Work Completed

Over the past week I have done research on about what type of materials should
the implant is made of and the sterilization techniques of these materials. I have also been
looking at various ways in which we can power the implant for a long period of time (3-5
years). Powering an implantable device is extremely important and special precautions
have to be taken into consideration for the patient’s safety and privacy. I have also been
looking at device housing cases at www.okwenclsoures.com. There have been some
changes to our optimal design for our final report. In the table of contents, the pressure
transducer will be replaced by the stretch sensor, and we will be using one micro-pump
instead of two. Using one micro pump will reduce the amount of power needed for our
design. Material that would be suitable or biocompatible for the stretch sensor would be a
non biodegradeable shape memory polymer. The figure below is an illustration of our
overall design.

![Figure 1](image-url)
Future Work

The work for this upcoming week is to understand how to establish a wireless communication of the implanted portion of our device. We also have to find a way to measure the resistance across the bladder more efficiently, as we can only measure the resistance up to 50% beyond that there is little or no change to the resistance. We will try to see if the accuracy will improve if we place the stretch sensor all the way around the bladder and record readings as the bladder becomes filled.

Project Review

Over the past we, we have been able to control the micro-pump using the CB2220. We still need to set up a wireless connection. We are hoping that the programming will be completed by the end of the week. If we are almost done on Friday March 28, 2008, we will be in over the weekend to finish and start troubleshooting.

Hours Worked

This week I worked 13 hours, majority of it spent doing research on our physical assembly, and research on the materials used and information for our user manual.