MedCuff: The Pill Adherence Band

Project Motivation:
The elderly are taking an average of 10 pills a day. The times to take the pills can vary for each prescription. This puts a great deal of stress on both the user and the user’s family and caregivers.

A recent study funded by CVS showed that only half of all people taking prescription medication are taking them during the directed times.

Health Insurance Companies and Pharmacies are looking for ways to combat this problem.

Proposed Solution:
We are developing a wearable device (MedCuff) that is a simple way for prescription users to remember their directed pill-taking times.

Some distinguishing features of this device are:
• No connectivity needed after programming
• Something that can be set and forgotten
• Small and comfortable enough wear
• Long battery life
• Low cost

How Does it Work:
• Programs the device with a list of events via Bluetooth
• After being programmed, the connection is not required.
• When the event occurs, the user is alerted via color-coded LED lights and vibration.
• User pushes button to acknowledge the alert.

Try it:
Be able to set time for an event and observe the device’s alarm at the programmed time.

The Future:
Develop the enclosure:
• Durable
• Waterproof
• Screen
• Comfortable band
• Smaller size

Design the User Interface:
Provide interface for pharmacist to set alerts as a standard procedure when helping a patient.

Establish Partnerships:
• Pharmacies
• Hospitals
• Health Insurance providers
• Nursing homes