

Vocational Rehabilitation poststroke

Kristine Oostra, MD, PhD
Rehabilitation Centre
University Hospital Ghent

<p>Phase 1</p> <p>Vital stimulation</p> <p>2x 2h/day</p> <p>Minimally conscious State</p> <p>ICF Functions</p>	<p>Phase 2</p> <p>Recovery mobility inside</p> <p>recovery Personal ADL</p> <p>ICF Activities</p>	<p>Phase 3</p> <p>Recovery mobility outside</p> <p>Recovery Instrumental ADL</p> <p>Leisure activities</p> <p>ICF Participation</p>	<p>Phase 4</p> <p>Vocational rehabilitation</p> <p>ICF Participation</p>
---	---	--	---

Vocational rehabilitation

20 % stroke → age < 65y

↗ 25% over the last 20y

Return to work priority n° 1 ~ guidelines rehabilitation

Important rehabilitation goal

Financial and social advantages

Global well-being

Mild stroke

About 50 % of stroke patients
NIHSS 0-5

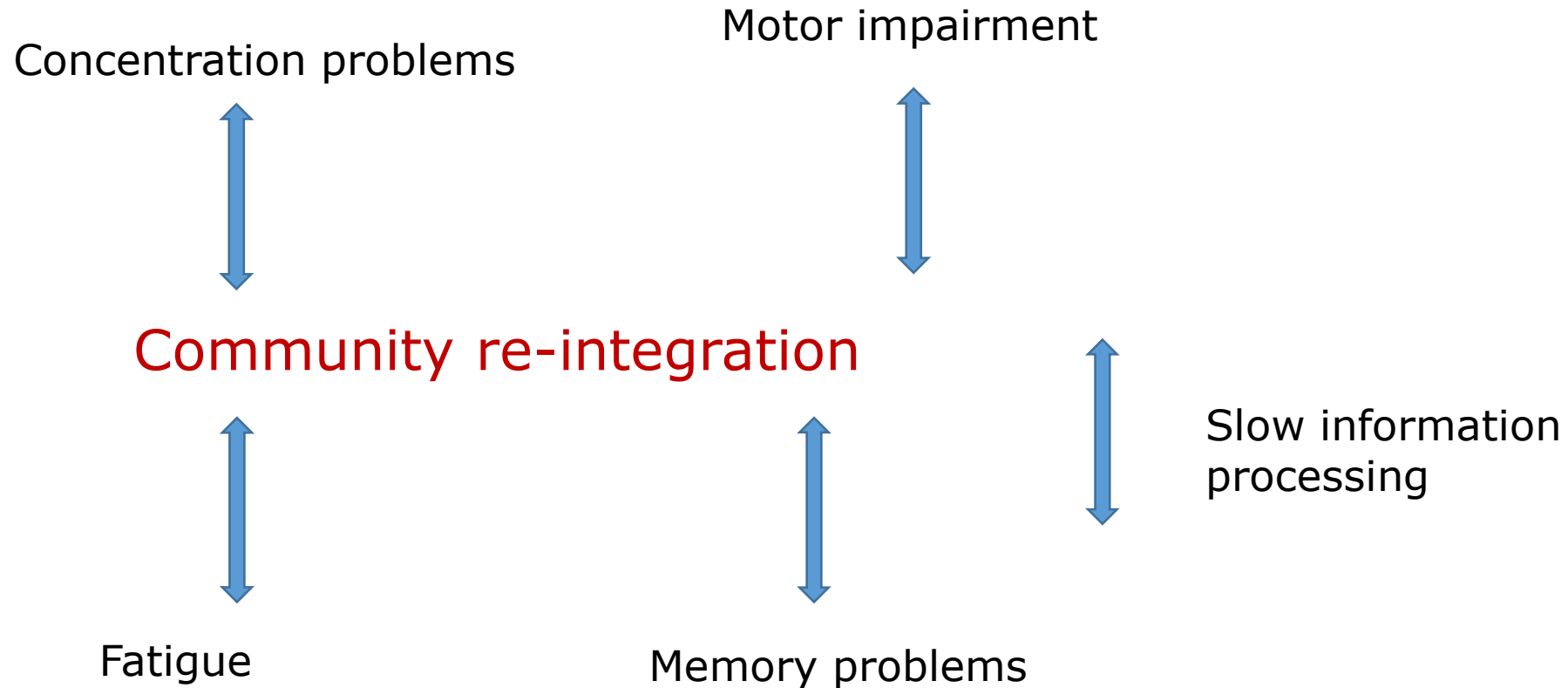
Needs

social re-integration
return to work
driving
'meaningful life rol'

Problems

underestimation symptoms
screening tools not sensitive
~~effective interventions~~

