Inspiratory and expiratory flow meter

Client: Christopher Green, M.D.

Team Members: Andrew Eley (Leader)
Sarah Offutt (Communicator)
Darshan Patel (BSAC)
Eric Bader (BWIG)

September 2 to September 15, 2005

Problem Statement

Our client desires a peak inspiratory and peak expiratory flow meter in a single device to monitor for symptoms of asthma and vocal cord dysfunction. It should measure flows up to about 700 liters per second for adults, be cheap, durable, and easy to use with clear measurement readings.

Last Week’s Goals

• Choose project on Friday and assemble team
• Exchange contact information and meet team members
• Assign team positions
• Research current peak flow meter designs and search for current patents.
• Brainstorm questions and prepare for meeting with client
• Contact Dr. Green and arrange a meeting
• Meet with Dr. Green and discuss project with him

Summary of Accomplishments

• Our team met for the first time on Friday. We issued team positions and clarified responsibilities for the semester.
• We met with Prof. Webster and reviewed current peak flow meter designs
• Sarah contacted Dr. Green assistant and set a meeting time with him.
• We met with Dr. Green on Monday, Sept. 12, and discussed the importance of having such a device as well as design requirements and logistics.
• We have one peak flow meter Prof. Webster provided for us, and two different ones from Dr. Green.

This Week’s Goals

• Research different methods of measuring air flow and determine which are viable solutions.
• Meet Friday in class: 1) update PDS, 2) create team project schedule, 3) Discuss different options of measuring air flow, 4) Set a time for a weekly meeting with our client, 5) Start brainstorming ideas.
• Patent searches
• Get a team photo

Difficulties
Currently there are none. There was a little difficulty in scheduling our first meeting but we are on our way.

**Activities**
- **Team:** 1.0 hours  Met with Dr. Green at UW Hospital
- **Sarah Offutt** 1.5 hours  Independent research, email correspondence
- **Andrew Eley** 1.0 hours  Independent research, wrote progress report, began PDR document
- **Darshan Patel** 0.5 hours  Independent research
- **Eric Bader** 0.5 hours  Independent research

**Project Timeline** under construction

**Expenses** none