

BASE PACK FOR ALFA PLATFORM

2025.1



Hardware requirements	3
What is needed?	3
Therapeutic tasks database	5
Movement time	5
Balance	7
Movement precision	9
Functional movements	17
Divided attention	33
Memory	35
Problem solving	37
Specialized	39

WHAT IS NEEDED?

Please make sure the PC where you want this module to be active have VAST.Rehab Patient Panel installed and that the following hardware requirements are met:

- Windows 10/11
- Intel Core i5 (8th gen or newer). Important: Avoid ultra-low-power versions (e.g., i5-8250U), as they may not meet performance requirements. Prefer standard or high-performance CPUs.
- Minimum: 8 GB RAM (16 GB or more recommended for optimal performance).





MOVEMENT TIME

DYNAMIC TEST

Measure time taken to carry out a movement of a limb or other part of the body. It is measured from rest to target position.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Range
- Show path
- Repetitions

OBJECTIVES

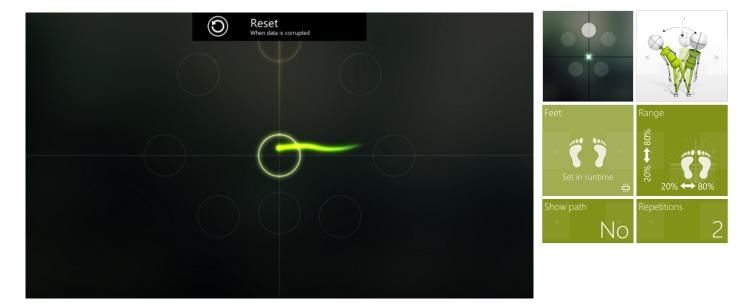
- Test the limits of balance and equilibrium
- Dynamics of planned movements

INSTRUCTION FOR PATIENT

Move the dot to the highlighted target and hold it for a moment. Next target will be highlighted.









BALANCE WEIGHT DISTRIBUTION TEST

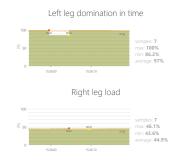
Measure and train individual's skills to perform specific movement patterns while keeping predefined weight distribution.

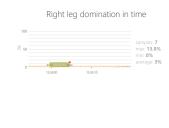
CONTROL MODES



RESULTS







ADJUSTMENTS

- Feet position
- Time to complete action
- Range
- Show feedback

OBJECTIVES

- Postural stability
- Balance and equilibrium training

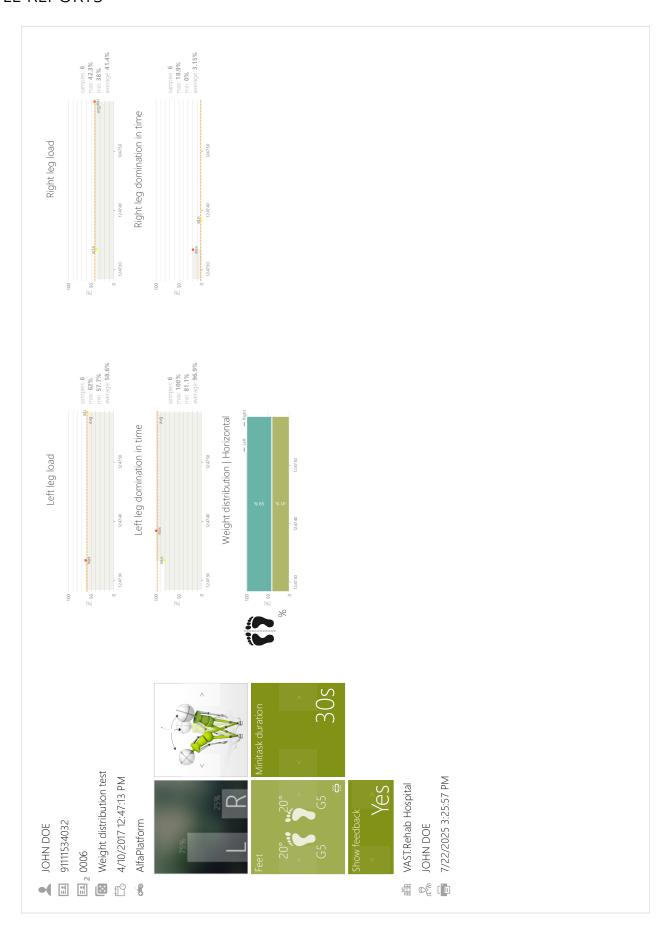
INSTRUCTION FOR PATIENT

Keep your body balanced.





