

Person-Centered Care for Parkinson's

Strategies, AAC Solutions, & Social Supports

Lingraphica[™]

1



Alexandria Russell,
M.S., CCC-SLP

Consumer Education
Specialist



Allie Reed,
M.S., CCC-SLP

Senior Online
Communities Manager

2

Financial Disclosure

Alex Russell and Allie Reed are employees of Lingraphica and thereby receive financial compensation from the Lingraphica company.

3

Content Disclosure

This course will primarily focus on Lingraphica products and services, including Lingraphica Speech Generating Devices, TalkPath Therapy and the Join In Parkinson's Community.

4

Learning Objectives

- Participants will be able to define the stages of Parkinson's disease and associated communication challenges
- Participants will be able to describe evidence-based communication interventions, including AAC, for individuals with Parkinson's disease
- Participants will be able to identify one person-centered therapeutic approach to support patients' communication needs and psychosocial well-being

5

Agenda

- Introduction
- Parkinson's Disease Communication Impairments
- AAC for Parkinson's Disease
- Supporting Psychosocial Well-Being
- Q&A

6



Parkinson's Disease Communication Impairments

7

What is Parkinson's?

- Parkinson's disease (PD) is a progressive neurological disorder, meaning symptoms develop and worsen over time. Symptoms can vary from person to person, but they generally fall into two categories: motor symptoms (affecting movement) and non-motor symptoms (affecting cognition, mood, and other body functions).

8

The Stages of Parkinson's

①

Mild Symptoms

Still able to participate in ADLs. Tremor on one side of the body. Physical changes. Beginning of masked facial expressions.

②

Moderate Symptoms

Progressing symptoms. Tremors on both sides of body. Rigidity. ADLs are becoming more.

③

Severe Symptoms

Loss of balance and falls. Worsening tremors and rigidity. Requires assistance with ADLs.

④

Advanced Stage

Symptoms are disabling. Patients may need to use a walker or wheelchair at this stage. Typically unable to live alone at this stage. Requires assistance with ADLs.

⑤

Late Stage

Extreme stiffness, rigidity, and immobility. Typically bed-bound at this stage. Cannot perform ADLs. Swallowing and cognitive difficulties may be present.

9

Communication Impairments in Parkinson's



- Vocal cord bowing
- Softening of voice, whispering
- Impaired auditory biofeedback
- Difficulty with speech initiation
- Stuttering
- Hypokinetic dysarthria
- Rapid, unintelligible speech
- Vocal tremor
- Reduced breath support
- Masked facial expressions

10

Swallowing Changes in Parkinson's



- **Oral Phase:**
 - Drooling
 - Difficulty with chewing and bolus manipulation
 - Oral residue
- **Pharyngeal Phase:**
 - Penetration/Aspiration
 - Pharyngeal residue
- **Esophageal Phase:**
 - Esophageal dysmotility/reflux

**Swallow presentation is very dependent on medication administration (i.e. off time vs. on time)*

11

Language & Cognitive Deficits in Parkinson's

- **Language:**
 - Auditory comprehension deficits
 - Difficulty with syntactical and grammatical formation
 - Generative naming deficits
 - Difficulty processing and producing action words
- **Cognition:**
 - Difficulty with executive functioning skills
 - Short term memory impairment
 - Attentional deficits

12

Communication Options

- Specialty Programs (LSVT Loud & SPEAK OUT!)
 - Therapy programs designed to improve the loudness and intelligibility of patients' speech.
- AAC
 - AAC devices allow people with Parkinson's disease to preserve the voice they have today through message banking.

13



AAC for Parkinson's Disease

14

The Importance of AAC in Progressive Conditions

- Parkinson's can gradually affect speech.
- AAC provides a way to maintain clear communication as speech changes over time.
- Early adoption helps users build comfort and confidence.
- Can supplement speech when words become difficult to produce.
- Reduces frustration in conversations.
- Provides independence in daily communication.

