



OmniVR[®]

Virtual Rehabilitation System

User Manual



AN ACPLUS[®] INTERCONNECTED TECHNOLOGY

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MNL-0007 (1.3)



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Delivery of the OmniVR® Elite

Upon receipt of the OmniVR® Elite with OmniVR® III software, inspect the shipping container and contents for any obvious or concealed damage. All ACP products are packaged carefully for rapid, safe delivery. We guarantee delivery in perfect condition to the postal or delivery services. However, any damage or loss incurred during transportation or delivery is the postal or delivery company's responsibility. If damage or loss to the product and/or container is obvious or suspected, appropriate notation must be made on the signed freight bill at the time of delivery. All damage claims should be promptly filed with the delivering carrier and must be initiated by the addressee where the package was to be delivered. Retain the original shipping container and inserts for validation of damage claim or use at a later date. Please contact your ACP Clinical Program Consultant or call ACP Customer Support at (800) 350-1100 to report any damage.

As part of the installation process, an ACP Clinical Program Consultant or other ACP Representative will be on-site to unpack and install your new OmniVR®. They will verify that all equipment and accessories are present and working properly. A list of enclosed accessories is provided with each unit to assist you in the identification of the type and number of accessories provided.

NOTE: The purpose of this manual is to acquaint medical professionals with the OmniVR®. Please read the manual carefully before attempting to operate the OmniVR®. If questions remain unanswered, contact your ACP Clinical Program Consultant or call ACP Customer Support at (800) 350-1100. Outside the USA, call +1 (775) 685-4000.

Symbols on the Product

Symbol	Used for	Symbol	Used for
	Serial number		Product number
	Date of manufacture		Manufacturer
	Caution, consult accompanying documents		Remote control connection
	Observe the user manual		Consult instructions for use
	Protect the product from humidity		ON/OFF push button

Introduction: Welcome to the OmniVR® by ACP

The **OmniVR®** is the first virtual reality (VR) system developed to meet the needs of medically complex patients, including aging adults. The OmniVR® uses an advanced 3D camera and specialized OmniVR® III computer software to immerse the patient and allow them to interact with a virtual world. The system includes a variety of skilled exercises and activities for physical, occupational, and speech therapy applications, without requiring headsets, hand-held controllers, or standing platforms/boards.

The OmniVR® addresses unmet clinical needs for the geriatric population, including, but not limited to, patients presenting with low function, pain, fall risk, cognitive deficits, visual deficits, hemiparesis, neurodegenerative disorders, cardiopulmonary disorders, general and orthopedic post-surgical conditions, and urinary incontinence.

The OmniVR® provides a broad range of settings via preset levels and adjustable parameters for personalization. The system's ability to customize the exercise allows patients to be progressively challenged while receiving frequent, positive feedback, setting them up for success. In addition, exercises can be performed in individual and multiple

participant formats. Objective data establishes baseline performance, supports individualized goal-setting, and can create a sense of competition within patients themselves and/or with others. These OmniVR® system benefits help deliver a higher quality of care with improved outcomes.

Research demonstrates that improvement in motor function is dependent upon exercise intensity and the number of repetitions performed. VR systems engage patients with a variety of medical conditions to perform a higher volume of exercise at greater intensities, whereas traditional therapy may be limited to tasks found to be boring or arduous. The use of virtual reality in conjunction with traditional therapy techniques for function and goal-oriented activities provides immediate visual and auditory performance feedback that is captivating and fun. Research supports the use of VR augmented biofeedback because patients benefit from this positive feedback loop within an interactive VR-based environment. Research also confirms that VR-acquired skills appear to transfer to real-life settings.



Indications

The OmniVR® is indicated for:

Post-stroke rehabilitation	General debility	Muscle weakness
Imbalance (static and dynamic)	Gait training	Sitting balance and posture
Cognitive impairment	Neurodegenerative conditions	Wheelchair immobility

Precautions

The OmniVR® is a professional rehabilitation tool intended for aging adults and others with physical, neurological, and/or cognitive limitations. The system requires the skills, knowledge, and judgment of a qualified practitioner such as a Physical Therapist, Occupational Therapist, or Speech-Language Pathologist. Their guidance and supervision are required for the safe and efficacious use of the OmniVR® with patients.

The system cannot monitor nor guarantee patient safety. The practitioner should judge whether a particular individual is able to perform a specific OmniVR® exercise or activity and monitor the patient's performance and safety during the exercise session.

Specific Contraindications (C), Warnings (W), and Precautions (P) for the OmniVR® system are noted in the table.

Subject	Description	C/W/P
Patient Instruction	Demonstrate an exercise to patients performing that exercise for the first time. This will ensure each patient understands the purpose of the exercise and how to perform it.	P
Impaired Cognition	Patients with cognitive impairment require close monitoring and cueing for safe and effective use.	P
Cardiopulmonary Conditions	Caution should be used for patients with suspected or diagnosed cardiopulmonary conditions. Closely monitor vital signs and patient responses to the exercises.	P
Healing Bones, Tissue	Caution should be used in the presence of recent surgical procedures, fractures, or healing bones and soft tissue when muscle contraction may disrupt the healing process. Ensure that range of motion and load limits are respected.	P
Imbalance	Patients with impaired static and/or dynamic balance require close monitoring. Be prepared to provide physical assistance in case of a loss of balance.	P
Hypersensitivity	Although rare, a patient may demonstrate anxiety, nausea, imbalance, or other problems in response to exercising in a virtual reality environment. All therapy treatments should be attended with the provision of physical assistance and patient cues as needed.	P
Exercise Area	Safe use of the OmniVR® requires that the exercise area be open and unobstructed with the flooring in good repair.	P
Equipment Hazards	If the OmniVR® is damaged/faulty or if error messages appear on the screen or the screen goes blank, attempt to power down the unit normally or, if necessary, unplug the power cord and contact ACP Customer Support.	P
Power Cords	Only connect the OmniVR® to a properly grounded power outlet using a hospital-grade cord. Examine the power cord, and if it appears damaged or frayed, discontinue its use and contact our Customer Support department for a replacement.	P

Exercise Termination Criteria

Patients should be monitored for any of the following conditions, which should lead to terminating or a reason to pause the exercise.

Chest pain	Severe shortness of breath	Significant blood pressure changes
BP > 200/110 mmHg	Lightheadedness; BP drops > 20 mmHg	Oxygen saturation < 90%
Severe headache	Sudden onset of numbness or weakness	Onset of confusion
Ataxia	Pallor	Cyanosis
Cold and clammy skin	Noticeable changes in heart rhythm	Patient request to stop

References and Recommended Readings

- Adamovich, S. V., Fluet, G. G., Tunik, E., & Merians, A. S. (2009). Sensorimotor Training in Virtual Reality: A Review. *NeuroRehabilitation*, 25(1), 29-44. <https://doi.org/10.3233/nre-2009-0497>
- Bevilacqua, R., Maranesi, E., Riccardi, G. R., Di Donna, V., Pelliccioni, P., Luzi, R., Lattanzio, F. & Pelliccioni, G. (2019). Non-Immersive Virtual Reality for Rehabilitation of the Older People: A Systematic Review into Efficacy and Effectiveness. *Journal of Clinical Medicine*, 8(11). <https://doi.org/10.3390/jcm8111882>
- Bryant, L., Brunner, M., & Hemsley, B. (2019). A Review of Virtual Reality Technologies in the Field of Communication Disability: Implications for Practice and Research. *Disability and Rehabilitation: Assistive Technology*. <https://doi.org/10.1080/17483107.2018.1549276>
- Coyle, H., Traynor, V., Solowij, N. (2015). Computerized and Virtual Reality Cognitive Training for Individuals at High Risk of Cognitive Decline: Systematic Review of the Literature. *American Journal of Geriatric Psychiatry*, 23(4), 335-359. <https://doi.org/10.1016/j.jagp.2014.04.009>
- de Rooij, I. J., van de Port, I. G., & Meijer, J. G. (2016). Effect of Virtual Reality Training on Balance and Gait Training Ability in Patients with Stroke: Systematic Reviews and Meta-Analysis. *Physical Therapy*, 96(12), 1905-1918. <https://doi.org/10.2522/ptj.20160054>
- Elliott, V., de Bruin, E. D., Dumoulin, C. (2015). Virtual Reality Rehabilitation as a Treatment Approach for Older Women with Mixed Urinary Incontinence: a Feasibility Study. *NeuroUrology*, 34(3), 236-243. <https://doi.org/10.1002/nuu.22553>
- Feng, H., Li, C., Wang, L., Ma, J., Li, G., Gan, L., Shang, X., & Wu, Z. (2019). Virtual Reality Rehabilitation Versus Conventional Physical Therapy for Improving Balance and Gait in Parkinson's Disease Patients: A Randomized Controlled Trial. *Medical Science Monitoring*, 25, 4186-4192. <https://dx.doi.org/10.12659/MSM.916455>
- García-Bravo, S., Cano-de-la-Cuerda, R., Domínguez-Paniagua, J., Campuzano-Ruiz, R., Barreñada-Copete, E., López-Navas, M. J., Araujo-Narváez, A., García-Bravo, C., Florez-García, M., Botas-Rodríguez, J., Cuesta-Gómez, A. (2020). Effects of Virtual Reality on Cardiac Rehabilitation Programs for Ischemic Heart Disease: A Randomized Pilot Clinical Trial. *International Journal of Environmental Research and Public Health*, 17(22), 8472. <https://doi.org/10.3390/ijerph17228472>
- Gerling, K., Livingston, I., Nacke, L., & Mandryk, R. (2012, May). Full-Body Motion-Based Game Interaction for Older Adults. CHI '12: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (pp.1873-1882). Austin, TX. <https://doi.org/10.1145/2207676.2208324>
- Gumaa, M., & Youssef, A. (2019). Is Virtual Reality Effective in Orthopedic Rehabilitation? A Systematic Review and Meta-Analysis. *Physical Therapy*, 99(10), 1304-1325. <https://doi.org/10.1093/ptj/pzz093>
- Holden, M. (2005). Virtual Environments for Motor Rehabilitation: Review. *CyberPsychology and Behavior*, 8(3), 187-211. <https://doi.org/10.1089/cpb.2005.8.187>
- Hornby, G., Reisman, D., Ward, I., Scheets, P., Miller, A., Haddad, D., Fox, E., Fritz, N., Hawkins, K., Henderson, C.I., Hendron, K., Holleran, C., Lynskey, J., Walter, A., & Locomotor CPG Appraisal Team. (2020). Clinical Practice Guideline to Improve Locomotor Function Following Chronic Stroke, Incomplete Spinal Cord Injury, and Brain Injury. *Journal of Neurologic Physical Therapy*, 44(1), 49-100. <https://doi.org/10.1097/NPT.0000000000000303>
- Karamians, R., Proffitt, R., Kline, D., Gauthier, L.V. (2019, Dec 7). Effectiveness of Virtual Reality- and Gaming Based Interventions for Upper Extremity Rehabilitation Post-Stroke: A Meta-Analysis. *Archives of Physical Medicine and Rehabilitation*, (Online ahead of print). <https://doi.org/10.1016/j.apmr.2019.10.195>
- Krch, D., Níkelshpur, O., Lavrador, S., Chiaravalloti, N., Koenig, S., & Rizzo, A. (2013). Pilot Results from a Virtual Reality Executive Function Task. *IEEE Trans Neural Systems and Rehabilitation Engineering*, 21(2), 182-190. <https://doi.org/10.3233/VES-170605>
- Laver, K. E., Lange, B., George, S., Deutsch, J. E., Saposnik, G., & Crotty, M. (2017). Virtual Reality for Stroke Rehabilitation (Review). Cochrane Database of Systematic Reviews. <https://doi.org/10.1002/14651858.CD008349.pub4>
- Lee, M., Suh, D., Son, J., Kim, J., Eun, S., & Yoon, B. (2016). Patient Perspectives on Virtual Reality-Based Rehabilitation After Knee Surgery: Importance of Level of Difficulty. *Journal of Rehabilitation Research and Development*, 53(2), 239-252. <https://doi.org/10.1682/JRRD.2014.07.0164>
- Mallari, B., Spaeth, E. K., Goh, H., Boyd, B. S. (2019). Virtual Reality as an Analgesic for Acute and Chronic Pain in Adults: A Systematic Review and Meta-Analysis. *Journal of Pain Research*, 12, 2053-2085. <https://doi.org/10.2147/jpr.s200498>
- Malloy, K., & Milling, L. (2010). The Effectiveness of Virtual Reality Distraction for Pain Reduction: A Systematic Review. *Clinical Psychology Review*, 30(8), 1011-1018. <https://doi.org/10.1016/j.cpr.2010.07.001>
- Penn, I. W., Chuang, E., Chuang, T. Y., & Yang, C. Y. (2018). Effects of Virtual-Reality Augmented Cardiopulmonary Rehabilitation Programs for Patients with Cardiovascular Diseases: A Systematic Review. *Neuropsychiatry*, 8(5), 1630-1636.
- Porrás, D. C., Siemonsma, P., Inzelberg, R., Zeilig, G., Plotnik, M. (2019). Advantages of Virtual Reality in the Rehabilitation of Balance and Gait: Systematic Review. *Neurology*, 90(22), 1017-1025. <https://doi.org/10.1212/wnl.0000000000005603>
- Rand D., Givon N., Weingarden H., Nota A., Zeilig G. (2014). Eliciting Upper Extremity Purposeful Movements Using Video Games: A Comparison with Traditional Therapy for Stroke Rehabilitation. *Neurorehabilitation and Neural Repair*, 28(8), 733-739. <https://doi.org/10.1177/1545968314521008>
- Sveistrup, H. (2004). Motor Rehabilitation Using Virtual Reality. *Journal of Neuroengineering and Rehabilitation*, 1(10), 1-8. <https://doi.org/10.1186/1743-0003-1-10>
- Torres-Sánchez, I., Cruz-Ramírez, R., Cabrera-Martos, I., Díaz-Pelegrina, A., & Valenza, M. C. (2017). Results of Physiotherapy Treatments in Exacerbations of Chronic Obstructive Pulmonary Disease: A Systematic Review. *Physiotherapy Canada* 69(2), 122-132. <https://doi.org/10.3138/ptc.2015-78>
- Triegaardt, J., Han, T. S., Sada, C., Sharma, S., Sharma, P. (2019). The Role of Virtual Reality on Outcomes in Rehabilitation of Parkinson's Disease: Meta-Analysis and Systematic Review in 1031 Participants. *Neurological Science*, (Online ahead of print). <https://doi.org/10.1007/s10072-019-04144-3>

Operation of the OmniVR® Elite

Space Requirements

The space required for optimal operation of the OmniVR® is approximately 6' x 9' (an 8' x 15' area is required for the Timed Up and Go therapy test). The area should be accessible and not cluttered by equipment, patients, or staff that can inhibit patient motion.

Environmental Factors

Placement of the OmniVR® in locations with the conditions listed below may result in camera instability:

- In front of stairs
- Below or near windows with direct sunlight, or below skylights with direct sunlight, or in front of mirrors
- Shiny floors such as linoleum or high-gloss wood laminate
- Infrared lamps in the same room
- Close to a bright wall, when the camera is looking parallel to the wall
- When camera is pointed directly at a wall within 9 to 12 feet away
- When the camera is pointed directly into an area with shiny surfaces (e.g., microwave, refrigerator, oven, etc.)

NOTE: Many camera stability or view issues can be eliminated or moderated with proper calibration and adjustment. Please call ACP Customer Support at (800) 350-1100 for assistance.


Operation of the OmniVR® Elite

Turning On the OmniVR®

1. Plug in the power cord into a wall outlet.
2. Depending on the device model, turn on the computer by pressing the green power button on the front of the computer module located on the monitor stand, or in the tray below the monitor on the OmniVR® stand.
3. Turn on the monitor by pressing the power button on the top back of the monitor.
4. The OmniVR® home screen/main menu screen will appear automatically after a series of start-up screens load.

NOTE: The OmniVR® system may remain “ON” for extended periods, including overnight, without harming the unit or reducing its longevity.

Turning Off the OmniVR®

1. Select the “Menu” icon at the top right corner of the home screen. Then, left-click the  Shutdown option on the drop-down box.
2. A warning pop-up window appears to confirm exiting the program. Select “yes” to confirm exiting the program and turning off the computer.
3. Turn the monitor off by pressing the power button on the air mouse or on the top back of the monitor.
4. Remove the power cord from the wall outlet.

NOTE: Do not remove power cord from the wall outlet before the OmniVR® is powered “OFF” using the procedure above.

Operating the OmniVR® Air Mouse

The OmniVR® air mouse is a computer mouse that controls the screen cursor using motion-sensing technology and does not require a desk. The clinician can direct the mouse in the air in order to control the cursor on the screen, and then click the mouse buttons to select options. For specific operating instructions on the air mouse you received with your OmniVR®, please go to <https://acplus.com/acp-technology-user-manuals>.



To order a replacement or additional air mouse, call ACP Customer Support at (800) 350-1100:

Part number: 14931

Navigating the OmniVR® III Software

This section of the User Manual references the OmniVR® III software, which is available on new and upgraded OmniVR® Elite systems, and most legacy systems.

Entry Points

The OmniVR® software has multiple navigation entry points, including:



All exercises

Select from an alphabetical list of all available exercises for quick access directly from the home screen.



Advisory menu

Provides four guided step-by-step options to help select an exercise appropriate for the patient's needs.



Therapy tests

Select for access to the three tests (Functional Reach Test, Sit to Stand Test, Timed Up and Go Test) directly from the home screen.

Advisory Menu Sections



Advisory menu: Anatomy

Exercises that focus on a specific area of the body: Head and neck, Upper extremity, Trunk, or Lower extremity.



Advisory menu: Function – Section GG

Exercises that focus on functional activities, self-care, and mobility performance.



Advisory menu: Cognition

Exercises that focus on cognitive function, including memory, planning, language, and mathematics.

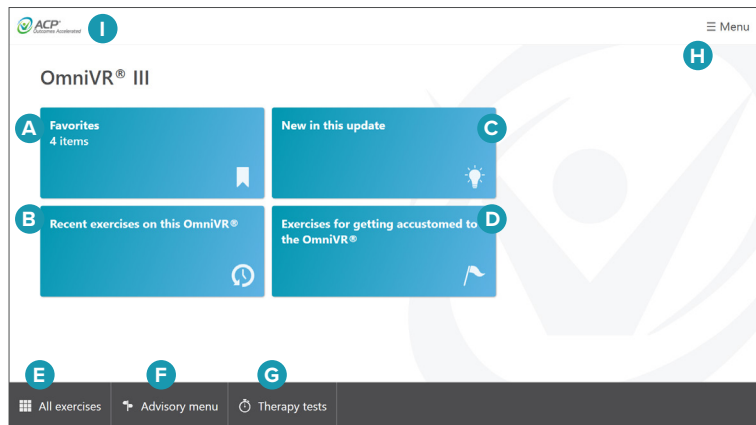


Advisory menu: Multiple participants

Exercises designed for two patients to perform (concurrent or group).

