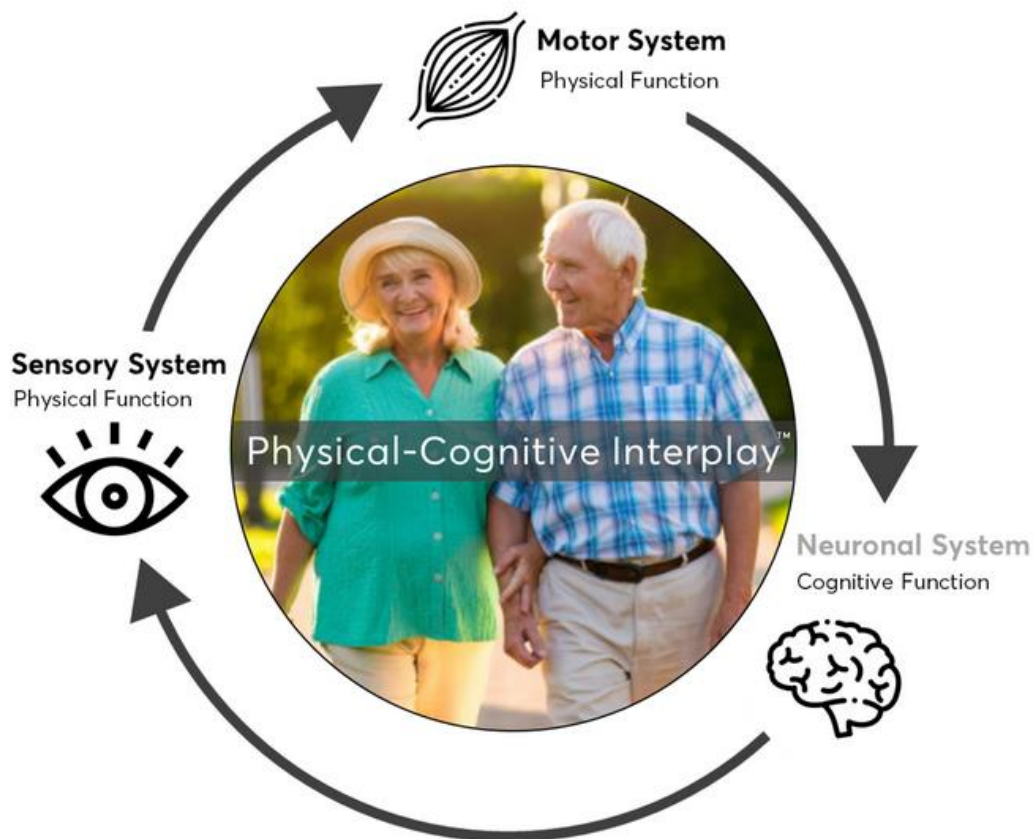


Faldforebyggelse og balancetræning med Senso teknologi fra Thera-Trainer/Dividat

Anders Rintza

Fysioterapeut og Produktspecialist fra Intramedic A/S

Senso er et forskningsbaseret balancetræningsudstyr, udviklet gennem et PhD studie i Schweiz - ud fra en teori om at kombinere motorisk træning og kognition



THERA
TRAINER



Senso – teknologien og den tilhørende gamingsoftware tilbyder:

4 validerede testprotokoller

18 evidensbaserede spil

Reaktionstid, skridtinitiering, balance, vægtforskydning og opmærksomhedstræning m.m.

