

## Design of Ambulatory Aid for Physiotherapy Patients Undergoing Rehabilitation



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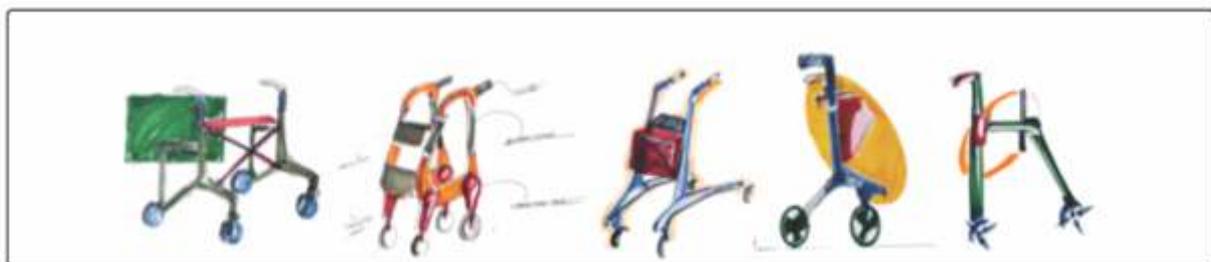
**Keywords:** Ambulatory Aid, Mobility, Rollator, Physiotherapy

**Abstract:**

An Ambulatory aid is a product, which assists people in locomotion, who are restricted by their health conditions. Physiotherapy Rehabilitation is the department where the patients suffering from neurological, muscular pains, sports injuries as well as elderly people who suffer from various health issues are treated with exercises, electrotherapy and wax therapy.

Ambulatory aids are product designed to help these patient to move from one point to another. A product study of the existing ambulatory aid was done for evaluating the structure and working mechanisms of these products to come up with a user-friendly ambulatory aid. Study of product environment was carried out for the targeted user group. Product Design Specification (PDS) was then derived and different concepts were generated based on mood boards. Form and colour exploration was carried out to generate concepts, based on the upcoming trends and consumer aspiration.

A complete study of the design of Ambulatory aid focusing on the product usage was carried out. Product study was the basis for designing the product. Conduction of market survey and interaction with the user, assisted in arriving at a new design for the product. Concepts were generated with reference to the Product Design Specification. The final concept developed is a rollator used as assistant aid for people who find difficulty in walking. The product could be used in indoor and outdoor environments. A 1:1 working model was developed to validate the design and the feedback results were positive and satisfactory.



**Various concepts of ambulatory aid for physiotherapy patients**



**Final concept**



**Final working model**