SAMPLE REPORTS







MOVEMENT PRECISION

FISH

Measure and train individual's skills to perform specific movement patterns with predefined speed and range.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Range
- Speed of objects

OBJECTIVES

- 3D space movements reproduction
- Planned movements
- Muscle strengthening
- Movement precision
- Visual motor coordination

INSTRUCTION FOR PATIENT

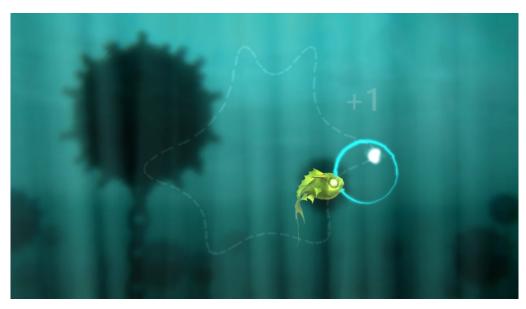
Move the blue circle to protect the sparks source from the fish. When the sparks source is inside the circle it is safe.

















MOVEMENT PRECISION

PENDULUM

Measure and train individual's skills to perform specific movement patterns with predefined speed and range.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Range
- Show path
- Period
- Rotation
- Pendulum height
- Pendulum width

OBJECTIVES

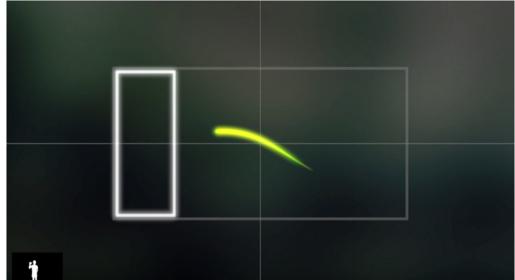
- 3D space movements reproduction
- Rhythmicity
- · Activity in a given rhythm
- Movement precision

INSTRUCTION FOR PATIENT

Try to synchronize yourself with the rectangle movements. Do your best to stay within the rectangle.











MOVEMENT PRECISION

TRACKING

Measure and train individual's skills to perform specific movement patterns with predefined speed and range.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Range
- Inverse direction
- Show path
- Period
- Radius
- Target radius

OBJECTIVES

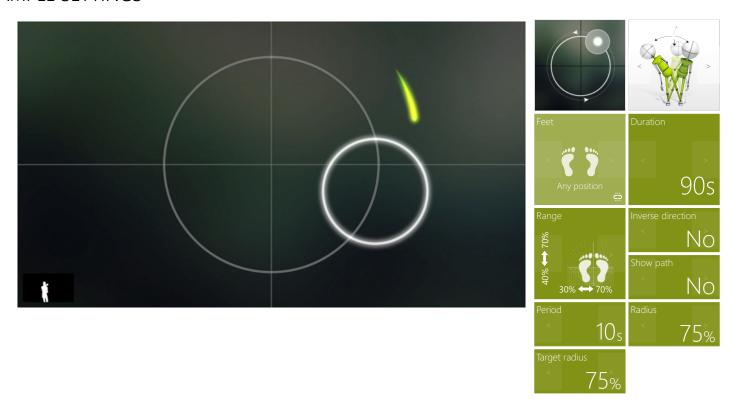
- 3D space movements reproduction
- Test the limits of balance and equilibrium

INSTRUCTION FOR PATIENT

Try to synchronize yourself with the circle movements. Do your best to stay within the circle.







