

Access The Ability

~1.0~

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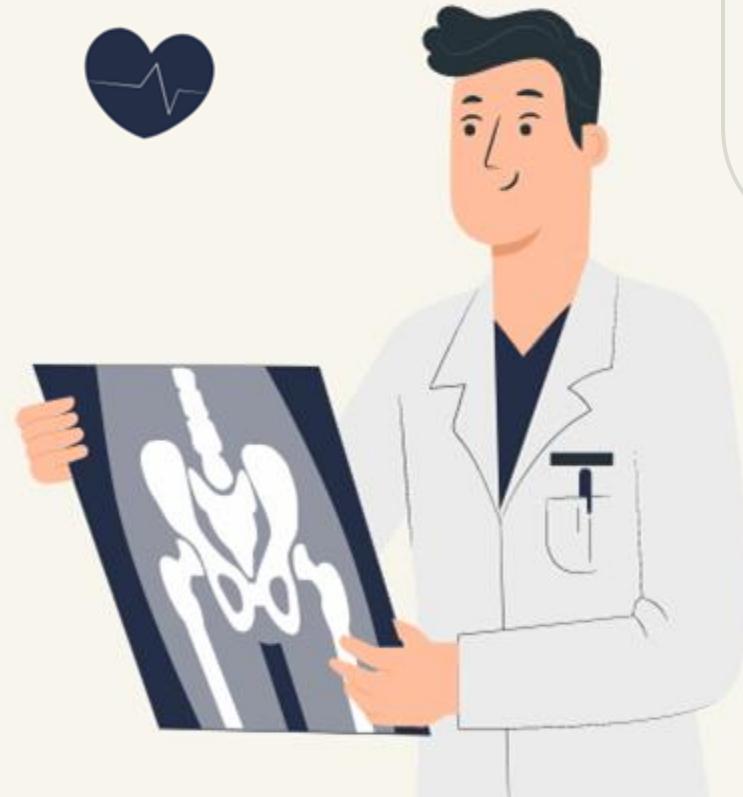


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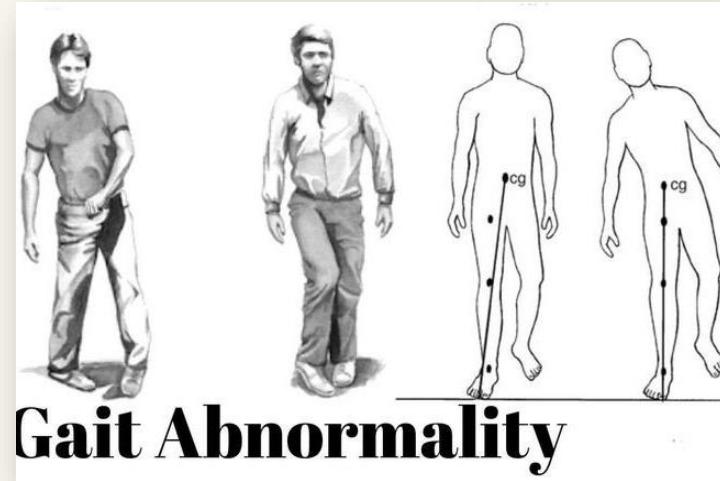
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01

The Problem



What Is The Problem?

- According to the Cleveland Clinic, by the age of 60 15% of US citizens experience an abnormal gait and mobility issues. However, there are limited widely available and affordable solutions for people on the market.
- These can be caused by many things, as displayed in Figure 1.0.
- Some common treatments for abnormal gait include surgery and physical therapy, which is costly and inaccessible to many people.
- Other common treatments include walkers, which may disrupt someone's day-to-day activities.