Navigating the OmniVR® III Software

Home Screen Definitions



NOTE: Hover over intended folder and the color changes from blue to green to for ease of selection.

A. Favorites: Any of the OmniVR® exercises can be saved to a folder on the home screen to allow you quick access. The blue Favorites folder will appear after the first exercise is saved.

B. Recent exercises on this OmniVR®: The OmniVR® tracks and provides quick access to recently performed exercises.

C. New in this update: A review of all the new items that are included within this new version of OmniVR® software.

D. Exercises for getting accustomed to the OmniVR®: A selection of OmniVR® exercise visualizations that will help the patient become comfortable exercising in a virtual environment.

E. All exercises: A listing of the 30 OmniVR® exercises in alphabetical order.

F. Advisory menu: The advisory menu provides step-by-step assistance selecting an exercise that best meets the patient's needs.

G. Therapy tests: Access to Functional Reach, Sit to Stand, and Timed Up and Go.

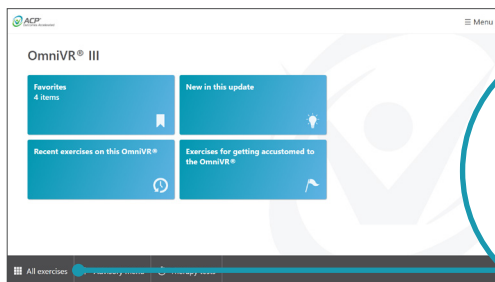
H. Menu: Access to embedded information, sound/volume control, and how to shut down the system. Embedded information includes:

- Exercise instructions
- Therapy tests and measures instructions
- Exercise indications and precautions

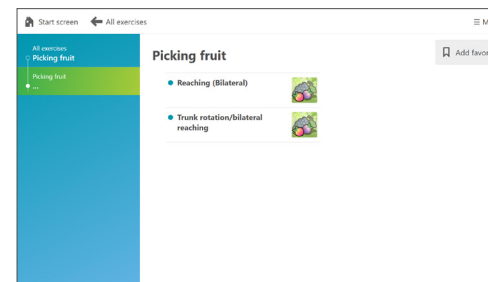
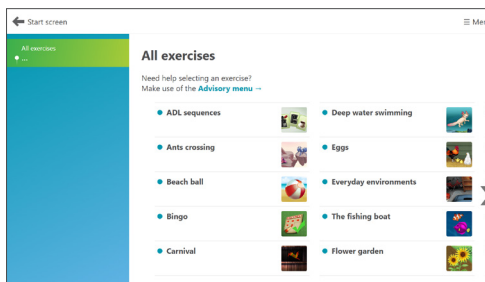
I. F3 Menu access (ACP logo): By double-clicking the ACP logo and entering the correct passcode, the F3 menu will appear. This menu contains access to the system settings controls.

Navigating the OmniVR[®] III Software – All Exercises

All Exercises



All exercises



All exercises

Select “All exercises” from the OmniVR[®] home screen.

Hover over intended navigation entry point and color changes from black to green for ease of selection.

Select exercise

All 30 of the OmniVR[®] exercises are listed in alphabetical order, grouped in 10 exercises per page.

To navigate between the three exercise pages, use the forward and backward arrow icons located to the side of the exercise selections.

Select an exercise to advance to the next screen.

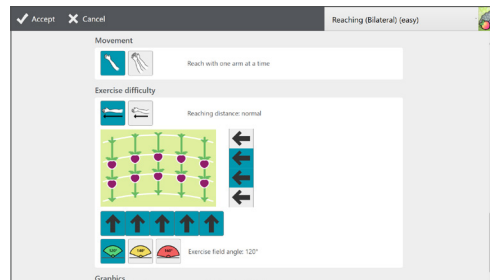
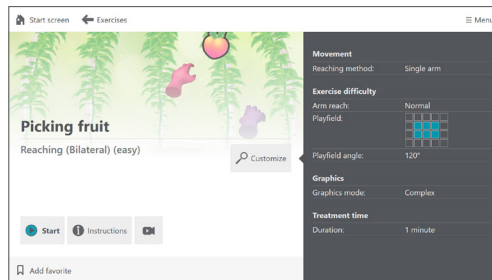
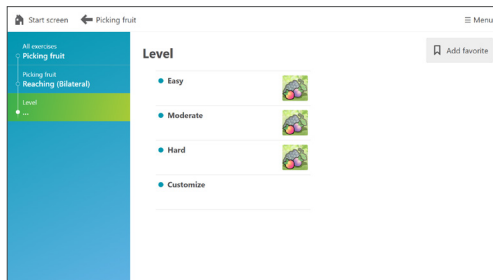
Select movement pattern position

The clinician can choose from a set of available movement patterns/positions for each exercise.

Select a movement pattern/position to advance to the next screen.

Navigating the OmniVR® III Software – All Exercises

All Exercises continued



Exercise levels

Each exercise will provide three levels of difficulty: Easy, Moderate, and Hard.

Selecting the Customize option provides the clinician access to the exercise parameter settings in order to set them to the patient's specific needs.

Exercise start screen

The exercise start screen provides an overview of the selected exercise and access to the following tools:

- **Customize**
- **Exercise instructions**
- **How-to video** (video camera icon)
- **Add favorite**
- **Start**

Customize parameters

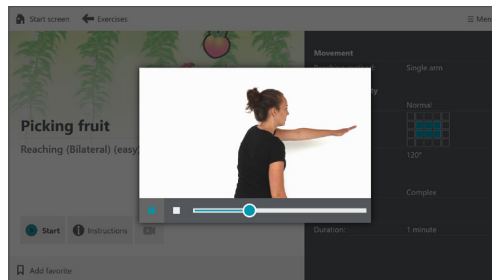
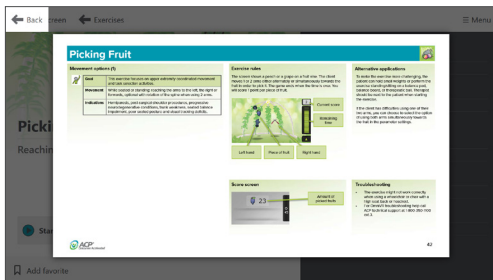
After selecting the “Customize” button on the exercise start screen, the clinician is able to edit the preset parameters as needed. Parameter category types available for customization include: Movement, Exercise difficulty, Graphics, and Treatment time.

After making any parameter changes, select the “Accept” button at the top left corner to return to the exercise start screen.

NOTE: Many of the parameter screens have two pages of parameters to review. To scroll from page to page, use the scroll function on the right side of the screen.

Navigating the OmniVR® III Software – All Exercises

All Exercises continued



Exercise instructions

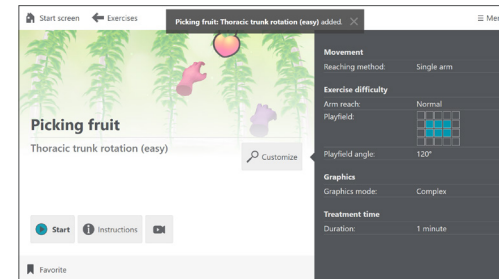
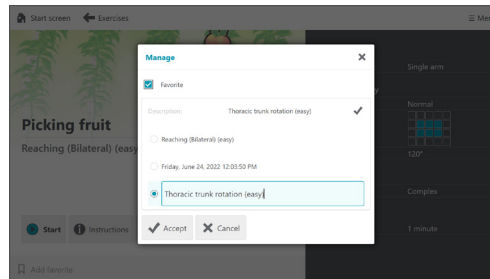
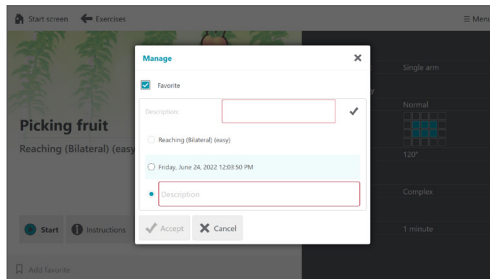
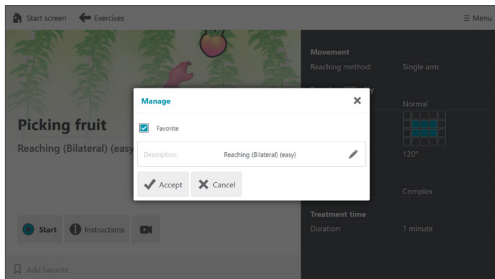
By selecting the “Instructions” button, the clinician will be taken to the embedded help menu for the specific exercise that has been selected.

How-to video

By selecting the “How-to video” icon, both the clinician and patient can watch a short video of the motion that should be performed for the exercise.

Navigating the OmniVR® III Software – All Exercises

All Exercises continued



Manage favorite

Customized exercises and short cuts for exercise menu selections can be saved to the favorite folder.

To add a favorite select “Add favorite” on the bottom left tool bar and the “Manage” pop-up will appear.

Favorite exercise name or menu selection

The favorite exercise or menu selection will automatically be named. To keep this name proceed to the next step.

Customize name

To edit the name, select the pencil edit icon. Next, select the “Description” box by clicking on the third bubble. Using the system keyboard, type in the custom name.

Accept name

Select “Accept” button with the checkmark icon at the bottom of the pop-up.

NOTE: If any favorite is saved with identical parameters, the most recent customized name will appear in the folder. The system will overwrite the previous name.

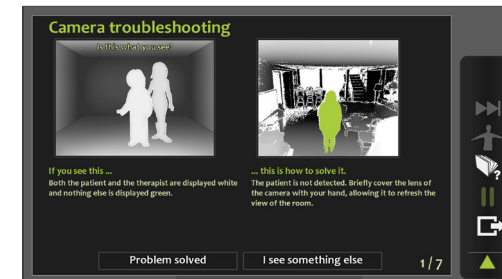
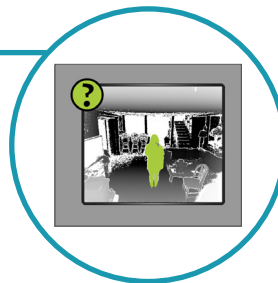
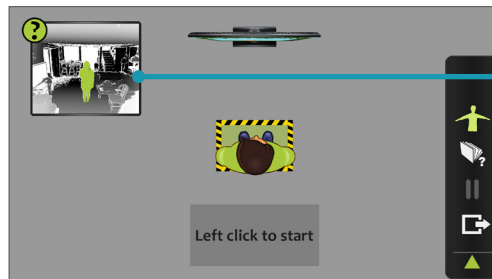
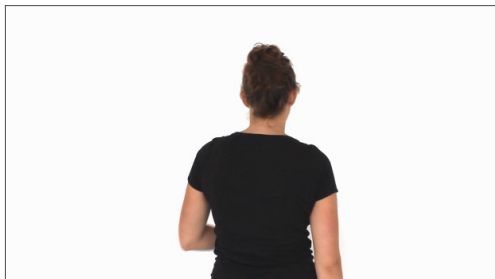
Name confirmation

A pop-up at the top of the screen will confirm the new exercise or menu selection name. Once saved, favorites can be retrieved from the blue “Favorites” folder on the Home screen.

NOTE: To remove any saved exercises from the “Favorites” folder, select the “Favorite” icon on the bottom of this screen. This action will change the icon text back to “Add favorite”.

Navigating the OmniVR® III Software – All Exercises

All Exercises continued



Start button

Once the exercise is selected with the proper parameter settings and patient movement, the exercise can be launched by selecting the “Start” button.

A full-screen “How-to video” will automatically launch, accompanied by the verbal cue, “This is how you perform the exercise.” This video can be bypassed by simply left-clicking the air mouse.

Proper patient positioning

Once the “How-to video” has ended or been bypassed, the next screen will provide guidance on proper patient positioning. The clinician can follow instructions on the screen to position the patient in the green highlighted box.

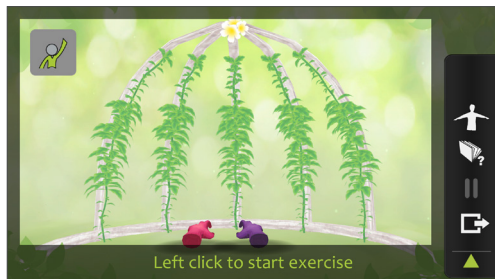
When the patient is properly positioned, left-click to start. Once started, the exercise can be paused, ended, or exited.

- **Camera view access:** Left-click on the camera view box in the top left corner to advance to the troubleshooting screen.

- **Camera view troubleshooting feature:** The camera troubleshooting feature will guide the clinician through a series of steps to help problem solve any camera issues that are encountered.

Navigating the OmniVR® III Software – All Exercises

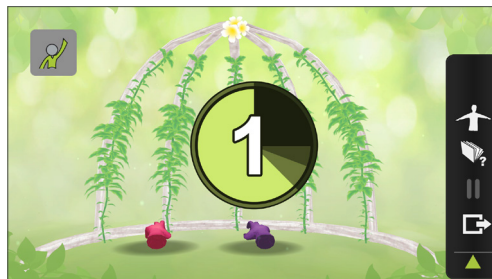
All Exercises continued



Start exercise

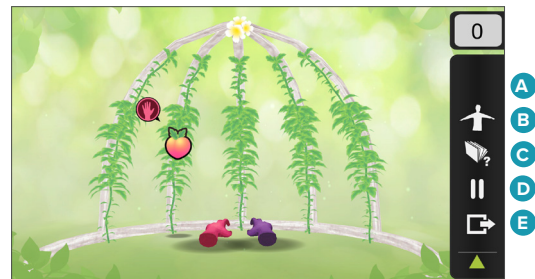
Prior to starting the exercise, the patient can interact with the biofeedback to demonstrate proper movement pattern and understanding of the exercise. After providing patient instruction as needed, left-click to begin the exercise.

NOTE: The movement icon in the top left corner is a reminder of the selected exercise movement pattern.



Countdown

The screen will count down 3-2-1, and the exercise will begin.



Exercise toolbar

Hover over the right margin of the screen to access icon options on the Exercise toolbar:

A. Biofeedback bar graph or Fast-forward: Based on the exercise, there may be an icon that displays a bar graph as a biofeedback visual cue (e.g., leaning excursion) or fast-forwards the exercise time, or neither. **NOTE:** This particular exercise does not have an icon.

B. Camera view: Displays the camera view. If detection works well, only the patient will appear green. See the troubleshooting section for additional information.

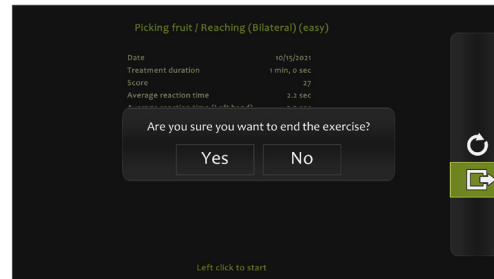
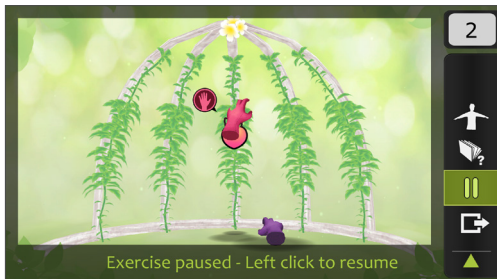
C. Embedded instruction: Displays embedded instruction for the current exercise.

D. Pause: Pauses the current exercise. Click again to resume.

E. Exit: Exits the current exercise.

Navigating the OmniVR® III Software – All Exercises

All Exercises continued



Pause exercise

To pause the exercise, either left-click on the air mouse or select the “Pause” icon on the Exercise toolbar. The exercise will remain paused. To restart the exercise, either left-click on the air mouse or select the “Pause” icon again.

Exercise summary report

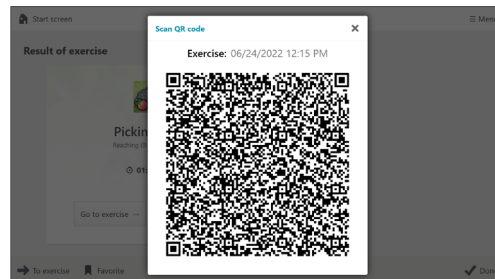
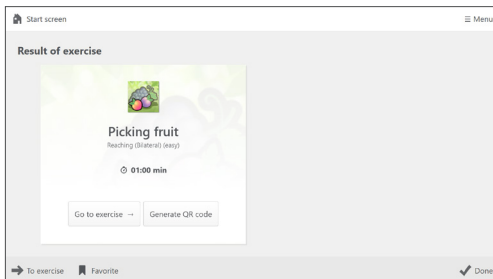
When the exercise is complete, the patient’s exercise summary report will appear on the screen.

- **Repeat exercise:** To repeat the same exercise with the patient, left-click the “Repeat Exercise” icon (circular arrow) located in the toolbar on the right side of the screen.

- **Exit exercise:** To exit the exercise, either right-click on the air mouse or select the “Exit Exercise” icon (box with arrow) located in the toolbar on the right side of the screen. A pop-up prompt will ask, “Are you sure you want to end the exercise? Yes or No.” Left-click to select the answer.

Navigating the OmniVR® III Software – All Exercises

All Exercises continued



Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

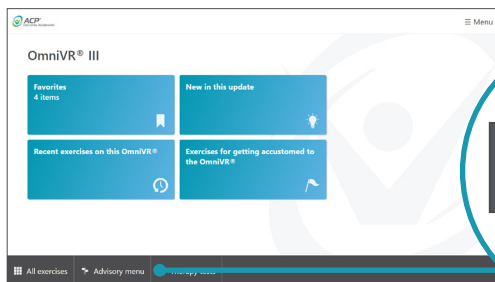
NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

QR code

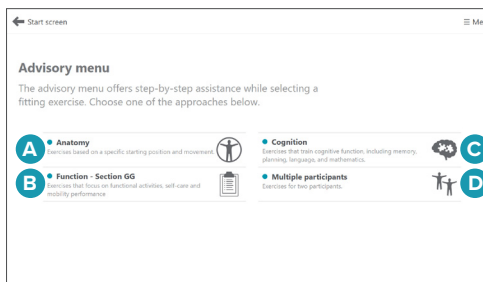
After selecting the “Generate QR code” button, a QR code pop-up with embedded device information, exercise parameters, and outcomes results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

Navigating the OmniVR® III Software – Advisory Menu

Advisory Menu



Advisory menu



Advisory menu access

Select “Advisory menu” on the bottom toolbar of the OmniVR® home screen.

Hover over intended navigation entry point and color changes from black to green for ease of selection.

Advisory menu

The Advisory menu provides four guided step-by-step options to help select an exercise appropriate for the patient’s needs.

A. Anatomy: Exercises that focus on a specific area of the body: Head and neck, Upper extremity, Trunk, or Lower extremity.