Vocational Rehabilitation



Neuropsychological screening

Standardized neuropsychological testing

Cognitive status → self-knowledge
rehabilitation needs
prognosis return to work

Neuropsychological screening

Acute phase

MOCA

Clock Drawing Test

Subacute phase

attention

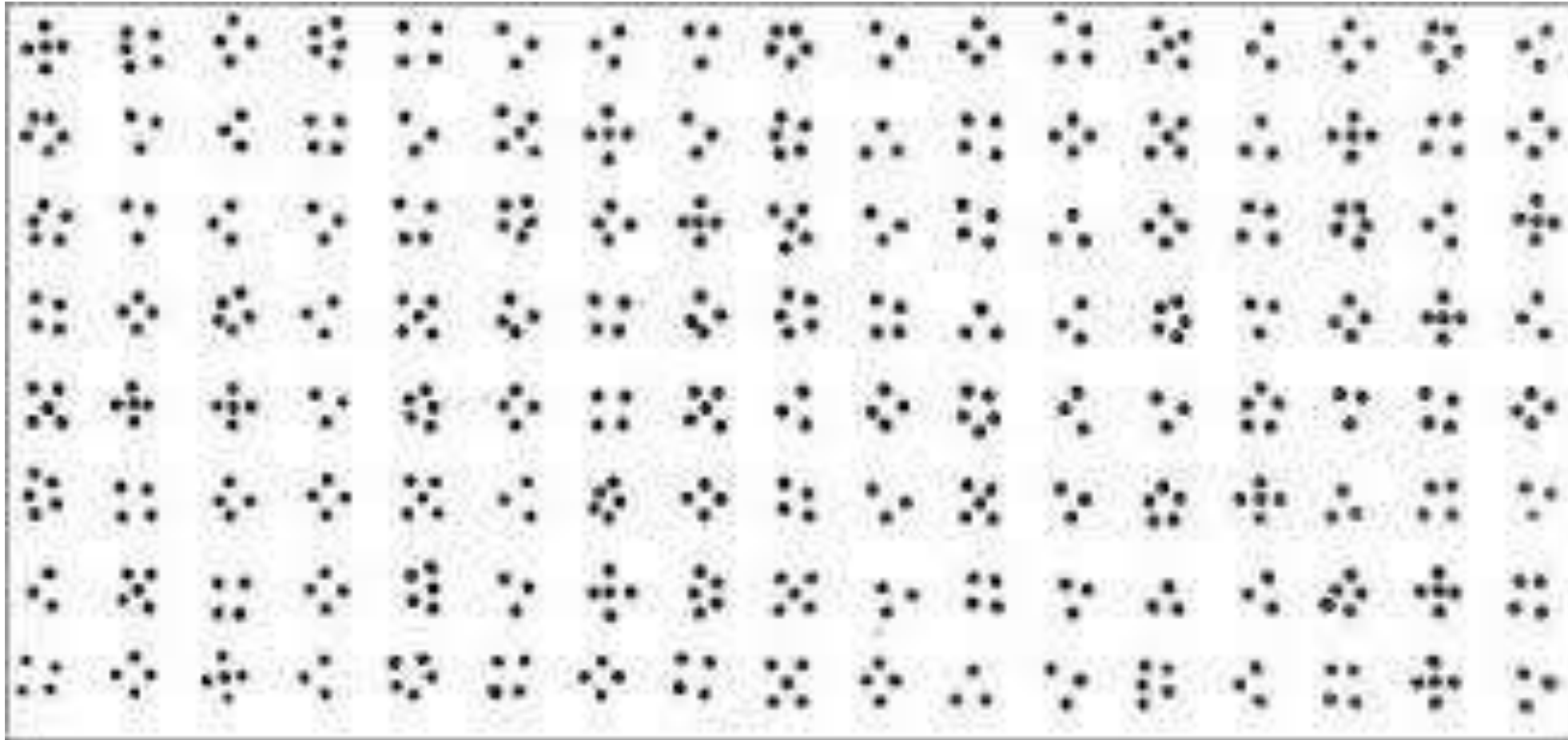
reaction speed

memory

visuo-spatial functions

executive functions

Neuropsychological screening



TOSSA

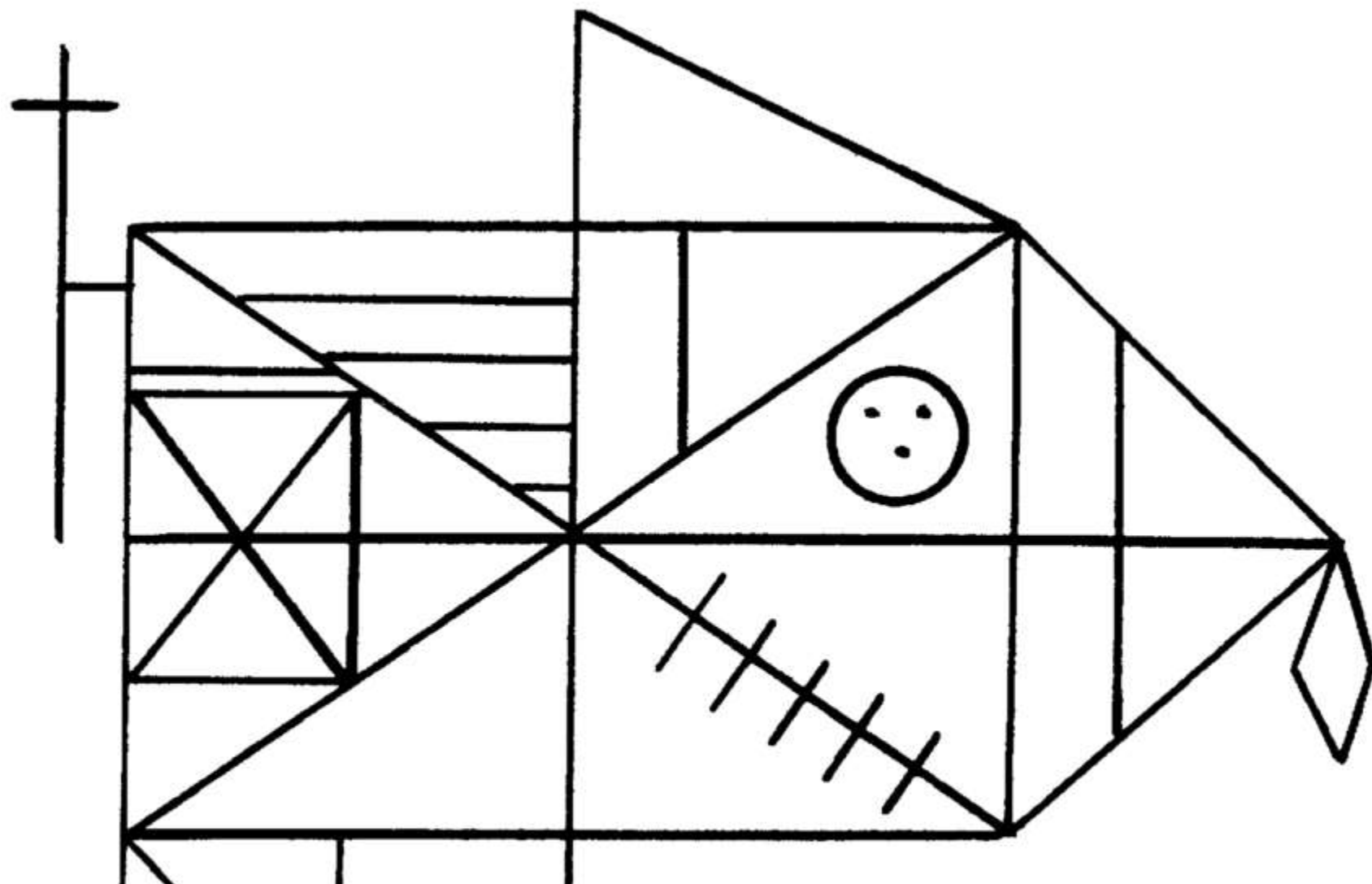
test of sustained selective attention

In this test groups of 2, 3, or 4 beeps are offered. You should only press the button when hearing a group of 3 beeps. This is how the beeps sound [PRESS 2, 3 or 4].

Pay attention: you only have to press the button when you hear 3 beeps.



Neuropsychological screening



AVLT

Auditory Verbal Learning Test

A	A1	A2	A3	A4	A5	B	B1	A6	A7	A
trommel						boek				trommel
gordijn						trein				gordijn
riem						bloem				riem
koffie						tapijt				koffie
school						strand				school
ouders						harp				ouders
zon						zout				zon
hof						vinger				hof
pet						appel				pet
boer						schouw				boer
zetel						knop				zetel
kalkoen						schaduw				kalkoen
kleur						sleutel				kleur
huis						ratel				huis
rivier						goud				rivier
Intrusies										
Totalen						Som				

