

# CHOOSING & USING EXTERNAL MEMORY AIDS IN ACUTE REHABILITATION

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REVIEW THE BASICS

# TYPES OF MEMORY

- Short term memory and working memory - short term storage of information
- Semantic memory - facts and knowledge about the world
- Episodic memory - memory for events
- Procedural memory - encoding for procedures
- Explicit memory - awareness of storing a memory
- Implicit memory - no awareness of storing the memory

# THE MEMORY PROCESS

## Attention

Paying attention to the task and also the amount of focus/sustained attention one has for the task

## Encoding

Making sense and meaning of the information to prepare it for the next step

## Storage

Storing the information in the relevant location in the brain

## Retrieval

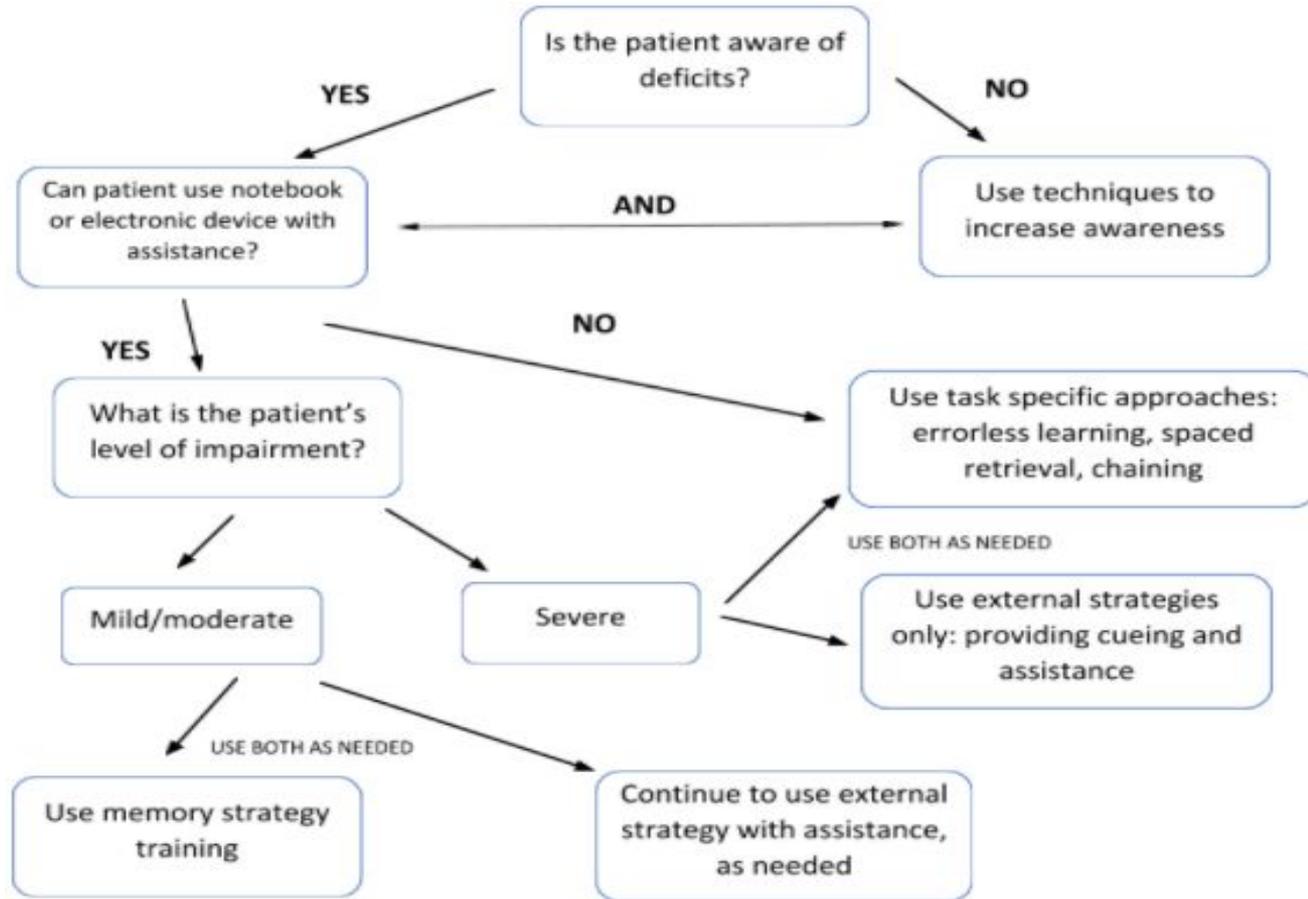
Being able to access the stored information when needed

# MEMORY AND EXECUTIVE FUNCTIONS

- Executive functions play a role in awareness of strengths and limitations, goal setting, planning and organization, self-monitoring, and flexibility.
- External memory aids may “cross over” to address both memory and executive functions to some extent
- Training the patient using context-based and errorless learning strategies is necessary to use the external aid OR training of therapy team, family and/or caregivers may be necessary for successful use

# EXTERNAL MEMORY AIDS

# WHEN TO USE THEM



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# TYPES OF MEMORY AIDS

## High Tech

- Smartphone calendars, to do lists, notes, alarms or timers, etc.
- HUGE variety of apps that can be downloaded for specific needs -- just search the app store

## Low tech

- Calendars
- Planners
- To do lists
- Notebooks
- Checklists of steps for a task
- Post-it or index card reminders
- Signs and labels

# EXAMPLES

- A daily notebook where daily events are recorded, including therapy tasks and progress
- Memory notebook with information about family, friends, and important past events
- Daily schedule
- List of steps for a given task posted where the task takes place
- List of items needed
- Post-it reminder on door for what to bring to therapy
- Covering parts of the bed/TV remote so patient can use key parts more independently

# CHOOSING & TRAINING

# CHOOSING

- Pick your external memory aids based on short term needs
  - Safety concerns
  - Decreasing burden of care/increasing independence
  - Based on patient or family identified needs for discharge home
- Keep them as simple as possible
  - Easy for the family and caregivers to implement AND immediately applicable to the patient's life at home

# CHOOSING

- Identify needs by working with PT, OT, the patient, family, and caregivers
  - The physical and occupational therapist are great resources to identify areas that are impacting safety and independence related to discharge home
- You must consider the requisite skills the patient will need to use the chosen external aid
  - Are those skills trainable using systematic instruction and/or errorless learning?
  - Will you, the rehab team, and/or family/caregiver need to provide certain cues or set up?

# TRAINING

- You must be systematic and consistent in training and educate your PT/OT to be systematic and consistent in using the external aid or aids
  - First you will train acquisition or the skills or procedures to use the tool
    - Chain the steps
    - Isolate steps that are difficult and mass practice
    - Use distributed practice
  - Then move on to mastery or generalization training
    - Focus on efficiency or fluency of use by timing the task
    - Help client generate when and how the tool can be used

# TRAINING

- Be clear about the expectations of using external aids and support role (i.e., cueing) the family or caregiver may need to provide at home
  - Listen carefully to what the family says is feasible for *them*
  - The family/caregiver WILL need multiple opportunities to work with you/the patient and train on using external aids

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