How to create interdisciplinary home exercise programs/patient resources: A practical How-to Guide

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#### **Course Objectives**

- Learn Best Practices for writing Home Exercise Programs
- Be able to identify Exercise Programs that Demonstrate Best Practices
- Break Out Session Create Sample Home Exercise Program.



#### **Best Practices**

- Language/Cognitive Considerations
- Visual Considerations
- Physical/Environmental Considerations
- Format/Media Delivery
- Compliance/Carry Over
- Person Centered Care
- Functional Applications/Relevance



## Language/Cognitive Considerations

- Grade Level/Reading Comprehension
- Culture
- Format
- Narrative vs. Bullet points
- Ability to Recall Information
- Ability to Sequence Information
- Number of Steps that is realistic for patient to complete



## **Visual Considerations**

- Font
- Color of Background
- Neglect



#### Physical/Environmental Considerations

- Position
- Ambulation
- Balance/Fall Risk
- Access
- Environment
  - Distractions
  - Obstacles
  - Activity level in the environment according to time of day
  - Activities in or around the home that could be barriers to carry over
  - When and where are the exercises supposed to occur.



# Format/Media Delivery

- PAPER/Written
- Video
- Audio
- Phone Ap



## Compliance

- Non compliance vs Poor Set up
  - Assess did you follow best practices and create client centered program
  - Exercise is relevant to the patient's life
  - Consult other disciplines on the team (including family/support system) to address following considerations:
    - Cognitive
      - Task management: i.e. do they have a reminder system or calendar that can be utilized
      - Steps required
      - sequencing steps of the exercise
      - Visual
      - Font, Colors vs. black and white, pictures, lighting
      - Attention/Concentration factors



## Compliance cont.

- Non compliance vs Poor Set up
  - Reading
    - Reading level, structure of narrative, cultural considerations balance of narrative vs. graphic/picture descriptions
    - Ability to scan and locate information, visuo spatial abilities.
    - Abstract language vs. concrete language
  - Environmental
    - Distractions: i.e. dogs or young children
    - Lack of resources (i.e. no pans, no chair)
  - Behavioral



#### Person Centered Care

- Make it Meaningful!
- Addressing Internal Motivators
  - Does it Relate to
  - what they enjoy doing (recreational/leisure interests)
  - want to be doing (vocational goals)
  - Where they want to spend their time (i.e. building family relationships)
  - Location (i.e. the lake fishing, outside in the garden, in their "she-shed")
- Consider Cultural Perspectives
- Assessing Effective Environments



## Function/Relevance

- Infuse Person Centered Care into functional Activities
  - Working in the Garden
    - PT: Provide them with pictures of steps to kneel. They are to plant X # of plants, which will replace 10 reps of a kneel in a more clinical setting.
  - OT: Client is to pick up plants and tools and put them in a basket and take them out to the garden, which will replace stacking cones and carrying them from one counter to the other.
  - SLP: Client names identifies all the favorite vegetables they
    want to plant in categories and makes a list of the seeds they
    should purchase to plant the garden. This replaces a clinical
    worksheet working on categorization and naming.



## Function/Relevance

 Ask yourself: "Does your patient see the correlation between what you are asking the patient to do and their discharge goals."

"Give Life, Not Exercise!" ~ Berta Bobath



#### Team Collaboration

- When there isn't collaboration
  - HEP's focus on isolated skills and could require the patient to perform non-discipline specific tasks that not matched to their ability level
  - PT
  - Provides the posture, pain tolerance, gross motor requirements
  - SLP
  - Provides the language, memory , attention, sequencing requirements
  - OT
  - Provides the posture, fine motor, vision adaptive equipment needs requirements, organization
  - Counseling
    - Provides emotional cues , environmental stimuli, behavior management, family relationship attributes



## **Break Out Sessions**

Create Home Exercise Program



- We should never assume that correlations can be made that facilitate carry Over
- Generalization is the "key to the kingdom"
- Never blame your patients for living in their reality
  - SHOW UP
  - Implement Best Practices
- And ......

Change Peoples Lives!!!



#### References

- Blake, M.L. (2009). Inferencing Processes After Right
   Hemisphere Brain Damage: Effects of Contextual Bias. Journal of Speech,
   Language, and Hearing Research, Vol. 52, 373-384.
   Manly JJ, Touradji P, Tang MX, Stern Y. (2003). Literacy and memory decline among
   ethnically diverse elders. Journal of Clinical Expertise Neuropsychology. 25(5), 680-90.
   Mehta KM, Simonsick EM, Rooks R, et al. (2004). Black and white differences in cognitive
   function test scores: what explains the difference? Journal of American Geriatric
   Society, 52(12):220-7.
   Proffitt, R. (2015). Understanding the nature of home exercise programs for persons with
   neurological disorders. Archives of Physical Medicine and Rehabilitation, 96, 10 11.
   Sohlberg, M.M. Griffiths, G.G., & Fickas S. (2015) An Exploratory Study of
   Reading comprehension in College Students after Acquired Brain Injury.
   American Journal 358 of Speech-Language Pathology, Vol. 24; 358-373.
   Sohlberg, M.M., Kucheria P, Fickas S. &Wadeb, S.L. (2015). Developing Brain Injury
   Interventions on Both Ends of the Treatment Continuum Depends Upon Early
   Research Partnerships and Feasibility Studies. Journal of Speech, Language, and
   Hearing Research Vol. 58: 1864-1870.