Neuropsychologische screening

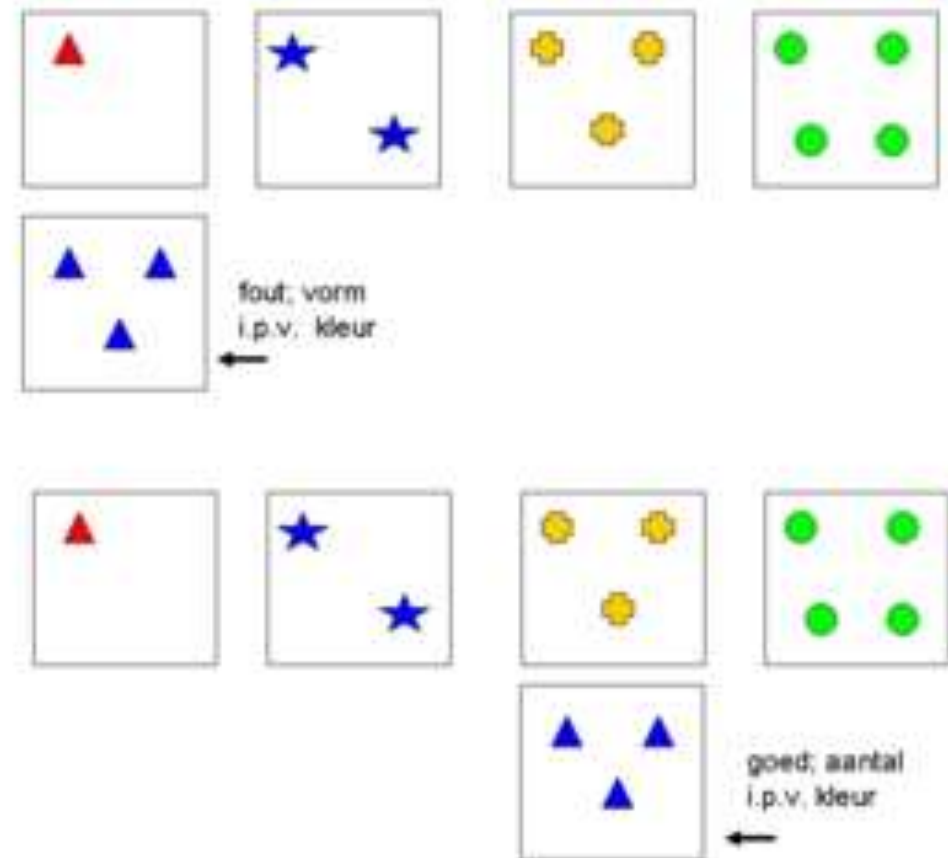
Executive functions

Wisconsin Card sorting test

Behavioural assessment of the d

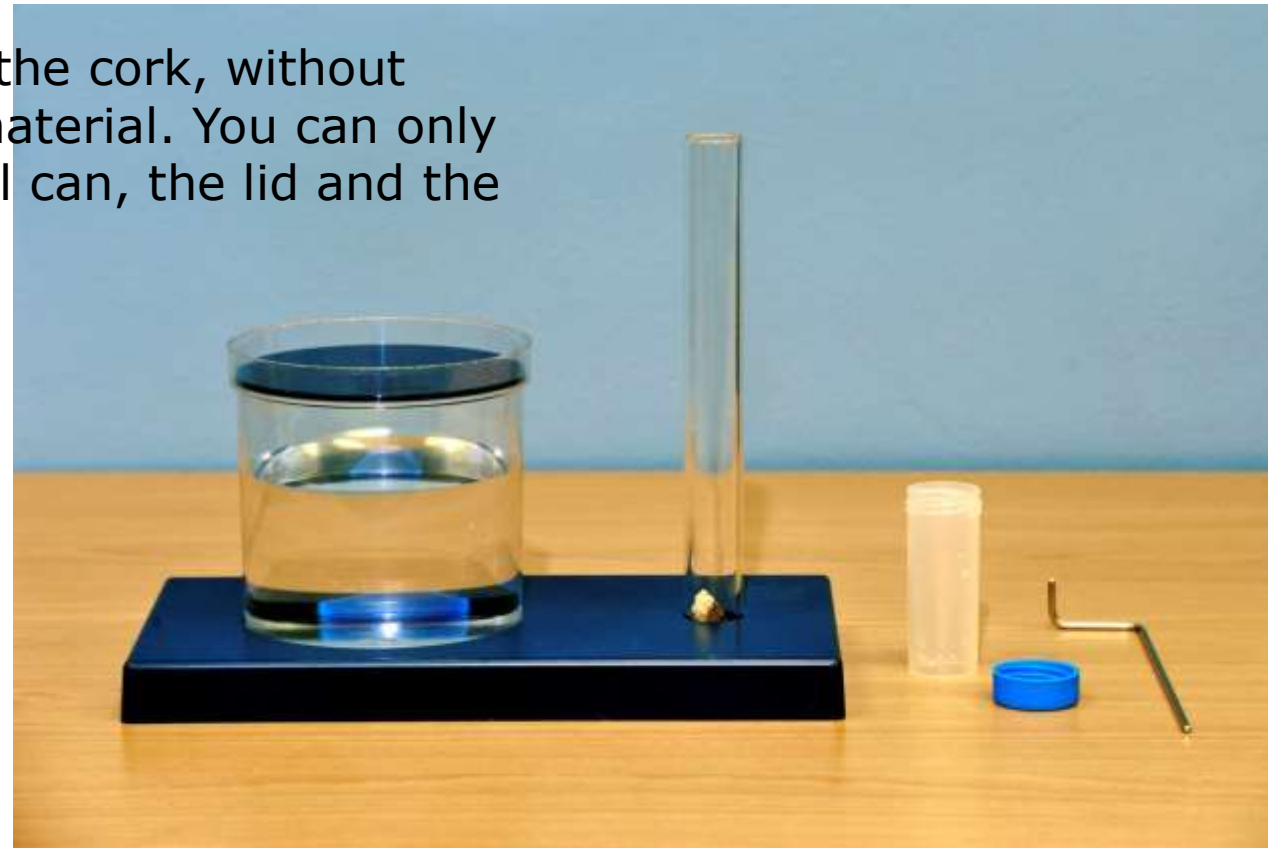
Word fluency Test

D-kefs : 20 questions test



BADS – Action program test

Try to remove the cork, without touching the material. You can only touch the small can, the lid and the metal.



Neuropsychological screening

TAP test battery

Test driving ability

Alertness

Divided attention

Incompatibility

Flexibility

Visual field

Impuls control

Visual scanning

Neglect



TAP – divided attention

