

Activity monitoring in stroke rehabilitation: Advanced information for therapists and motivational factor for patients

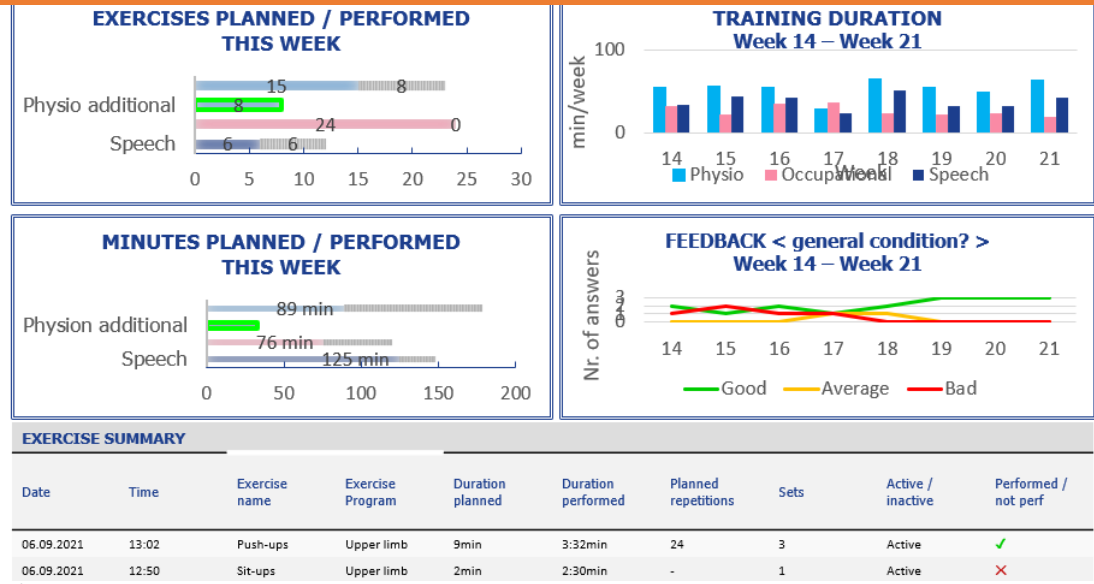
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BACKGROUND:

- new possibilities through teletherapeutic services
- tracking and visualizing rehabilitation process
- The REHA2030 project: development of services/devices for stroke telerehabilitation
- activity monitoring is one key element of the REHA230 platform



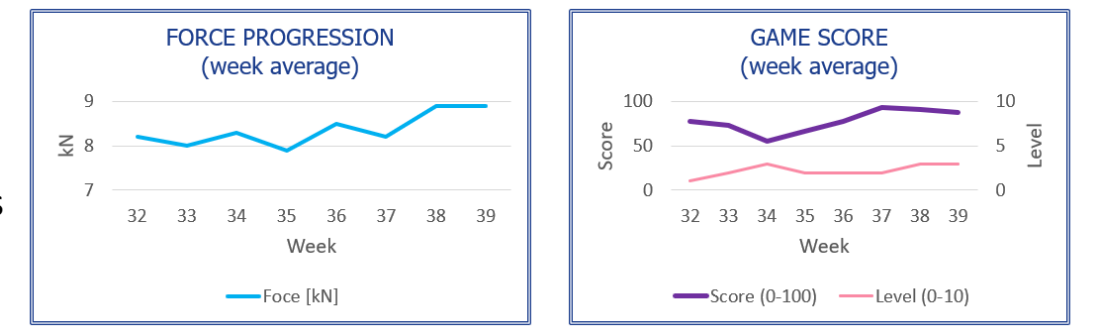
Therapist Activity Monitoring: Overview

RESULTS:

- the activity monitoring comprises for therapists and patients statistics and graphics on:
- conducted exercises
 - training duration
 - feedback by the patient
 - parameters of robotic training

MATERIALS & METHODS:

- user centered design approach
- workshops: therapists and rehabilitation experts
- requirements gathered
- developed solution validated



DATE	TIME	Meas1	Meas2	Meas3	AVERAGE	Game1 Score (Level)	Force Adjustmen t	Game2 Score	Force Adjustmen t	Game3 Score	Force Adjustmen t	AVERAGE
04.08.21	09:30	8,3kN	9,4kN	7,3kN	8,2kN	66 (6)	23% +/- 0%	89 (6)	33% +3%	78 (6)	39% -6%	85,3

Therapist Activity Monitoring: subpage on hand rehabilitation device statistics

CONCLUSION:

- tailored activity monitoring of rehabilitation for patients and therapists
- Outlook:
- further validation and development with patients/therapists

