

Integrated Care Platform That Utilizes Artificial Intelligence, and Extended Reality With Principles of Gamification to Integrate Palliative Care Services Into the Rehabilitation Journey

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Tens of millions suffering from chronic conditions specifically, hearing loss affects 466 million individuals worldwide, face challenges in communication and interaction with caregivers, speech difficulties, difficulties in accessing information, and suitable care centers, high device costs, and inadequate investment in rehabilitation centers. This leads to psychological and occupational burnout in the targeted group. The study aims to develop an integrated care system that utilizes artificial intelligence, and extended reality with principles of gamification to integrate palliative care services into the rehabilitation journey. This approach can help alleviate the stress associated with treatment and have a positive impact on individuals and communities. The web app provides a space for caregivers and care recipients to encourage scientific and procedural cooperation, ultimately strengthening relationships for all beneficiaries. The mobile app includes an extended reality environment for rehabilitating individuals with hearing loss in a virtual environment that teaches proper speaking methods through 3D graphics and real-life scenarios. Virtual reality has great potential in improving the skills of the deaf and hearing-impaired in a cost-effective way. The study included interviews and visits to rehabilitation centers and hospitals that provide palliative care service, as well as analyzing 156 patient files and questionnaires from users. Results showed that the website was beneficial (97%), easy to use (90%), and improved the work of professionals (88%). Specialists valued the platform's services in bridging the gap between caregivers and care recipients. addressing all issues will improve quality of life and alleviate burdens on the healthcare system.

Awards Won:

Third Award of \$1,000