Our Problem

At MindScope Health, our story is inseparable from the problem we address, the solution we have created, and the patients we strive to impact. This is because our team was founded by patients of brain diseases and mental illnesses who want to transform the way that "invisible" diseases and symptoms are communicated and treated.

According to the National Institute of Mental Health, over 43.6 million adults in the US are diagnosed with a mental illness. Approximately 700,000 people in the US live with brain tumors, in addition to those with Parkinson’s disease (1,000,000), Huntington’s disease (30,000). However, a diagnosis does not automatically result in receiving the right treatment or care. Patients of these illnesses suffer from symptoms and treatment side effects that are virtually "invisible" to their doctors, including mood, behavior, and energy changes. These symptoms and side effects can drastically affect a patient’s quality of life and can have serious consequences if unaddressed.

Because "invisible" symptoms are difficult for doctors to observe or track over time, doctor-patient communication is key to choosing treatment plans that effectively combat a patient's disease without sacrificing a patient's quality of life. However, patients often only have short, infrequent (and thus stressful) appointments in which to convince doctors of the reality of their invisible symptoms. In patients with a reduced capacity to communicate due to the nature of their illness, this problem is exacerbated. As a result, important "invisible" health changes are often overlooked, resulting in patients with lower quality of life and dissatisfaction with their treatment.

<table>
<thead>
<tr>
<th></th>
<th>Track Invisible Symptoms?</th>
<th>Symptom Customizable?</th>
<th>Used by Doctors?</th>
<th>Designed by Patients?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MindScope Health</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Apple iOS Health</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Microsoft HealthVault</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Optimism</td>
<td>NO</td>
<td>NO</td>
<td>Partially (Paid)</td>
<td>NO</td>
</tr>
<tr>
<td>Pacifica</td>
<td>NO</td>
<td>NO</td>
<td>Partially</td>
<td>YES</td>
</tr>
<tr>
<td>Start</td>
<td>YES, but not every day</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Patient Wisdom</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>DBSA Wellness Tracker</td>
<td>Moods, but no symptoms</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

Market Research: As of January 2017, no services provide the same service as MindScope Health.

Our Solution: MindScope Health

MindScope Health is a mobile app for patients and a computer program for doctors that gives patients an alternative way to communicate with their doctors about their invisible symptoms.

A doctor should be able to chart a patient’s “invisible” symptoms over time just as they chart weight, blood pressure, or heart rate. MindScope Health makes this possible by allowing patients to track their invisible symptoms in detail and share that data with their doctors.

The app allows patients to choose symptoms they want to track from a symptoms database. As many times throughout the day as they wish, patients can rate the severity of their symptoms. Each time a patient ranks their symptoms, the time and date is recorded and the severity value is added as a data point on a chart. The data they enter is interpreted, compiled, and meaningfully displayed for doctors to observe trends in patient health. In addition to recording new symptoms, the app will generate charts for patients and doctors that compare symptom severity ratings over time. This chart can then be overlaid with other data, including changes in medication or treatment, the time of day medication is taken, major life events, a patient’s sleep and menstrual cycle, and more, all of which can also be entered into the app. Because of the program’s flexibility and its incorporation into doctor’s offices, this app can be used as a vital diagnosis and treatment tool.

The Market

While a variety of health tracking apps exist on the market, MindScope Health sets itself apart in three critical areas:

1. Detailed tracking of invisible symptoms beyond overall mood
2. The incorporation into a doctor’s practice
3. Patient-led and patient-centered design

Although popular health-tracking services like iOS Health by Apple and Fitbit Watch offer ways to record information about sleep, exercise, and heart rate, these services fail to provide a way to track “invisible” symptoms and changes in mental health. Other applications, like Pacifica and Optimism, which are geared towards mental health, only allow patients to record overall mood or emotions with a single scale, which is insufficient for professional diagnosis or detailed tracking. Moreover, these apps are hard to operate for patients since users cannot customize which symptoms they record.
Metrics

We believe that effective doctor-patient communication about invisible symptoms is an important aspect of improving patient quality of life and prescribing the correct care. With this in mind, our goals are as follows:

Short-term goals (within the next year): Establish official partnerships with five clinics or hospitals.

- Because this goal focuses on spreading our program to potential users, success can be measured in the number of patients reached, number of practitioners using our software, and their satisfaction with the program. Satisfaction will be measured via in-app surveys and through gathering patient and doctor testimonials.

Long-term goals (within the next three years): Improve patient quality of life scores of all active users, particularly in regards to satisfaction with doctor-patient communication and quality of care.

- Patient quality of life (QoL) will be assessed via surveys (offered monthly in the app) that modify standard QoL methods (SF-36, EQ-36, SF-6D). Each survey will be customized to include only those symptoms and factors most relevant to a patient's quality of life, as determined by their activity in the app.

Budget

Currently, MindScope has three pressing financial needs:

1. Providing a stipend for a programmer. The majority of our budget will be allocated to support a programmer who will help us design and create our Minimum Viable Product in addition to successive versions of our app.

2. Obtaining legal counsel and accounting services. These services are essential in enabling us to incorporate and handle our finances. In addition, our program will need to navigate a variety of health tech and data protection compliance laws (including HIPAA) to be able to operate. As such, over one third of our budget will be allocated towards hiring legal and accounting services.

3. Purchasing our domain name and paying web hosting fees. Comprising 5% of our budget, meeting this need will enable us to build a professional website and attract programmers and health care professionals.

In order to avoid placing additional financial burden on low-income patients, we are committed to providing the MindScope Health app and computer program to patients and hospitals at no cost to them. Anonymized data from our program will be sold to research institutions and medical companies that are developing new treatment options and medications. These funds will enable us to sustainably support a programming team in addition to meeting future IT costs.

The Timeline

February 2017

- Launch MindScope Health website.
- Finalize team membership, including a programmer and a legal/business advisory board.

April 2017

- Incorporate as a B-Corp.
- Complete and launch a Minimum Viable Product in cooperation with two campus health clinics at Wesleyan University and Case Western Reserve University in Ohio.

June 2017

- Open an office in Cleveland, OH to facilitate team communication, development, and build relationships with local doctor's offices and clinics.
- Continue beta-testing product.

October 2017

- Establish an official relationship with a health clinic in Cleveland.
- Begin collecting anonymized patient data after receiving HIPAA compliant status.

Our Team

Siri McGuire  Executive Director
Wesleyan University ‘17

After her freshman year in college, Siri was diagnosed with a pituitary tumor that upended her life. While being treated, Siri saw an opportunity to improve patient quality of life and communication, which eventually resulted in the creation of MindScope Health. As Executive Director, Siri leads the organization, fundraising, and marketing of MindScope Health in addition to conducting outreach to patient organizations, potential team members, and strategic partners.

Taiga Araki  Director of Research and Data Management
Wesleyan University ‘17

Taiga is currently a senior at Wesleyan majoring in biology and government. During his freshman year as an international student, a number of social struggles resulted in a social anxiety disorder. Utilizing his experiences and statistical/data management skills, Taiga is looking forward to developing MindScope and supporting millions of other patients who struggle with invisible symptoms.

Sarah Jammal  Creative Director
Case Western Reserve University ‘18

Sarah is a junior at Case Western Reserve University studying sociology. She enjoys focusing on urban sociology and medical sociology and hopes to pursue public health in graduate school. When she’s not in school, you can find Sarah cycling with CWRU’s club team or volunteering at nursing homes near campus. As Creative Director, Sarah oversees app design, manages the app development team, and drafts new features for MindScope Health.