

Team Name: “Bed, Back and Beyond”

Project Title: Accessible Power-Assist Hospital Bed Back Angle Controller

Angela Baltz Chris Heintzelman

Robert MacArthur Magdalen Obiefule

Current Status:

The team is working hard to nail down specific parts to order as well as trying to acquaint themselves with all the different subsystems involved in the project.

Work Completed:

Researched current hospital bed dimensions and design
Presented the project to the Electrical Engineering students and faculty

Current Work:

Individual research

- Chris is looking up variable speed motors that can meet our performance requirements and budget
- Angie is continuing to research joysticks, especially those used in industrial applications such as farming implements
- Rob is researching bed-back speed and beginning to organize our Proposal
- Magdalen is researching bed hinges, bed-back design, and cost of materials

Researching electrical components needed including a microprocessor, actuator, and clinometers

Researching servo motors capable of applying the needed resistance to the joystick

Researching additional requirements that may need to be incorporated such as RF shielding of the device.

Future Work:

Choosing parts with special attention to how the components will be coupled

Ordering parts (before Thanksgiving break)

Writing the Proposal

Presenting our Proposal to the BME department

Analyzing the skill sets of the team and determining in what areas we'll need to acquire/improve knowledge or skills (e.g. programming) so that we can be prepared to start integrating the systems once we get our parts.