Overview

Ola is a system (smartphone application + pod) that provides real time context aware care for diabetic patients through smart wearable devices and advanced data analytics.

The purpose of experiment is to evaluate OLA’s user interface design using heuristic evaluation to ensure a great user experience.
Representative tasks

1. Eating a meal.
   ○ Counting amount of carbohydrates in food and determining amount of insulin to inject.
2. Changing dosages.
   ○ Determine and implement optimal insulin dosage.
3. Emergency care.
   ○ Emergency treatment and response when user suffers from severely low blood sugar.
Revised UI design & rationale

Add buttons to call emergency contact and medical help in emergency care information screen.

Reason: Our low-fi interviewee thought it would help the bystander (caregiver) to have the ability to contact experts.
Revised UI design & rationale

Add instructions on the usage of food camera.

Reason: Our low-fi interviewee thought she should take a selfie with it.
Revised UI design & rationale

Provide built-in options for insulin delivery rate.

Reason: Our low-fi interviewee thought free-form input can lead to errors.

Three Types of Bolus Insulin

- Normal Bolus
- Square-Wave Bolus
- Dual-Wave Bolus
Scenarios

Live demo!
Tools Used

We used proto.io to create our med-fi prototype.

What worked

● Screen transitions.
● Most interactions.
● Screen layout.

OZ

● Black out detection
● Glucose measurement/history
● Insulin injection
● Food camera carb count

What did not work

● Simulate the passage of time.
● Transition to phone lock screen.
● Food camera.
● Generate dynamic content.
● Keep lots of state.
● Concurrent access.
Summary

1. Tangible interactive mockup of our user interface design with hard coded state/data.
2. Not every UI functionality is implemented. Only what is required for our representative tasks.
3. Still have work to do - ready for Heuristic Evaluation.