Tools for Effective Patient Visits:

Practical Supports for Cognition and Communication

Jaime Booz, MS, CCC-SLP
February 4, 2025

HEALTH UNIVERSITY OF UTAH
Project ECHO
Bateman Horne Center
RESEARCH | CLINICAL CARE | EDUCATION

Disclosures

- No Disclosures

Learning Objectives

- Demonstrate understanding of cognitive communication deficits in Long COVID and post-infectious syndromes like ME/CFS.
- Identify barriers to health care access for patients with cognitive communication deficits.
- Mitigate these barriers by implementing cognitive communication strategies and other supports to improve patient visits.

Cognitive Impairment Profile

General Profile

- Most reported symptoms are difficulty with **attention/concentration**, **short term memory**, and **word finding**
- Cognitive exertion contributes to post-exertional malaise (PEM)
- Symptoms fluctuate day to day and over time
- Compounding factors
  - Level of complexity of task or information
  - Awareness of cognitive limits
  - Sleep
  - Emotional regulation
  - Comorbid conditions
  - Overall exertion (physical, emotional, social, sensory, cognitive)

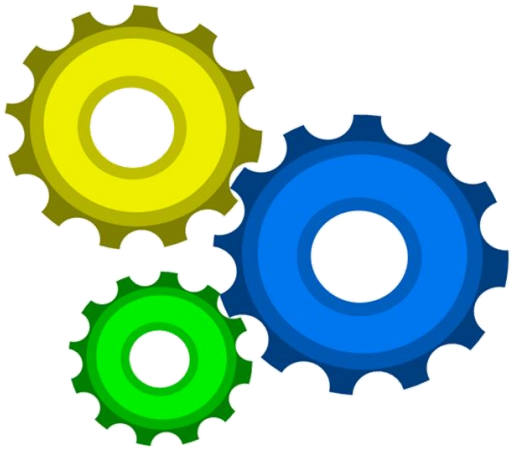
Functional Impact

- Limitations affect all life functions
- Symptoms may not be immediately obvious to others and is difficult to explain
- Identity shift
  - Cognition and communication are core features of identity
  - Changes impact relationships
  - Typically affects confidence or feelings of competence

Functional Impact Cont.

- High risk for social isolation and depression
- Changes often have high emotional impact
- Can result in anxiety loop with negative self-judgements
- Self-advocacy in communication
  - Inherently requires social discomfort and vulnerability
  - May not be intuitive