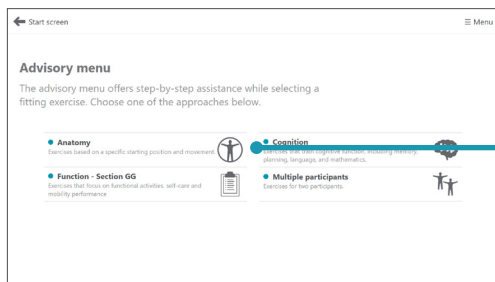
B. Function – Section GG: Exercises that focus on functional activities, self-care, and mobility performance.

C. Cognition: Exercises that focus on cognitive function, including memory, planning, language, and mathematics.

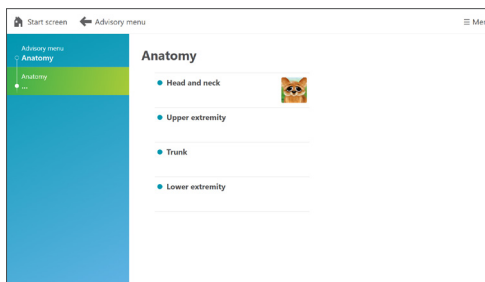
D. Multiple participants: Exercises designed for two patients to perform (concurrent or group).

Navigating the OmniVR[®] III Software – Advisory Menu

Anatomy



Anatomy



Advisory menu: Anatomy

Select Anatomy from the Advisory menu screen.

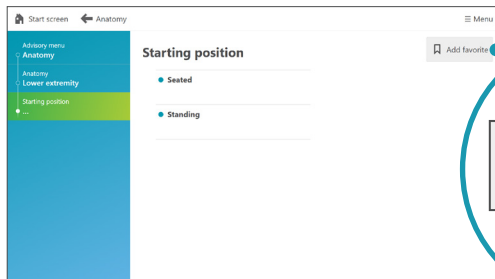
Anatomy

Select the exercise from the anatomical region of the body based on the patient's clinical presentation.

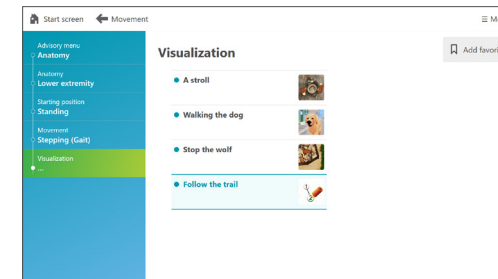
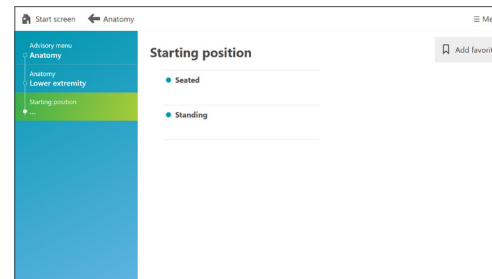
- Head and neck
- Upper extremity
- Trunk
- Lower extremity

Navigating the OmniVR® III Software – Advisory Menu

Anatomy continued



Add favorite



Starting position

The clinician can choose the appropriate exercise starting position. Select a starting position to advance to the next screen.

NOTE: In this example, the anatomical region is Lower extremity, with Standing selected as the starting position.

During navigation, “Add favorite” can be selected to provide direct access from the Home Screen “Favorites” folder, for that selected menu step.

Movement

The clinician can choose from available movement patterns for each exercise.

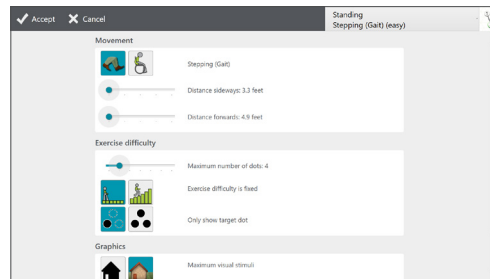
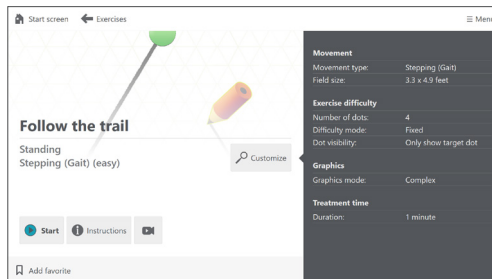
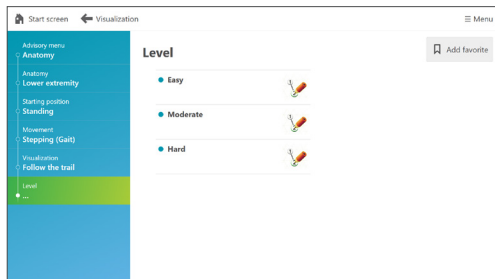
Select a movement pattern to advance to the next screen.

Visualization

The exercise visualization options displayed on this screen are based on the clinician’s previous selections for anatomical region, starting position, and movement pattern.

Navigating the OmniVR® III Software – Advisory Menu

Anatomy continued



Exercise levels

Each exercise will provide three levels of difficulty: Easy, Moderate, and Hard.

Selecting the Customize option provides access to the exercise parameter settings to set them to the patient's specific needs.

NOTE: In this example, Follow the trail exercise visualization is selected.

Exercise start screen

The exercise start screen provides an overview of the selected exercise and access to the following tools:

- **Customize**
- **Exercise instructions**
- **How-to video** (video camera icon)
- **Add favorite**
- **Start**

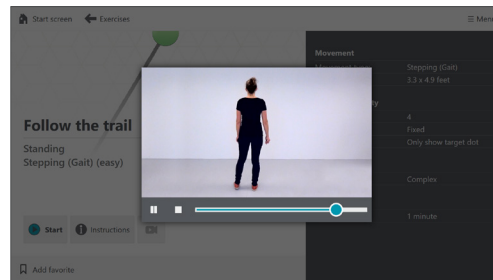
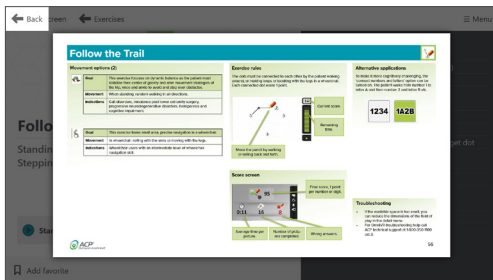
Customize parameters

After selecting the “Customize” button on the exercise start screen, the clinician is able to edit the preset parameters as needed. Parameter category types available for customization include: Movement, Exercise difficulty, Graphics, and Treatment time.

After making any parameter changes, select the “Accept” button at the top left corner to return to the exercise start screen.

NOTE: Many of the parameter screens have two pages of parameters to review. To scroll from page to page, use the scroll function on the right side of the screen.

Anatomy continued



Exercise instructions

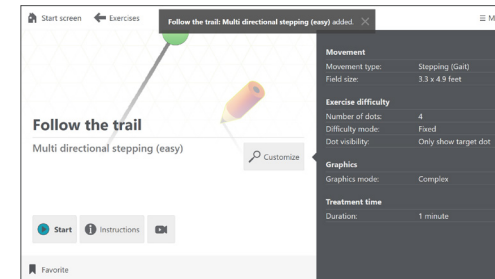
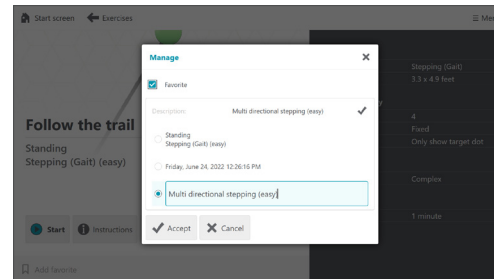
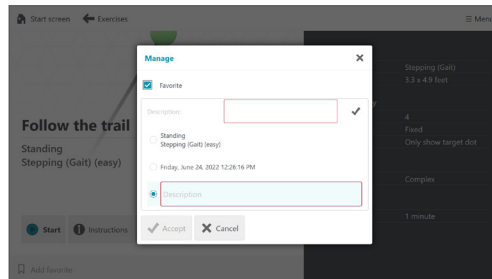
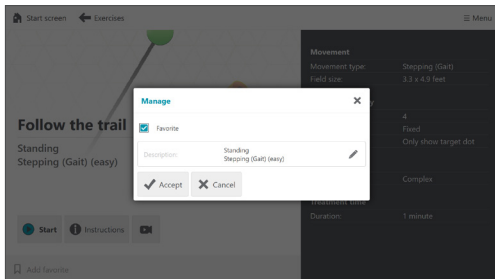
By selecting the “Instructions” button, the clinician will be taken to the embedded help menu for the specific exercise that has been selected.

How-to video

By selecting the “How-to video” icon, both the clinician and patient can watch a short video of the motion that should be performed for the exercise.

Navigating the OmniVR® III Software – Advisory Menu

Anatomy continued



Manage favorite

Customized exercises and short cuts for exercise menu selections can be saved to the favorite folder.

To add a favorite select “Add favorite” on the bottom left tool bar and the “Manage” pop-up will appear.

Favorite exercise name or menu selection

The favorite exercise or menu selection will automatically be named. To keep this name proceed to the next step.

Customize name

To edit the name, select the pencil edit icon. Next, select the “Description” box by clicking on the third bubble. Using the system keyboard, type in the custom name.

Accept name

Select “Accept” button with the checkmark icon at the bottom of the pop-up.

NOTE: If any favorite is saved with identical parameters, the most recent customized name will appear in the folder. The system will overwrite the previous name.

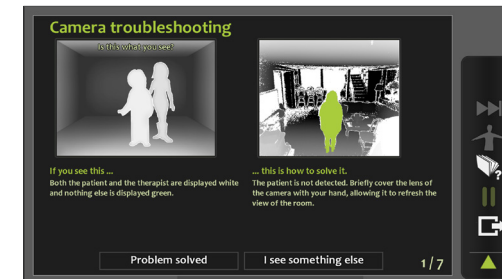
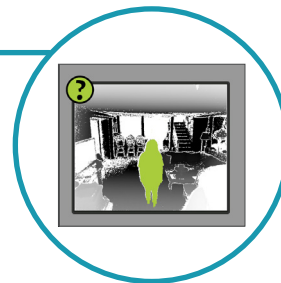
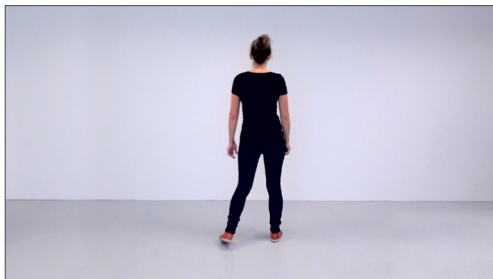
Name confirmation

A pop-up at the top of the screen will confirm the new exercise or menu selection name. Once saved, favorites can be retrieved from the blue “Favorites” folder on the Home screen.

NOTE: To remove any saved exercises from the “Favorites” folder, select the “Favorite” icon on the bottom of this screen. This action will change the icon text back to “Add favorite”.

Navigating the OmniVR® III Software – Advisory Menu

Anatomy continued



Start button

Once the exercise is selected with proper parameter settings and patient movement, the exercise can be launched by selecting the “Start” button.

A full-screen “How-to video” will automatically launch, accompanied by the verbal cue, “This is how you perform the exercise.” This video can be bypassed by simply left-clicking the air mouse.

Proper patient positioning

Once the “How-to video” has ended or been bypassed, the next screen will provide guidance on proper patient positioning. The clinician can follow instructions on the screen to position the patient in the green highlighted box.

When the patient is properly positioned, left-click to start. Once started, the exercise can be paused, ended, or exited.

• Camera view access:

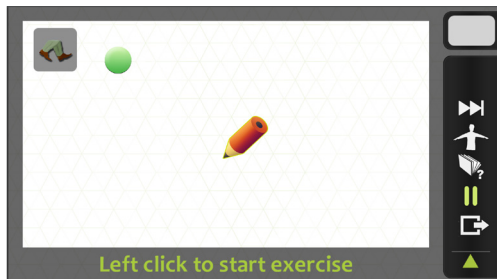
Left-click on the camera view box in the top left corner to advance to the troubleshooting screen.

• Camera view troubleshooting

feature: The camera troubleshooting feature will guide the clinician through a series of steps to help problem solve any camera issues that are encountered.

Navigating the OmniVR® III Software – Advisory Menu

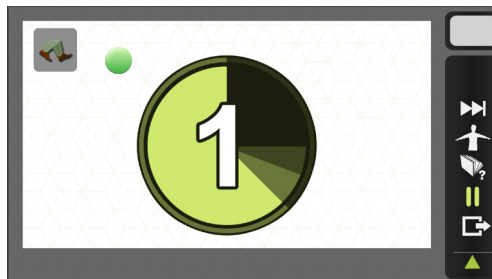
Anatomy continued



Start exercise

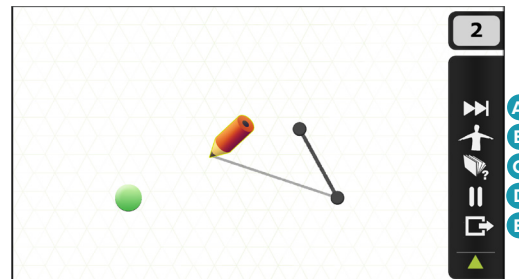
Prior to starting the exercise, the patient can interact with the biofeedback to demonstrate proper movement pattern and understanding of the exercise. After providing patient instruction as needed, left-click to begin the exercise.

NOTE: The movement icon in the top left corner is a reminder of the selected exercise movement pattern.



Countdown

The screen will count down 3-2-1, and the exercise will begin.



Exercise toolbar

Hover over the right margin of the screen to access icon options on the Exercise toolbar:

A. Biofeedback bar graph or Fast-forward: Based on the exercise, there may be an icon that displays a bar graph as a biofeedback visual cue (e.g., leaning excursion) or fast-forwards the exercise time, or neither. **NOTE:** This particular exercise includes the icon that fast-forwards the exercise time.

B. Camera view: Displays the camera view. If detection works well, only the patient will appear green. See the troubleshooting section for additional information.

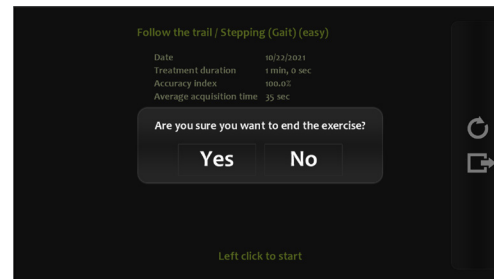
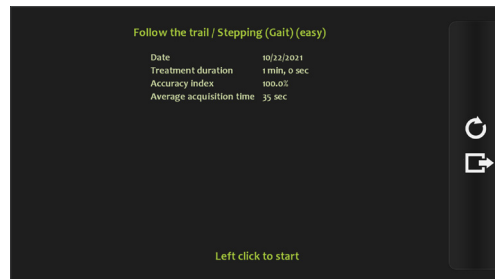
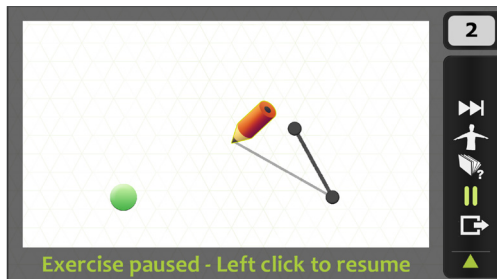
C. Embedded instruction: Displays embedded instruction for the current exercise.

D. Pause: Pauses the current exercise. Click again to resume.

E. Exit: Exits the current exercise.

Navigating the OmniVR® III Software – Advisory Menu

Anatomy continued



Pause exercise

To pause the exercise, either left-click on the air mouse or select the “Pause” icon on the Exercise toolbar. The exercise will remain paused. To restart the exercise, either left-click on the air mouse or select the “Pause” icon again.

Exercise summary report

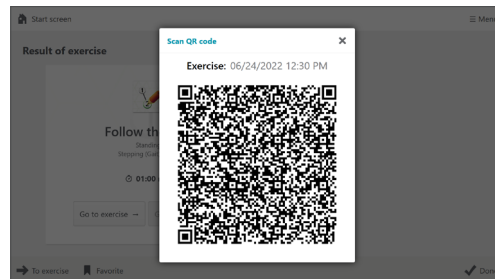
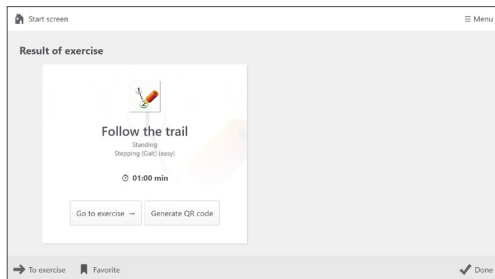
When the exercise is complete, the patient’s exercise summary report will appear on the screen.

- **Repeat exercise:** To repeat the same exercise with the patient, left-click the “Repeat Exercise” icon (circular arrow) located in the toolbar on the right side of the screen.

- **Exit exercise:** To exit the exercise, either right-click on the air mouse or select the “Exit Exercise” icon (box with arrow) located in the toolbar on the right side of the screen. A pop-up prompt will ask, “Are you sure you want to end the exercise? Yes or No.” Left-click to select the answer.

Navigating the OmniVR® III Software – Advisory Menu

Anatomy continued



Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

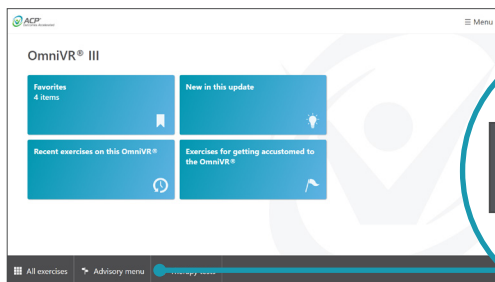
NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

QR code

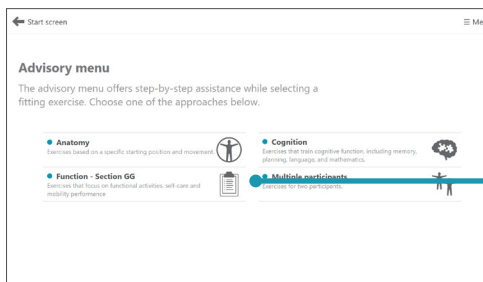
After selecting the “Generate QR code” button, a QR code pop-up with embedded device information, exercise parameters, and outcomes results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

Navigating the OmniVR® III Software – Advisory Menu

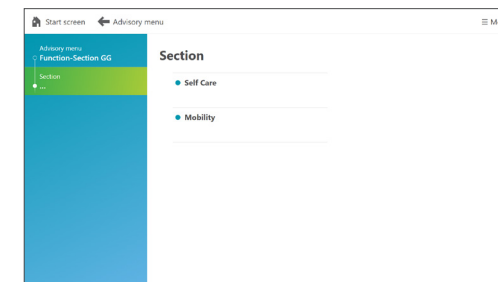
Function – Section GG



Advisory menu



Function - Section GG



Advisory menu access

Select “Advisory menu” on the bottom toolbar of the OmniVR® home screen.

