OT Mastery

Technology-Enhanced Interventions

1. What is the difference between technology as an intervention and technology-enhanced interventions?

A. Technology as an intervention is not covered by most insurers, but technology-enhanced interventions are covered by the majority of insurers since evidence shows this is more effective.
B. Technology as an intervention involves solely training a patient in the use of technology, whereas technology-enhanced interventions use technology alongside other treatments to achieve a certain goal.
C. There is no difference. These are two terms for the same thing: using technology in rehabilitation settings.
D. Technology as an intervention involves using technology alongside other treatments to achieve a certain goal, whereas technology-enhanced interventions involve solely training a patient in the use of technology.

---

2. Research shows that therapists should be involved in what steps of technology?

A. Design and implementation
B. Design only
C. Creation and adoption
D. Creation only

---

3. What does research say is one of the biggest factors leading therapists to abandon technology in the clinic?

A. Lack of user-friendly design
B. Set-up time
C. Cost
D. Organizational demands

---

4. What is co-design relative to technology?

A. Therapists working with designers to make user-friendly technology
B. A collaborative design approach involving investors, designers, end users, programmers, and other relevant parties
C. Co-design involves cosigners offering money in the early stages to assist with design
D. Approval from third-party payers that expands device availability in the early stages and allows for better chances of success

---

5. What is the difference between augmented reality and virtual reality in therapy?

A. Augmented reality creates an entirely new, immersive environment for the patient to receive therapy in and virtual reality adds simulated elements to a patient's real environment
B. Augmented reality can only be used by occupational therapists and virtual reality can be used by occupational and physical therapists
C. Augmented reality adds simulated elements to a patient's real environment and virtual reality creates an entirely new, immersive environment for the patient to receive therapy in
D. Augmented reality is a newer form of the same simulated technology so it doesn't have approval from most payers and virtual reality offers more reliable and well-known simulations so it is approved by most all insurers

---

6. What is one solution used to overcome privacy and design concerns related to artificial intelligence?

A. The use of human-centered principles
B. Ensuring use on tablets instead of smartphones
C. Adhering to HIPAA principles at all times
D. Ensuring use on hospital-sanctioned computers only

---

7. Why might augmented reality pose a concern for people with visual concerns?

A. There is a high risk of distraction
B. Lack of insurance coverage
C. Limited privacy features
D. Limitations in field of view and image resolution along with delays in input and output

---

8. What does the research say about long-term use for exoskeletons?

A. Exoskeletons serve the most benefit when used during the rehabilitation process, not on a long-term basis
B. Exoskeletons serve the most benefit when used over long periods
C. Exoskeletons don't offer any long-term benefits that patients can't reap from robotic devices
D. Exoskeletons are only meant for sports training and have not yet proven useful for rehabilitation purposes

---

9. A 54-year-old patient sustained a spinal cord injury and has limited lower body function along with balance and gait impairments. What technology-enhanced intervention may prove most useful during ADL retraining?

A. Artificial intelligence-based programming
B. Exoskeleton
C. Augmented reality device
D. Virtual reality device

---

10. An 88-year-old patient with uncontrolled seizures has just been discharged from the hospital and will live with his adult daughter, who will be his caregiver. She works from home some of the time and cannot provide 24/7 supervision, so his therapist recommends some technology to assist with protecting the patient in the event of a seizure. What device may be best for this patient?

A. Exoskeleton
B. Video biofeedback device
C. Hip protection device
D. Virtual reality device

---

11. What other technology may NOT pair well with telerehabilitation if the patient has intact cognition but doesn't have someone to assist them physically?

A. Virtual reality
B. Augmented reality
C. Gamified programs
D. Robotic braces

---

12. What deficit may lead someone to have difficulty with robotic arm braces due to their current limitations?

A. Poor visual-motor skills
B. Impaired fine motor skills
C. Limited insight
D. Impaired safety awareness

---

13. What is one major concern related to robotic braces (both arm and leg)?

A. Lack of customization making it not suitable for a range of therapy needs
B. An excess of time is needed to see minimal short-term gains
C. Too many customization features make them overwhelming and not user-friendly
D. Lack of ability to address muscle strength

---

14. What aspect of smart home technology can be helpful for someone with a chronic disease affecting all home management abilities?

A. Audio and video controls
B. Lighting control
C. Networking
D. Smart home automation

---

15. Research shows that what populations stand to benefit from smart technologies the most?

A. Older adults

B. Young adults with Autism Spectrum Disorder
C. Powered wheelchair users, individuals with complex physical disabilities
D. Middle-aged individuals at an increased risk of falls

---

16. In what ways does terminology impact the use of technology-enhanced interventions?

A. Unclear or inaccurate verbiage can negatively impact legislation, research, adoption, and coverage for technology in the healthcare space
B. Policymakers should be the only ones determining terminology for healthcare technology
C. Terminology should not be considered and focus should only be on the devices
D. Healthcare providers should be the only ones determining terminology for healthcare technology

---

17. How does disability status impact telerehabilitation use?

A. Individuals with low and high disability statuses stand to benefit from telerehabilitation
B. Disability status has not been studied in relation to telerehabilitation
C. Research shows that patients with a lower disability status are less likely to engage in telerehabilitation services despite having deficits they could improve upon
D. Research shows that patients with a lower disability status are more likely to engage in telerehabilitation

---

18. The Intersectional Technology Education and Competency in Healthcare Model was designed to help with the use of technology in therapy and medical fields. What is NOT a domain outlined in this model?

A. Service type
B. Diversity, equity, inclusion, and justice
C. Setting delivered
D. Service frequency

---

19. What do therapists need to remember about billing codes for technology-enhanced interventions?

A. Medical necessity does not apply to technology-enhanced interventions
B. They can still use many of the same CPT and HCPCS codes they already use for traditional therapies with technology
C. Billing and coding guidelines should be up to the device's manufacturer only
D. There are no CPT codes that apply directly to assistive technology, as they are looped into other CPT codes

---

20. What is the most accurate summary of the intent of technology-enhanced interventions in the OT field?

A. Focused on elevating the lives of individuals with disabilities

B. Evidence-based and functionally grounded
C. Evidence-based, occupation-based, supportive of health equity, and client-centered
D. Enabling participation and evidence-based
