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LAMPIRAN

Foto Bentuk *Mobile Application*

1. *Care4Stroke* (J. D. M. Vloothuis et al., 2019)

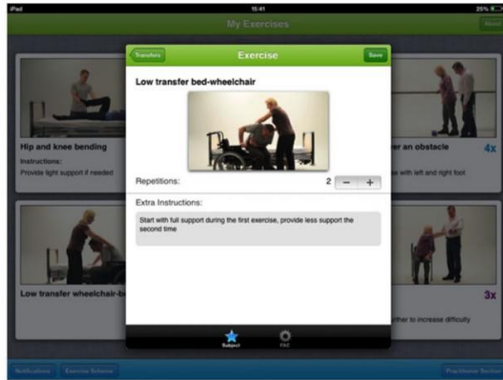


FIGURE 1 Screenshot of the CARE4STROKE app



FIGURE 2 An example of an exercise Transfers: Low transfer from bed to wheelchair. Aim: Improve sliding transfer from bed to wheelchair. Task description for the patient: The patient sits on the edge of bed. The wheelchair has to stand on the unaffected side. The wheelchair should be at the same level as the bed at a 45° angle to the bed. Armrest and footrest of the wheelchair near the bed should be removed. The break of the wheelchair has to be on. The patient sits up straight with feet supported on ground. The legs are looking away from wheelchair. The feet are placed under knee. The patient leans forward, shoulders directly over knees. The patient reaches and holds with unaffected arm the armrest of the wheelchair. The patient pushes with feet and lift his or her buttock off the bed then slides from bed to the wheelchair. The patient puts the armrest and footrest back into place. Task description for the caregiver: If needed, the caregiver places the palms flat on patients back and gives support during movement

2. *Mobile game-based Virtual Reality* (Y. H. Choi & Paik, 2018)

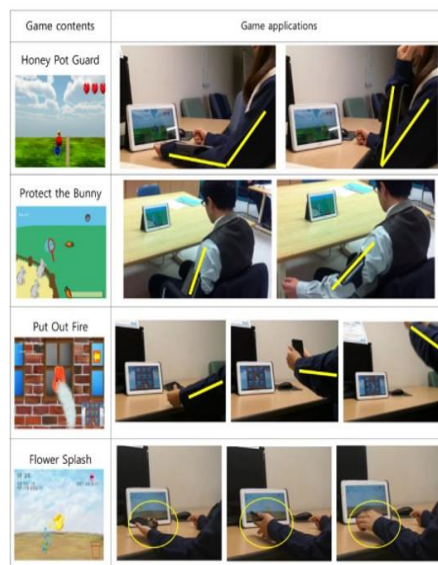


Figure 2: Game contents and applications of the mobile game-based upper extremity VR program. Each game application targets a specific movement of the hemiplegic arm. The level of difficulty is adjusted according to each patient's upper extremity function. The target movements in the target joints is represented by yellow lines and circles. Please click here to view a larger version of this figure.

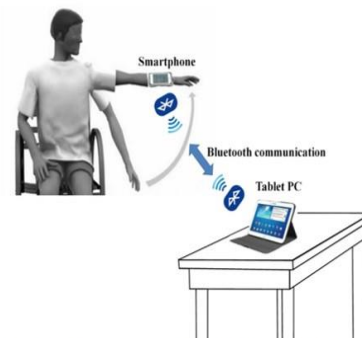


Figure 1: The Configuration of the mobile game-based upper extremity VR program. The system for the mobile game-based upper extremity VR program includes a mobile device (tablet PC) for display and a mobile device (smartphone) for obtaining information on the movement using built-in sensors. Please click here to view a larger version of this figure.