Hover over intended navigation entry point and color changes from black to green for ease of selection.

Advisory menu: Function – Section GG

Select Function – Section GG from the Advisory menu screen.

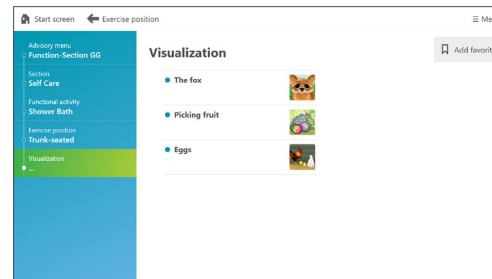
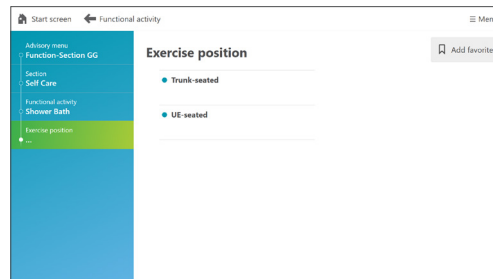
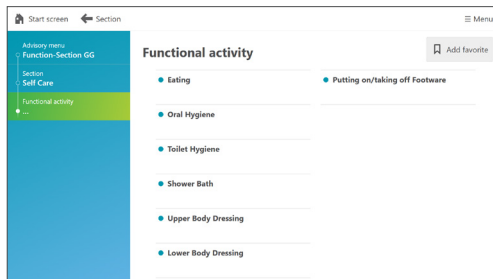
Function – Section GG

Exercises that focus on functional activities, self-care, and mobility performance.

- Self Care
- Mobility

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Functional activity

The clinician can choose the appropriate activity based on the patient's functional deficit.

Select a functional activity to advance to the next screen.

Exercise position

The clinician can choose from available exercise positions for each exercise.

Select an exercise position to advance to the next screen.

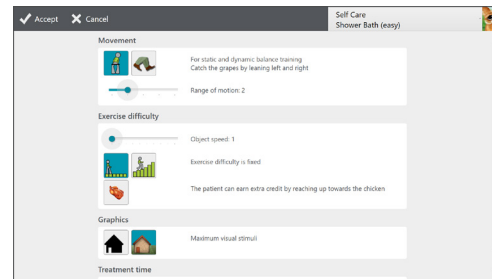
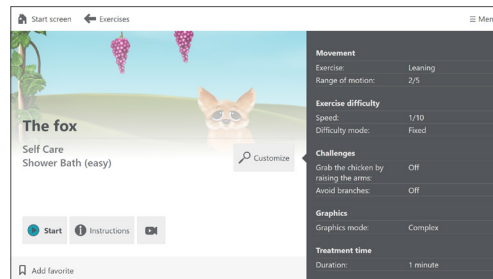
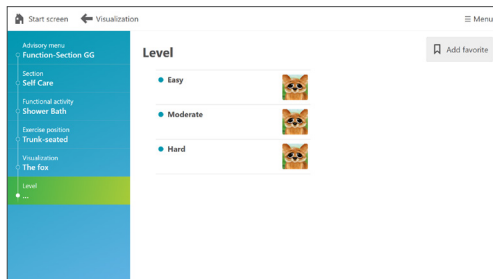
Visualization

The exercise visualization options displayed on this screen are based on the clinician's previous selections for section, functional activity, and exercise position.

NOTE: In this example, the section is Self Care, with Shower Bath as the functional activity and Trunk-seated as the exercise position.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Exercise levels

Each exercise will provide three levels of difficulty: Easy, Moderate, and Hard.

Selecting the Customize option provides access to the exercise parameter settings to set them to the patient's specific needs.

NOTE: In this example, The fox exercise visualization is selected.

Exercise start screen

The exercise start screen provides an overview of the selected exercise and access to the following tools:

- **Customize**
- **Exercise instructions**
- **How-to video** (video camera icon)
- **Add favorite**
- **Start**

Customize parameters

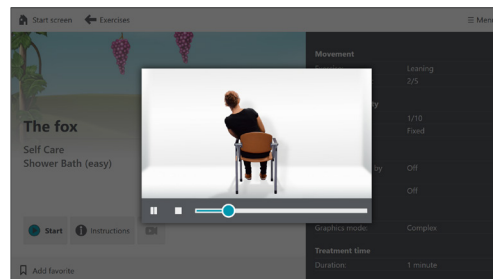
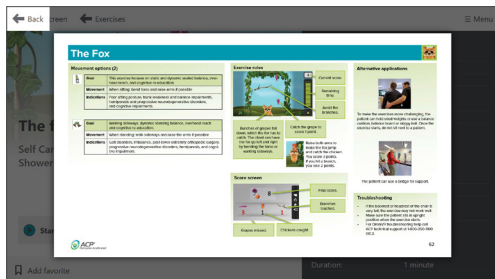
After selecting the “Customize” button on the exercise start screen, the clinician is able to edit the preset parameters as needed. Parameter category types available for customization include: Movement, Exercise difficulty, Graphics, and Treatment time.

After making any parameter changes, select the “Accept” button at the top left corner to return to the exercise start screen.

NOTE: Many of the parameter screens have two pages of parameters to review. To scroll from page to page, use the scroll function on the right side of the screen.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Exercise instructions

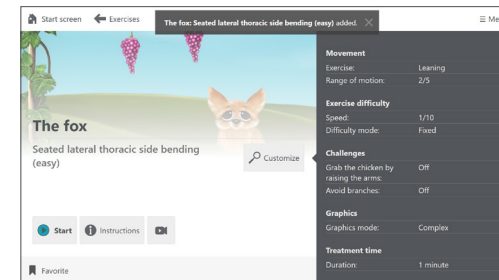
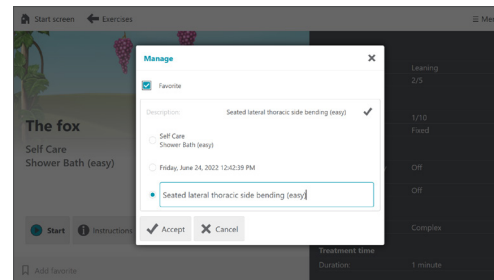
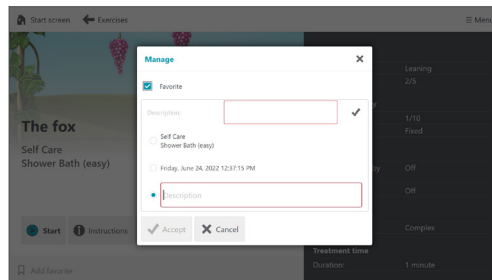
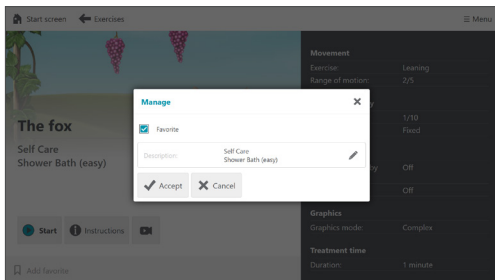
By selecting the “Instructions” button, the clinician will be taken to the embedded help menu for the specific exercise that has been selected.

How-to video

By selecting the “How-to video” icon, both the clinician and patient can watch a short video of the motion that should be performed for the exercise.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Manage favorite

Customized exercises and short cuts for exercise menu selections can be saved to the favorite folder.

To add a favorite select “Add favorite” on the bottom left tool bar and the “Manage” pop-up will appear.

Favorite exercise name or menu selection

The favorite exercise or menu selection will automatically be named. To keep this name proceed to the next step.

Customize name

To edit the name, select the pencil edit icon. Next, select the “Description” box by clicking on the third bubble. Using the system keyboard, type in the custom name.

Accept name

Select “Accept” button with the checkmark icon at the bottom of the pop-up.

NOTE: If any favorite is saved with identical parameters, the most recent customized name will appear in the folder. The system will overwrite the previous name.

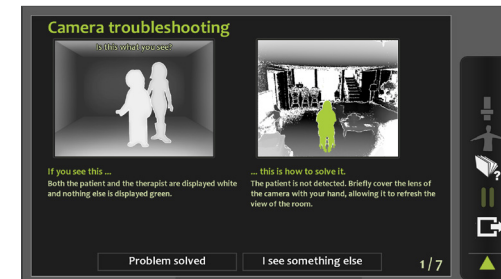
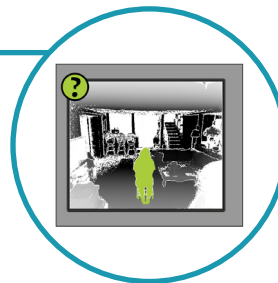
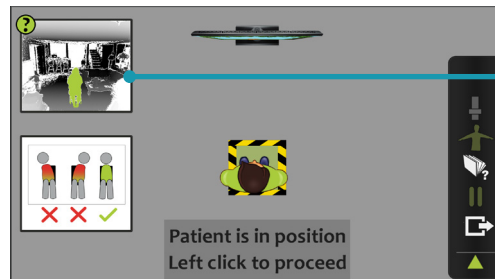
Name confirmation

A pop-up at the top of the screen will confirm the new exercise or menu selection name. Once saved, favorites can be retrieved from the blue “Favorites” folder on the Home screen.

NOTE: To remove any saved exercises from the “Favorites” folder, select the “Favorite” icon on the bottom of this screen. This action will change the icon text back to “Add favorite”.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Start button

Once the exercise is selected with proper parameter settings and patient movement, the exercise can be launched by selecting the “Start” button.

A full-screen “How-to video” will automatically launch, accompanied by the verbal cue, “This is how you perform the exercise.” This video can be bypassed by simply left-clicking the air mouse.

Proper patient positioning

Once the “How-to video” has ended or been bypassed, the next screen will provide guidance on proper patient positioning. The clinician can follow instructions on the screen to position the patient in the green highlighted box.

When the patient is properly positioned, left-click to start. Once started, the exercise can be paused, ended, or exited.

• Camera view access:

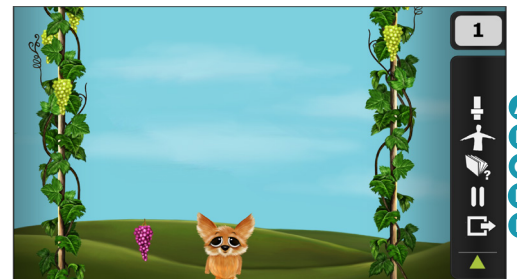
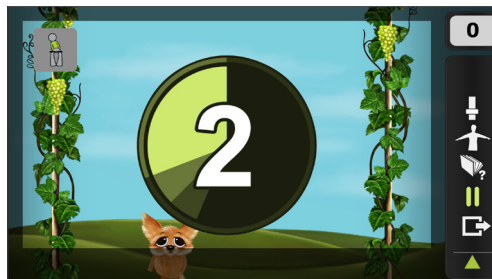
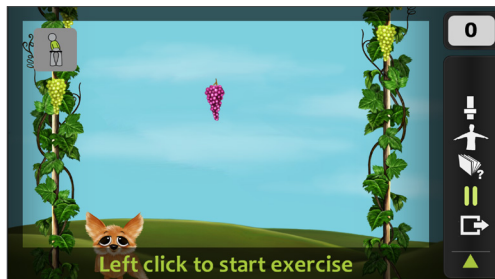
Left-click on the camera view box in the top left corner to advance to the troubleshooting screen.

• Camera view troubleshooting feature:

The camera troubleshooting feature will guide the clinician through a series of steps to help problem solve any camera issues that are encountered.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Start exercise

Prior to starting the exercise, the patient can interact with the biofeedback to demonstrate proper movement pattern and understanding of the exercise. After providing patient instruction as needed, left-click to begin the exercise.

NOTE: The movement icon in the top left corner is a reminder of the selected exercise movement pattern.

Countdown

The screen will count down 3-2-1, and the exercise will begin.

Exercise toolbar

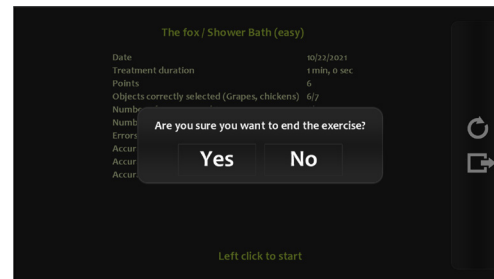
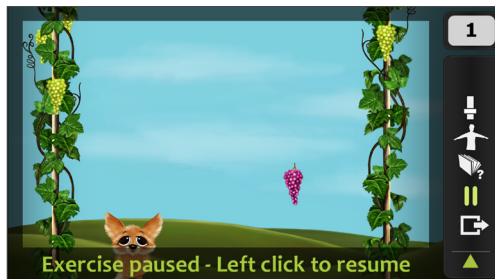
Hover over the right margin of the screen to access icon options on the Exercise toolbar:

A. Biofeedback bar graph or Fast-forward: Based on the exercise, there may be an icon that displays a bar graph as a biofeedback visual cue (e.g., leaning excursion) or fast-forwards the exercise time, or neither. **NOTE:** This particular exercise includes the icon that displays the biofeedback bar graph.

- B. Camera view:** Displays the camera view. If detection works well, only the patient will appear green. See the troubleshooting section for additional information.
- C. Embedded instruction:** Displays embedded instruction for the current exercise.
- D. Pause:** Pauses the current exercise. Click again to resume.
- E. Exit:** Exits the current exercise.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Pause exercise

To pause the exercise, either left-click on the air mouse or select the “Pause” icon on the Exercise toolbar. The exercise will remain paused. To restart the exercise, either left-click on the air mouse or select the “Pause” icon again.

Exercise summary report

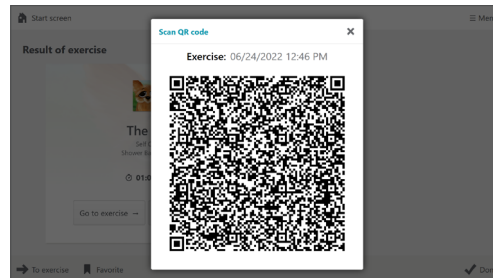
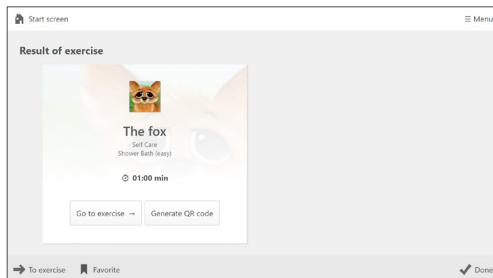
When the exercise is complete, the patient’s exercise summary report will appear on the screen.

- **Repeat exercise:** To repeat the same exercise with the patient, left-click the “Repeat Exercise” icon (circular arrow) located in the toolbar on the right side of the screen.

- **Exit exercise:** To exit the exercise, either right-click on the air mouse or select the “Exit Exercise” icon (box with arrow) located in the toolbar on the right side of the screen. A pop-up prompt will ask, “Are you sure you want to end the exercise? Yes or No.” Left-click to select the answer.

Navigating the OmniVR® III Software – Advisory Menu

Function – Section GG continued



Result of exercise

The Results of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

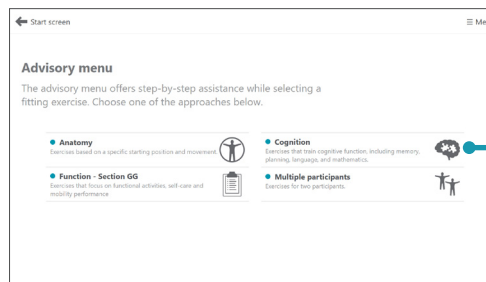
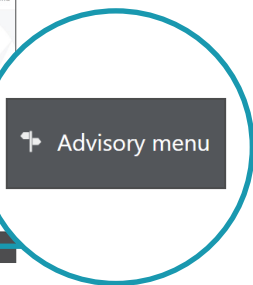
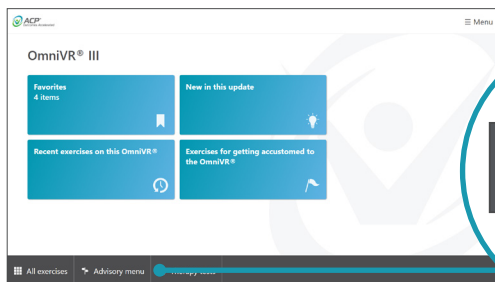
NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

QR code

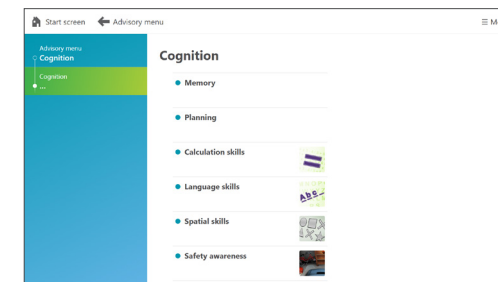
After selecting the “Generate QR code” button, a QR code pop-up with embedded device information, exercise parameters, and outcomes results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

Navigating the OmniVR® III Software – Advisory Menu

Cognition



Cognition



Advisory menu access

Select “Advisory menu” on the bottom toolbar of the OmniVR® home screen.

Hover over intended navigation entry point and color changes from black to green for ease of selection.

Advisory menu: Cognition

Select Cognition from the Advisory menu screen.

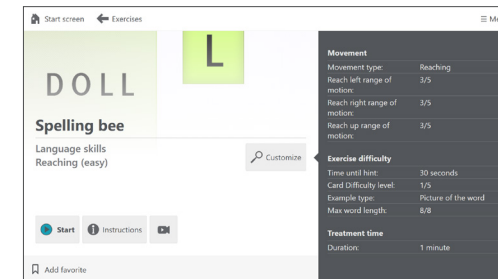
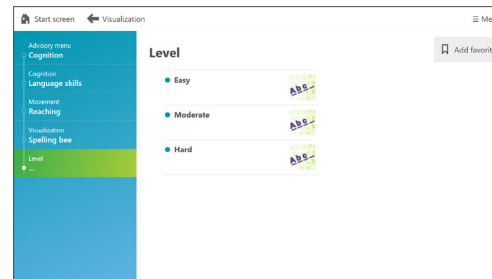
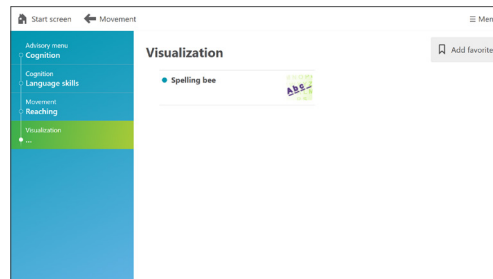
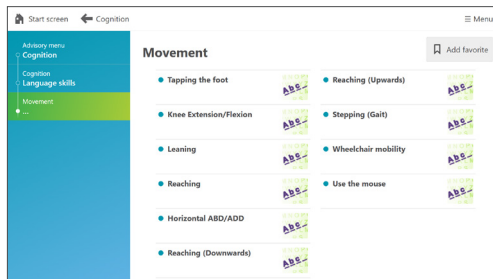
Cognition

Exercises that focus on cognitive function, including memory, planning, language, and mathematics.

