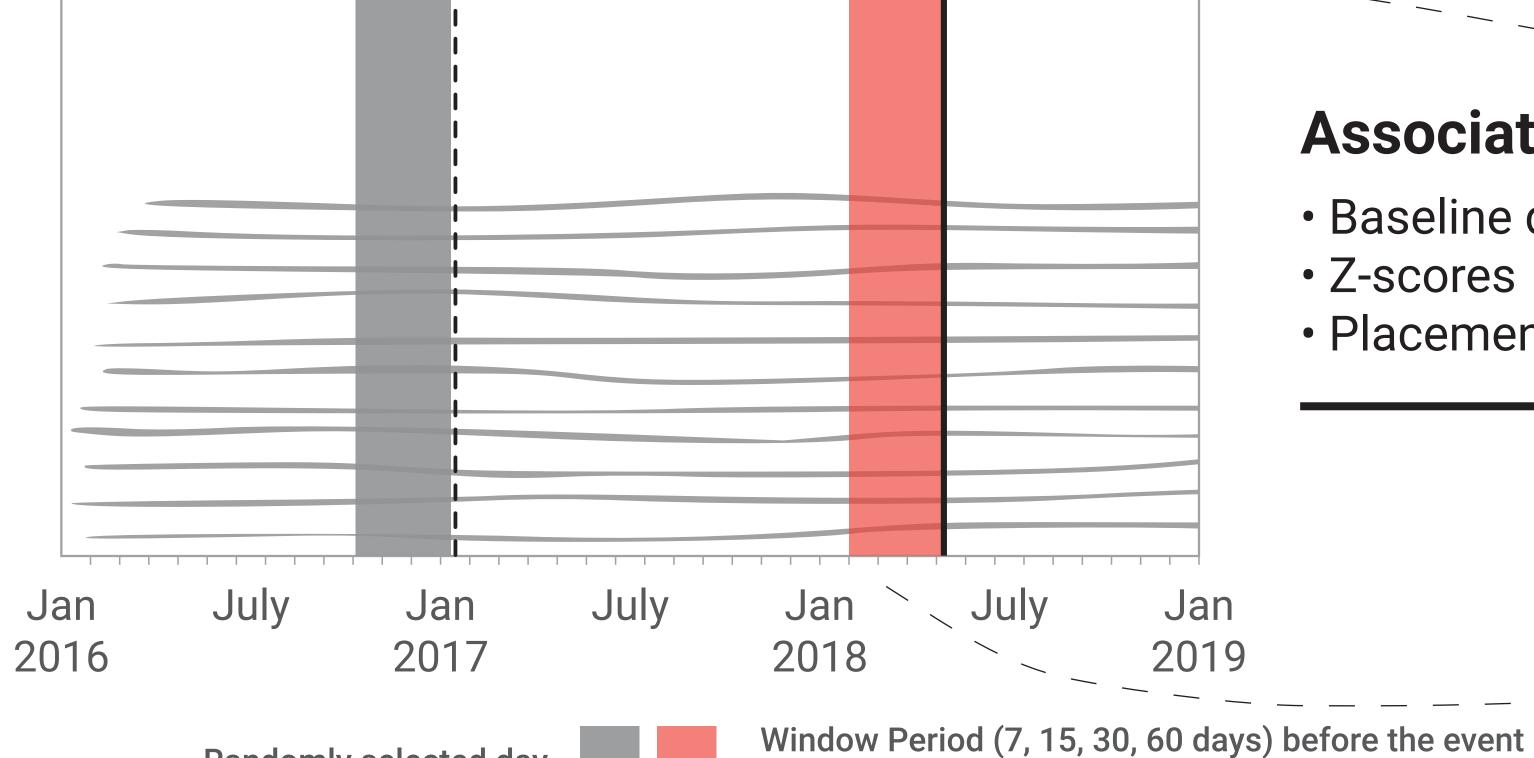




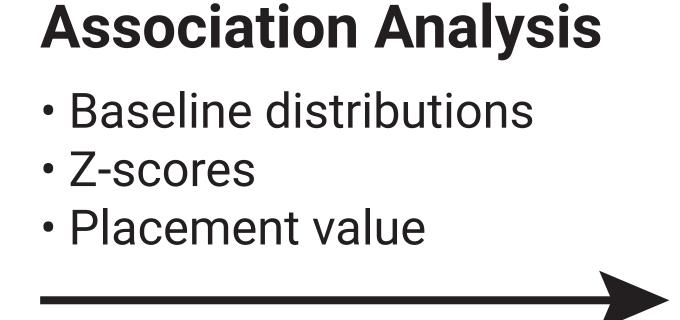
Search Data Featurization

 Semantic Aggregate statistics (mean, standard deviation, max and min) in the selected window Behavioral

