* Progress Report 2

* Title: Measurement of Pulse Transit Time

* Names: Blake Hondl (Team Leader)
  Anna Karas (Communications/BSAC)
  Meghan Olson (BWIG/BSAC)
  Zak Cohen

* Client: Christopher G. Green, M.D.

* Advisor: Mitch Tyler

* Date: 09/09/05 – 09/15/05

* Problem Statement: Develop a device/method to measure pulse transit time (PTT) in pediatric patients using signals from an ECG monitor and an oximeter. This will allow a physician to monitor whether a patient is being aroused from REMS sleep and help the physician determine if the patient has obstructive sleep apnea.

* Restatement of Team Goals:
  • Meet with client and/or his administrative assistant (client is currently out of town)
  • Continue researching ECG, oximetry, and PTT

* Summary of Accomplishments:
  • Generated question for client to complete PDS
  • Met with client to define project/problem
  • Started PDS
  • Met with advisor to gain insight and direction for project

* Statement of Team Goals:
  • Complete PDS
  • Meet with Steve Weber, the neurophysiologist in charge of UW Hospital’s sleep lab
  • Get Zak up to speed with course and project

* Project Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Activities</th>
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<tbody>
<tr>
<td>1</td>
<td>09/02/05</td>
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<td>2</td>
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<td>3</td>
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<td>7</td>
<td>10/14/05</td>
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<td>8</td>
<td>10/21/05</td>
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9 10/28/05 Work on prototype
10 11/04/05 Work on prototype
11 11/11/05 Work on prototype
12 11/18/05 Complete prototype
13 11/25/05 Work on poster presentation, **Thanksgiving**
14 12/02/05 Complete poster presentation, work on final report, **final poster presentations**
15 12/07/05 Complete final report, **final report and notebooks due**
15 12/09/05 **Final meeting with advisor**

* **Difficulties:** Meeting with client and/or his administrative assistant

* **Activities:**

  **Group:**
  - Class meeting/meeting with client: 1.25 hrs
  - Meeting with advisor: 1 hr

  **Individual:**
  - **Blake Hondl**
    - Generating questions for client/PDS: 0.5 hr
    - Updating design notebook: 0.25 hr
  - **Anna Karas**
    - Updating design notebook: 0.25 hr
    - Brainstorming questions for client meeting: 0.25 hr
  - **Meghan Olson**
    - Researching design topics: 1 hr
    - Creating questions for client: 0.5 hr
  - **Zak Cohen**

  Weekly Total: 9.5 hrs

  Semester Total: 15.5 hours

* **Expenses:**

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<tr>
<th>Item</th>
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<td>Fall 2005</td>
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