Divided Attention / dual task

You have two tasks in this test:

First task:
You will see a region on the screen in which a varying number of crosses appear simultaneously. When four of these crosses form a square, then please press the key as quickly as possible.

Example:

×	·	×	·
×	·	×	×
·	·	×	×
·	×	·	·

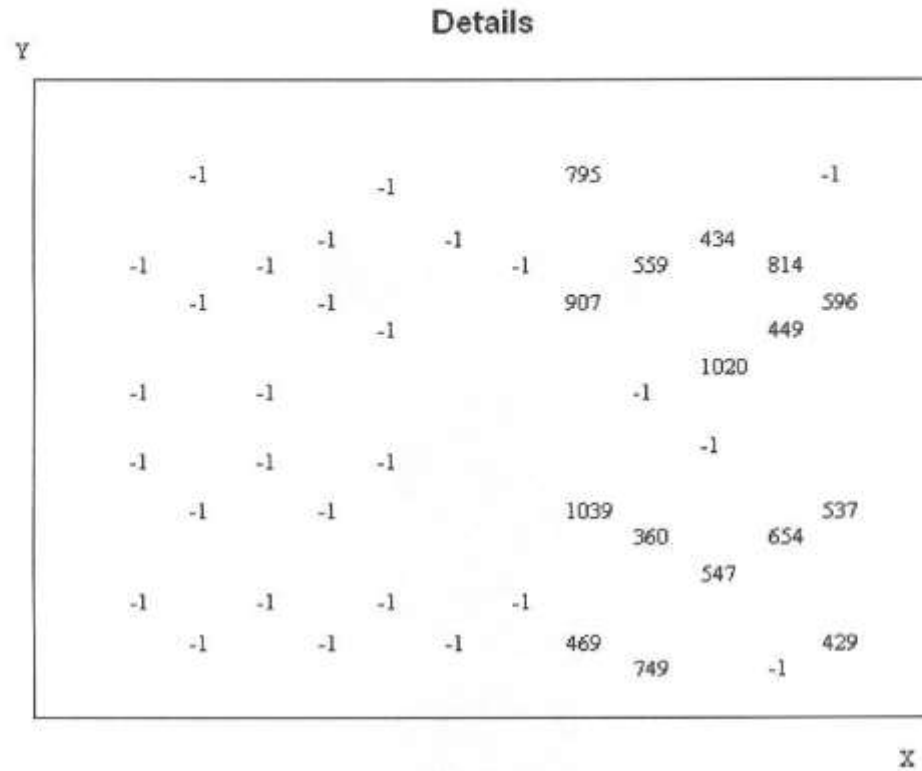
Second task:
In this task you will hear a high and a low tone in sequence. You must decide whether the same tone occurs twice in a row. Please press the key as quickly as possible!

Your task is to pay attention to both squares and tones at the same time.

