

Patient Transfer Device

Client: *Ashish Mahajan, MD*

Team Members:

Justin Gearing (Leader)

Jamon Opgenorth (Communications)

Daniel Miller (BSAC)

Alex Bloomquist (BWIG)

3/20/09 – 3/27/09

Problem Statement:

Currently, patients are transferred by 5-6 workers using an articulating roller, which is designed for a flat bed to flat bed patient transfer. The client would like a jointed roller system that will allow for efficient transfer of patients who are to remain in a sitting up or “crunched” position through the transfer. Design needs to be reliable, lightweight, and compact to fit behind the door of the recovery room.

Last Week’s Goals

- Complete testing of ball bearings
- Order joints and joint materials
- Cut raw materials down to size
- Test ball bearings to assure they will work

Summary of Accomplishments

- Cut all tubing down to size at ECB shop
- Cut Aluminum rod and end-plates down to size.
- Began to mill out tubing.
- Fit several ball bearings into tubing to assure they will work

This Week’s Goals

- Complete installation of ball bearings
- Complete lathing out of the tubing
- Begin to familiarize ourselves with the mill so we can finish our end plates

Project Difficulties

- We have yet to purchase parts for attaching our tubes to our endplates.
- A lot of manufacturing has yet to be completed.
- We ordered 1” and 1 and 1/16” ball bearings, which will work but they will require a significant amount of fabrication, which is currently in progress.

