The Wheelchair Helper

Blue A
Motivation

• In 2003, over 100,000 wheelchair related injuries were treated in emergency departments in the U.S.

• Transfer mishaps = 2\textsuperscript{nd} leading cause of these injuries

Customer Need

“Transferring patients in and out of wheelchairs is backbreaking work.”

--Rehabilitation Center Nurse
Existing Products

Multi-Lift from Accessibility Unlimited

Cost = $4,625.10
Our Design
What We’ve Learned

• Alignment of main base with pad is difficult

• **Solution:** Increase the allowed margin of error when aligning
What We’ve Learned

- Connecting base to pad needs to be quicker and easier

- **Solution:** Sliding rod to attach tracks
What We’ve Learned

- Current tracks are a safety hazard
  - **Solution:** Change track material and shape

- Currently, caregiver needs to bend down to operate
  - **Solution:** Add vertical handles
Enhancing the safety and mobility the wheelchair transfer process for the disabled and caregivers alike
Any Questions?