Please press a key (cancel with X)

TAP – neglect

TAP-Gezichtsveldtest: Neglect: [REDACTED]



Neuropsychological screening

presence and severity cognitive impairment

no prediction functioning in real life situations

prediction if same demands as in real life situations and jobs

problem testing executive functions

problem 'underachievers'

Neuropsychological screening

CEBIR testbattery

Center for **B**asic **I**nteractive **R**esearch

Computer tests / selection recruitment

Evaluation labor skills

Social skills, reasoning, administrative skills, planning and organizing, memory and learning capacity, interpretation tables and graphs, technical & mechanical insight, spatial awareness,...

Vocational rehabilitation

Definition return to work

Full-time or part-time work

1-20h/week

Min 50% of former work rhythm

No sickness compensation

Min work income

Vocational rehabilitation

Predictive factors 'Return to work'

Self-employed > employee

High education > low education

Higher socio-economical status

Positive attitude

Support from others

Nation (Denmark/ Netherlands)

Vocational rehabilitation

Predictive factors 'return to work'

Men = women

White collar > blue collar

iCVA > hCVA

Aphasia

Hemiplegia

6 months < 1 year < 2 years

} severity stroke

41% 0-6 months
53% after 1 y
56 % 1,5 y
66 % after 2 y

Vocational rehabilitation

Poststroke fatigue

35-75% patients poststroke

Fatigue, energy loss, weariness

Loss of motivation

No/slow recovery after rest

Problems with initiating and keeping up activities

Fatigue Severity Scale

Multifactorial: Detection List Fatigue scale

Vocational rehabilitation

Poststroke fatigue

Most important complaint 40 %

Most important reason work delay

→ mild stroke/ SAH

→ younger patients

~~depression~~

Treatment:
cognitive behavioral therapy
'graded activity'
physical activity
power naps
medication

Vocational rehabilitation

Bridge between 'care' and 'work'

Project: 'We go to work'

Mention 'work' early in the rehabilitation trajectory

Assessment as a start VR

Physical skills, FCE

Cognitive skills, NP tests

Emotional skills

Functional Capacity
Evaluation

Vocational rehabilitation

Program-based vocational rehabilitation

Train-and-place

Intensive rehabilitation of labor skills

Job trials

Supported employment model

Place-and-train

Job placement

Job training

On-the-job coaching, problem solving in 'real time'

Combo

Case-management

Hart et al

J head trauma rehab 2006

Vocational rehabilitation

Real world job conditions

Simulation work conditions rehab setting

Traditional rehabilitation less successful than techniques that mimic real work conditions

Asap real life work tasks:

- Practice and evaluate skills

- Promote insight in limitations

- Create realistic expectations and goals

Vocational rehabilitation

Real world job conditions

Job trials real work environment

Negative attitude/anticipation employer

Feelings of inferiority and failure

Continuing rehabilitation at the workplace

Vocational rehabilitation

Real world job conditions

Job trials real work environment

Administration

Analysis tasks, anticipation problems, education employer/ colleagues

Intensive follow up (evaluation patient/employer, adjustments,...)