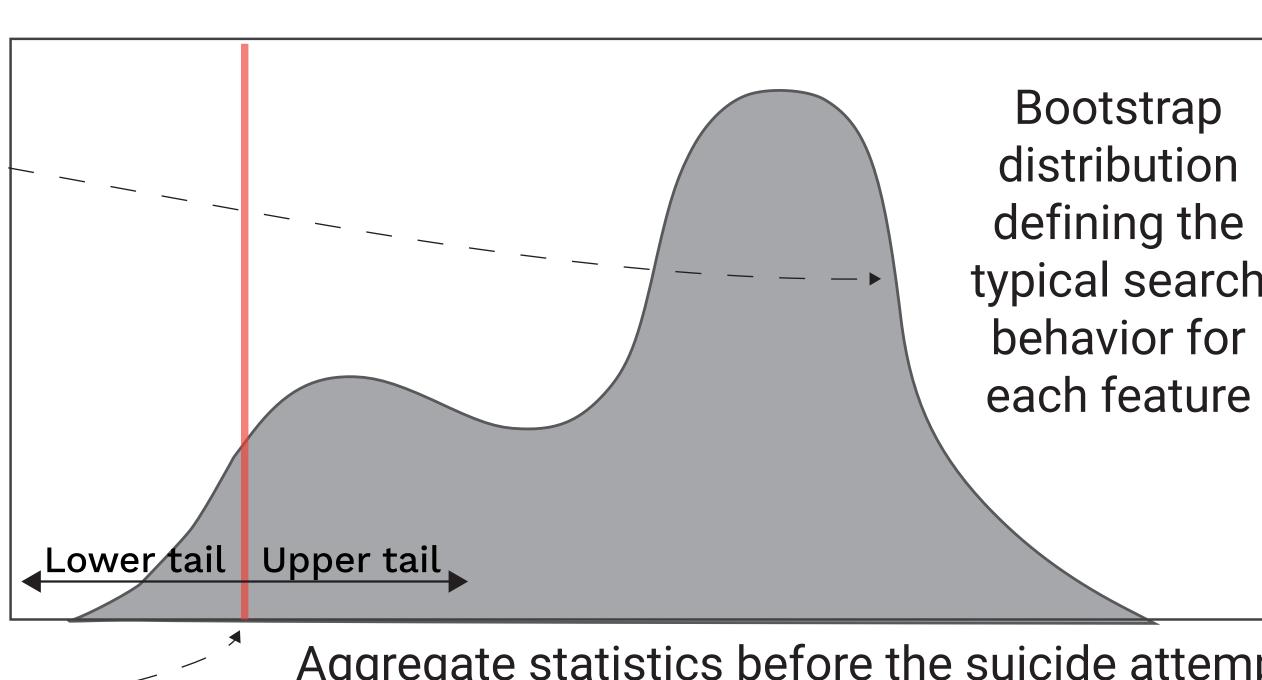




Randomly selected day



of interest (randomly selected day or suicide attempt)



typical search each feature

Aggregate statistics before the suicide attempt