Hurtig opsætning

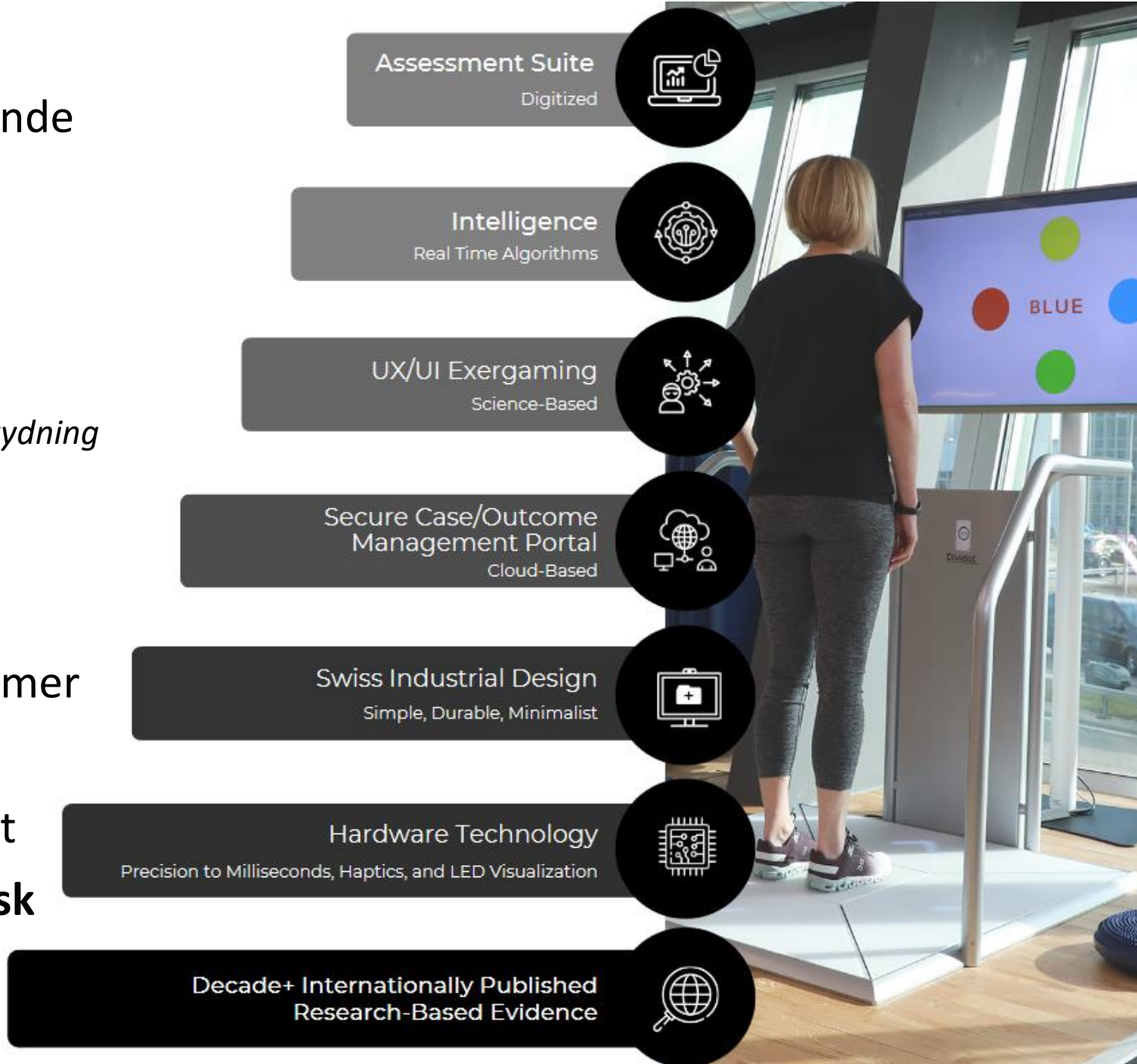
Selvtræning

Individualiserede træningsprogrammer

Indlevende spiloplevelser

Visuel rapportering af fremskridt

REAL-Time adaption – automatisk progression under spil !



4 Test-protokoller til vurdering og effektevaluering:

- **SWAY-test** : måler evnen til at opretholde balancen i stående stilling (Postural kontrol)
- **Go-NoGo -test:** måler evnen til selektiv opmærksomhed og bevidst kontrol af reaktioner
- **Flexibility test:** måler graden af kognitiv fleksibilitet og evnen til at skifte fokus/reaktion
- **Stroop test:** måler evnen til at inhibere/"frasortere" irrelevante informationer og reaktioner

Yderligere 8 test-protokoller under udarbejdelse..

Eksempel på spil: Target

Træning af kognitivt fokus – reaktionsevne - timing



80-årig neurologisk patient - ved opstart og efter 9 måneder



Auto-lagring i patientrapport

manager Persons Dashboard Shared training plans



Careware

Joined 2023-05-09 · ID: 18630176-9dae-4832-aa6e-3eaa2e370d34

Overview Results Training Plan Assessment Manage

Sessions 1	Activities 1	Time 2 min
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Top Activities



Latest Session

2023-05-10 • 2 min



Simple

Results per day

	Jun 2022	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2023	Feb	Mar	Apr	May
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Sa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Su	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Assessment performed

Activities performed

Primære effekter for patienten/borgeren:

Øger den kognitive spændevidde

Senso sætter krav til koncentration, opmærksomhed, problemløsning og dual-task

Øger den fysiske kapacitet

Senso faciliterer til bedre balance, postural kontrol, reaktionstid, ganghastighed og koordination

Resultatet

Bedre evne til at tilpasse sig omgivelser og forhold under færd i dagligdagen.

Dette medfører mindre faldrisiko.

Publications on Dividat Senso

Step-based interventions have been proven to be an effective method for improving gait stability. Our training programs are developed based on current research findings and in collaboration with research institutions worldwide.

2023	Jäggi et al.	[PDF] Feasibility and effects of cognitive– motor exergames on fall risk factors European Journal of Medical Research Open Access in typical and atypical Parkinson's inpatients
2023	Seinsche et al.	[PDF] Older adults' needs and requirements for a comprehensive exergame-based telerehabilitation system
2021	A. Schättin, et al.	[PDF] Design and Evaluation of User-Centered Exergames for Patients With Multiple Sclerosis: Multilevel Usability and Feasibility Studies
2021	Swinnen et. al.	[PDF] The efficacy of exergaming in people with major neurocognitive disorder residing in long-term care facilities
2020	J. Bakker, et al.	[LINK] Balance training monitoring and individual response during unstable vs. T stable balance Exergaming in elderly adults: Findings from a randomized controlled trial
2020	Swanenburg et al.	[PDF] Exergaming with integrated head turn task improves compensatory saccade pattern in some patients with chronic peripheral unilateral vestibular hypofunction
2019	de Bruin	[PDF] Playing Exergames Facilitates Central Drive to the Ankle Dorsiflexors During Gait in Older Adults; a Quasi-Experimental Investigation
2019	Rebsamen et al.	[PDF] Exergame-Driven High-Intensity Interval Training in Untrained Community Dwelling Older Adults: A Formative One Group Quasi- Experimental Feasibility Trial
2018	Swanenburg et. al.	[PDF] Exergaming in a Moving Virtual World to Train Vestibular Functions and Gait
2016	Schaettin et. al.	[PDF] Adaptations of Prefrontal Brain Activity, Executive Functions, and Gait in Healthy Elderly Following Exergame and Balance Training: A Randomized-Controlled Study

Tak for **opmærksomheden !**

Yderligere info:

www.intramedic.dk

www.intramedic.dk/produkter/bevaegelse-og-traening/thera-trainer-senso/