

Portable PT (Physical Therapy) Staircase System

Technology for Co-Development Summary

The Portable PT Staircase system is a lightweight, modular, collapsible, staircase that allows therapists and trainers to reach more patients by bringing the stairs to them.

Background

The ability for patients to navigate (ascend and descend) stairs is critical to many for safe discharge planning. Physical Therapy staff throughout the system struggle to find a safe and efficient way to provide staircase training beyond "portable curb step" training. Various issues include: 1. Taking patients in a functioning stairwell can create significant risks to patients and staff due to isolation, limited communication, potential blockade creation if there is an emergency evacuation, etc. 2. Some locations do not have rehab gyms, and even with gyms only one PT Stair exists in facility and therapists must take a patient off the floor to get to the stairs, which is inefficient. 3. If stairwells are available, they are often unclean and do not provide a great customer experience.

Technology

The PT Staircase System embodies all the specifications and requirements of certified, stationary stair systems but includes features that allow them to be easily collapsed, transported, and brought directly to patients. The stair system is comprised of a locking, open and close mechanism to easily move and deploy the stairs. The mechanism requires no tools, includes wheels to transport, and can be operated by one person. The assembly is constructed of safe, lightweight yet sturdy materials. Additional features include adjustability to step height and width, adjustable handrails, anti-microbial touchpoints and easy to clean surfaces.

Advantages

- Brings stairs to patient vs stairs located in a central location
- Increases ability to see more patients, more frequently with less staff oversight
- Staircase folds into smaller package allowing more systems on the PT floor
- Improves quality of healthcare systems within facility

Inventors

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Market

Over 170,000 hospitals, rehab centers, assisted living and care facilities in the US. Addressable patient market in the US requiring some form of step therapy is 41 million touchpoints per year, including over 1.2 million patients undergoing hip or knee replacement each year.

Stage of Development

Drawings only

For More Information Contact

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