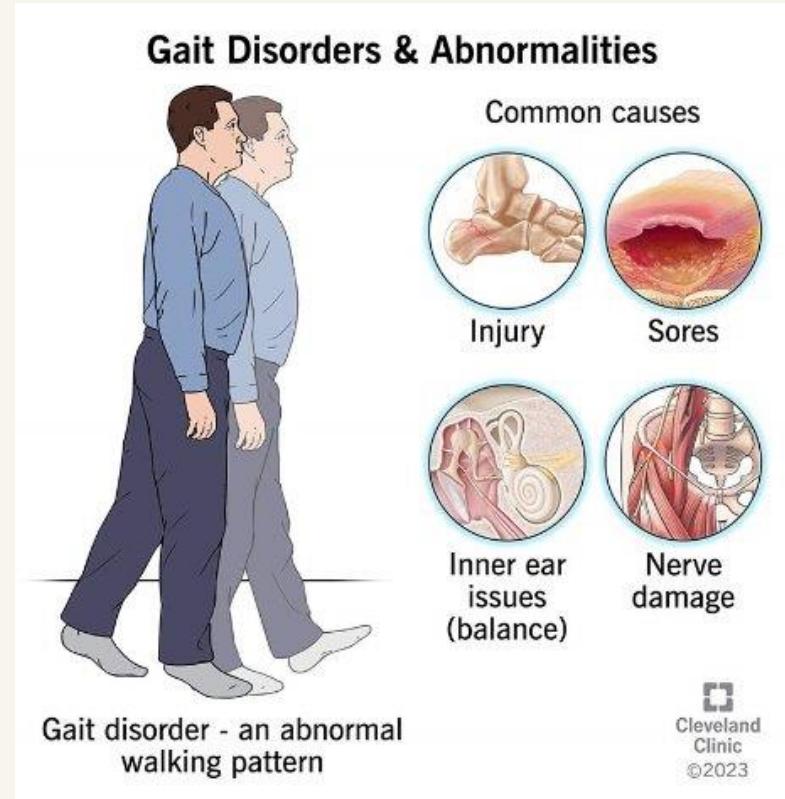


Figure 1.0, Cleveland Clinic



Why Is It Important?

1. Many people do not have the ability to access **affordable** walking alignment assistants that are **practical** for everyday use
2. The **barrier** of surgeries, doctor appointments, and other **expensive unfeasible** treatments leave many users out of solutions

Current Market



Custom Orthotics

Pros:

- Personalized fit
- Benefit complex conditions

Cons:

- Over-reliance
- Not universal item
- Not wearable



Gait Retraining Exercises

Pros:

- Personalized
- Professional guidance

Cons:

- Slow progress
- Inaccessible long-term
- Inconvenient
- Expensive



Wearable Technology

Pros:

- Improved mobility
- Health monitoring

Cons:

- Over-reliance
- Battery life
- Expensive

02

User Feedback

Based on a survey issued to
personal relatives



Testimonials

User 1

“The biggest issue has been durability. Getting the right fit has also been tricky”



User 2

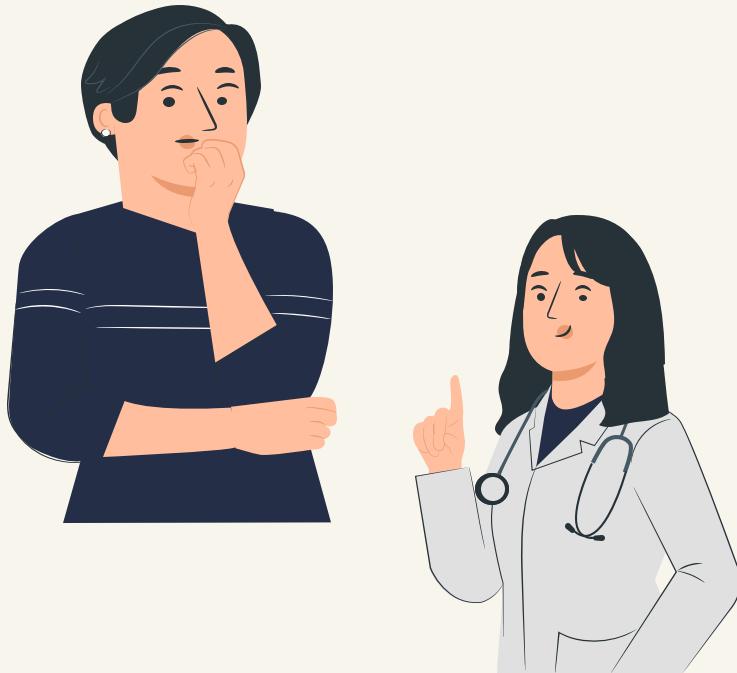
“The ideal product would be lightweight but sturdy, offering firm support without being bulky.”

User 3

“I need adjustments every few months as my condition changes, but it’s hard to find affordable custom solutions.”

03

User Needs



Our Users and User Needs



Customer Requirements

- Adjusts to desired position for varying levels of misalignment
- Superficial attachment device
- Relieves pain sufficiently when walking

Product Performance

- Mechanically strong, can hold body weight for long periods
 - Adjustable solution for multiple wearers
- Can withstand wear and tear; does not deteriorate easily in different terrains

Other

- Design is adaptable to various foot sizes or conditions with adjustable features to cater to individual needs
- Materials should prioritize comfort and durability; long term use without replacement

Who are the stakeholders?