- Memory
- Planning
- Calculation skills
- Language skills
- Spatial skills
- Safety awareness

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Movement

The clinician can choose from available movement patterns for each cognitive exercise.

Select a movement pattern to advance to the next screen.

Visualization

The exercise visualization options displayed on this screen are based on the clinician's previous selections for cognitive exercise and movement pattern.

NOTE: In this example, the cognitive exercise is Language skills, with Reaching as the movement pattern.

Exercise levels

Each exercise will provide three levels of difficulty: Easy, Moderate, and Hard.

Selecting the Customize option provides access to the exercise parameter settings to set them to the patient's specific needs.

NOTE: In this example, the Spelling bee exercise visualization is selected.

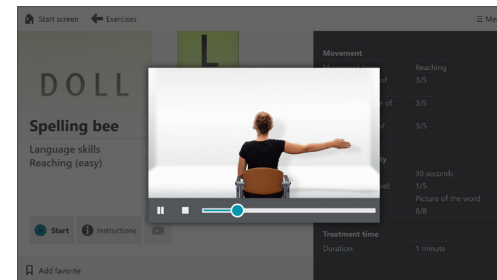
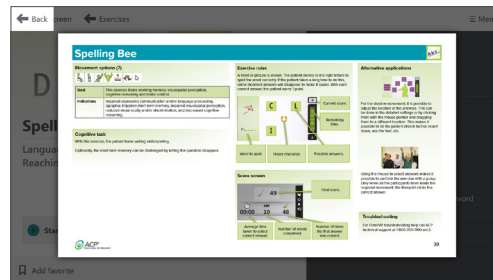
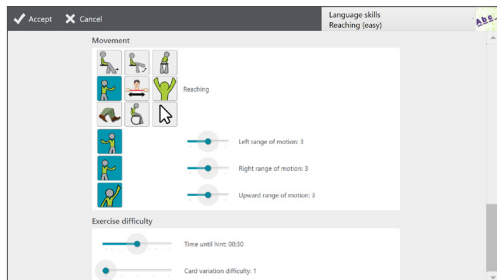
Exercise start screen

The exercise start screen provides an overview of the selected exercise and access to the following tools:

- **Customize**
- **Exercise instructions**
- **How-to video** (video camera icon)
- **Add favorite**
- **Start**

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Customize parameters

After selecting the “Customize” button on the exercise start screen, the clinician is able to edit the preset parameters as needed. Parameter category types available for customization include: Movement, Exercise difficulty, Graphics, and Treatment time.

After making any parameter changes, select the “Accept” button at the top left corner to return to the exercise start screen.

NOTE: Many of the parameter screens have two pages of parameters to review. To scroll from page to page, use the scroll function on the right side of the screen.

Exercise instructions

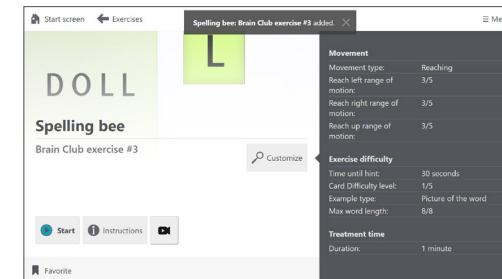
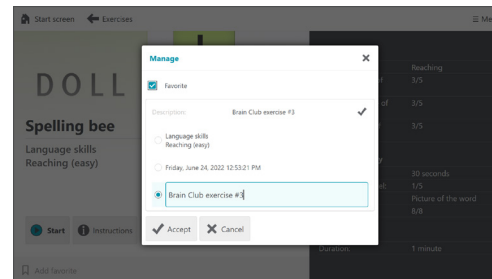
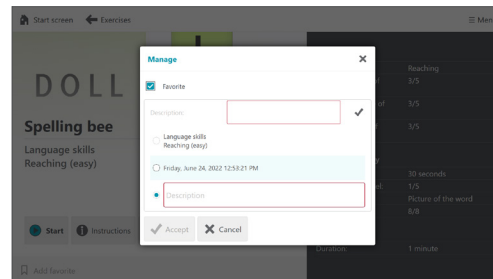
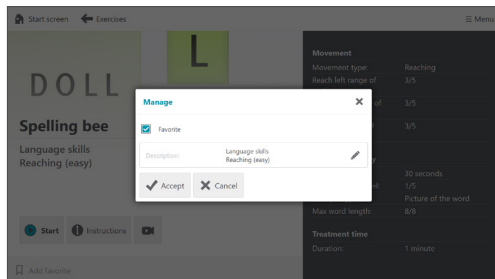
By selecting the “Instructions” button, the clinician will be taken to the embedded help menu for the specific exercise that has been selected.

How-to video

By selecting the “How-to video” icon, both the clinician and patient can watch a short video of the motion that should be performed for the exercise.

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Manage favorite

Customized exercises and short cuts for exercise menu selections can be saved to the favorite folder.

To add a favorite select “Add favorite” on the bottom left tool bar and the “Manage” pop-up will appear.

Favorite exercise name or menu selection

The favorite exercise or menu selection will automatically be named. To keep this name proceed to the next step.

Customize name

To edit the name, select the pencil edit icon. Next, select the “Description” box by clicking on the third bubble. Using the system keyboard, type in the custom name.

Enter and accept

Using the keyboard, type in the custom name, then, select “Accept” button with the checkmark icon.

NOTE: If any favorite is saved with identical parameters, the most recent customized name will appear in the folder. The system will overwrite the previous name.

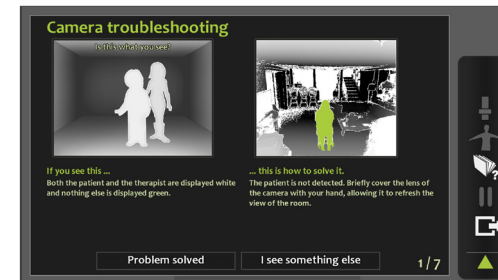
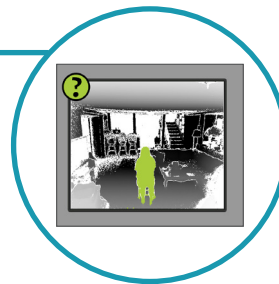
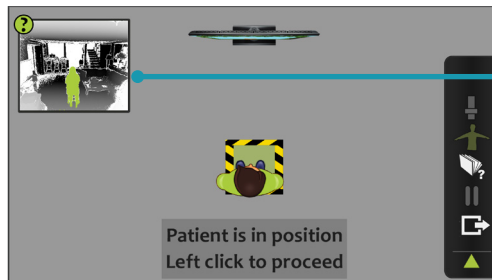
Name confirmation

A pop-up at the top of the screen will confirm the new exercise or menu selection name. Once saved, favorites can be retrieved from the blue “Favorites” folder on the Home screen.

NOTE: To remove any saved exercises from the “Favorites” folder, select the “Favorite” icon on the bottom of this screen. This action will change the icon text back to “Add favorite”.

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Start button

Once the exercise is selected with proper parameter settings and patient movement, the exercise can be launched by selecting the “Start” button.

A full-screen “How-to video” will automatically launch, accompanied by the verbal cue, “This is how you perform the exercise.” This video can be bypassed by simply left-clicking the air mouse.

Proper patient positioning

Once the “How-to video” has ended or been bypassed, the next screen will provide guidance on proper patient positioning. The clinician can follow instructions on the screen to position the patient in the green highlighted box.

When the patient is properly positioned, left-click to start. Once started, the exercise can be paused, ended, or exited.

• Camera view access:

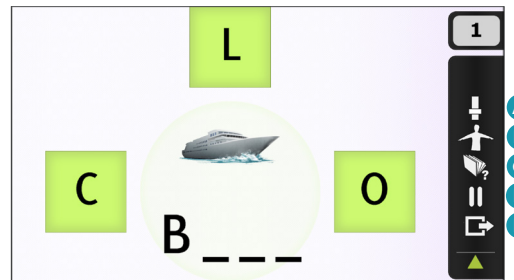
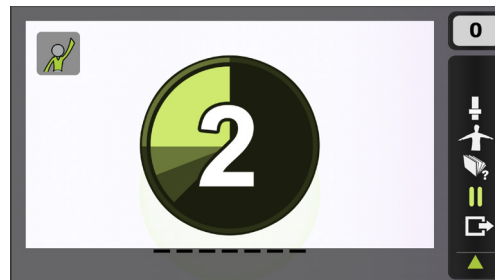
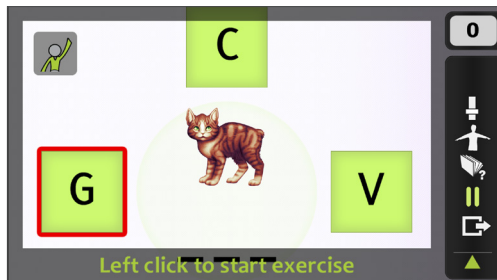
Left-click on the camera view box in the top left corner to advance to the troubleshooting screen.

• Camera view troubleshooting

feature: The camera troubleshooting feature will guide the clinician through a series of steps to help problem solve any camera issues that are encountered.

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Start exercise

Prior to starting the exercise, the patient can interact with the biofeedback to demonstrate proper movement pattern and understanding of the exercise. After providing patient instruction as needed, left-click to begin the exercise.

NOTE: The movement icon in the top left corner is a reminder of the selected exercise movement pattern.

Countdown

The screen will count down 3-2-1, and the exercise will begin.

Exercise toolbar

Hover over the right margin of the screen to access icon options on the Exercise toolbar:

A. Biofeedback bar graph or Fast-forward: Based on the exercise, there may be an icon that displays a bar graph as a biofeedback visual cue (e.g., leaning excursion) or fast-forwards the exercise time, or neither. **NOTE:** This particular exercise includes the icon that displays the biofeedback bar graph.

B. Camera view: Displays the camera view. If detection works well, only the patient will appear green. See the troubleshooting section for additional information.

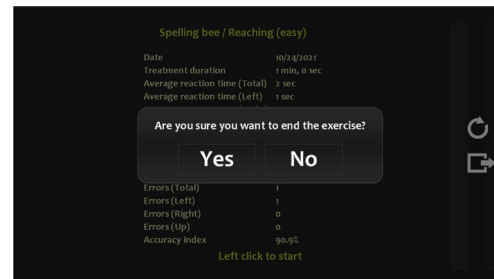
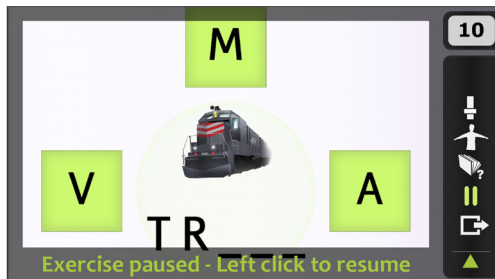
C. Embedded instruction: Displays the embedded instruction for the current exercise.

D. Pause: Pauses the current exercise. Click again to resume.

E. Exit: Exits the current exercise.

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Pause exercise

To pause the exercise, either left-click on the air mouse or select the “Pause” icon on the Exercise toolbar. The exercise will remain paused. To restart the exercise, either left-click on the air mouse or select the “Pause” icon again.

Exercise summary report

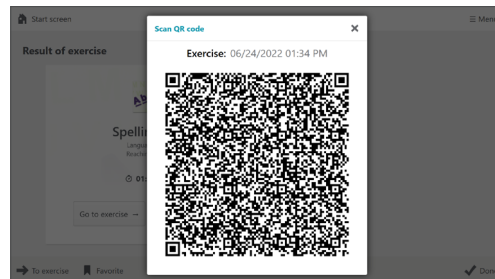
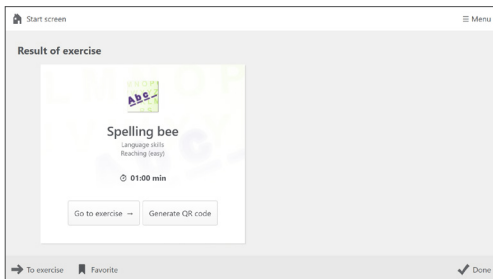
When the exercise is complete, the patient’s exercise summary report will appear on the screen.

- **Repeat exercise:** To repeat the same exercise with the patient, left-click the “Repeat Exercise” icon (circular arrow) located in the toolbar on the right side of the screen.

- **Exit exercise:** To exit the exercise, either right-click on the air mouse or select the “Exit Exercise” icon (box with arrow) located in the toolbar on the right side of the screen. A pop-up prompt will ask, “Are you sure you want to end the exercise? Yes or No.” Left-click to select the answer.

Navigating the OmniVR® III Software – Advisory Menu

Cognition continued



Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

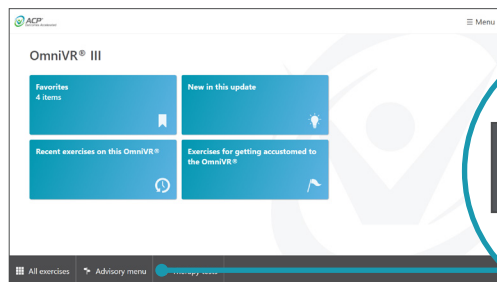
NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

QR code

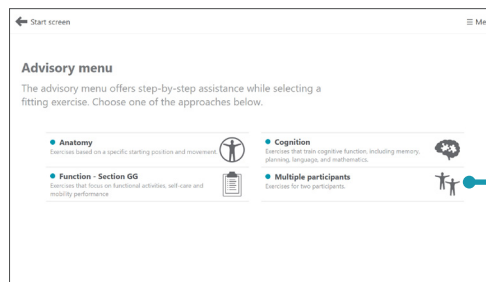
After selecting the “Generate QR code” button, a QR code pop-up with embedded device information, exercise parameters, and outcomes results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

Navigating the OmniVR[®] III Software – Advisory Menu

Multiple Participants



Advisory menu



Multiple participants



Advisory menu access

Select “Advisory menu” on the bottom toolbar of the OmniVR[®] home screen.

Advisory menu: Multiple participants

Select Multiple participants from the Advisory menu screen. These exercises are designed for two patients to perform (concurrent or group).

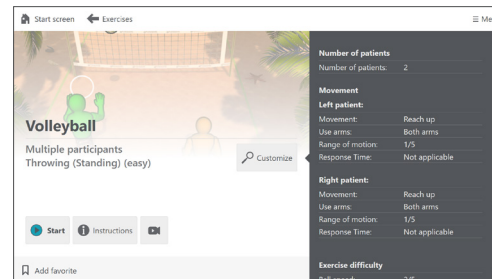
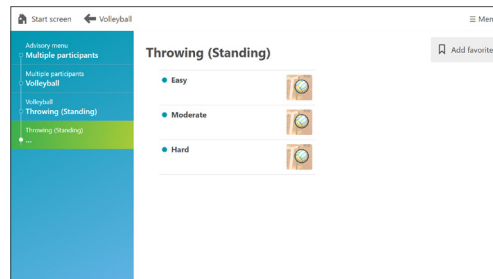
Multiple participants visualization

The seven exercise visualization options designed for two participants are as follows:

- Bingo
- Picture bingo
- Volleyball
- Beach ball
- A stroll
- The mole
- Stop the wolf

Navigating the OmniVR® III Software – Advisory Menu

Multiple Participants continued



Movement

The clinician can choose from available movement patterns for each exercise.

Select a movement pattern to advance to the next screen.

Exercise levels

Each exercise will provide three levels of difficulty: Easy, Moderate, and Hard.

Selecting the Customize option provides access to the exercise parameter settings to set them to the patient's specific needs.

NOTE: In this example, the exercise visualization is Volleyball, with Throwing (Standing) as the movement pattern.

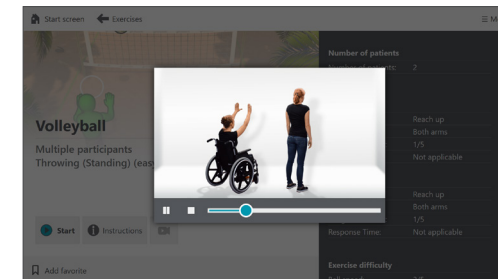
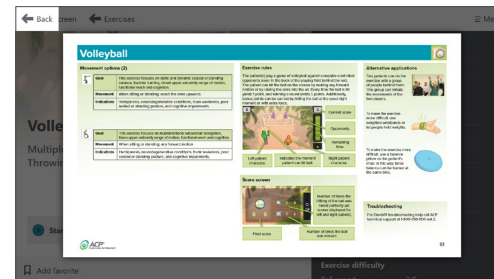
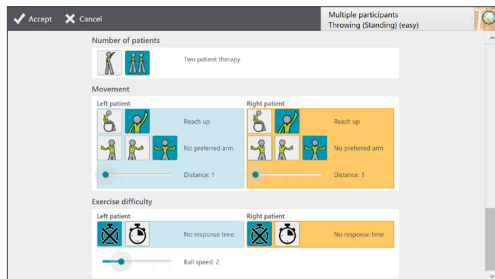
Exercise start screen

The exercise start screen provides an overview of the selected exercise and access to the following tools:

- **Customize**
- **Exercise instructions**
- **How-to video** (video camera icon)
- **Add favorite**
- **Start**

Navigating the OmniVR® III Software – Advisory Menu

Multiple Participants continued



Customize parameters

After selecting the “Customize” button on the exercise start screen, the clinician is able to edit the preset parameters as needed. Parameter category types available for customization include: Movement, Exercise difficulty, Graphics, and Treatment time.

The editable parameters for the patient on the left are in blue and the editable parameters for the patient on the right are in orange.

After making any parameter changes, select the “Accept” button at the top left corner to return to the exercise start screen.

NOTE: Many of the parameter screens have two pages of parameters to review. To scroll from page to page, use the scroll function on the right side of the screen.

