



Digital Health Sandbox Success Story - Power of Patients



Power of Patients empowers people with neurological conditions and their caregivers through a cloud-based app that helps both patients and caregivers track symptoms, triggers, and progress. In December 2021, MeHl awarded \$50,000 to Power of Patients to work with MITRE, an award that enabled Power of Patients to further develop and refine their solution. This work was funded

through the COVID-19 Innovations to Support Caregivers Challenge, which was supported by funding from the U.S. Department of Commerce's Economic Development Administration (EDA) through their SPRINT Challenge Grant.

For Lynne Becker, the founder and CEO of Power of Patients, this is personal. Both of her daughters have traumatic brain injury (TBI) diagnoses. When she saw firsthand the challenge of tracking data between visits and communicating that to providers, she knew she had to act. She recalls thinking, "these people can't wait."

We spoke with Lynne to learn more about the Power of Patients' story, their solution, and their work with MITRE.

• What is the health issue you are addressing?

Originally, we were addressing Traumatic Brain Injuries or TBIs for patients. Since it takes at least two people to manage a TBI recovery, I knew we needed to assist caregivers too, so we added a caregiver track. Then we expanded our application to allow patients and caregivers the ability to invite providers into their portal. Once we completed this patients-caregivers-providers pathway, we added stroke to the application. More recently, we added other neurological indications such as dementia, Parkinson's disease, Alzheimer's disease, and autism.



Lynne Becker, Founder

What was the timeline of your journey? When did you first conceive of this idea?

Both of my daughters are brain injury patients. I have learned through their distinctively different head injuries (concussions versus TBI) that no two brain injuries are alike.

Like many other caregivers, I lost my job shortly after my daughter Natalie was injured. I was at a loss wondering what to do for work. My expertise is in clinical trial recruitment, and this aspect of the industry is an abyss when it comes to digital solutions. So, I went to our local college and took an entrepreneurial course to learn how to create a company that could help.

Simultaneously, I was manually tracking my daughter's rehab, challenges, defeats and progress because I couldn't get the clinicians to listen to me about what was happening to Natalie after her rehab sessions. When I showed clinicians the data, they were like "Wow, this is cool! Can I have a copy?" That was when I knew I was onto something.

What is Sallie® and what makes your solution unique to the market?

Sallie® is a cloud-based platform, named after my daughter's therapy dog, that allows brain injury survivors and their caregivers to track daily symptoms and triggers. What distinguishes Sallie® from other apps, EMRs, registries, etc. is that we start with the patients and turn their words into data. I designed the platform with a clinical trial design in mind and made patients their own controls. Every patient has a 100% customized platform; they are in charge of their data, and they invite providers to view it. We are truly patient-centric, collecting unique real-world data between clinic visits. And that's the important part – that window between the 6-10 week visits when real life is happening.

• Briefly, can you describe the project you did with MITRE?

The project goal was to develop a new feature for Sallie®: a bi-directional, secured communication between caregivers and providers. MITRE provided critical feedback on implementing secure messaging and other security issues to protect patient data. They also guided us on how to effectively collect feedback on the tool from our intended audience. With their guidance, we conducted a pilot and surveyed 39 participants from 3 distinct focus groups, including both providers and caregivers.

The partnership with MITRE pushed us to not only have patients share their data, but to add in secure, direct two-way messaging between caregivers and providers as well. We were able to expand our application into the allied health and case manager aspects of online and mobile applications. We learned more about our security protocols and began the first round of our machine learning applications.

Working with MITRE illuminated the fact that this bi-directional communication tool is just the beginning of feature buildouts for Sallie®. I could not have been more fortunate to have such a great team and partnership with MITRE.

• What was the value of conducting this pilot in Massachusetts as opposed to somewhere else?

Massachusetts is the *perfect* location to be if you are interested in the intersection of health and IT. The brain power, the connections, and the support the state provides to startups is truly unmatched. As a matter of fact, whenever I meet a new startup, I tell them to move to Massachusetts and set up their business here. The incubators, accelerators, MeHI, sandbox environments, Mass Life Sciences Center, NextGen, network events, schools, the list just goes on.

• Where is Power of Patients going next?

Right now, we have over 1,000 organic users. We have created tracks for all Central Nervous System (CNS) conditions and have built out our upward data movement to assist providers with Clinical Decision Support (CDS) to improve the rehabilitation process for patients. We have just begun to commercialize and have licensed Sallie® to a university. We are negotiating with states to build their neuro-trauma registries, and are onboarding concussion clinics. We are also going international and are working with an organization in Canada to bring Sallie® there. Our next goal is 5,000 users. We believe that we are on track to meet that goal, and are excited about the prospect of expanding this application to assist thousands of more patients and caregivers internationally!