

Problem Statement 2: Ergonomic Crutches

Disabled patients are highly dependent on crutches or other similar aids for stability and mobility. During their use, traditional crutches are incapable to evenly disperse the load on the body, resulting in huge strain being placed on the shoulder, neck and back. Their continuous long term use can sometimes lead to a condition known as crutch paralysis, or crutch palsy, which arises from the pressure put on nerves in the armpit, or axilla. Also, there is difficulty in carrying crutches for disabled patients. Current crutches are heavy and bulky to carry.

The teams are supposed to build a simple, light weight, easy to use, patient friendly device that can bear patient's load and assist walking/activities.