Cognitive Processing

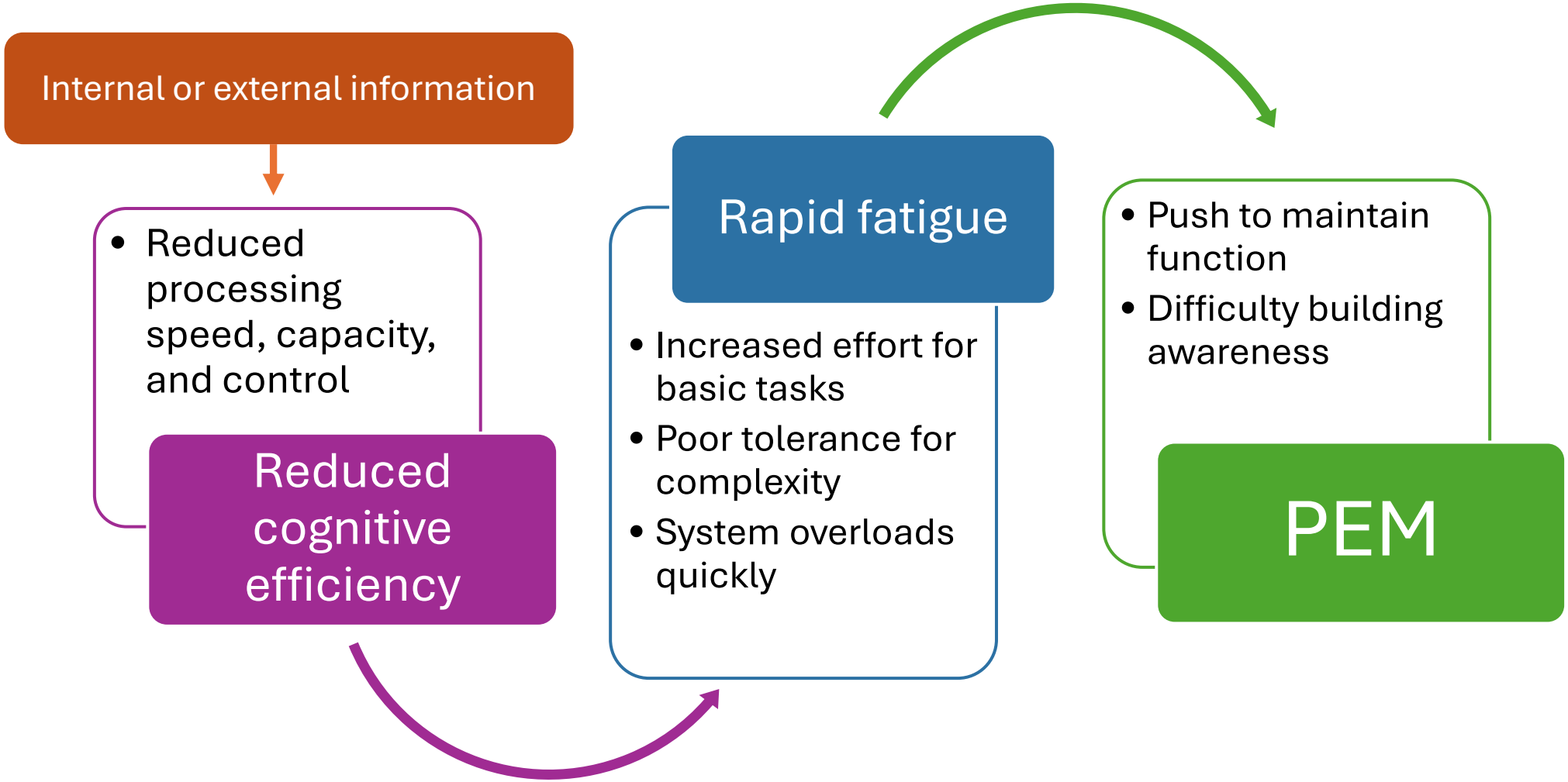


1. ALL information must be processed
2. Processing supports all other cognitive functions
3. Processing requires attentional control

Speed: How quickly the system processes information

Capacity: How much information can be processed

Control: Which information to attend to and which to ignore


Internal or external information
• Reduced processing speed, capacity, and control
Reduced cognitive efficiency
Rapid fatigue
• Increased effort for basic tasks
• Poor tolerance for complexity
• System overloads quickly
• Push to maintain function
• Difficulty building awareness
PEM

Case Example: Hailey

- Background Information
  - 32 year old female
  - History of asthma, migraines, and GERD
  - COVID infection in February 2023 and March 2024
- Symptoms
  - Frequent PEM episodes of increasing length and severity
  - Lightheadedness, nausea, and tachycardia daily
  - PEM episodes include severe migraines, brain fog, weakness, muscle and joint pain, neuropathy, vomiting, and fatigue

Case Example: Hailey, Cont.

- Level of function
  - Worsening symptoms last six months
  - On leave of absence from graduate program
  - Largely housebound
  - Limited in completing basic household tasks
  - Difficulty completing most cognitive, communication, and leisure tasks/activities
- Support system
  - Limited family support
  - Lives with roommate
  - More distant from friends since illness
  - Has support from advisor in her academic program

Case Example: Hailey, Cognitive Symptoms

- Slowed processing
- Attention
- Cognitive fatigue
- Memory
- Managing complex tasks
- Expressive and receptive communication
- Reading
- Written expression

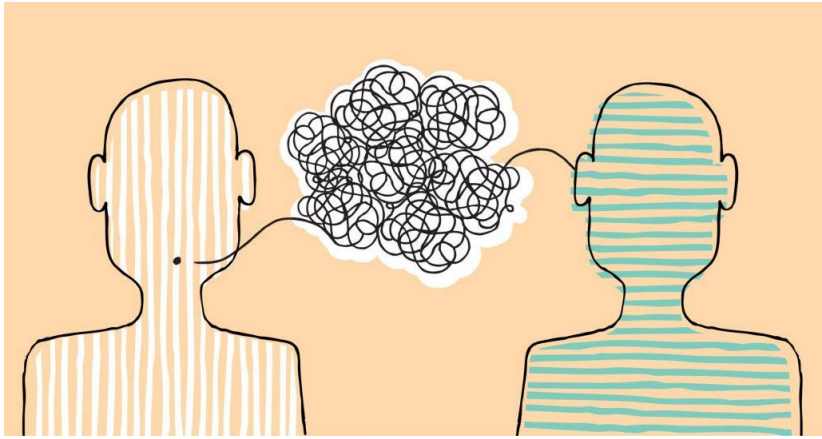
Communication Symptoms and Supports

Encouraging Self-Advocacy

- Reinforce value of pacing during appointments
- Give specific examples of ways to advocate
- Ask how they would like you to handle communication difficulty
- Outline right to accessibility in communication
- Reframe communication as partnership
  - Share what might help you both be successful
  - Model self-advocacy
  - Reinforce shared responsibility

