

Team Name: “Bed, Back and Beyond”

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

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Current Status:

- The team completed the feasibility study October 5th. Currently, research on the most feasible approach to building our device is underway. The project is progressing as expected.

Work Completed:

- Feasibility Study
- Contacted manufacturing instructor, Emile Damotte, about suitable materials.

Current Work:

- Individual research
 - Chris is looking up motors
 - Angie is researching joysticks
 - Rob is researching bed dimensions, bed-back speed, and bed materials
 - Magdalen is researching bed hinges, wheels, and cost of materials
- Researching electrical components needed including a microprocessor, actuator, and clinometer
- Continue comparing and expanding upon plans outlined in feasibility study

Future Work:

- Pick the most feasible plan for completing the project
- Finalize design Criteria
- Ordering parts (before Thanksgiving break)
- Developing the Proposal

References/Attachments:

Summary of meeting minutes

October 3, 2006

- Divide sections of feasibility study for group member to work on individually
- Group decides to try and order parts by thanksgiving break or soon after break
- Design criteria must include: max speed of bed, low speed of bed and intuitive direction of handle for adjustment of bed angle
- Group may need to purchase a step down transformer because some hospital outlets output higher voltages than motor can handle

October 10, 2006

- Individual research is assigned to each group member
- Home health companies will be contacted about hospital beds currently used
- Motor needs continuous motion, variable speeds, low noise, carry 180lb load, and fit within price range
 - Continue research of car seat motors and controls
 - Pick maximum speed of bed that is faster then current speed yet comfortable for patients