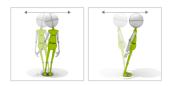


MOVEMENT PRECISION

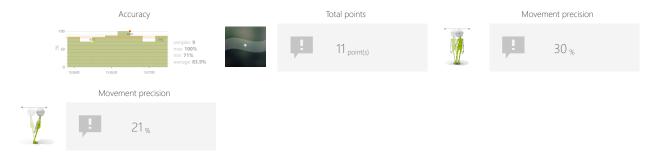
GRAPH

Measure and train individual's skills to perform specific movement patterns with predefined speed and range.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Graph shape (sinus or square, amplitude, border, etc.)
- Feet position
- Task duration
- Range

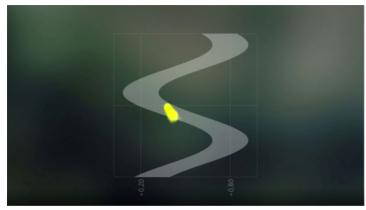
OBJECTIVES

- Movement precision
- Activity in a given rhythm
- Repetitive movements

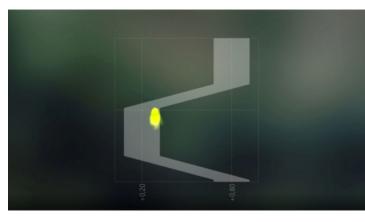
INSTRUCTION FOR PATIENT

Try to stay within the borders.

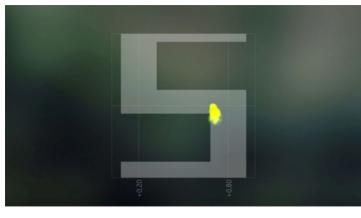


















FUNCTIONAL MOVEMENTS

VAMPIRES

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Positions to have targets on
- Feet position
- Task duration
- Range
- Time between objects
- Time to react

OBJECTIVES

- Visual motor coordination
- Exercise with or without support from healthy limb
- Spontaneous movements in 3D space
- Speed of movement

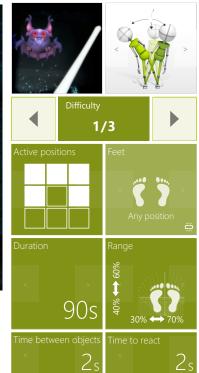
INSTRUCTION FOR PATIENT

Use your sword to knock down flying vampires who want to bite you!















FUNCTIONAL MOVEMENTS

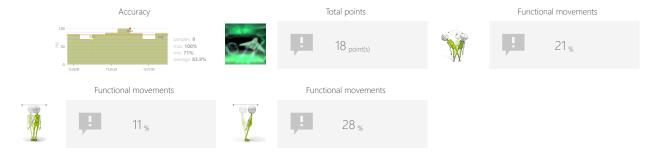
AIRPLANE

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Speed
- Feet position
- Task duration
- Range

OBJECTIVES

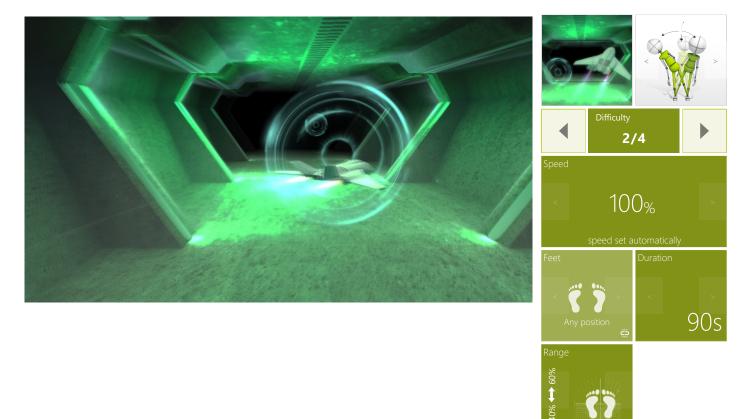
- Focusing
- Perceptivity
- Movement precision
- Predicting the trajectory of objects in 3D space

INSTRUCTION FOR PATIENT

Make the airplane fly through the circles. The closer to the center it flies the more points you get.