Communication Complexity

- Cognitive deficits
- Time pressure
- Power dynamics
- Topic familiarity
- Topic complexity
- Emotional valence
- Managing technology
- Length of conversation
- Internal factors
- External factors



Examples of Supports for Expression

- Encourage patient to prepare
  - Templates, questionnaires, topics, apps, pictures
- Narrow vs wide field of options
  - Breaking symptom impact into contexts (work, home, driving)
  - Making comparisons (“more like x, or more like y?”)
  - Providing possible descriptive words (stabbing, aching, burning)
- Redirecting
  - “I’d like to finish talking about ___, then we can come back to this topic.”
  - “I’m going to steer us back on course.”

Supporting Comprehension

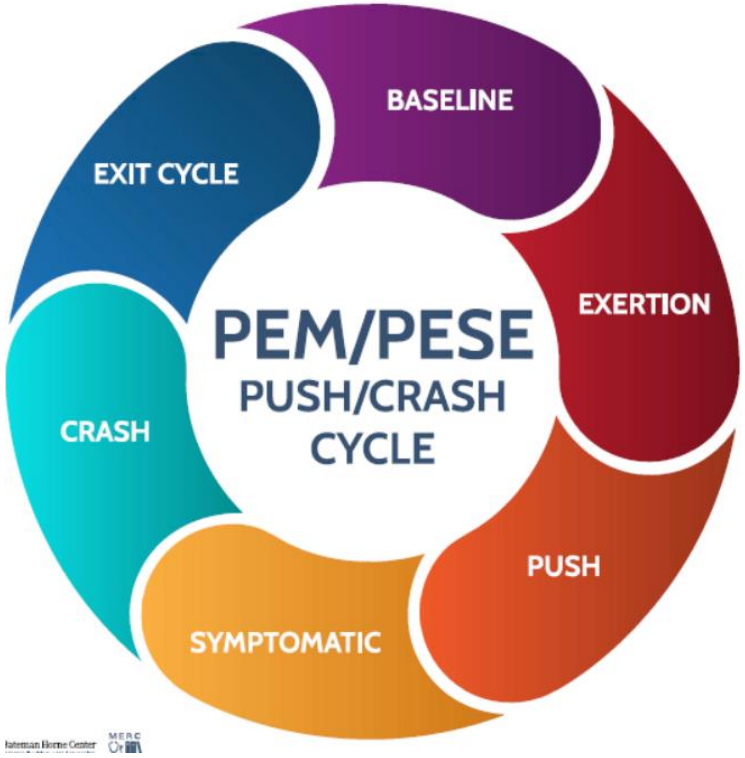
- Support auditory processing
  - Eliminate other distractions
  - Use more visual information
  - Use a “clear speech” strategy
  - Chunk or segment information

Examples of Comprehension Supports

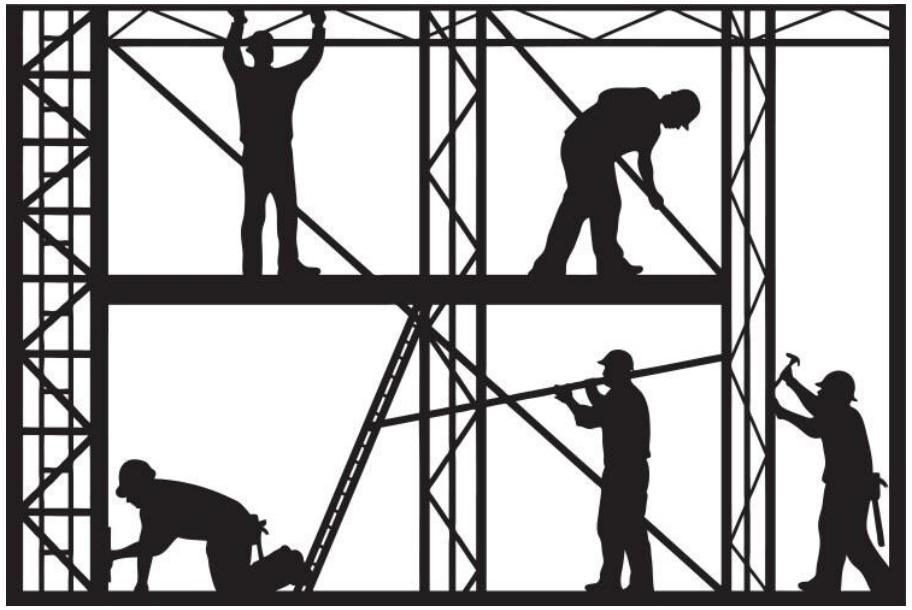
- Scripting, e.g.
  - PEM
  - Why exercise isn't indicated
  - Autonomic nervous system
- Sign posting
  - "First, let's talk about __"
  - "I'm going to explain this process, then we'll talk about options."
  - "I want to go back to when you said ___."
- Repetition
- Check for comprehension
  - "What stood out to you today in our discussion?"
  - "Does that make sense before we move on?"