Exercise instructions

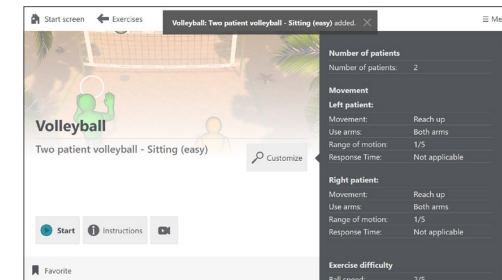
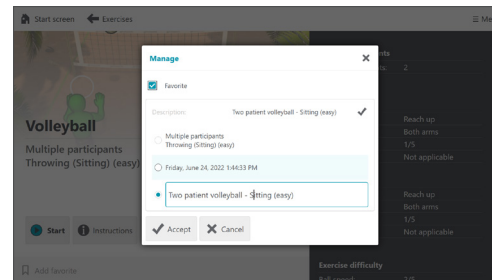
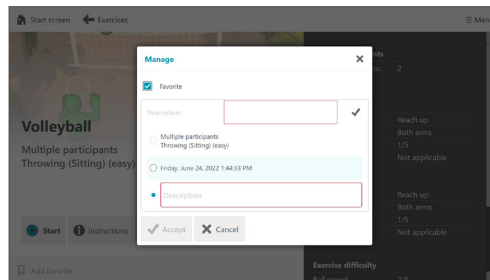
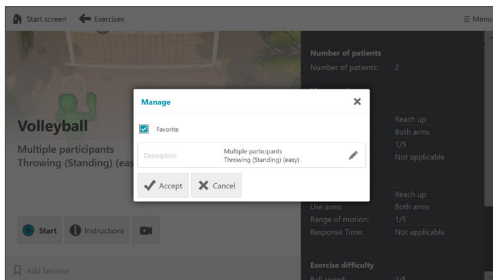
By selecting the “Instructions” button, the clinician will be taken to the embedded help menu for the specific exercise that has been selected.

How-to video

By selecting the “How-to video” icon, both the clinician and patient can watch a short video of the motion that should be performed for the exercise.

Navigating the OmniVR® III Software – Advisory Menu

Multiple Participants continued



Manage favorite

Customized exercises and short cuts for exercise menu selections can be saved to the favorite folder.

To add a favorite select “Add favorite” on the bottom left tool bar and the “Manage” pop-up will appear.

Favorite exercise name or menu selection

The favorite exercise or menu selection will automatically be named. To keep this name proceed to the next step.

Customize name

To edit the name, select the pencil edit icon. Next, select the “Description” box by clicking on the third bubble. Using the system keyboard, type in the custom name.

Enter and accept

Using the keyboard, type in the custom name, then, select “Accept” button with the checkmark icon.

NOTE: If any favorite is saved with identical parameters, the most recent customized name will appear in the folder. The system will overwrite the previous name.

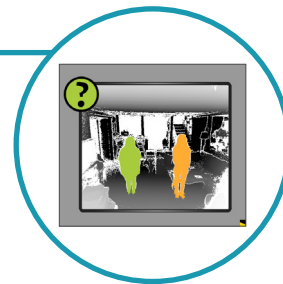
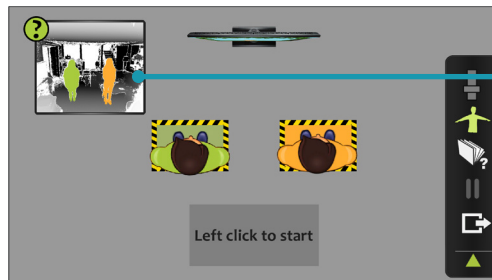
Name confirmation

A pop-up at the top of the screen will confirm the new exercise or menu selection name. Once saved, favorites can be retrieved from the blue “Favorites” folder on the Home screen.

NOTE: To remove any saved exercises from the “Favorites” folder, select the “Favorite” icon on the bottom of this screen. This action will change the icon text back to “Add favorite”.

Navigating the OmniVR® III Software – Advisory Menu

Multiple Participants continued



Start button

Once the exercise is selected with proper parameter settings and patient movement, the exercise can be launched by selecting the “Start” button.

A full-screen “How-to video” will automatically launch, accompanied by the verbal cue, “This is how you perform the exercise.” This video can be bypassed by simply left-clicking the air mouse.

Proper patient positioning

Once the “How-to video” has ended or been bypassed, the next screen will provide guidance on proper patient positioning. The clinician can follow instructions on the screen to position the patient on the left in the green highlighted box and the patient on the right in the orange highlighted box.

When the patients are properly positioned, left-click to start. Once started, the exercise can be paused, ended, or exited.

• Camera view access:

Left-click on the camera view box in the top left corner to advance to the troubleshooting screen.

- **Camera view troubleshooting feature:** The camera troubleshooting feature will guide the clinician through a series of steps to help problem solve any camera issues that are encountered.

Navigating the OmniVR[®] III Software – Advisory Menu

Multiple Participants continued



Start exercise

Prior to starting the exercise, the patients can interact with the biofeedback to demonstrate proper movement pattern and understanding of the exercise. After providing patient instruction as needed, left-click to begin the exercise.

The patient on the left is the green avatar, and the patient on the right is the orange avatar.

Countdown

The screen will count down 3-2-1, and the exercise will begin.

Exercise toolbar

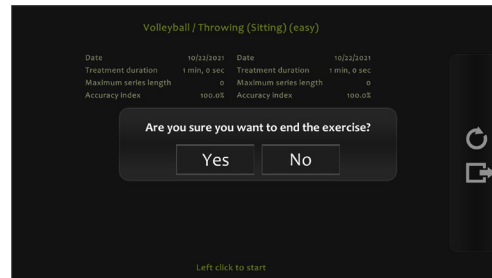
Hover over the right margin of the screen to access icon options on the Exercise toolbar:

A. Biofeedback bar graph or Fast-forward: Based on the exercise, there may be an icon that displays a bar graph as a biofeedback visual cue (e.g., leaning excursion) or fast-forwards the exercise time, or neither. **NOTE:** This particular exercise includes the icon that displays the biofeedback bar graph.

- B. Camera view:** Displays the camera view. If detection works well, only the patient will appear green. See the troubleshooting section for additional information.
- C. Embedded instruction:** Displays the embedded instruction for the current exercise.
- D. Pause:** Pauses the current exercise. Click again to resume.
- E. Exit:** Exits the current exercise.

Navigating the OmniVR[®] III Software – Advisory Menu

Multiple Participants continued



Pause exercise

To pause the exercise, either left-click on the air mouse or select the “Pause” icon on the Exercise toolbar. The exercise will remain paused. To restart the exercise, either left-click on the air mouse or select the “Pause” icon again.

Exercise summary report

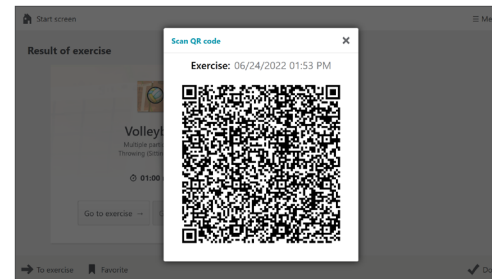
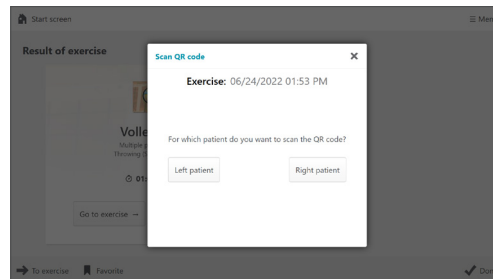
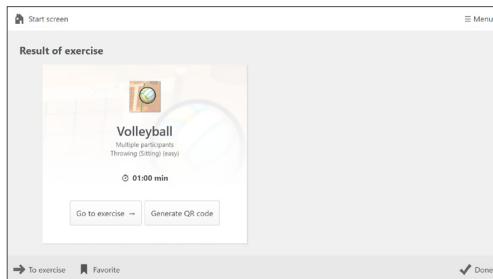
When the exercise is complete, the patient’s exercise summary report will appear on the screen.

- **Repeat exercise:** To repeat the same exercise with the patient, left-click the “Repeat Exercise” icon (circular arrow) located in the toolbar on the right side of the screen.

- **Exit exercise:** To exit the exercise, either right-click on the air mouse or select the “Exit Exercise” icon (box with arrow) located in the toolbar on the right side of the screen. A pop-up prompt will ask, “Are you sure you want to end the exercise? Yes or No.” Left-click to select the answer.

Navigating the OmniVR® III Software – Advisory Menu

Multiple Participants continued



Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

Choose QR code

A pop-up will present the option to choose either the “Left patient” or the “Right patient” button.

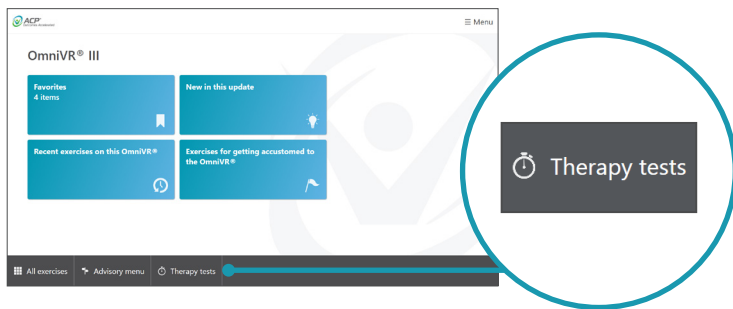
QR code

After choosing the appropriate patient, a QR code pop-up with embedded device information, exercise parameters, and outcomes results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

NOTE: Repeat this sequence for the other patient, as needed.

Navigating the OmniVR® III Software – Therapy Tests

Therapy Tests



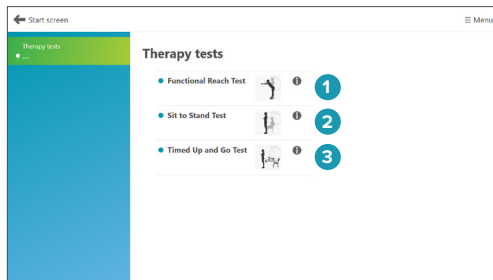
Therapy tests

Select “Therapy tests” from the bottom toolbar of the OmniVR® home screen.

Hover over intended navigation entry point and color changes from black to green for ease of selection.

Navigating the OmniVR® III Software – Therapy Tests

Therapy Tests continued



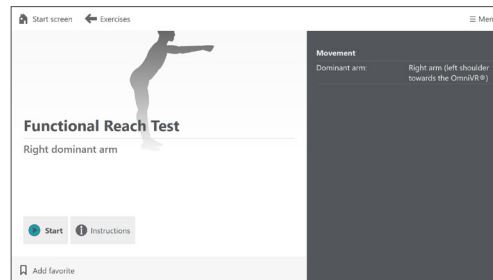
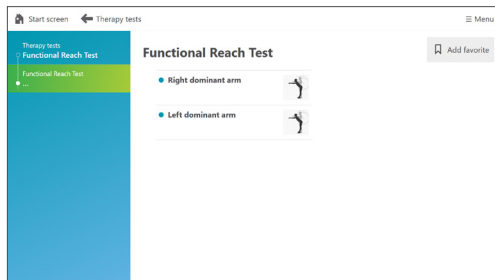
Therapy tests options

1. **Functional Reach Test:** A simple and widely used clinical outcome measure of standing balance and limits of stability. The test measures the difference, in inches, between the arm's length and maximal forward reach, using a fixed base of support. This test can be used to identify balance impairments or changes in balance over time.
2. **Sit to Stand Test:** A simple and widely used clinical outcome measure assessing lower extremity function. A reduction in lower extremity function and strength has been shown to predict subsequent development of disability, as it may reflect the effects of chronic disease, coexisting conditions, and overall physiologic decline. The 5 Times Sit to Stand Test is a measure of strength. The 30 second Sit to Stand Test is a measure of strength and endurance.
3. **Timed Up and Go (TUG) Test:** A simple and widely used clinical outcome measure of mobility, lower extremity function, and fall risk. The test requires a series of key mobility tasks, including standing from seated position, walking 10 feet (3 meters), turning, stopping, and sitting down.

NOTE: To access more information on each test, click on the information icon **i** to the right of each of the Therapy tests.

Navigating the OmniVR® III Software – Therapy Tests

Functional Reach Test



Select dominant arm

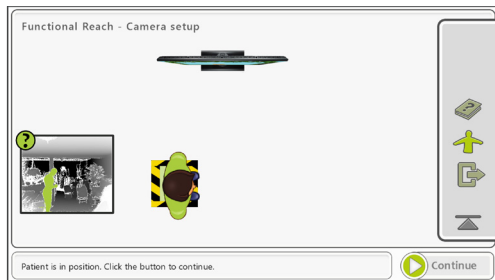
The patient's dominant arm should be used for this test. Select the appropriate dominant arm option on the screen.

Start screen

- **Start:** Selecting the “Start” button will advance to the patient setup screen in order to perform the first of three Functional Reach trials.
- **Instructions:** Selecting the “Instructions” button will display the embedded test instructions.

Navigating the OmniVR® III Software – Therapy Tests

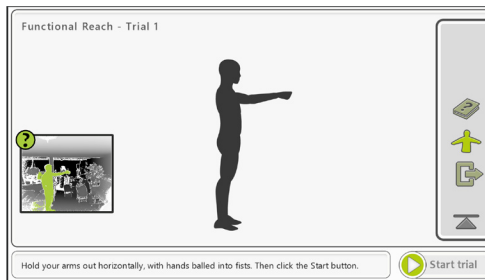
Functional Reach Test continued



Patient positioning

Position the patient within the green box, and select the “Continue” button at the bottom right corner of the screen.

NOTE: Position the patient so that their dominant arm is on the side furthest from the OmniVR® system. Be sure the patient keeps the dominant arm, with hand fisted, horizontal with the floor during the test.



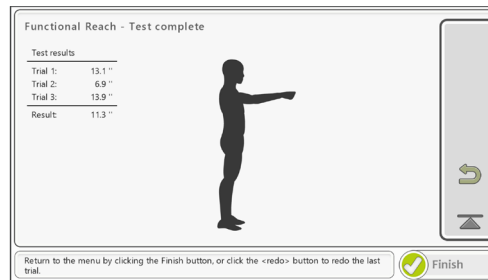
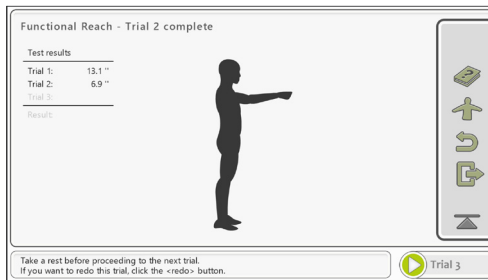
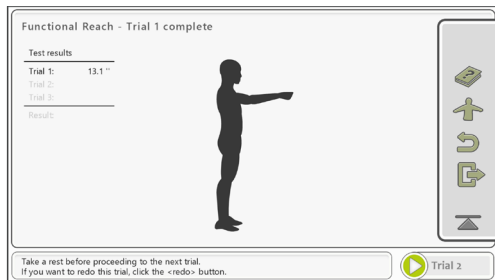
Start trial

The Functional Reach Test consists of three trials. Follow the prompts on the bottom of the screen.

- Select the “Start trial” button on the bottom right corner of the screen when ready to begin the first trial. There will be a 3-2-1 countdown.
- During each trial, have the patient hold the point of their furthest reach for up to 3 seconds.

Navigating the OmniVR® III Software – Therapy Tests

Functional Reach Test continued



Trial 1 complete

At the completion of Trial 1, the patient's functional reach distance is displayed in inches.

Select the "Trial 2" button on the bottom right corner of the screen when ready to begin the second trial. There will be a 3-2-1 countdown.

NOTE: Select the "Redo" icon in the toolbar on the right side of the screen to go back and perform Trial 1 again, as needed.

Trial 2 complete

At the completion of Trial 2, both of the patient's functional reach distances are displayed in inches.

Select the "Trial 3" button on the bottom right corner of the screen when ready to begin the third and final trial. There will be a 3-2-1 countdown.

NOTE: Select the "Redo" icon in the toolbar on the right side of the screen to go back and perform Trial 2 again, as needed.

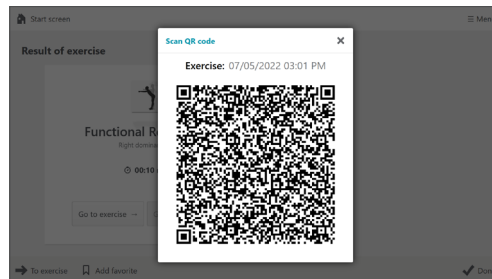
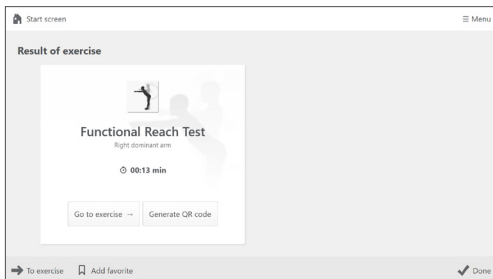
Trial 3 complete

At the completion of Trial 3, all three of the patient's functional reach distances are individually displayed in inches, as well as the average distance.

- **Redo test:** To go back and perform the test again, as needed, select the "Redo" icon in the toolbar on the right side of the screen.
- **Finish:** To advance to the Therapy test summary screen, select the "Finish" button at the bottom right corner of the screen.

Navigating the OmniVR® III Software – Therapy Tests

Functional Reach Test continued



Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

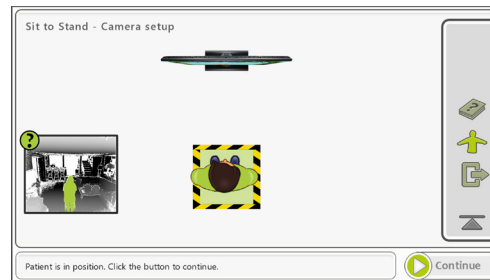
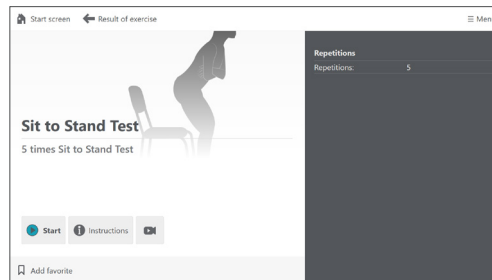
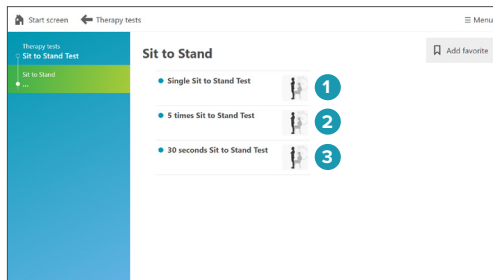
NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

QR code

After selecting the “Generate QR code” button, a QR code pop-up with embedded device information and Therapy test results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

Navigating the OmniVR® III Software – Therapy Tests

Sit to Stand Test



Sit to Stand Test options

1. **Single Sit to Stand Test:** Assesses lower extremity function.
2. **5 times Sit to Stand Test:** Measures lower extremity strength.
3. **30 second Sit to Stand Test:** Measures lower extremity strength and endurance.

NOTE: The screen navigation is the same when performing any Sit to Stand Test option.