Progressive structure

Preparation return to work

Vocational rehabilitation

Role and experiences of employer and colleagues

Emotional challenge

Practical challenge, too much responsibility

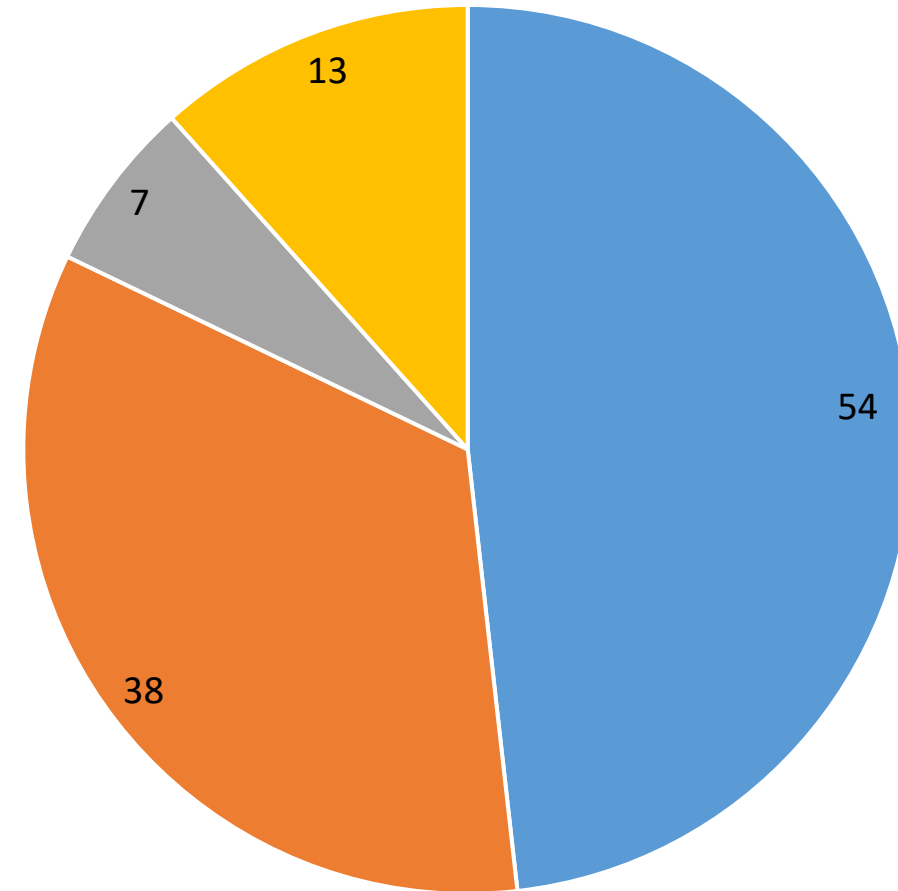
~~Knowledge about~~ stroke

Need for a long follow up

Ambulatory rehab University hospital Ghent

Patients included

01/01/2019 tem 31/12/2019