Make it more visual!

- Consider lip reading, gestures, facial expression
- Captions/transcripts
- Pictures
- Visual analogies
- Demonstration
- Marking important information on handouts
- Checklists
- Templates



Cognitive Supports



Pacing Cognitive Activity

- Consider assigning some tasks outside of appointment, e.g., forms
- Telehealth vs in-office
- Give patient a way to prepare
  - Templates, symptom lists, checklist for items to bring, etc.
- Provide structure (next slide)
- Breaks
  - Monitor patient cognitive symptoms (pausing, reduced engagement, e.g.)
  - Offer or create breaks frequently
  - Encourage patient to request breaks as needed

Creating Structure

- Outline appointment tasks at the beginning of the visit
- Help patient manage time
  - Let them know how long appointment will last
  - Account for breaks
  - Give heads-up when approaching end of appointment
- Use visual organization when possible
- Guide patient in identifying areas of priority

End of Session Wrap-up

Summarize
- Today we talked about what can affect memory function, strategies for medication, keeping track of objects, and managing calendar/to do list
- We also reviewed pacing strategies from last week

Patient TO DOs
- Call to schedule neurology appointment
- Review hand outs (check inbox)
- Implement at least 2 memory strategies from today
- Find example of difficult reading material

Clinician TO DOs
- Send hand outs from today
- Accommodations support letter ready by Wednesday
- Refer for OT

Next session
- What worked and what didn't with strategies tried
- Topic: Reading difficulty and strategies

Take a break after therapy

Reducing Cognitive Load

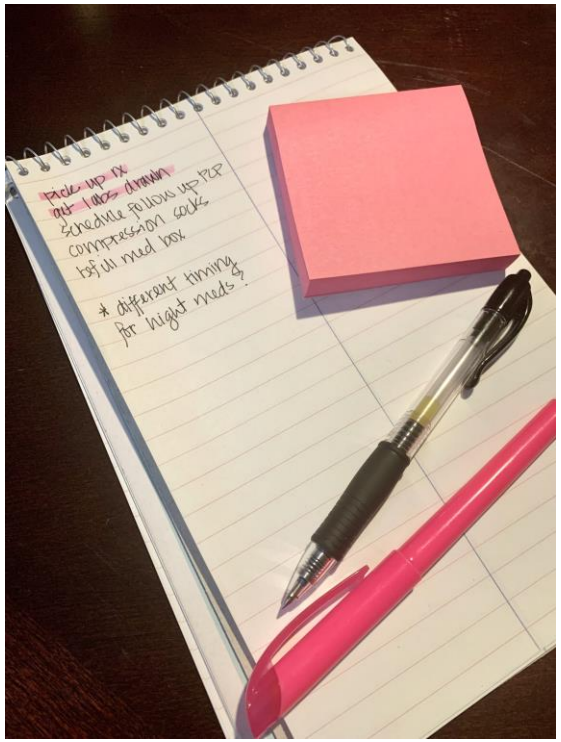
- Create a supportive environment
  - Reduce sensory stimulation
  - Reduce distractions
  - Use accessible signage
- Simplify information
- Slow pace of information
  - Within appointment
  - As a consideration for spacing appointments
- Limit multi-tasking (provider and patient)

Supporting Cognitive Efficiency

- Limit searching or scanning
- Repeat important information
- Summarize or recap at end of appointment
- Use multi modality approach
- Go over materials together and identify critical information
- Offload note taking to others/tech