3. *Home-based telesupervising rehabilitation* (J. Chen et al., 2017)

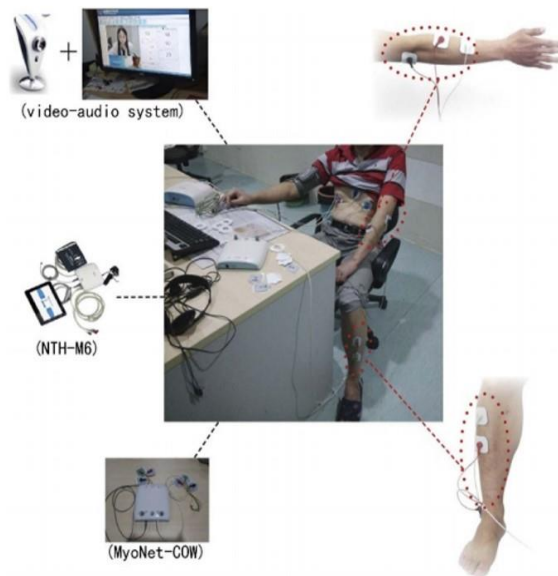








FIGURE 1. Architecture of the patient end.

4. ActivABLES (Olafsdottir et al., 2020)

Table 1 Prototypes of ActivABLES tested in the feasibility study		
	Description	Purpose
	<p>ActivFOAM</p> <p>A foam balance mat with pressure sensors that gives individually tailored visual and audio feedback on weight shifting and center of mass while standing. The mat is connected to a tablet which is positioned in front of the user. Three games and different forms of audio feedback can be selected from the tablet.</p>	To exercise balance and weight-bearing in a standing position.
	<p>Walking STARR</p> <p>An application for iPhone which records steps and walking time. The idea is to simulate taking the dog for a walk. Games include having to stop to let the dog pee and eat. Finishing games allows the user to collect stars.</p>	To motivate and provide feedback on progress of walking.
	<p>ActivBALL</p> <p>A soft ball to exercise motor control of the arm and develop grip strength. The ball is connected to a tablet which is positioned in front of the user and which can be pre-programmed for individually tailored sets of exercises. The range of motion and pressure detected while squeezing can be adjusted for each user. The tablet gives feedback by counting the repetitions. The ball can be used to exercise: 1) forearm pronation/supination, 2) dorsiflexion and palmar flexion of the wrist, 3) external/internal rotation of the shoulder, 4) flexion and extension of the fingers while squeezing.</p>	To exercise the motor control of the hand and forearm
	<p>ActivSTICKS</p> <p>Two sticks linked together forming an angle from 0° to 180°. The sticks are connected to a tablet which is positioned in front of the user and which can be pre-programmed for individually tailored sets of exercises. The range of motion detected, and resistance can be adjusted for each user. The tablet gives feedback by counting the repetitions. The sticks can be used to exercise: 1) abduction and adduction of the shoulder, 2) flexion of the shoulder, 3) elbow flexion and extension, along with coordination of the left and right arms while doing "scissors", 4) rotation of the upper body.</p>	To exercise the motor control of the shoulder and upper body.
	<p>ActivLAMP</p> <p>A lamp that gradually brightens in connection with exercises or physical activities. The lamp is connected to a tablet and can be connected to any of the above exercise tools.</p>	To motivate and provide feedback on progress of exercises or walking.
	<p>ActivTREE</p> <p>A tree that has three branches that gradually brighten in connection with exercises and physical activities. The tree is connected to a tablet and can be connected to any of the above exercise tools. Each branch represents a different tool and they all share the same trunk.</p>	To motivate and provide feedback on progress of exercises and walking.

5. *Starfish* (Paul et al., 2016)

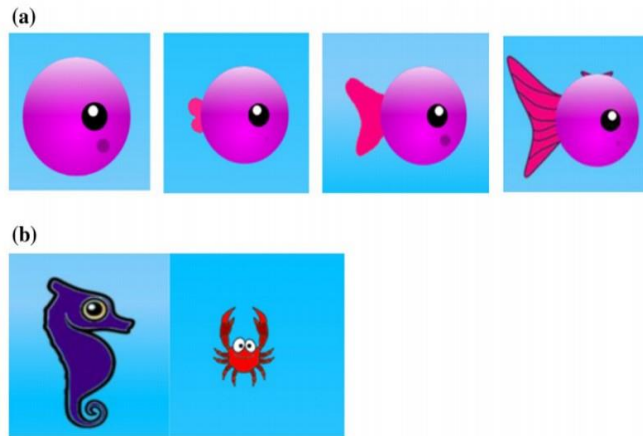


Figure 1 (a) Change in visualization of fish as users reach their individualized step target. (b) Examples of sea creatures who are added to the fish tank if the group reach 80% of their step count target on five days of the week.