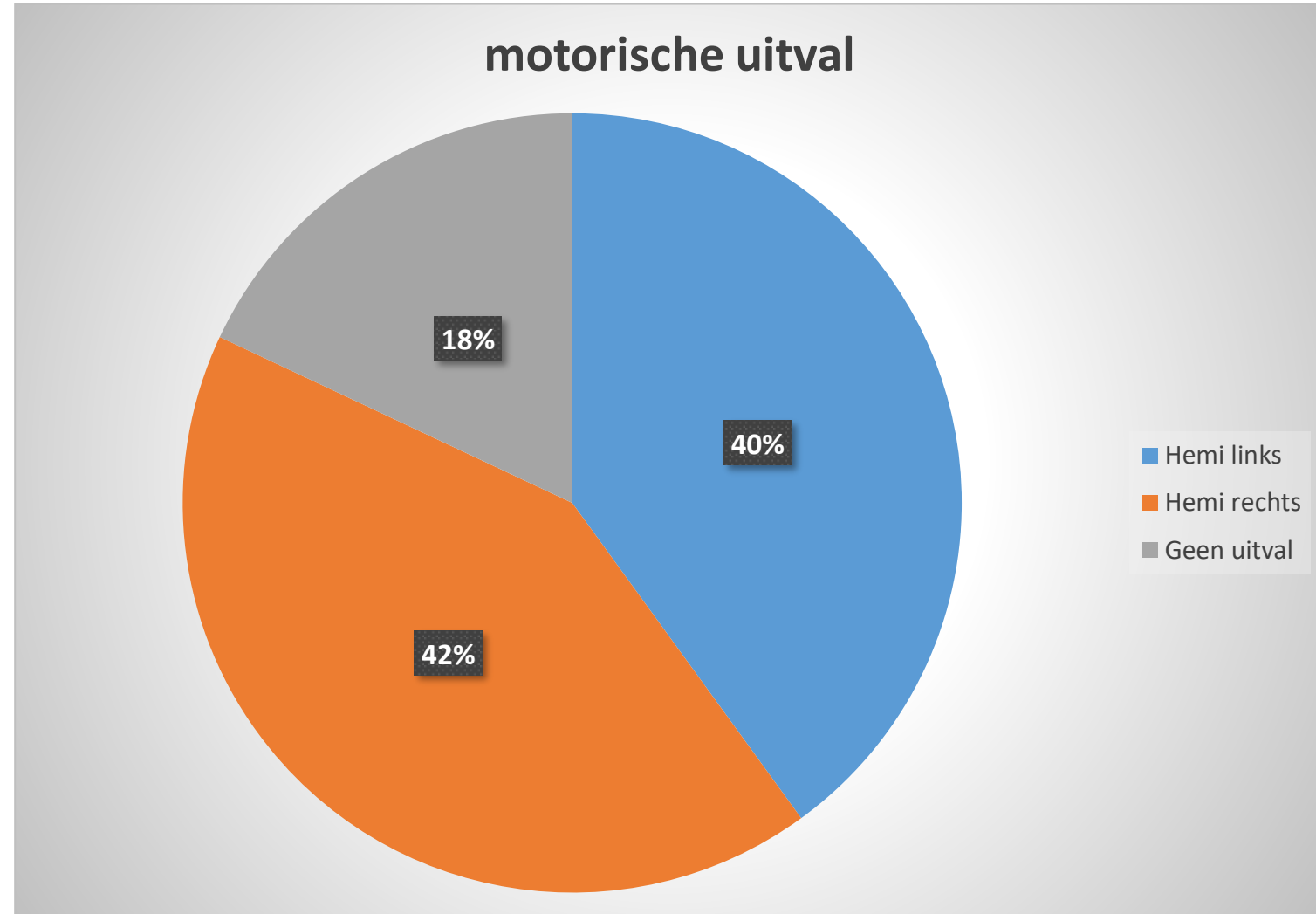


■ stroke ■ trauma ■ tumor ■ andere

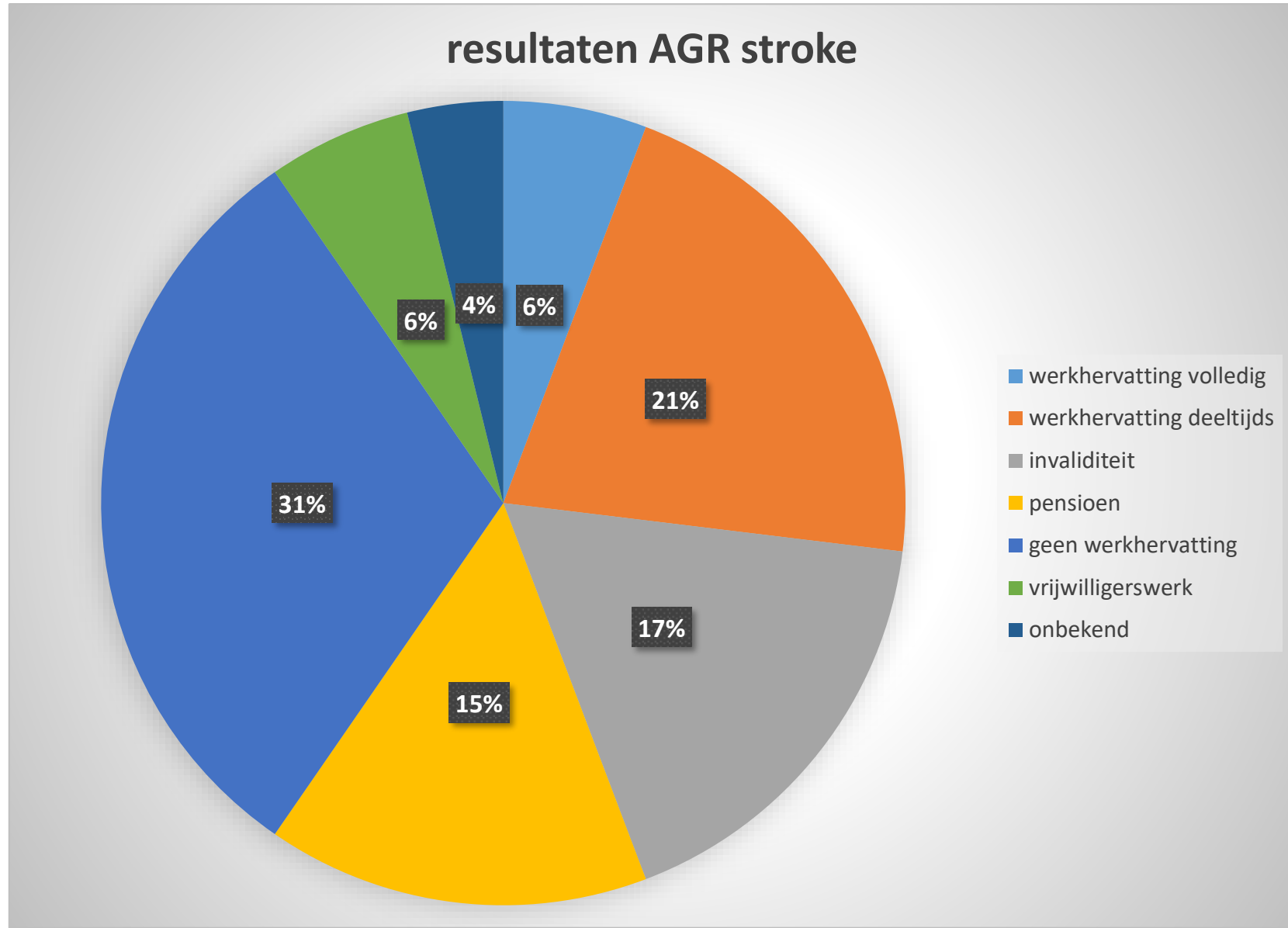
Ambulatory rehab University Hospital Ghent

Stroke population

- Mean age 49 y
- Blue collar 18
- White collar 14
- Pension 7
- none/invalid 11



Ambulatory rehab University Hospital Ghent



Ambulatory rehab University Hospital Ghent