In-Office tools

- Time management
  - Visual timer
  - Wall calendar
  - Session checklist
- Easy access memory tools
  - Paper and pens/pencils
  - Paper education materials
- Organizational tools
  - Highlighters
  - White board/markers



Appointment To Do

- ☐ Vitals
- ☐ Review medications
- ☐ Symptom update
- ☐ Questions
- ☐ Make a plan
- ☐ Summarize
- ☐ Schedule follow up

Supporting Carryover

- Encourage strategy use during appointments
- Provide accessible educational materials
- Suggest charts, trackers, etc. to build symptom awareness
- Suggest keeping everything in one place and organized
- Encourage routines to cement new habits
- Encourage “top down” thinking

Handouts, Education, and Questionnaires

- Familiarize with best practices for accessibility
- Keep information “short and sweet”
- Limit quantity of information
- Provide information in multiple formats where possible
  - Ask patient which formats work best for them

Handouts, Education, and Questionnaires

- Documents, tables, forms, and websites
  - Reduce visual crowding, increase contrast, wider line spacing
  - Reduce search time in visual field (use headers, bullets, etc.)
  - Ease effort of navigation and selection in questionnaire design
  - Consider computer adapted questionnaires
- Audio/Video
  - Provide videos with captions and transcripts
  - Provide audio with transcript
  - Ability to change playback speed is helpful

		All the time	Most of the time	A good bit of time	Some of the time	A little of the time	Hardly any of the time	None of the time
1	Have you had chest or stomach pains as a result of your cough?	1	2	3	4	5	6	7
2	Have you been bothered by phlegm production when you cough?	1	2	3	4	5	6	7
3	Have you been tired because of your cough?	1	2	3	4	5	6	7
4	Have you felt in control of your cough?	7	6	5	4	3	2	1

1=all the time 2=most of the time 3=a good bit of the time 4=some of the time 5=a little bit of the time 6=hardly any of the time 7=none of the time	
1) In the last 2 weeks, have you had chest or stomach pains as a result of your cough?	
2) In the last 2 weeks, have you been bothered by sputum (phlegm) production when you cough?	
3) In the last 2 weeks, have you been tired because of your cough?	
4) How often during the last 2 weeks have you felt embarrassed by your coughing?	

1. In the last 2 weeks, have you had chest or stomach pains as a result of your cough?
   1 All of the time 2 Most of the time 3 A good bit of the time 4 Some of the time 5 A little of the time 6 Hardly any of the time 7 None of the time
2. In the last 2 weeks, have you been bothered by sputum (phlegm) production when you cough?
   1 Every time 2 Most times 3 Several times 4 Some times 5 Occasionally 6 Rarely 7 Never
3. In the last 2 weeks, have you been tired because of your cough?
   1 All of the time 2 Most of the time 3 A good bit of the time 4 Some of the time 5 A little of the time 6 Hardly any of the time 7 None of the time
4. In the last 2 weeks, have you felt in control of your cough?
   1 None of the time 2 Hardly any of the time 3 A little of the time 4 Some of the time 5 A good bit of the time 6 Most of the time 7 All of the time

Leicester Cough Questionnaire

Name: _____ Date: _____

1. In the past 2 weeks, have you had chest or stomach pains as a result of your cough?

1	2	3	4	5	6	7
All the time	Most of the time	A good bit of the time	Some of the time	A little bit of the time	Hardly any of the time	None of the Time

2. In the last 2 weeks, have you been bothered by sputum (phlegm) production when you cough?

1	2	3	4	5	6	7
Every time	Most times	Several times	Sometimes	Occasionally	Rarely	Never

3. In the last 2 weeks, have you been tired because of your cough?

1	2	3	4	5	6	7
All the time	Most of the time	A good bit of the time	Some of the time	A little bit of the time	Hardly any of the time	None of the Time

We are interested in *your present condition*, that is, how you have felt during *the past month*.
When you are comparing your condition with "than before", compare it with how it was before the injury or getting ill.
Each question below is followed by four statements that describe: No (0), Slight (1), Fairly serious (2) and Serious (3) problems. We would like you to place a circle around the figure before the statement that best describes your problems. Should you find that your problem falls between two statements, there are also figures to indicate this.

For each question, use the following scale to rate how you have felt *in the past month* compared to how you felt before your illness:

0 = No problem

1 = Slight problem

2 = Fairly serious problem

3 = Serious problem

There is a statement next to each number to guide you. If your answer is between two statements, use the .5 option.

Questions?