Executive Summary

Product Description/Objective

Brain Profiler is your superior integrative medical record, a patient-interactive digital platform for neuro-scientific psychiatric diagnosis. Integrative medical record simultaneously keeps your medical registration synchronized with patient’s psychiatric conditions, offering better follow-up, hands-on for emergencies and increasing adherence to treatment. Digital platform plugins “sense” patient’s phenomenology providing better objective accurate reliable diagnosis. Neuro-scientific psychiatric diagnosis is achieved by translating patient’s clinical phenomenology into predicted brain-disturbances, offering the vehicle for discovering psychiatric etiology. Scientifically (See Below) Brain Profiling is based upon Clinical Brain Profiling (CBP), a novel reformulation of mental disorders as brain disorders. CBP is based on new approaches to brain research, namely the connectom (network) approach of neural-computation and complex-systems theories integrated with clinical psychiatric phenomenology (symptoms and signs). Actually Brain Profiling maps clinical assessments, patient’s-complaints and digital-sensors activity onto a predictive personalized diagnostic profile, which is then validated with the appropriate electrophysiological brain imaging of the patient. Such Brain Profiling integration brings psychiatry into a totally new level of scientific technological capacity with the promise to revolutionize the field leading to a new level of effective treatments, namely brain-pacing therapies.

As early as at the initial interactive tele-psychiatry EMR level, Brain Profiling will improve diagnosis, make it personalized, more focused and accurate, manage patient’s follow-up as to increase efficacy and reduce costs for clinics, medical institutes and HMO’s. Built-in telemedicine capacity using alerts and notifications will increase adherence to psychiatric care make early detections and interventions easy, thus preventing deterioration and expensive hospitalizations. Accumulated large-data statistics will provide Brain Profiler with remarkable exceptional prognostic and pharmaceutical-response predictions. With the application of digital-sensors these capabilities of Brain Profiler will increase multi-fold to offer unprecedented levels of psychiatric effective care. Finally with the Brain imaging validation Brain Profiling is in a position to revolutionize the field and any new treatment technology, pharmaceutical or brain-pacer will require brain profiling for activation and monitoring. To conclude Brain profiler takes psychiatry to new levels of efficacy while reducing costs enormously (by increasing adherence, improved personalize objective diagnosis, follow-up managements and disease prevention). Brain profiler has depth into the future by revolutionizing the field of psychiatry reaching etiological brain-related psychiatry where Brain Profiler will have the role of launching a whole new generation of brain-pacing expertise.

Stage

Investment = Seed.
Product = MVP Ready

Customer Pain the Solution Solves

In the US alone, there are 43,000,000 psychiatric patients, with annual costs exceeding $200Bn for the privatised healthcare systems. Psychiatric-care costs have now exceeded heart conditions ($147bil), trauma ($143bil), and cancer ($122bil). Inaccurate/Erroneous diagnosis’ prevalence raises both financial and emotional costs. We, as a society, require a more efficient way to track and measure our mental health, and the problems therein.
Brain Profiler will provide for:
- Improved accessibility to better patient care
- Overcoming limited clinical resources
• Overcoming limited staff trained to deliver evidence-based treatment across the many therapeutic orientations
• Location-free, portable, available at any time, and can be used across a broad range of settings and during patient transitions
• Overcoming logistical difficulties associated with scheduling and travel to receive services cost savings
• Queue management and prevention of hospitalizations
• Overcoming the high cost of training busy staff to deliver evidence-based treatment across the many therapeutic orientations
• Better, more-personalized, objective diagnosis and treatment
• Better, statistic-based, treatment-response prediction and prognosis
• Clinical process for discovering the brain-related causes of the mental disorders

The Science

Brain Profiling is based on 20-years of theoretical research of Clinical Brain Profiling (CBP) which reformulates mental disorders as brain ‘Globalopathies’ (connectopathies) discovered by ‘NeuroAnalysis’ methodology. (see literature here)

- Fogelson N, Litvak V, Peled A, Fernandez-del-Olmo M, Friston K.
- The functional anatomy of schizophrenia: A dynamic causal modeling study of predictive coding.
- Schizophr Res. 2014 Sep;158(1-3):204-12.
- Impaired network stability in schizophrenia revealed by TMS perturbations.
- Arzouan Y, Moses E, Peled A, Levit-Binnun N.

For a more detailed explanation of CBP see a short Article of Psychiatry Advisor “The Copernican Revolution”
Target Costumers
B-to-B all psychiatric medical institutes and HMO’s
b-to-C all psychiatrist and their patients

Competition & Advantages (uniqueness)
There are many companies working in the field of telemedicine and digital mental health, Ethoos, Ginger.io, Life Graph, Mon4t, Healthloop, TalkSpace, Video Medicine, Telehealth365, Cure My way, Beyond Verbal are only a fraction of these. These companies either simulate regular psychiatric performances targeted to certain sections of illnesses of psychiatry or they support regular telemedicine services which also do not go beyond conventional psychiatry.
The Advantage and uniqueness of Brain Profiling is in the multilevel integration of psychiatric practice and the “deepness” into future innovation. These two advantages take psychiatric practice into a totally deferent higher-level. The multilevel integration of Brain Profiling offers a unique ability for the EMR to become the diagnostic and treatment tool that uses tele-medical components to optimize care. At the same time brain Profiling integrates sensors signaling into one meaningful diagnostic format. This format is testable, valid-able due to the Clinical Brain Profiling diagnostic approach of brain Profiling, one that translates psychiatric phenomenology into brain-related disturbances. No other existing technology has all these multiple capabilities.

Regulatory Issues
Initially the Brain Profiling technology is used as a decision-support management tool, as such it is covered by the medical licensing and medicolegal insurances of users. In the future if it develops into a direct automated diagnostic or intervention technology it will have to conform to the relevant regulatory requirements (e.g., FDA).

Investments, Revenue forecast, Millstones and Models.
Investment: Raising $1M seed round. Will raise and additional $5m to scale up operations.
Strategic partners – None at the moment

Revenue Model: Licensing institutes and HMO’s (BtoB) and Revenue from users (BtoC)

Millstones
Year 1: Beta program with clinicians and their patients and pilots with HMOs (Israel and US). Continued development of the commercial product.
Year 2: Commercial launch to

Management Team and Metrix
Employees = founders
Founders
Oren Fuertst
Jackie Skidelsky
Noy Grisaru
Abraham Peled