FUNCTIONAL MOVEMENTS

STONES

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Speed
- Feet position
- Task duration
- Range

OBJECTIVES

- Perceptivity
- Dynamics of planned movements
- Reaction to the positive visual stimuli
- Response to negative visual stimuli

INSTRUCTION FOR PATIENT

Make the spaceship collect the colorful creatures and avoid the rocks.













FUNCTIONAL MOVEMENTS

HAMMER

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Positions to have targets on
- Feet position
- Task duration
- Range
- Time to react
- Reticle size

OBJECTIVES

- Planning and Strategy
- Speed of decision making

INSTRUCTION FOR PATIENT

Hit the burning barrels as quickly as you can. Then return to the center.









FUNCTIONAL MOVEMENTS

RUNAWAY

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Range
- Number of enemies
- Enemies speed

OBJECTIVES

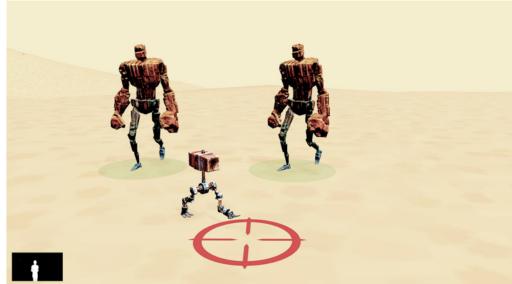
- Predicting the trajectory of objects in 3D space
- Response to negative visual stimuli
- Focusing
- Perceptivity

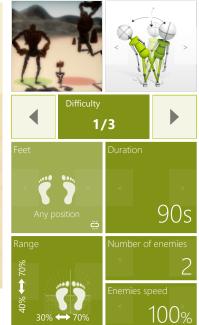
INSTRUCTION FOR PATIENT

Keep away from the big robots.

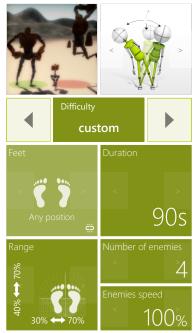














FUNCTIONAL MOVEMENTS

BOX CRUSHER

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS











ADJUSTMENTS

- Positions to have targets on
- Feet position
- Task duration
- Range
- Required force

OBJECTIVES

- 3D space movements reproduction
- Movement awareness
- Muscle strengthening
- Repetitive movements

INSTRUCTION FOR PATIENT

Smash boxes with the club.











FUNCTIONAL MOVEMENTS

AMBULANCE

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Speed
- Feet position
- Task duration
- Range
- Distance between cars

OBJECTIVES

- Dynamics of planned movements
- Focusing
- Speed of decision making
- Visual motor coordination

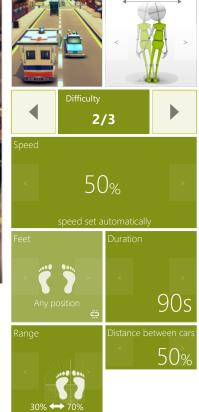
INSTRUCTION FOR PATIENT

Go as fast as you can and avoid hitting other cars.

















FUNCTIONAL MOVEMENTS

ARCANOID

Measure and train individual's skills to perform movements based on real-world situational biomechanics. They usually involve multi-planar, multi-joint movements which place demand on the body's core musculature and innervation.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Range
- Reticle size
- Speed of objects

OBJECTIVES

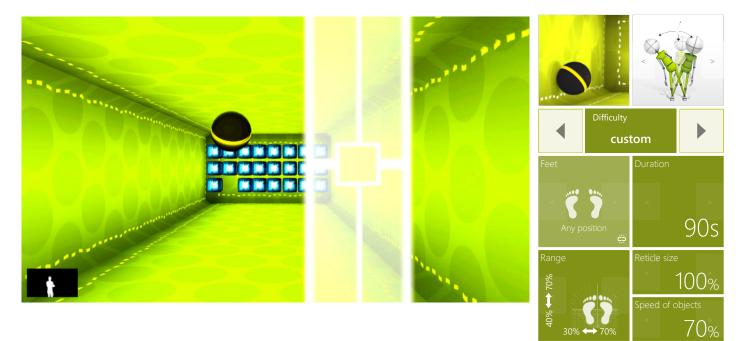
- Dynamics of planned movements
- Predicting the trajectory of objects in 3D space
- Visual motor coordination

