

The Empowerment Equation

Executive Summary

Community Partner

Dr. Tracey Vogel

Student Consulting Team

Mahima Arya

Griffin Tang

John Kim

Background

Project Description

Project Opportunity

One in four women experience trauma before the age of 18. A previous traumatic experience can lead to a triggering or traumatizing birthing experience, putting women at risk for postpartum depression. Not only is postpartum depression a cyclical issue generationally, but it is also much more difficult and costly to treat than it is to prevent. The scope of this project seeks to create a tool that will effectively screen women at risk for postpartum depression so that they can receive trauma informed care instead of a potentially scaring traditional birth experience. Preventing postpartum depression does not only benefit the social good, but can also reduce the fiscal cost on society of therapy, medication, and loss of economic contribution of the affected individual.

Project Vision

To reduce postpartum stress, trauma, PTSD, and ultimately forge stronger bonds between mothers and their babies by catching and treating warning signs before the birthing experience.

Project Outcomes

As the Empowerment Equation is a new venture, though the vision for reducing postpartum depression is large, our project will focus on finding the data and evidence needed to prove that there is an community of at-risk mothers that needs medical and emotional aid. The ultimate goal is to create a survey system that future mothers can take at a clinic in order to asses their need for aid, as well as make providers aware of that need in the form of a diagnosis. This proposal outlines the implementation of that goal in the form of a screening tool connected to The Empowerment Equation's Weebly website.

Primary outcomes:

1. Researched and implemented design for emotional comfort and traumatic experience prevention
2. Visited West Penn Hospital to understand how to administer the survey
3. Built the screening tool using Typeform
4. Integration of the screening tool onto the client's website
5. User testing to ensure the survey is non-triggering but effective

Project Deliverables

Screening Tool

The survey questions are being administered digitally through the Typeform service. The survey begins with a soothing background and text to onboard patients in a gentle manner. Logic jumps were also used to skip questions that aren't relevant to the patient and expedite the process. The diagnosis that is uncovered at the end of the survey takes the form of a colored flower, where the color indicates to the care providers whether the patient is recommended to see a specialist for further consultation.

Website Integration

In order to grant the project more technical freedom with a purchased solution, we decided to integrate the typeform into the Weebly website where we can inject custom HTML. We used the custom HTML to integrate music, a "take a breath" modal in order to prevent triggering from hard questions.

Recommendations

Our solution meets the very first need of the greater goal of ending postpartum depression. In order to show quantitative results for trauma informed care, we must first identify the group that needs it and assess the cost of their current plan versus the potential treatment needed for postpartum depression. Our screening tool hones in on finding that patient base, such that the results of the test are both anonymous on record, blind to the patient, and qualitative on the side of the provider. Our screening tool is built to be accessible, non-triggering, and private. With our solution, hopefully finding the women that need treatment is no longer a guessing game, nor do doctors need to "read between the lines" to find patients with trauma. In addition, the field of trauma informed care can get actual metrics on how many of their patients are at risk or experiencing postpartum depression.

Student Consulting Team

Mahima Arya served as client relationship manager. She is a third-year student majoring in Information Systems with an additional major in Human-Computer Interaction. She will be interning at GoDaddy this summer and is looking forward to a career in software engineering and user experience design.

Griffin Tang served as quality assurance manager and client transition manager. He is a third-year Information Systems major with minors in Human-Computer Interaction and Intelligent Environments. He will be interning at Apple this summer for UX, which is the field he intends to pursue.

John Kim served as project manager. He is a third-year majoring in Information systems with an additional major in Statistics/Machine Learning. He will be interning at Mastercard this summer as a Data Scientist.