

Mental Health Forecast



> TRL 5
> Clinical

Problem

Mental health conditions are dynamic and highly individual, yet many existing assessment approaches rely on periodic clinical reviews, static risk scores, or clinician judgement alone. This makes it difficult to anticipate changes in a person's condition, identify emerging risks, and tailor monitoring or interventions to their specific needs. Existing digital tools often provide one-time predictions or focus on a narrow set of symptoms, limiting their ability to reflect the complexity of mental health journeys. Healthcare providers need more accurate, personalised and continuously updated insights to support earlier intervention, optimise care pathways, and improve outcomes for people experiencing mental health challenges.

Solution

This technology uses advanced machine learning and predictive analytics to learn how an individual's mental health changes over time using routine self-report questionnaire data. The software continuously updates forecasts as new information becomes available, generating personalised predictions of future mental health trajectories across multiple wellbeing domains. Built as an interoperable API-based platform, it can integrate with existing digital health systems and decision-support tools. In addition to forecasting likely outcomes, the technology provides measures of risk, variability and uncertainty, helping clinicians and healthcare services gain deeper insights into patient progress and make more informed, evidence-based care decisions.

Potential Commercial Applications

- AI prediction engine for digital mental health platforms.
- Clinical decision-support enhancement for healthcare providers.
- Measurement-based care and patient monitoring solutions.
- Risk stratification and outcome forecasting for mental health services.
- Personalised care pathway and intervention planning tools.
- Population health analytics for mental health organisations.
- Embedded analytics for wellness and behavioural health applications

Inventors

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