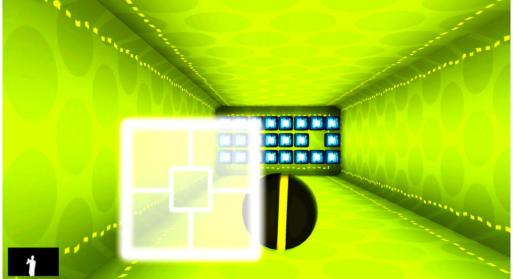
INSTRUCTION FOR PATIENT

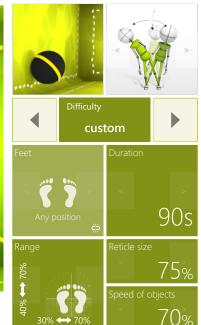
Destroy as many boxes as you can.















DIVIDED ATTENTION SORTER

Measure and train individual's skills to successfully execute more than one action at a time, while paying attention to two or more channels of information.

CONTROL MODES





RESULTS











ADJUSTMENTS

- Feet position
- Task duration
- Range
- Number of objects
- Gap size
- Speed of objects

OBJECTIVES

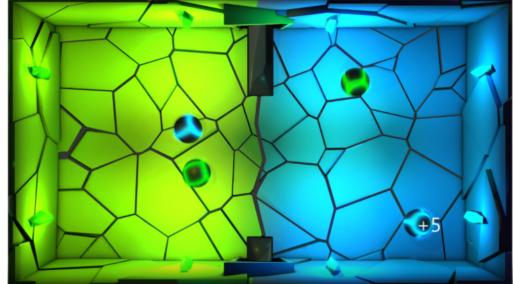
- Predicting the trajectory of objects
- Focusing
- Perceptivity
- Movement precision
- Exercise with or without support from healthy limb

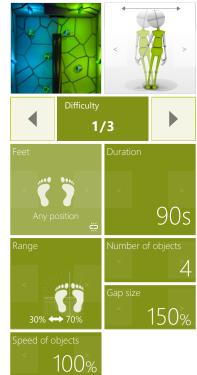
INSTRUCTION FOR PATIENT

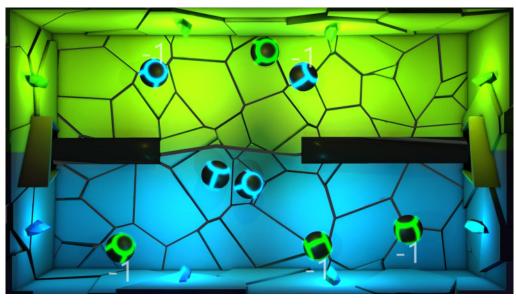
Pass or block the balls so that the blue balls are on the blue side and the green balls are on the green side of the screen.



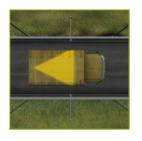








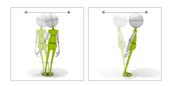




MEMORY TRUCKS

Measure and train individual's skills to memorize information.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Range
- Variations

OBJECTIVES

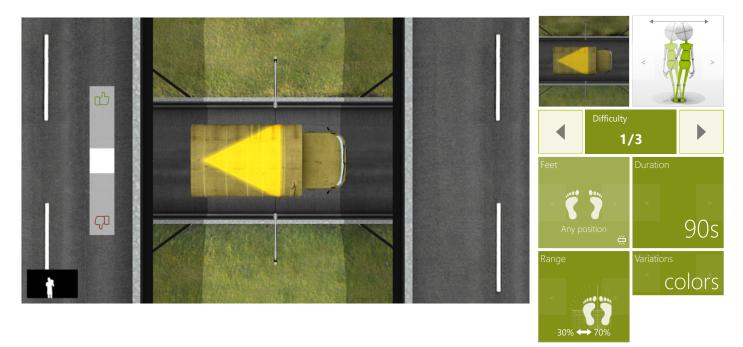
- Logical tasks
- Focusing
- Perceptivity

INSTRUCTION FOR PATIENT

Remember the shape and/or its color on the roof of the car you see. Decide with thumbs up or down whether the next car has the same shape and/or color on the roof as the previous one.