(Fried-Oken et al., 2015 & APDA, 2020)

15

Preserving Your Patient's Voice

- Techniques to Preserve & Strengthen The Voice
 - Daily vocal exercises (e.g., sustained vowel sounds, pitch variation).
 - Speaking with use of communication strategies (louder, slower, emphasizing clarity).
 - Practice phrases you use often to maintain familiarity.
- AAC as a Tool for Voice Preservation
 - Some AAC devices allow voice banking to preserve your unique voice for future use.
 - Amplification tools can help make your natural speech louder and clearer.
 - Text-to-speech apps can supplement speech when vocal fatigue sets in.
- Building a Customized Plan
 - Work with an SLP specializing in Parkinson's to tailor strategies.
 - Integrate AAC early to create a communication backup when needed.
 - Encourage care partners to practice strategies alongside you for better communication.

(Fried-Oken et al., 2015 & Schalling et al., 2017)

16



Lingraphica[®]

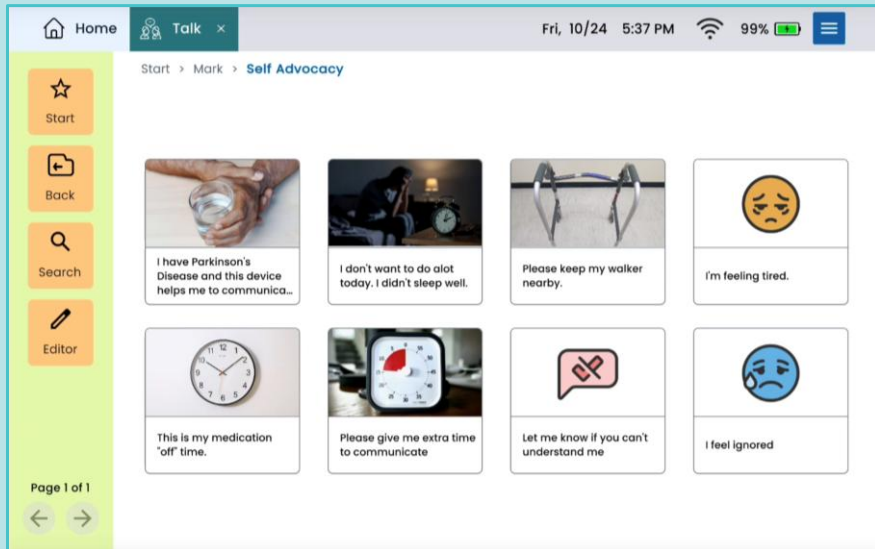
17



Device Customization Examples

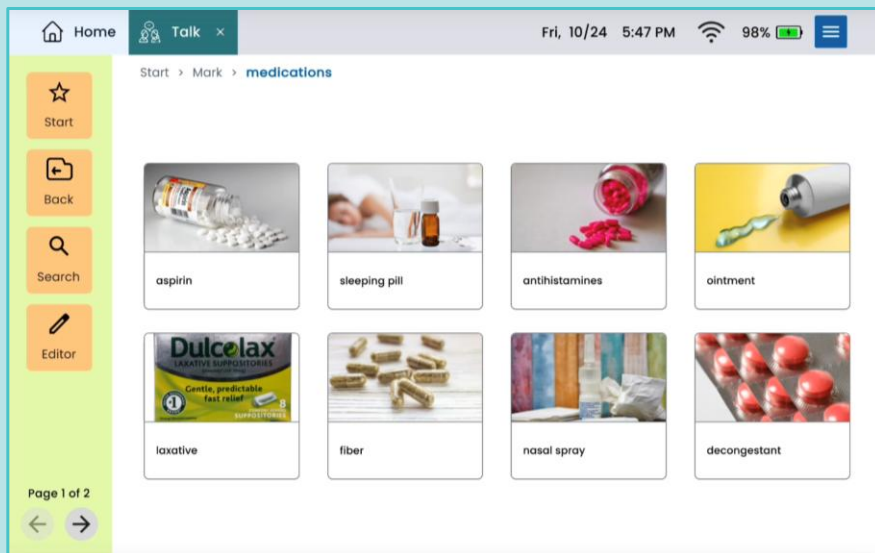
18

Advocacy



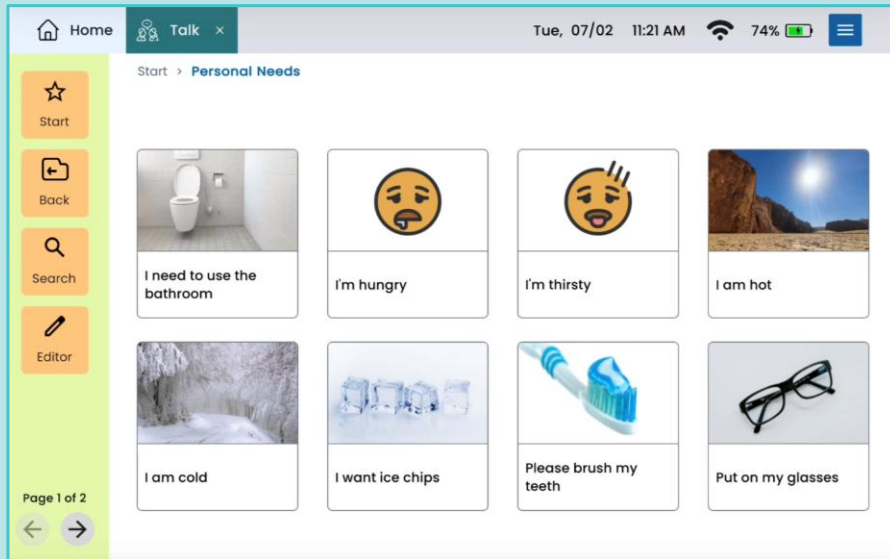
19

Medications



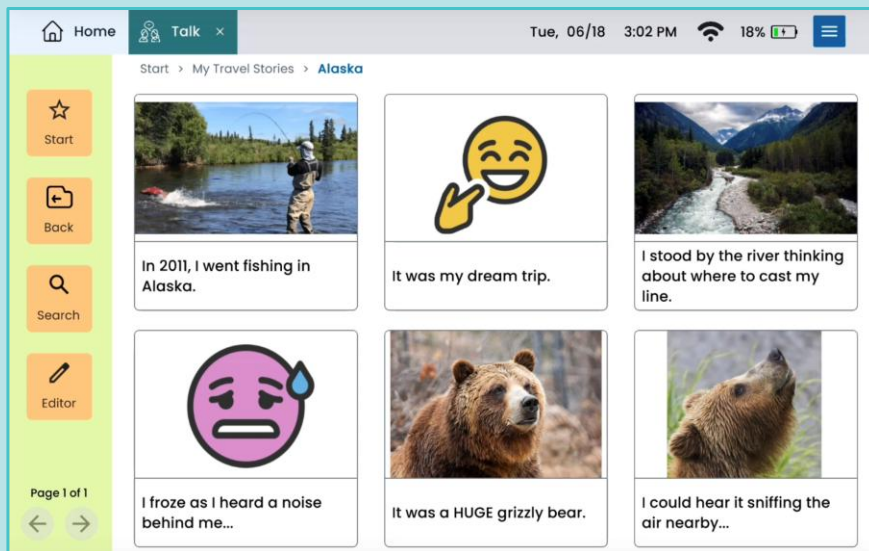
20

ADLs



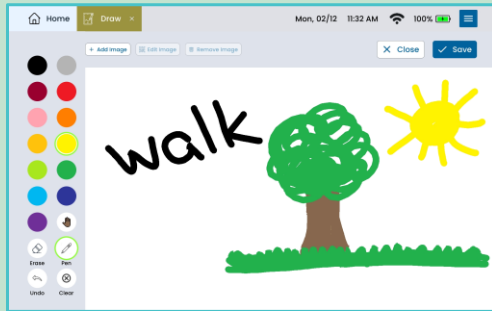
21

Storytelling



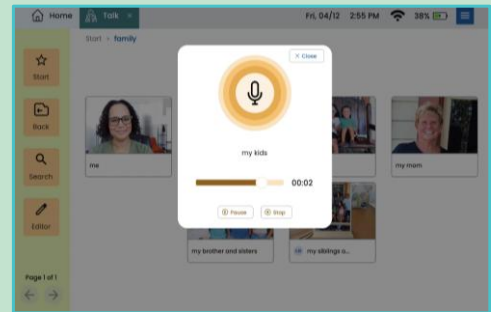
22

Therapy Features for Parkinson's



Draw

Use this whiteboard to practice writing and target micrographia.



