

GNG2101 – One Handed Walker Steering System

Design Day Pitch

Team Z22: The Fast and Fabricating Five (FFF)

Faculté de génie | Faculty of Engineering uOttawa.ca



Agenda: Design Day Pitch

- 1. Empathizing With Our Client
- 2. Customer Needs & Problem Statement
- 3. Significant metrics
- 4. Overview of Concept Design
- 5. Demonstration
- 6. Lessons Learned
- 7. Questions



Difficulties with everyday tasks

Single parent

Cannot do full ROM movements

Suffers from Ehler-Danlos Syndrome (EDS)

Can only use 1 brake handle

Imagine

Arm is kept in a sling

Very dependent on 11-year-old daughter

Limited mobility

Small apartment

Folding the walker is essential

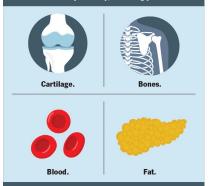
Often dislocates shoulders

Cannot depend on elevators

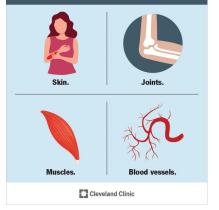
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Ehlers-Danlos Syndrome

Ehlers-Danlos syndrome can affect any connective tissue in your body, including your:



Depending on where EDS affects your connective tissue, you might experience symptoms in your:



Ehlers Danlos Syndrome



Adaptable

Convenient

Portable



Customer Needs & Problem Statement

The client requires a **maneuverable**, **lightweight**, **easily attachable** device that allows them to steer the walker **effectively** with one arm through narrow spaces and diverse terrain.



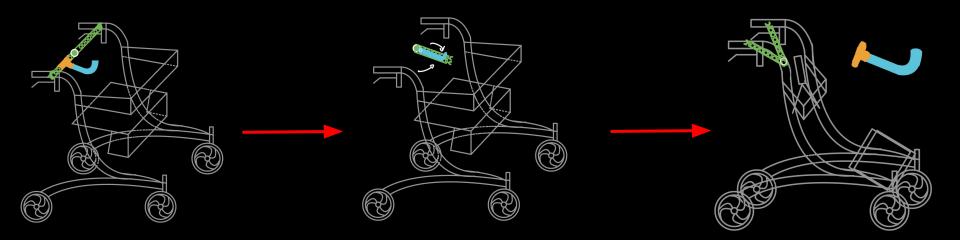
01 Portability



O3 Use with either arm



How does it work?





THE FAST AND FABRICATING FIVE We wheely care

Questions?