Product Contract

R＋D

Product description: Affordable interactive therapeutic robot

Intended user: Individuals with early stages of dementia
Intended customer: Caregivers, families, or nursing homes who could purchase the product for individuals with dementia

Market: $500 each for 1-2% of individuals with dementia worldwide ($175M-$350M)

User Need	Product Attribute	Specification
Relieves the Behavioral and Psychological Symptoms of Dementia (BPSD) • Improvement in well-being • Stress relief • Raised self-esteem • Improvement in communication	Encourages interaction	Average increase of ≥50% in WIB (Well/Ill Being) score using DCM (Dementia Care Mapping) observational tool[1]
		Increase in 17-Ketosteroid sulfate (17-KS-S) levels in urine[2]
		An average reduction in Face Score[3] of 2-3 points
		80% of caregivers indicate improvement in communication

Customer Need	Product Attribute	Specification
Financial accessibility	Affordable* retail price	$400-$600
Safety	Electrical protection	Zero shock instances
	Pinch points	Zero pinch points
Durability	Mechanical/electrical resistance to damage	Maintains full functionality after ≤6 foot drop
Easy maintenance	Easily cleanable exterior	Can be cleaned in ≤15 minutes
	Rechargeability	Internal battery charges without product disassembly

Notes:
* By "affordable," we mean approximately 10% of the selling price of existing products on the market
1. Dementia Care Mapping is an observational tool that is recommended by the US National Library of Medicine
2. Wada, K., Shibata, T., Saito, T., & Tanie, K. (2004). Effects of robot-assisted activity for elderly people and nurses at a day service center. IEEE, 92(11), 1780-1788. doi: 10.1109/JPROC.2004.835378
3. C.D. Lorish and R. Maisaiak, "The face scale: A brief, nonverbal method for assessing patient mood," Arthritis Rheumatism, vol. 29, no. 7, pp. 906-909, 1986.