PROBLEM SOLVING

CLONES

Measure and train individual's skills to reach a solution of specific problems. Problem solving may include mathematical or systematic operations and can be a gauge of an individual's critical thinking skills.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Task duration
- Time to complete action
- Range
- Number of pairs

OBJECTIVES

- Perceptivity
- Visual motor coordination
- Logical tasks

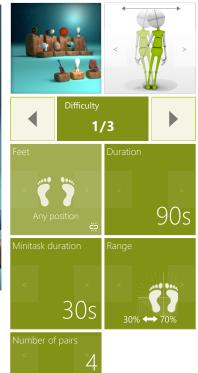
INSTRUCTION FOR PATIENT

Select the item which has a pair on the screen.











SPECIALIZED BLOOD PRESSURE

Specialized tasks and evaluations that collect data from multiple categories or do have a unique objectives.

CONTROL MODES



ADJUSTMENTS

• Feet position

OBJECTIVES

• Monitor external parameters

INSTRUCTION FOR PATIENT

Measure yourself your blood pressure and type it in the result.





SPECIALIZED

ROMBERG TEST

Specialized tasks and evaluations that collect data from multiple categories or do have a unique objectives.

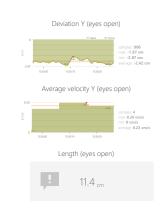
CONTROL MODES



RESULTS









ADJUSTMENTS

- Feet position
- Time to complete action
- Show feedback

OBJECTIVES

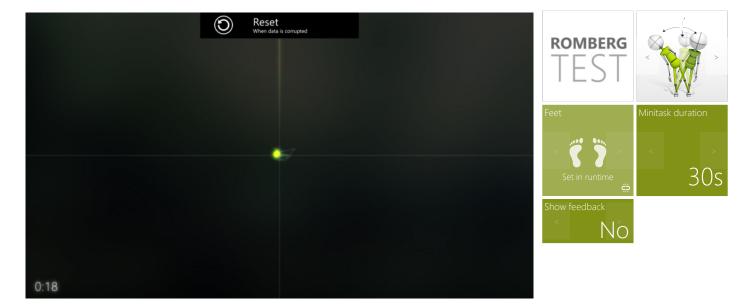
• Assesses static standing balance

INSTRUCTION FOR PATIENT

Romberg test. Try to stand as steadily as you can. First with eyes open, then with eyes closed.

