



UNDERSTANDING BRAIN INJURY: THE IMPACT ON COMMUNITY ENGAGEMENT

AGENDA:

- Introductions
- Mental Health Services
- Community Outings
- Cognitive communication impairments
- Communication Technologies
- Case Studies
- Questions and open discussion
- Resources





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M.S.



- Inpatient Rehabilitation Counselor at UPMC Mercy
- Graduate course work: major depression disorder and spinal cord injury.
- Fun fact: I'm a cheerleading coach at Pitt (H2P), North Catholic High School and teach tumbling lessons!



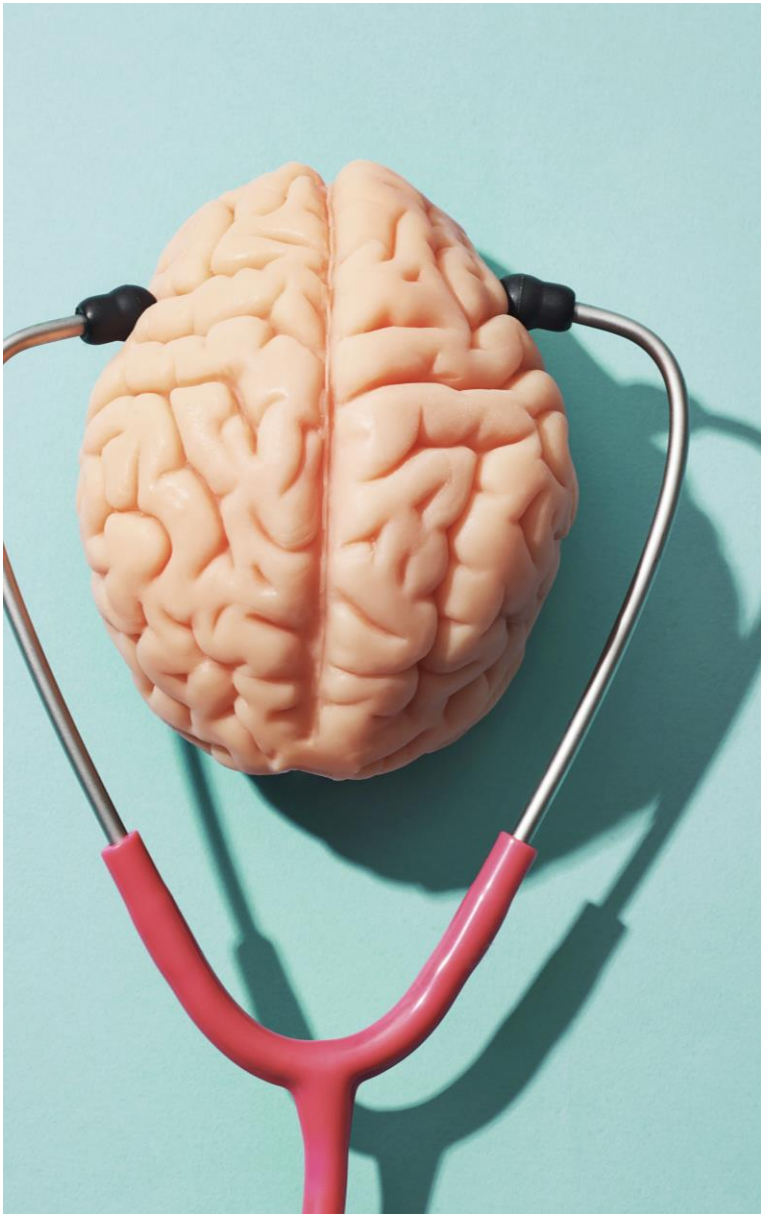
EMMA DALY, M.S., CCC-SLP

- I graduated from the University of Vermont with my bachelor's degree and the University of Pittsburgh for my master's degree
- I work as a speech language pathologist as part of the Rehabilitation Institute at UPMC Mercy, working primarily on the TBI IPR unit
- Fun fact: I grew up in Massachusetts, so my perfect summer vacation is on the beach in MA with a good book!



