Opportunity and Significance

This project has the opportunity to improve the quality and longevity of the lives of young patients with chronic medical diseases. The transition period from ages 13 to 25 is a high at-risk period for these patients as they move from their pediatrician to an adult physician. This application allows patients to enter medical data history, store and print documents, set reminders and more to help them transition smoothly into adulthood.

Technical Approach, Accomplishments and Results

The MyHealthKeeper mobile application has already been built and is currently available on the iOS App Store. It was written in Swift code and utilizes a SQLite database. Our approach this semester was to continue using the same technologies to add more functionalities to the app and improve existing ones if needed.

Our accomplishments so far this semester are as follows. All major bugs that were causing the app to crash have been fixed, the code has been updated to Swift 4, the user interface has been completely redesigned. New functionalities that have been added include a biometric login, a daily appointment and medication schedule, a calendar, a medication reminder feature, a checklist for users to keep track of necessary appointments and procedures, and an import/export feature so that users can transfer their data to a new device if necessary.

Our final and most important accomplishment of this semester will be getting all new changes and updates pushed to the iOS App Store. Once this has been done, patients will be able to securely store and track all necessary medical information, helping them transition smoothly into adulthood.

Next Steps for Development and Test

Once the project has been completed this semester, no further research or development should be necessary. The client, Dr. Misra, would like this to be the final product, all that is left will be having users test out the new functions and get their feedback.

Commercialization Plan & Partners

For this project our team worked with Dr. Amrit Misra, a pediatric cardiologist at the Children’s Hospital of Michigan.

In order to commercialize our project we will be working directly with Apple. They will be examining and approving our work to be updated to the App Store.

The main hurdle of commercialization will be getting approval from Apple. They have very strict guidelines on what can and cannot be accepted in the iOS App Store. After sending them our application, we will wait for feedback. If changes need to be made, we will make the necessary modifications and repeat this process until our work has been approved.