Healthcare Providers (Physical therapists)

Those who are providing solutions to patients with a wide variety of mobility issues

Designers and Engineers of Orthopedic Devices

Those who create custom inserts molded/shaped to patients needs

General Footwear Manufacturers + Material Suppliers

Collaborations with these companies to ensure smooth integration with our innovation and allow for the use of safe, durable materials

Patients/Customers

Individuals with foot discomfort or those just in need of extra walking support through various environments

Retailers/Distributors

Places where foot products may be sold, such as pharmacies, medical supply stores, specialized shoe stores, or online platforms



User Need Statement



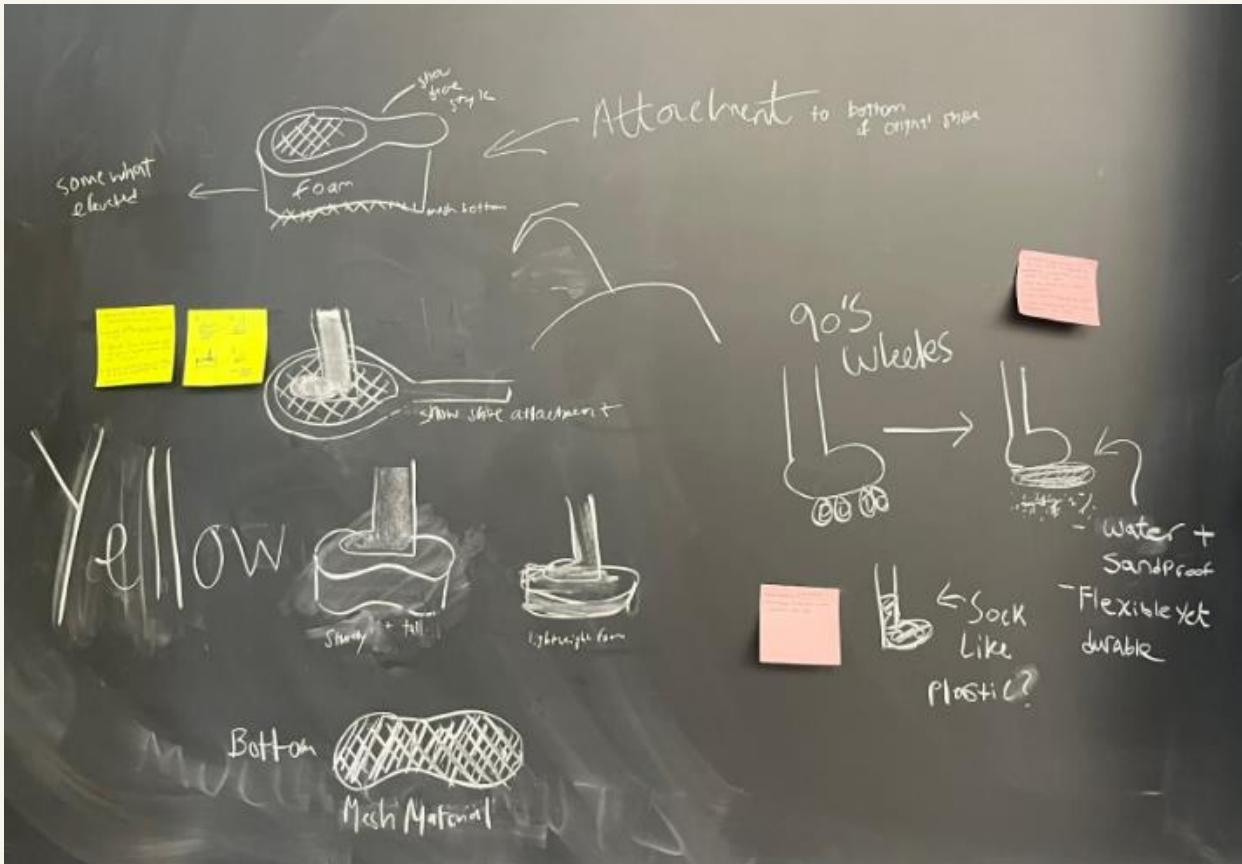
Individuals with **abnormal gait patterns** caused by conditions such as diabetic neuropathy and plantar fasciitis, **experience significant discomfort and mobility challenges**, emphasizing a need for interventions that **improve foot alignment and walking stability**.

04

Moving Forward



Potential Concepts To Pursue



Thank You and Stay Tuned!