Patient Positioning Aid

Week 2
Jan 31, 2006
Bhavin Patel

Work Completed:

This week we were able to complete the tracks for the arm and leg stabilizers on the transfer board. We went with a \( \frac{1}{4} \)" slit 7" long for the arm stabilizer, and \( \frac{1}{4} \)" slit 14" long for the leg stabilizer. Christen milled the tracks after we finalized the size and marked the board. Figure 1 shows the track system on the transfer board.

![Track System](image)

**Figure 1:** Track System

We didn’t make the handles because we decided to change the design into nylon ropes that will be put through holes in the board with the ends burned. There will be 6 of these three on each side, one at each end, and one in the center between the tracks for the arm and leg stabilizer.
Aluminum knobs were finalized and ordered through the MSC book. We will need 8 of these for each track with a width of 1.5”. A design for support to prevent flexing of the transfer board was also finalized and PVC square rods were ordered.

Ashley and I looked at machine shop drawings of the arm stabilizer and marked it for milling. The design of the arm stabilizer was assessed and it was found that it will not be configured correctly in order to provide adequate support. A design similar to parts seen in the 80/20 demonstration is being considered in order to allow tilting and variation in angles made with respect to the board.

**Future Work:**

We plan to alter the arm stabilizer and submit order forms for parts needed for the new design by Friday. I plan to mill the arm stabilizer into the needed sizes for our design. Christen and I will be handling the support for the transfer board once the PVC rods arrive and work to finish the board as soon as possible. This week we also plan to handle the little things we need to order like PVC glue and aluminum screws.

**Project Review:**

So far we are close to the timeline set forth. We need to finish the transfer board which cannot be done until the necessary parts arrive. The arm stabilizers are also a problem but we plan to finish its design this week. No last minute action is necessary as of now since we do not face any major set backs.
Hours Worked:

BME lab: 6 hours

Outside lab: 2 hours

Total of 8 hours