Start screen

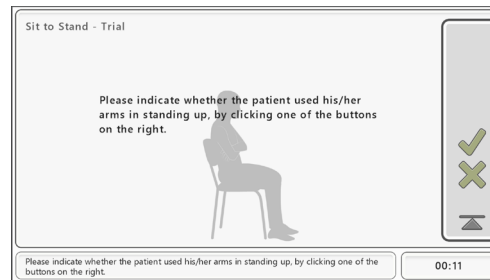
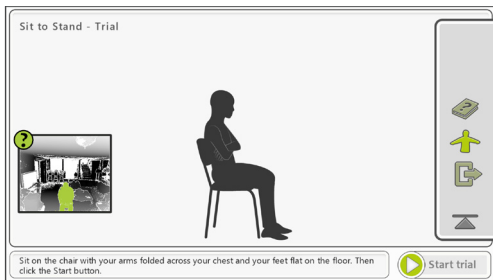
- **Start:** Selecting the “Start” button will advance to the patient setup screen in order to perform the chosen Sit to Stand Test.
- **Instructions:** Selecting the “Instructions” button will display the embedded test instructions.
- **Video:** Selecting the “Video” icon will display a video of the proper test technique.

Treatment area and patient positioning

- In order for the camera to properly detect the patient, ensure that the path in front of the chair is free from obstruction.
- For all assessments, use a sturdy chair with arms and no wheels at a seat height of approximately 18 inches, regardless of the height of the patient.
- For safety, the chair should be placed in front of the OmniVR® and secured to prevent movement.
- Position the patient within the green box, and then select the “Continue” button on the bottom right corner of the screen.

Navigating the OmniVR® III Software – Therapy Tests

Sit to Stand Test continued



Start trial

Follow the prompts on the bottom of the screen.

- Have the patient sit up straight in the chair with their arms folded across their chest and feet flat on the floor.
- Select the “Start trial” button at the bottom right corner of the screen when ready to begin the test. There will be a 3-2-1 countdown.

- The patient will then stand up and sit down 5 times.

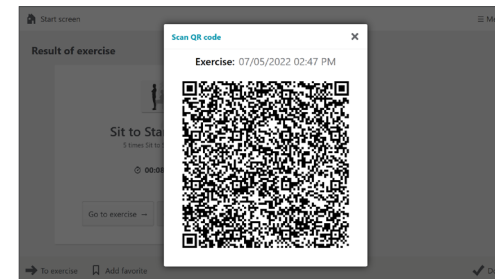
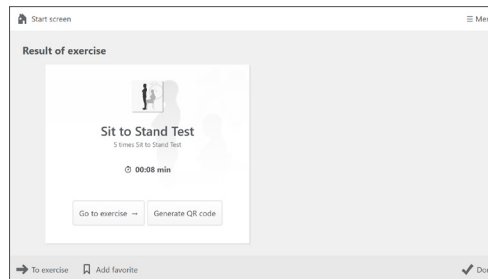
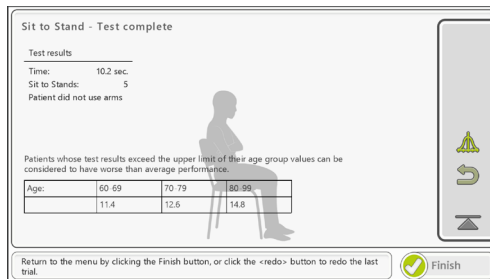
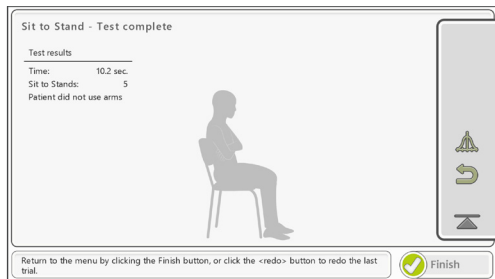
NOTE: In this example, the 5 times Sit to Stand Test is selected.

Armrests

After all five repetitions are completed, the clinician must indicate whether the patient used the armrests to stand or sit during the test. Left-click the “Checkmark” icon for Yes and the “X” icon for No.

Navigating the OmniVR® III Software – Therapy Tests

Sit to Stand Test continued



Test completion screen

At the completion of the test, the cumulative time for all five repetitions is displayed, along with whether or not the patient used their arms.

- **Normative data:** To compare the patient's results to normative data, select the "Bell-curve" icon in the toolbar on the right side of the screen.

- **Redo test:** To go back and perform the test again, as needed, select the "Redo" icon in the toolbar on the right side of the screen.
- **Finish:** To advance to the Therapy test summary screen, select the "Finish" button at the bottom right corner of the screen.

Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the "Done" button at the bottom right corner will end the exercise.

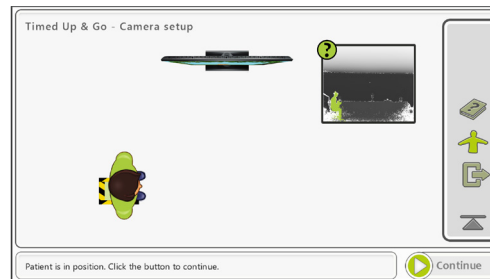
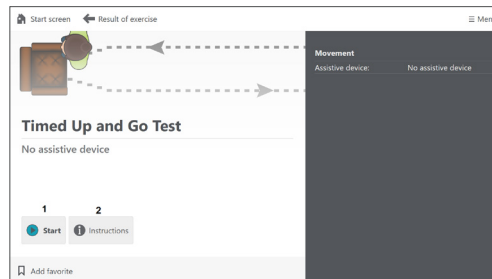
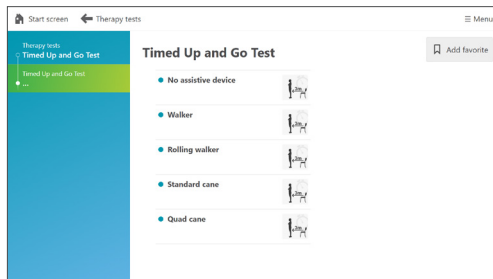
NOTE: Selecting the "Generate QR code" button will create a QR code pop-up.

QR code

After selecting the "Generate QR code" button, a QR code pop-up with embedded device information and Therapy test results will appear. Scanning the QR code can add this information to the patient's Electronic Medical Record using the ACPlus® application.

Navigating the OmniVR® III Software – Therapy Tests

Timed Up and Go (TUG) Test



Select assistive device

The TUG Test does not allow for any patient support.

At the start of the test, indicate if the patient is using an assistive device for walking, and if so, what type.

Start screen

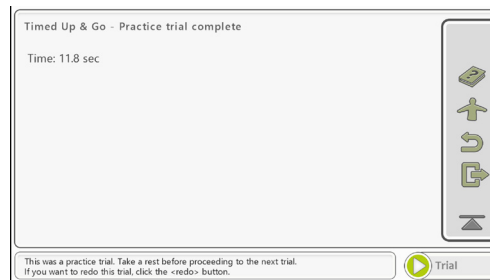
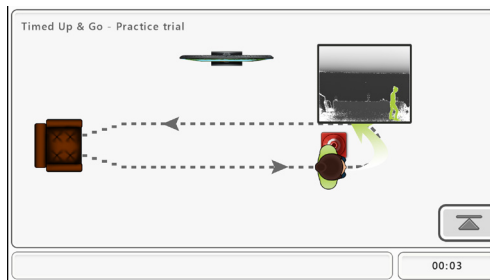
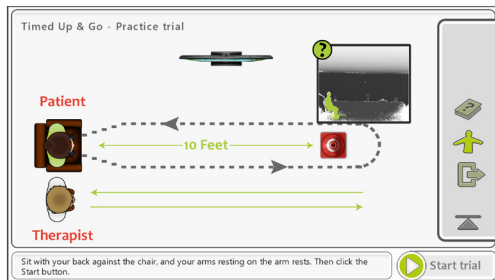
- **Start** : Selecting the “Start” button will advance to the patient setup screen in order to perform the TUG practice trial and test.
- **Instructions**: Selecting the “Instructions” button will display the embedded test instructions.

Treatment area and patient positioning

- Place a cone 10 feet from the chair so the path is perpendicular to the OmniVR®. The path should have enough space away from the system for proper camera detection as the patient performs a loop around the cone and back to the chair. The cone serves as a visual aid for patients to plan their trajectory.
- For safety, the chair should be secured to prevent movement.
- Position the patient within the green box, and then select the “Continue” button on the bottom right corner of the screen.

Navigating the OmniVR® III Software – Therapy Tests

Timed Up and Go (TUG) Test continued



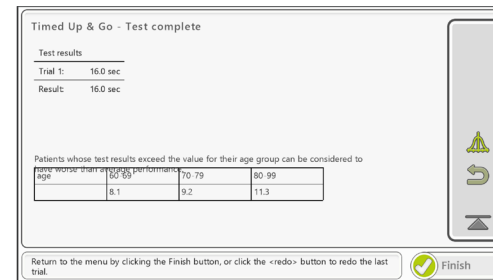
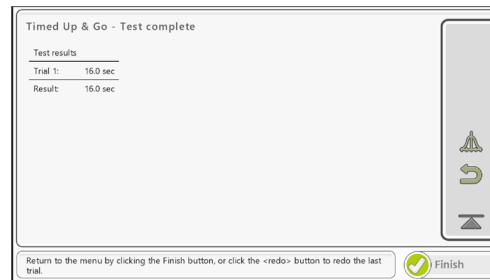
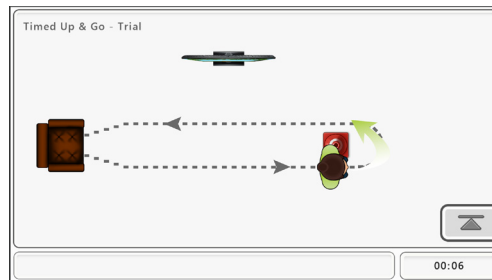
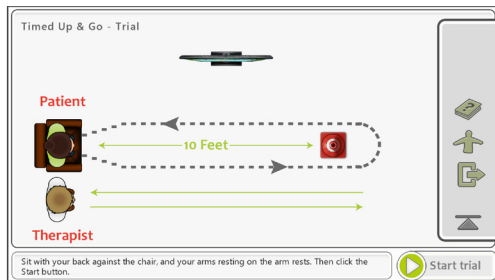
Start practice trial

Follow the prompts at the bottom of the screen.

- A TUG practice trial is recommended prior to performing the actual test.
- Have the patient sit with their back against the chair and hands on the armrests. Select the “Start trial” button at the bottom right corner of the screen when ready to begin the practice trial. There will be a 3-2-1 countdown.
- The patient will stand up, walk 10 feet, turn around the cone, walk 10 feet back to the chair, and sit down. If the patient requires monitoring during the test, the clinician must stay on the left side of the OmniVR® system at all times.
- At the completion of the practice trial, the time is displayed.
- To continue to the TUG Test trial, select the “Trial” button at the bottom right corner of the screen.

Navigating the OmniVR® III Software – Therapy Tests

Timed Up and Go (TUG) Test continued



Start test trial

Following the practice trial, reposition the patient in preparation for the TUG Test trial. Then select the “Start trial” button at the bottom right corner of the screen when ready to begin the test.

NOTE: If the patient requires guarding during the test, the clinician must stay on the left side of the OmniVR® system at all times.

Test trial in progress

The patient will stand up, walk 10 feet, turn around the cone, walk 10 feet back to the chair, and sit down.

Test completion screen

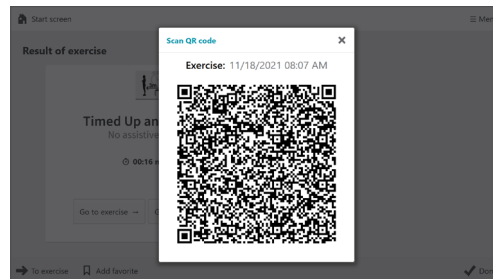
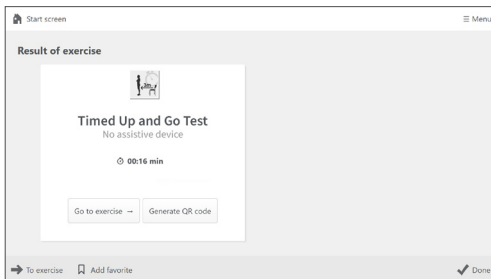
At the completion of the test, the time is displayed.

- **Normative data:** To compare the patient’s results to normative data, select the “Bell-curve” icon in the toolbar on the right side of the screen.
- **Redo test:** To go back and perform the test again, as needed, select the “Redo” icon in the toolbar on the right side of the screen.

- **Finish:** To advance to the Therapy test summary screen, select the “Finish” button at the bottom right corner of the screen.

Navigating the OmniVR® III Software – Therapy Tests

Timed Up and Go (TUG) Test continued



Result of exercise

The Result of exercise screen provides an overview of the selected exercise, difficulty level, movement pattern, and duration. Selecting the “Done” button at the bottom right corner will end the exercise.

NOTE: Selecting the “Generate QR code” button will create a QR code pop-up.

QR code

After selecting the “Generate QR code” button, a QR code pop-up with embedded device information and Therapy test results will appear. Scanning the QR code can add this information to the patient’s Electronic Medical Record using the ACPlus® application.

Troubleshooting

Service Center

For repair or service of ACP products and accessories, please call (800) 350-1100 and follow the prompts. Normal hours of operation are 6:00am to 5:00pm Pacific Standard Time. After hours, please leave a message, and a technician will return your call during the next scheduled workday.

The following table lists problem symptoms and possible areas to check for the problem causes. If these suggested measures do not correct the problem, call your ACP Customer Support representative.

Troubleshooting

General

Problem	Cause	Remedy
Does not recognize the patient's upper body during an upper extremity exercise or lower extremity exercise while involved in a sitting or standing activity.	If patient is wearing “baggy pants,” the camera may not be able to distinguish between the left and right leg and thus, not be able to recognize marching in place.	Use clothespins to tighten up the pants so the camera can see left and right leg.
	The OmniVR® camera could be out of alignment.	Check the alignment of the OmniVR® camera. To ensure that the camera is in proper alignment, the camera should be firmly secured to the camera mount (not loose) and the camera aligned, so the patient is visible and highlighted in green using the camera view function.
	If patient is not marching in place (lifting feet from floor) but shuffling feet in place, the camera will not recognize leg motion.	Place a small “step-up” board in front of the patient, and request the patient to alternately step up and down, left and right, to simulate marching in place.
	Patient is wearing dark non-reflective clothes. Some non-reflective fabrics may not be recognized by the camera.	If this is suspected, have patient sit down and check upper extremity and lower extremity motion yourself. If this is the case, advise patient to wear lighter color clothing during the next rehabilitation session.
Camera does not recognize patient in a seated position.	If the camera does not recognize the floor, it will be unable to recognize a patient in a seated position. The OmniVR® camera could be out of alignment.	Call ACP Customer Support as the camera angle may be too high or too low, or a wall is too close to the camera view. Check the alignment of the OmniVR® camera. To ensure that the camera is in proper alignment, the camera should be firmly secured to the camera mount (not loose) and the camera aligned, so the patient is centered and highlighted green when using the camera view function.
Camera does not recognize one of the patients in a Group Therapy program.	If the camera does not recognize the floor, it will be unable to recognize a patient sitting in a chair or standing in a Group Therapy program. The OmniVR® camera could be out of alignment.	Call ACP Customer Support as the camera angle may be too high or too low, or a wall is too close to the camera view. Check the alignment of the OmniVR® camera. To ensure that the camera is in proper alignment, the camera should be firmly secured to the camera mount (not loose) and the camera aligned, so the patient is centered and highlighted green when using the camera view function.

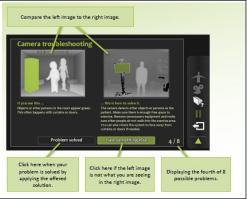
Troubleshooting




General

Problem	Cause	Remedy
No audio from monitor	No audio from monitor	Check settings in the OmniVR® program. Make sure that the sound is not muted. Use the monitor remote (or buttons on the monitor) to turn the volume up and to unmute the monitor.
	Audio source not set to HDMI	Using the monitor controls on the back of the monitor, press the input button. Then select the audio source and ensure the source is set to HDMI. If not, use the up and down arrows to select the HDMI option, and press the plus (+) sign to save settings.
	Monitor speakers turned OFF	Find the external speaker switch on the left rear side of the monitor. Turn on the speakers and test audio.
	Factory reset of monitor	Unplug the power cord from the back of the monitor, press the power button 25 times, and then hold the power button in the on position while simultaneously plugging in power cord.
The unit will not power-on	Damaged power cord	Examine the power cord, and if it appears damaged or frayed, discontinue its use and contact our Customer Support department for a replacement.
Frayed or damaged power cord	Only connect the OmniVR® to a properly grounded power outlet using a hospital-grade cord. Examine the power cord, and if it appears damaged or frayed, discontinue its use and contact our Customer Support department for a replacement.	

Troubleshooting

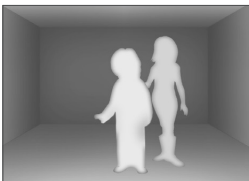
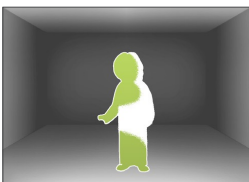
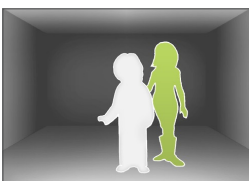
General Camera Tips

Problem	Remedy
	<ul style="list-style-type: none"> Click on the camera image button. Only the patient should be green. Is the free space around the patient limited, for example, by walls, objects, or other people? Try to create more space or move or turn the OmniVR®. If there is too much of sunlight, then use blinds or curtains. If the clinician is guiding the patient, he or she should remain behind the patient as much as possible and maintain a bit of distance.
Camera detection troubleshooting	If the exercise visualizations do not react well to the movements of the patient, there are a few easily accessible functions available in the OmniVR® that can help determine what is wrong.

Problem	Remedy
	In some exercises, the biofeedback icon can be selected in the user interface. Biofeedback bars appear on screen to indicate the range of motion detected by the camera. If the slider does not reach the top of the bar, it means that the range of motion is not large enough to trigger an event on screen.
	If selecting the camera view icon in the user interface, the camera view appears on screen. This image shows exactly what the camera sees. The green object is what the camera is capturing. The patient should be green. In a two-patient exercise, the left patient should be green, and the right patient should be orange. If this is not the case, click the question mark for suggestions on what to do.
	If selecting the question mark in the camera view, the camera detection troubleshooting screen appears. It shows some examples of possible problems and offers solutions to those problems.


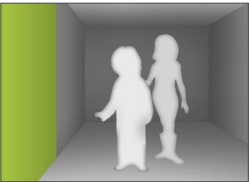
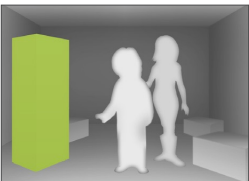
Troubleshooting

General Camera Tips continued

Problem	Problem	Remedy
	Both the patient and the clinician are displayed white, and nothing else is displayed green.	The patient is not detected. Make sure the patient is standing in front of the OmniVR® in the normal position. Briefly cover the lens of the camera with your hand, allowing it to refresh the view of the room.
	The patient is displayed green, but large parts of the patient's body are displayed white.	Try to limit the amount of both direct and indirect sunlight in the exercise area. Closing blinds or curtains often helps. Another option is to move the OmniVR® to another location.
	The clinician is displayed green, and the patient is displayed white.	The clinician is detected instead of the patient. The clinician should try to move out of the camera's view by moving to the side or standing behind the patient.