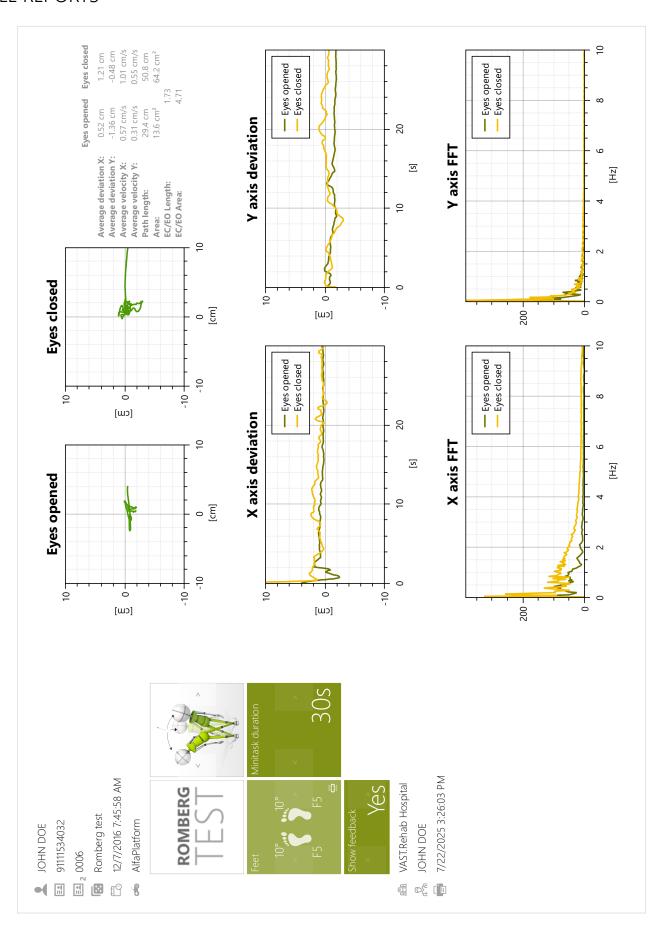








SAMPLE REPORTS







SPECIALIZED UNTERBERGER'S TEST

Specialized tasks and evaluations that collect data from multiple categories or do have a unique objectives.

CONTROL MODES



RESULTS





ADJUSTMENTS

- Feet position
- Time to complete action
- Show feedback

OBJECTIVES

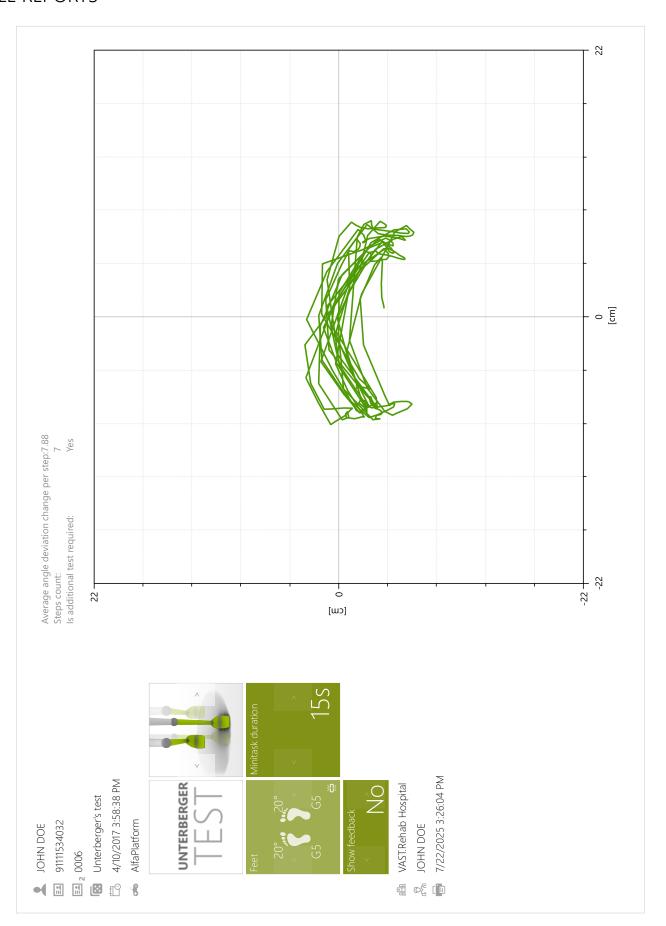
• Vestibular disorders diagnosis

INSTRUCTION FOR PATIENT

Walk in place with your eyes closed.



SAMPLE REPORTS







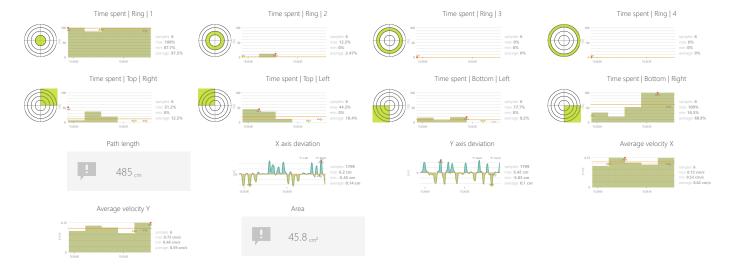
SPECIALIZED STABILITY TEST

Specialized tasks and evaluations that collect data from multiple categories or do have a unique objectives.

CONTROL MODES



RESULTS



ADJUSTMENTS

- Feet position
- Time to complete action
- Show feedback
- Radius

OBJECTIVES

- Relaxation
- Postural stability

INSTRUCTION FOR PATIENT

Keep your body balanced.