TBI AND REINTEGRATION INTO COMMUNITY

- Why is this difficult?
 - Medical Complications
 - Environmental & Social Factors



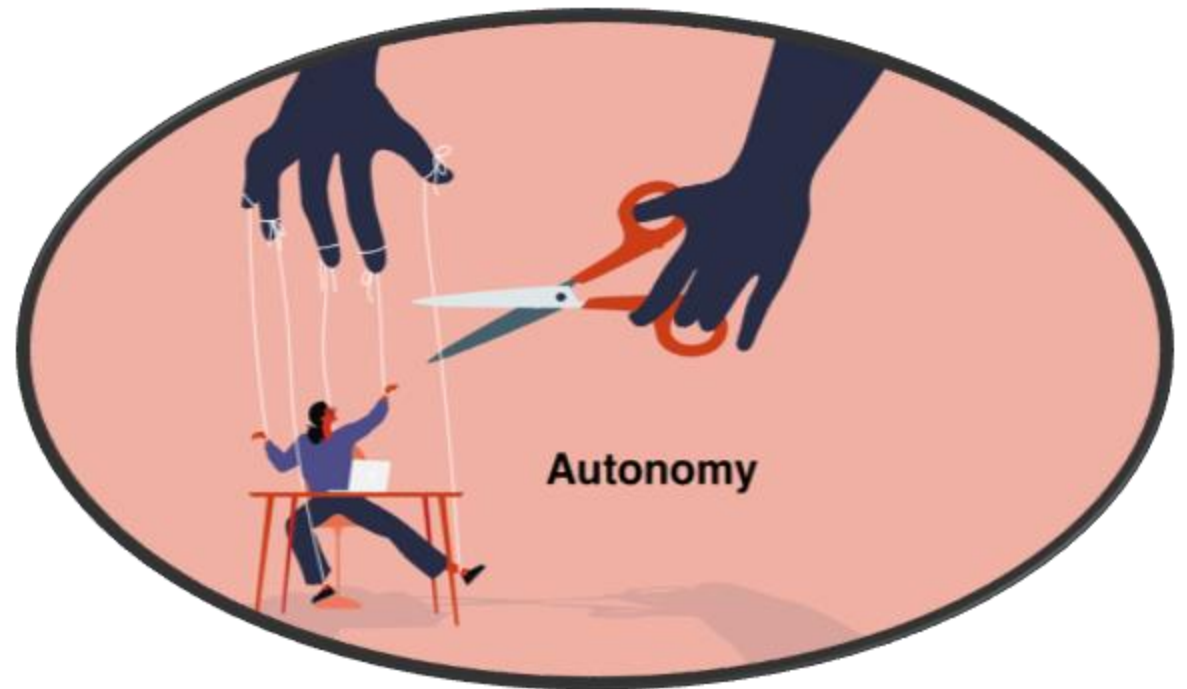
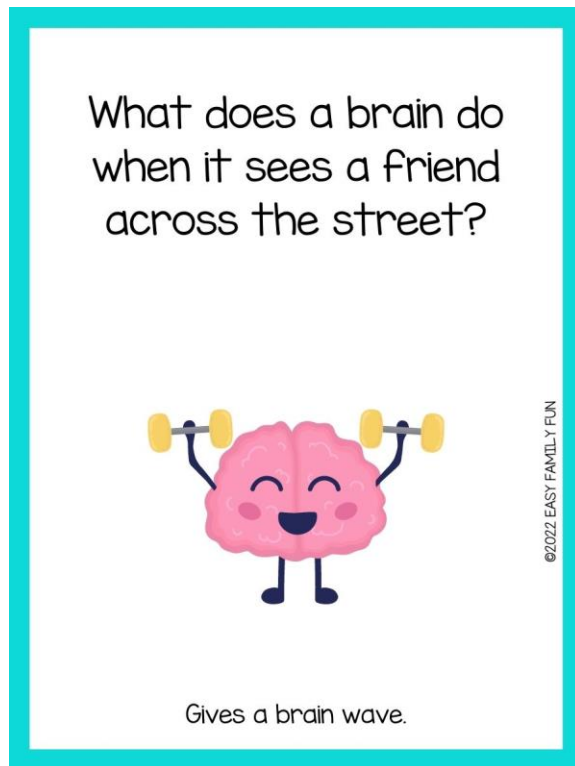
MENTAL HEALTH

- Mood can be a HUGE contributing factor to integrating back into social settings
- Why? May be due to injury to areas of the brain that control emotions and chemical balances
- OR – may be due to compromised functions, physical deficits, or loss of independence



WHY IS COMMUNITY IMPORTANT TO THIS POPULATION?

SENSE OF BELONGING AND SOCIAL
INTEGRATION = HIGHER SELF ESTEEM AND
QUALITY OF LIFE!!