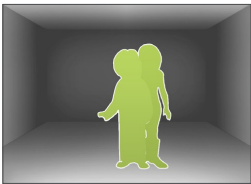
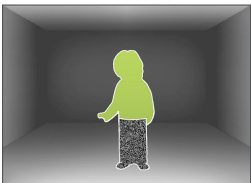
Troubleshooting

General Camera Tips continued

Problem	Problem	Remedy
	Green spots appear around the patient, or an object far away in the back of the room is displayed green.	The distance between the camera and the back of the room is too large. Either place the system in another room, make it face another direction, or call ACP Customer Support to help you set up the camera for large rooms.
	One of the walls becomes green.	The exercise area is too small. Make sure there is enough free space. Consider moving the system to a different room or turning it to face away from the wall.
	Objects or other persons in the room appear green. This often happens with curtains or doors.	The camera detects other objects or persons as the patient. Make sure there is enough free space to exercise. Remove unnecessary equipment, and make sure other people do not walk into the exercise area. The system can also be rotated to face away from curtains or doors if needed.


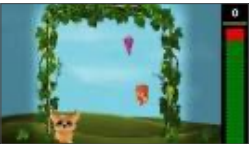

Troubleshooting

General Camera Tips continued

Problem	Problem	Remedy
	The patient and the clinician are both displayed green.	The clinician is too close to the patient, so they are detected by the camera as a single person. Increase the distance between patient and clinician.
	Most of the patient is green, but a specific piece of clothing of the patient is black.	Some types of fabric are not easily detected by the camera. Cover the piece of clothing with a different fabric, or try a different type of clothing.


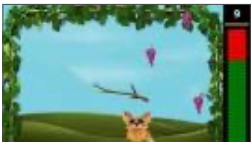
Troubleshooting

Sitting Exercises – The Fox

Problem	Cause	Remedy
Unable to reach sides: 	<p>The system is not measuring the actual movement of the patient during the exercise to determine how far he/she should move.</p> <p>Additional cause may be that the clinician is sitting at the patient's side, and the camera recognizes them and not the patient.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient. Reset the calibration by placing your hand over the camera lens for approximately 2 to 5 seconds and retry. Let the patient lean left and right a few times to see if the problem has been resolved.</p>
Fox off-center: 	<p>The system will assume the patient is in the center of the screen when "OK" is selected. If the patient moves afterward, the center will be off (e.g., moves his/her chair or walks to the chair).</p> <p>Additional cause may be that the clinician is sitting at the patient's side, and the camera recognizes them and not the patient.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p>
Fox does not jump: 	<p>If the camera does not recognize the floor, it will be unable to recognize a patient sitting in a chair or standing in a Group Therapy program.</p> <p>The OmniVR® camera could be out of alignment.</p>	<p>Call ACP Customer Support as the camera angle may be too high or too low, or a wall is too close to the camera view.</p> <p>Check the alignment of the OmniVR® camera. To ensure that the camera is in proper alignment, the camera should be firmly secured to the camera mount (not loose) and the camera aligned, so the patient is centered and highlighted green when using the camera view function.</p>

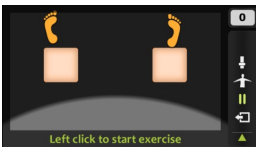
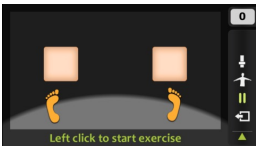
Troubleshooting

Sitting Exercises – The Fox continued

Problem	Cause	Remedy
Fox jumps too much: 	The system is reacting to an upward movement of the hands, even if they are not fully raised.	Instruct the patient to rest their hands completely to their lap when they do not want the fox to jump.
Playing area is very large and the fox is almost not moving: 	The “walking” version of The fox exercise has been unintentionally selected.	Go back to the menu and select the sitting version.

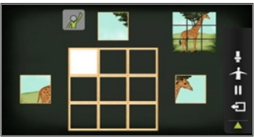

Troubleshooting

Sitting Exercises – Picnic

Problem	Cause	Remedy
Feet are not recognized or too far backward or forward: 	<p>The system measures the “at rest” position of the feet at the start of the exercise. If the patient is sitting with their feet too far forward or backward at that time, the measurement will not be valid.</p>	<p>Instruct the patient to sit with their feet on the floor and knees bent to approximately 75 degrees during the setup. This will ensure an accurate measurement.</p>
Feet are jumpy/jittery: 	<p>This is most commonly caused by other objects (e.g., bag on the floor next to the chair legs) near the patient's legs or the legs of the chair. In addition, shiny floors may create camera interference with the system leading to jumpy or jittery feet.</p>	<p>Remove all clutter from the floor of the treatment area. If shiny floors are a concern, place a thin non-reflective mat in front of the chair.</p>



Troubleshooting

Sitting Exercises – Puzzle


Problem	Cause	Remedy
Pieces move by themselves: 	<p>This may occur if the patient is not well detected, and the system is following another person or object.</p>	<p>Make sure the patient is sitting on a chair with as few objects around as possible.</p> <p>Check the alignment of the OmniVR® camera. To ensure that the camera is in proper alignment, the camera should be firmly secured to the camera mount (not loose) and the camera aligned, so the patient is centered and highlighted green when using the camera view function.</p>
Pieces do not move: 	<p>This may occur if the patient is not well detected, and the system is following another person or object.</p> <p>Movements are not correct for settings found in the “Adjustable Parameters.”</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse.</p> <p>The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Make sure the patient is sitting on a chair with as few objects around as possible.</p> <p>Check if the settings in the detail menu correspond to the movement made.</p> <p>In the standard settings, the system reacts only to body movements and not to arm movements. If arm movements are selected in the “Adjustable Parameter” settings, the system will not react to body movements.</p>

Troubleshooting

Sitting Exercises – Bingo



Problem	Cause	Remedy
<p>Patient stands but camera does not recognize the movement:</p> 	<p>The activity requires that the patient start the sit to stand movement with sufficient trunk flexion. The camera will not recognize the patient pushing themselves straight up from the chair without sufficient forward bend at the beginning of the action.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Instruct the patient on the proper sit to stand technique by first bending forward and then standing. To ensure the patient is performing a mechanically correct sit to stand, turn the biofeedback marker on and observe the patient's motion during the exercise. Additionally, if the back of the patient's chair is above their shoulder height, this may cause difficulties in the camera seeing the patient bend forward.</p> <p>Biofeedback bar</p> 

Sitting Exercises – Volleyball

Problem	Cause	Remedy
<p>Patient hits too early:</p> 	<p>Any upward or forward movement will trigger an action from the figure on the screen.</p>	<p>Patient should initiate the action only when the ball is very close to the avatar's hands. If the ball is still triggered too early, position the patient closer to the camera and/or set the movement adjustment in the "Adjustable Parameter" settings to "larger movements."</p>

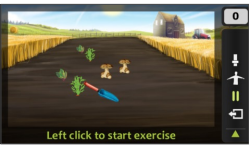
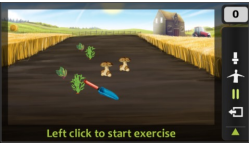
Troubleshooting

Sitting Exercises – Carnival

Problem	Cause	Remedy
Unintended throws: 	<p>Any upward or forward movement will trigger an action from the figure on the screen.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse.</p> <p>The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Be sure the patient is making the appropriate throwing motion (upward-forward and downward-throwing motion).</p> <p>Try moving the patient back 1 foot from their current position.</p> <p>Make sure to start the action only when the animal is very close. If the ball is still triggered too early, try sitting closer to the camera and/or setting the movement adjustment in the “Adjustable Parameters” to “large movements.”</p>
Not recognizing throws: 	<p>The patient is sitting in a chair with a chair back height that is above their shoulders.</p> <p>The patient is positioned incorrectly in their chair, and the camera cannot see the patient perform the exercise.</p> <p>The patient is only performing an internal and external rotation of the shoulder in an abducted position (not the motion pattern the camera is looking for).</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse.</p> <p>The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Be sure the patient’s chair back height does not extend above the height of their shoulders. Use a chair that has a chair back height lower than the patient’s shoulder height.</p> <p>Be sure the patient is in a proper exercise position (as able). The patient should be seated forward in their chair bearing weight on their feet (as able) and should not be resting on the back of the chair (as able).</p> <p>The exercise motion pattern is a straight-ahead, forward functional reach incorporating trunk flexion (as able) and tolerated, during which the patient simulates throwing a ball at the animals on the screen.</p>


Troubleshooting

Sitting Exercises – Vegetable Garden

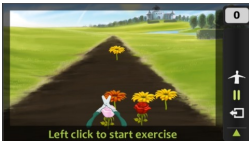
Problem	Cause	Remedy
Tool makes unintended jumps:  <p>Left click to start exercise</p>	<p>The exercise requires the patient to use a large area. This may bring the patient close to walls or other objects that may interfere with the camera.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Move the objects that are in the way, place the OmniVR® in a larger open space, or adjust the exercise field in the “Adjustable Parameters.”</p>
Squatting to get distant vegetables makes the shovel shake or is too hard to get:  <p>Left click to start exercise</p>	<p>In some cases, the shovel may jump or shake when trying to retrieve the vegetables at the very background of the screen, causing the patient to “miss” the task. This may happen particularly with shorter individuals and occurs because the camera momentarily loses sight of the patient.</p>	<p>The issue can be resolved by squatting more quickly or using a slightly smaller playing area, which can be selected in the “Adjustable Parameters.”</p>

Troubleshooting

Sitting Exercises – Stop the Wolf




Problem	Cause	Remedy
Patient cannot move far enough backward: 	This activity requires a substantial amount of space in the Moderate and Maximum difficulty sections.	Ensure that the treatment area is of sufficient size and not too close to a wall at the back of the treatment area.

Gait Exercises – Flower Garden

Problem	Cause	Remedy
Scissor makes unintended jumps: 	The exercise requires the patient to use a large area. This may bring the patient close to walls or other objects that may interfere with the camera.	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Remove the objects that are in the way, place the OmniVR® in a larger open space, or adjust the playing field in the “Adjustable Parameters.”</p>



Troubleshooting

Gait Exercises – The Fox

Problem	Cause	Remedy
Fox makes sudden small moves to left and right: 	<p>This happens when the patient comes close to an object, wall, or clinician.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>Reposition the patient, making sure that they have sufficient room to perform the exercise.</p>
The playing area is small and the fox jumps around: 	<p>You have inadvertently selected the sitting version of The fox exercise.</p>	<p>From the main menu, select the side-stepping option in the movement section of The fox exercise, or choose the “1.5m” or “3m” settings in the “Adjustable Parameters.”</p>
Fox does not jump: 	<p>Out-stretching the hand to the side of the body will not typically trigger a jump.</p>	<p>Check if the patient is visible and highlighted in green in the camera view by activating the camera view feature or pressing the center scroll button on the mouse. The clinician could be in the camera view. The clinician or another object could be directing the camera focus from the patient.</p> <p>To trigger the proper jumping movement for the fox, the patient should be instructed to reach further forward and overhead.</p>

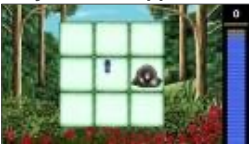

Troubleshooting

Balance Exercises – The Mole

Problem	Cause	Remedy
Feet are shaking, making the activity difficult to perform: 	<p>The camera is detecting interference from a walker or from the floor and should be recalibrated. Open the Camera View mode to observe if there is a conflict with the camera view of the patient.</p>	<p>It is suggested that a walker not be used with this exercise. If the patient requires a walker, please consider using the Flower Garden exercise as an alternative. Call ACP Customer Support if you have any questions or concerns.</p>
No feet appear: 	<p>The patient is not in the right position. The camera is following another person or object.</p>	<p>Clear the immediate area and instruct the patient to move into the playing area. Ask the patient to move around until he/she is detected by the camera.</p> <p>Reset the camera by putting your hand in front of the camera for 2 to 5 seconds and retry.</p>

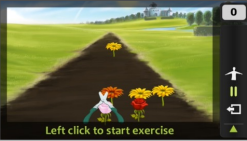

Troubleshooting

Balance Exercises – The Mole continued

Problem	Cause	Remedy
Only one foot appears: 	<p>If the legs are not well detected, an object such as a chair may be creating a camera obstruction, or the patient may be wearing non-reflective clothing.</p>	<p>Remove all objects from the treatment area and/or try the exercise program with another patient.</p> <p>If appropriate, ask the patient to wear lighter colored clothes for their next exercise session.</p>
The feet sometimes suddenly “jump” out of the screen: 	<p>Some other object, or a wall, is interfering. When the patient comes close, this object is interpreted by the camera as a leg.</p>	<p>Place the OmniVR[®] in a less constrained space if possible.</p>

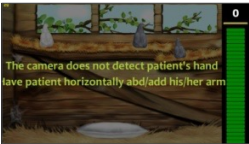
Troubleshooting

Wheelchair Exercises – Flower Garden


Problem	Cause	Remedy
<p>Scissor makes strange jumps:</p> 	<p>This exercise program requires a larger area, which may bring the patient too close to walls or other objects that can interfere with the camera.</p>	<p>Move the objects that are in the way, place the OmniVR® in a larger open space, or adjust the playing field in the “Adjustable Parameters.”</p>
<p>Turning the wheelchair leads to unintended jumps:</p> 	<p>If the patient uses a very large wheelchair, as shown to the left, the camera cannot interpret the difference between a front view and a side view. This leads to unintended “jumps” with the scissors whenever the wheelchair turns.</p>	<p>The exercise cannot be performed with this kind of wheelchair.</p>

Troubleshooting

UE Exercise Memory and Eggs

Problem	Cause	Remedy
The camera does not recognize the hand when moving it: 	This may occur when the patient's hand has been still for too long, is moving too slowly, or has been laid momentarily in their lap, causing the camera to lose track of the required movement.	Have the patient horizontally abduct/adduct his/her arm. Instruct the patient to keep their hand moving during the activity. Therapeutic rest may be provided as needed by pressing the left mouse button to “pause” the exercise program.

Functional Reach Test

Problem	Cause	Remedy
Capturing the patient's Functional Reach position seems to take a long time: 	The average Functional Reach Test measurement acquisition time is about 3 to 4 seconds. Times greater than this may occur if the patient is swaying or oscillating on their feet while doing the test, as the OmniVR® is looking for the patient to be in a stationary forward reach position for a duration of 2 seconds.	First, be sure the patient is performing a correct forward reach with hand in a “fisted position” and feet positioned so the patient feels a secure base of support. If their base of support is too narrow, there is a higher probability the patient will sway or oscillate while reaching forward. Second, inform the patient to reach as far forward as possible without losing their balance or taking a step.

Standard Limited Product Warranty

The warranty information provided in this section is applicable only to products purchased from ACP, directly or through an authorized dealer. This section does not apply to leased products. The terms of maintenance and repair of any leased products are detailed in the separately executed agreement between the parties.

Warranty Coverage

This warranty provides coverage, for Equipment purchased, against manufacturer's defects in material and workmanship, and extends to the original owner of the product during the warranty period for that product. Only those items returned to the ACP Service Center within the warranty period, and also within thirty (30) days after notification to ACP of the defect, shall be eligible for repair under the Standard Limited Product Warranty. Buyer is responsible for shipping cost associated with sending the Equipment to the ACP Service Center. ACP shall ship Equipment

to Buyer after repair at no cost to the Buyer provided repair is deemed to be under warranty. ACP may, at its discretion and only for valid warranty claim, repair or replace any part(s) that prove to be defective during the warranty period.

Warranty Exclusion

Any and all warranty coverage will be void if any of the following have occurred:

1. The product contains repairs or replacement parts not furnished by ACP.
2. The product is damaged resulting from misuse or negligence.
3. The product has been tampered with and/or altered, including serial number alteration.

NOTE: Use of the Equipment with accessories and/or supplies not approved by ACPL for use with the Equipment may void the warranty if such accessory or supply item caused damage to the Equipment.

Warranty Period

The following coverage is provided at no additional cost to the Buyer:

- **New Equipment/Product.** Products purchased as new from ACP are warranted against manufacturer's defects in material and workmanship for a period of two (2) years from the date of purchase.
- **Refurbished Equipment/Product.** Products purchased specifically as Refurbished Equipment are warranted against manufacturer's defects in material and workmanship for a period of one (1) year from the date of purchase.
- **Accessories.** All accessories for ACP equipment/products are warranted against manufacturer's defects in material and workmanship for a period of three (3) months from the date of purchase.

Warranty Validation

The following information needs to be provided to the ACP Customer Support representative prior to the product being returned under warranty coverage:

1. Buyer name or account number as it appears under the "Bill To" on the ACP or recognized ACP Dealer invoice.
2. Invoice Date and Number.
3. Model number, description, and serial number of equipment.
4. Detailed description of the problem.

Standard Limited Product Warranty Continued

Service Center

For repair or service of ACP products and accessories, please call (800) 350-1100 and follow the prompts. Normal hours of operation are 6:00am to 5:00pm Pacific Standard Time. After hours, please leave a message, and a technician will return your call during the next scheduled workday.

Return of Defective Equipment

Any Equipment returned to the ACP Service Center under warranty coverage must have the Warranty coverage validated and must receive authorization from ACP Customer Support prior to being received at the Service Center.

Shipping charges, insurance, and any other costs incurred in sending product to ACP Service Center is the responsibility of the customer and will not be refunded. ACP shall cover the shipping charges and related costs to return the unit to the customer, provided repair is deemed to be under warranty.

ACP is not responsible for any loss or damage to the Equipment prior to receipt at the ACP Service Center. Equipment returned for warranty service must be shipped complete with all accessories (except for manuals), in its original packing or equivalent so as not to be damaged while in transit.

NOTE: Any Equipment sent to the ACP Service Center that is not covered by the ACP Limited Product Warranty is subject to a minimum service and handling fee.

IMPORTANT: DO NOT SHIP THE EQUIPMENT TO ACP SERVICE CENTER WITHOUT FIRST SECURING AUTHORIZATION TO DO SO. PLEASE CALL CUSTOMER SERVICE AT (800) 350-1100 FOR AUTHORIZATION. EQUIPMENT SENT IN WITHOUT AUTHORIZATION FROM ACP CUSTOMER SERVICE WILL NOT BE ACCEPTED.

Returned Materials Shipping Address:

Accelerated Care Plus
Attn: ACP Service Center
4999 Aircenter Circle, Suite 103
Reno, NV 89502



4999 Aircenter Circle, Suite 103
Reno, NV 89502

800.350.1100 | acplus.com

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