

## **A smartphone based psychiatrist-aid system to monitor and prevent recurring illnesses (Ramot)**

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Lifegraph enables early detection of disease deterioration in mental health patients, using proprietary machine-learning algorithms applied to data collected from the smartphone sensors.

### **VISION**

Improving lives of patients with mental disorders and decreasing the burden of disease on patients, their families and society as a whole.

### **NEED AND MARKET POTENTIAL**

Mental disorders are a leading cause for loss of productivity and hospital admissions, with 2 million admissions and \$45.3 billion spent on hospitalizations every year.

Currently, patient follow-up is based on face-to-face meetings which do not happen often enough, thus do not enable early detection of mental disorder episodes. On-going, dynamic, follow-up is crucial to improving outcomes, reducing unnecessary hospitalizations and improving medication management.

### **Solution**

Lifegraph extracts behavioral patterns from data passively collected from the patient's smartphone. Continuous monitoring and advanced machine-learning algorithms enable the detection of early signs of clinically significant mental disorder episodes. The patient's day-to-day behavior and an alert log are presented in an intuitive dashboard to the care provider and caregiver. This novel solution

provides the objective view that is currently missing from clinical practice, with information typically revealed only after deterioration and hospitalization already occurred. Insights provided by Lifegraph aid clinical decisions, facilitate drug dosage optimization and improve treatment quality.

### **IP**

US Patent Application No. 61/986,918: Method and system for behavioral monitoring.

Proprietary know how: behavioral features and machine learning algorithms that can detect patients' life habits.

### **STATUS**

Lifegraph's end-to-end platform is already working and is being used in Israel's top hospitals by leading

psychiatrists that monitor and treat patients with affective disorders (i.e. bipolar, unipolar/depression and schizo-affective disorders).

Our preliminary results approve that Lifegraph is sensitive to clinically significant changes in patient's

behavioral and emotional condition. The platform enables early detection of deterioration 2-4 weeks before a new episode arises.

Sensing Mental Health

Further clinical trials are being planned these days in other domain areas like ADHD.

### **Contact for more information:**

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