GOING BACK TO COMMUNITY!

- Community outings:
 - Penguins Game
 - Harlem Globetrotters
 - Upcoming: Spaghetti Dinner at Duquesne University



WHAT WE SEE: COGNITIVE COMMUNICATION DISORDERS

What is a cognitive communication disorder?

- Multiple domains related to the individual and their abilities to communicate and self-regulate
- This includes...
 - Cognition
 - Communication
 - Emotional
 - Physical
- These domains are interrelated and related to patient competence

What can we do?

- Interdisciplinary collaboration
- Numerous interventions
- Target social simulations and actual situations—keeping it functional!
- We first need to make sure patients can communicate their wants and needs...
- ...then, we can get back to community!



AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (AAC)

- Used for assessment and treatment of severe traumatic brain injury
- Versatile and dynamic to meet individuals at all stages of recovery/ communication needs
- Reason for use: patient is unable to use natural speech to effectively communicate wants/ needs
 - Cognition or language
 - Physical or respiratory
 - Speech or voice disorders



USING AAC IN INPATIENT REHAB (IPR) AND PLANNING FOR DISCHARGE

- Initial evaluation – IPR SLP or Center for Assistive Technology (CAT) SLP
- Dynamic assessment
- Interdisciplinary approach
- Goal: functional communication
- Staff and family training – all communication partners
- Encourage use throughout the day with all communication partners
- Follow-up upon discharge with ongoing SLP services (and CAT too!)



CASE STUDY #1 – EYE GAZE SELECTION

E-TRAN Board

Low Tech AAC



Accent 1400

High Tech AAC – speech generating device



CASE STUDY #2 – DIRECT SELECTION

Lingraphica Touch Talk

High Tech AAC – speech generating device



Communication Boards

Low Tech AAC



CASE STUDY #3

"No tech" AAC



Low tech AAC



AAC APPS

These apps could be utilized in place of a dedicated speech generating device if a speech generating device cannot be funded in a skilled nursing facility.

- Proloquo2Go (symbol & text based) \$249.99 lifetime purchase
- CoughDrop (symbol & text based) \$295 lifetime purchase
- TD Snap (symbol & text based) \$9.99/mo TD Snap communication platform
- TouchChat HD (symbol and text based) \$149.99 lifetime purchase





Name: _____

Address: _____

Telephone: _____

Emergency Contact: _____

Emergency Contact Telephone: _____

I HAVE A BRAIN INJURY.

Symptoms caused by my injury may include:

- Poor coordination or unsteady walking
- Impaired talking, seeing, hearing, understanding, or remembering
- Confusion, disorientation, or distractibility
- Slow response to questions
- Agitation, irritability, impatience, or anxiety
- Anger, aggression, or explosive behavior

Please help me through this crisis by being patient and by calling the emergency contact number on the other side of this card.

For more information on brain injury, please visit BrainLine at www.BrainLine.org.

