Wheelchairs Inflict Back Pain in the Elderly
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Heal the World with Professor Rao and Professor Stoddard

Goal: To reduce back pain, discomfort, and pressure sores for elderly manual wheelchair users while remaining within their financial limits.

Problem
Depression & Dementia
Discomfort
Pressure Sores
Back Pain

Patients with Pressure Sores

- 28% Under 65
- 72% Over the age of 65 years

60,000 people die annually from pressure ulcers which is equivalent to 168 people dying daily.

Financial Constrictions
Average Social Security
$1,360 Monthly = $16,320 Yearly Expenses

- Housing: 35.4%
- Food: 19.7%
- Transportation: 13.2%
- Healthcare: 14.2%
- Personal Insurance: 12.4%
- Other: 5.1%

Lifespan
Adjustable Frame
Cushion
Custom Cushion
Flex-IT Foam

Cost
$1000+
$20-80
$1500+
$20

Solutions

Implementation
1. Contact DEKA Research and Development Corp. with our concept
2. Create instructions and kit to create cushions
3. DEKA Corp sells cushions, including tips on managing back pain
4. After implementation, expand kit to all ages.

Flex-iT Foam
Flex-iT Foam is poured into a mold, then rises.

The user sits on top of a protective layer until the foam has solidified.

Assessment Plan
Work with Benchmark Assisted Living to evaluate effect of Flex-iT cushions.

Conduct evaluations every 6 months for a total of 4 years.

References

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