

NLP System

Background

We train NLP models using carefully curated data that expresses depression, anxiety, positive moods and negative moods. Once trained, an NLP model predicts the semantic tone of new, incoming text as belonging to one of these four categories.



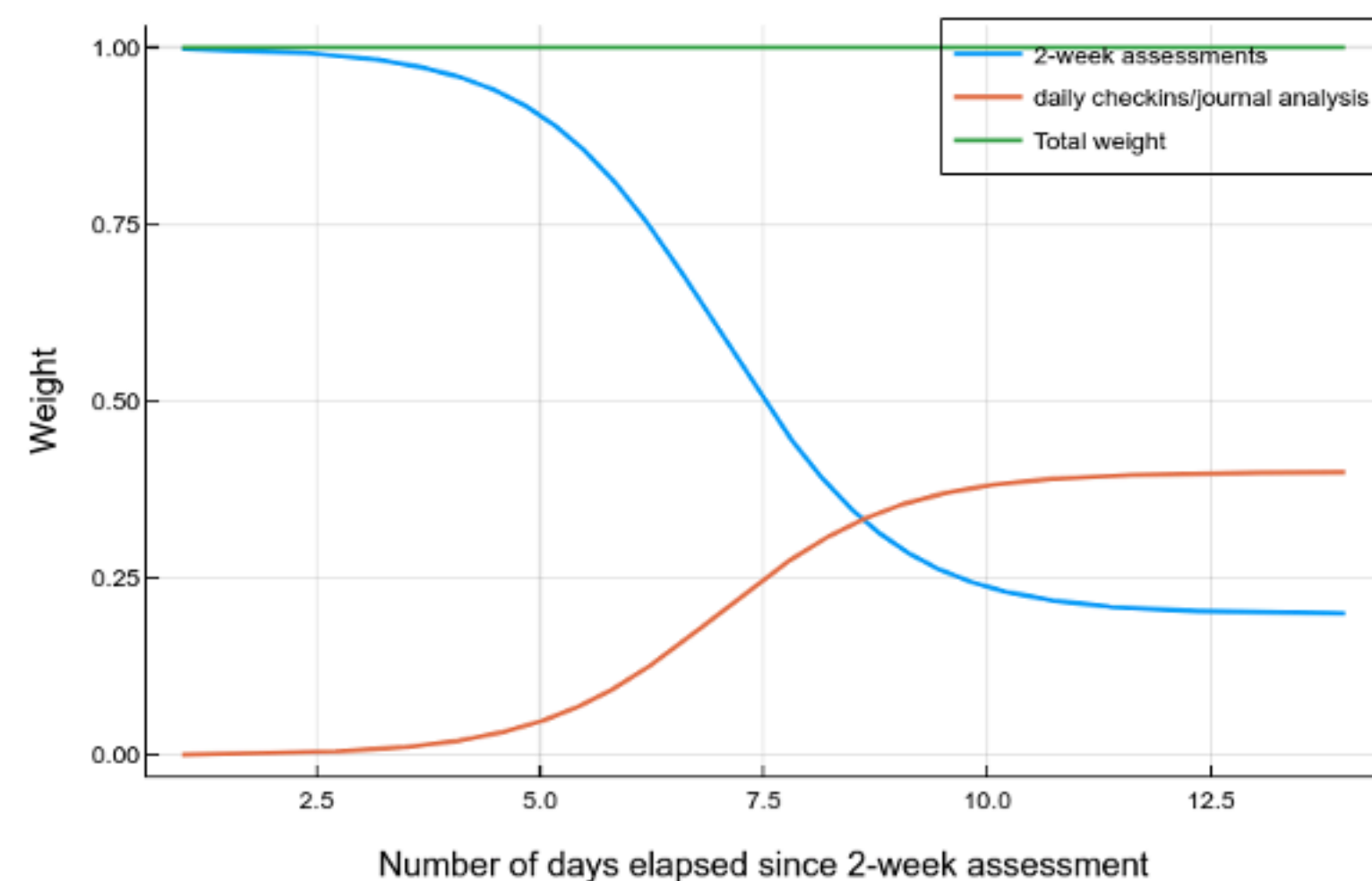
We evaluate our models via a **2-stage process**, to ensure they aren't disproportionately associating specific words with specific categories

Rose Clinic Metrics

How do we assess and flag a patient's risk level to the clinician?

Our clinical team (led by Dr. Matt) and our R&D team (Dr. Atif / Prashanth) jointly developed a novel monitoring system to flag patients based on their daily/scheduled assessments.

We (currently) use a weighted sum of clinical assessments (PHQ-8/GAD-7), daily check-ins (Levels 1-5 for mood and anxiety) and NLP predictions on journal entries.



Red flag

Atkins, B.
Shah, K
Sinclair, R
...

Yellow flag

Smith, C.
Yuan, M.
...

We adjust the weights such that the clinical assessments (PHQ-8/GAD-7) lose their value over time, and daily check-ins and journals gain in value over time. However, **clinical assessments still hold the most weight** for up to 8 days after they are taken.

Patients are organized into the appropriate flagging category and displayed on the clinician dashboard