Work Completed:

During the 8th week of Senior Design 2 I was able to completely finish the arm stabilizer system. I was able to finish tapping the arm rest so it could be attached to the rest of the stabilizer system (figure 1)

Ashley was able to glue the foam padding to the arm rests so that they would be more comfortable for patients. I also switched out any remaining steel hardware with aluminum hardware. The completed arm stabilizer can be seen as shown in figures 2 and 3.
Figure 2: Rear view of arm stabilizer

Figure 3: Side view of arm stabilizer
I also purchased nylon washers to be used in conjunction with the pivot system of the arm stabilizer as they ease use and fixation of the device. As a group we decided to reorder our padding for the board, as the old one does not fit anymore. We will return the old one upon receiving the new one. Drew and I also went to the machine shop this week to Drill the holes for the attachment of the cross members for our board. We were able to completely drill the board (figure 4), however were not able to drill the countersinks or the actual aluminum cross section.

![Drilling holes in board for attachment of cross members.](image)

**Figure 4:** Drilling holes in board for attachment of cross members.

**Future Work:**

Drew and I will attend the machine shop tomorrow to drill the cross members and countersinks in the board. I will also mill the arm slide slot out a bit more at this time
since it is currently not long enough. Once this is completed we will attach the cross members using the brass machine screws we already have. This will allow us to test the flexion of the board. Also, we will attach the hand bar to the board using the aluminum bolts we already have. Collectively, we will sand down the rough edges of the board to make it safer. Hopefully our silicon bronze carriage bolts will arrive this week so we can switch out the steel ones currently in use in our board. We will also attach our handles when they arrive as this is a very simple procedure.

**Project Review:**

Currently, we are still on track to finish the device in time. No emergency actions are required to finish on time. Hopefully, the functional prototype will be completed in the next couple days so testing can begin.

**Hours Worked:**

- Lab hours – 6
- Machine Shop – 3
- Independent – 2
- Total – 11 hours