

Group 7: Portable Change Table

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Project Presentation

- The client is in need of a change table for a teenager with cerebral palsy. The change table has to be portable, quick to assemble, compact, and lightweight to accommodate the user and client's needs.
- Most public venues don't have accessible washrooms large enough or change tables sturdy enough for an adult or adolescent to use.
- Individuals with cerebral palsy have more specific needs than individuals without cerebral palsy. Part of these needs involves a change table for changing and stretching when out in public for extended periods of time.
- 50 000 Canadians have a muscular dystrophy with over 150 different types ¹
- Cerebral Palsy affects 2 to 3 per 1000 individuals ²

1. <https://healthpartners.ca/healthy-canadians/life-saving-research/muscular-dystrophy>

2. [https://cps.ca/en/documents/position/comprehensive-care-of-the-ambulatory-child-with-cerebral-palsy-gmfc-i-and-ii-a-canadian-perspective#:~:text=In%20Canada%2C%20cerebral%20palsy%20\(CP,to%203%20per%201000%20individuals.](https://cps.ca/en/documents/position/comprehensive-care-of-the-ambulatory-child-with-cerebral-palsy-gmfc-i-and-ii-a-canadian-perspective#:~:text=In%20Canada%2C%20cerebral%20palsy%20(CP,to%203%20per%201000%20individuals.)

Client Needs

Client Needs in 3 different categories and ranked from 1-5 , where 5 is the highest

	Safety	Necessity	Comfort
#	Need		Importance
1	Need to support 60 kg		5
2	Safety belt around mid table		5
3	Wider than the user		3
4	A reasonable length to be able to use it for several years		3
5	Firm material to reduce the user from sinking in the table		2
6	No latex (allergy)		5
7	Fold flat		2
8	Can be hung on the chair or carried like a backpack		1
9	Low setting up time (folding and unfolding time)		4
10	Waterproof material		2
11	The height of the change table should be in-line with the wheelchair seat		5
12	No hard plastic material		4
13	Handles on each side of the bed		2

Benchmarking

Benchmarking of Similar Products

Need #	Metric	Importance	Coleman Trailhead Cot	Jay-Be Saver Folding Cot Bed:	Teton Sports Outfitter XXL Camping Cot
1	Yes/No	5	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
2	Yes/No	5	<u>No</u>	<u>No</u>	<u>No</u>
6	Yes/No	5	<u>Not latex</u>	<u>Not latex</u>	<u>Not Latex</u>
8	Yes/No	1	<u>Yes</u>	<u>No</u>	<u>Yes</u>
9	Yes/No	4	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>
12	Yes/No	4	<u>Yes</u>	<u>No</u>	<u>Yes</u>

None of these benchmarks were a suitable solutions due to the following reasons:

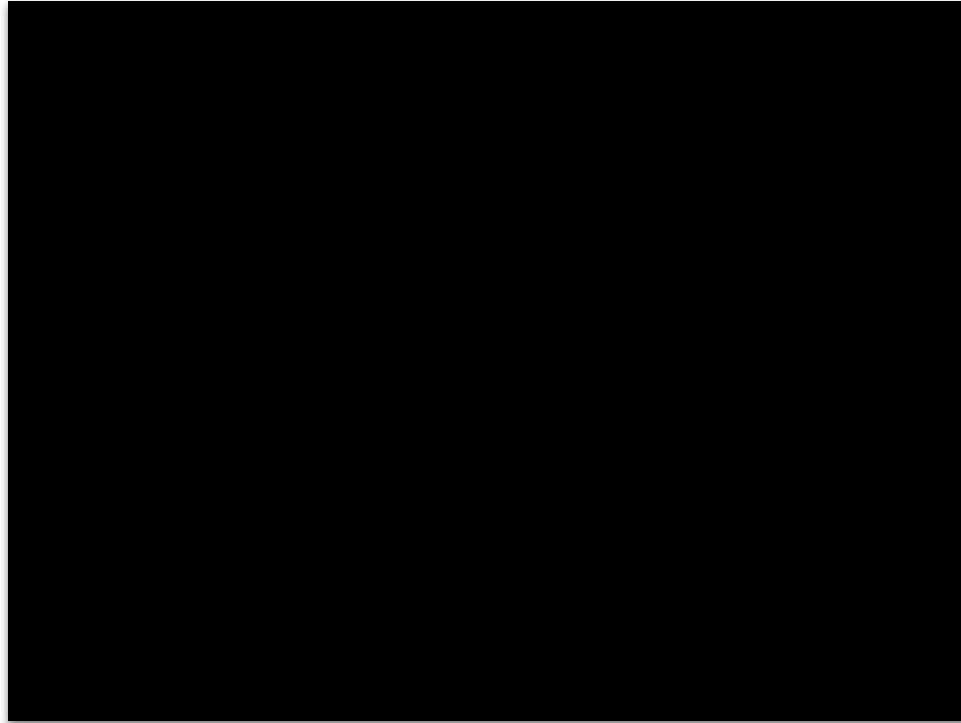
#1 none of the listed benchmarks meet the budget constraints of the project

#2. An additional client concern was the bed of the table not being rigid enough for when the caretaker helps to lift him from the table back to the wheelchair. All of these benchmarks use a hammock style bed, which is not rigid enough to meet this client need.

Final Product



Video Demonstration



Why our Product

- Tailored for the client needs
- Easily transported with the help of the wheels and handle
- Fulfills all of the client needs
- Easy assembly and disassembly
- Quick set up time (approximately 1.5 min)
- Compact size fits in car trunk.

Thanks

Any Questions or Comments ?

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