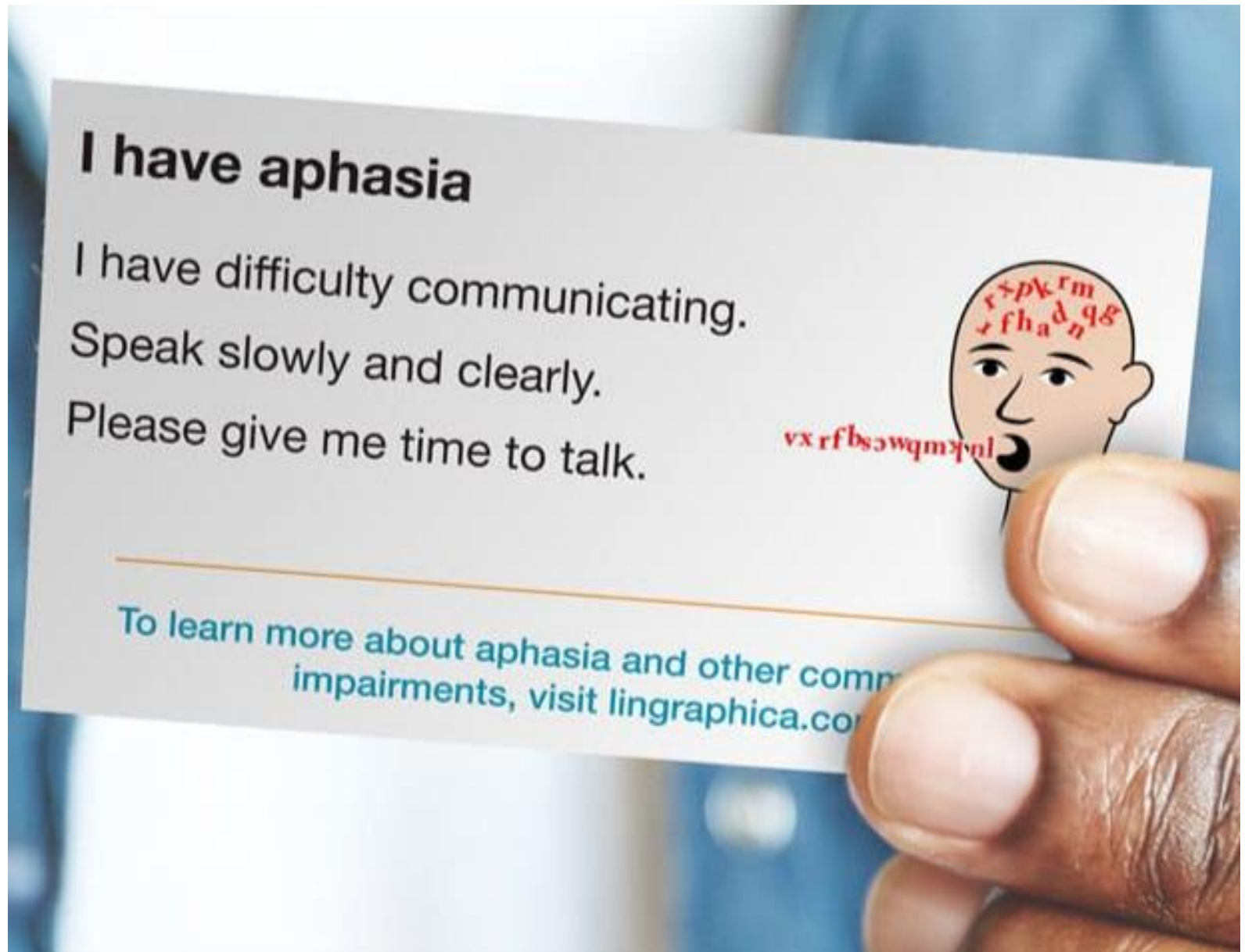
PRINTABLE TBI ID CARD

[HTTPS://WWW.BRAINLINE.ORG/ARTICLE/BRAIN-INJURY-ID-CARD](https://www.brainline.org/article/brain-injury-id-card)

PRINTABLE APHASIA ID CARD

■ Resource from Lingraphica

<https://lingraphica.com/printable-id-card/>





QUESTIONS & OPEN DISCUSSION



CENTER FOR ASSISTIVE TECHNOLOGY (CAT)

[HTTPS://WWW.UPMC.COM/SERVICES/REHAB/CRS/SERVICES/CAT](https://www.upmc.com/services/rehab/crs/services/cat)

The CAT provides support for various types of assistive technology.

Contact information:

- Call **412-647-1310** or email catfrontdesk@upmc.edu for more information on CAT and our services.
- Telecommunications Device for the Deaf (TDD): **412-647-1325.**
- **Center for Assistive Technology**
Forbes Tower, Suite 3010
3600 Forbes Ave. and Meyran Ave.
Pittsburgh, PA 15213

RESOURCES

- MacDonald, 2017 - <https://www.tandfonline.com/doi/abs/10.1080/02699052.2017.1379613>
- Lé, Coelho, & Fiszdon, 2022 - <https://pubmed.ncbi.nlm.nih.gov/35226552/>
- Doyle & Fager, 2011 - <https://leader.pubs.asha.org/doi/10.1044/leader.FTR8.16022011.np>
- TBI ID Card - <https://www.brainline.org/article/brain-injury-id-card>
- Aphasia ID Card - <https://lingraphica.com/printable-id-card/>
- Greenwald, 2024 - [https://www.pmr.theclinics.com/article/S1047-9651\(24\)00023-8/abstract](https://www.pmr.theclinics.com/article/S1047-9651(24)00023-8/abstract)

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A graphic illustration of two human profiles facing each other, with their heads filled with a dense collection of colorful icons representing various aspects of modern life and technology. The left profile is blue, and the right profile is orange. The icons include a car, house, news, camera, laptop, smartphone, heart, globe, and many others.

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