Decibel Meter

Target vocal intensity by using the voice recorder.

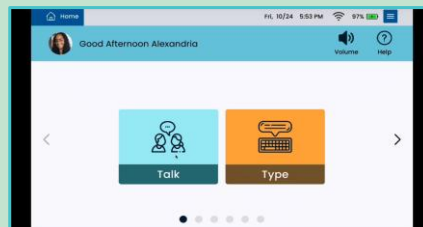
23

Accessories & Accessibility for Parkinson's



Weighted Stylus

Promotes accurate selection for those with tremors or other upper extremity weakness.



Tap Delay

A good option for arthritis or hand tremors. Features wide barrel grip and added weight.



Ignore Repeated Touches

Tablet-specific settings to ignore repeated taps.

24

Accessories & Accessibility



Rugged case with
built-in stand



Ball-grip stylus



T-grip stylus



EZ Eyes keyboard



Weighted stylus



Extended stylus



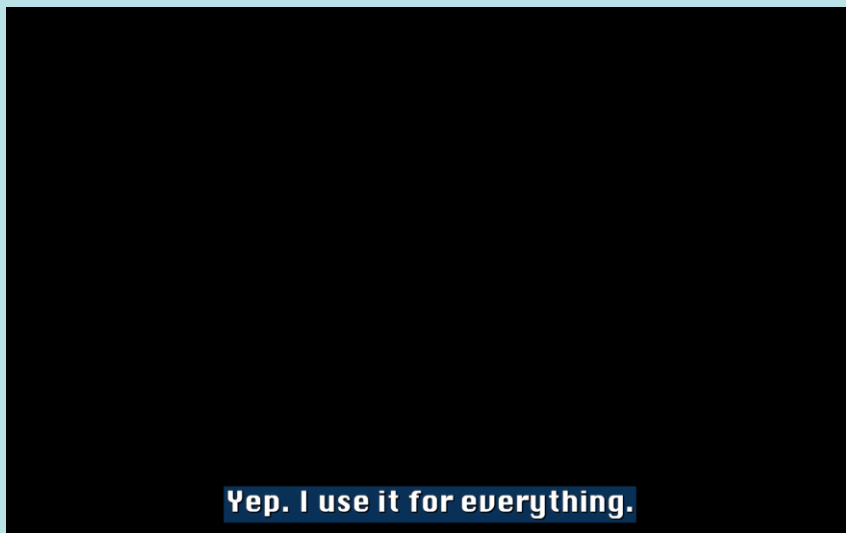
Flexible stylus



Flexible stylus
with strap

25

Success Story



26

Interprofessional Parkinson's Care

27

Why Interprofessional Care Matters in Parkinson's



- Parkinson's impacts multiple systems → requires person-centered approach
- AAC supports ADLs/IADLs by enabling communication and participation
- Collaboration improves:
 - Patient care & safety
 - Clinical performance
 - Clinician satisfaction & reduced burnout

28

Evidence for Collaboration & Expanding the Circle of Care

- ASHA guidelines support co-treatment across rehab disciplines
- SLP + OT partnership: integrating AAC into daily living tasks and therapy routines
- SLP + PT partnership: using AAC safely and effectively in home & community, integrating AAC into therapy routines
- Research highlights:
 - Better teamwork = more organized care (Deneckere et al., 2013)
 - Improved outcomes with interprofessional practice (Guck et al., 2019)
 - Team collaboration reduces burnout (LeNoble et al., 2020)

29

Expanding the Circle of Care

- Interprofessional care goes beyond rehab → includes mental health & caregiver support
- At least 40% of individuals with PD experience depression/anxiety
(*Parkinson's Foundation, 2019/2023*)
- Caregivers also at risk of loneliness and depression
(*McRae et al., 2009*)
- Social support groups + SLP counseling play a vital role in psychosocial well-being

30



Supporting Psychosocial Well-Being in Patients with Parkinson's Disease

31

Mood Changes

- Depression & anxiety are two of the most common non-motor symptoms in individuals with Parkinson's disease.
- At least 40% of individuals with Parkinson's disease will develop clinical depression or an anxiety disorder at some point during the disease progression.

(Parkinson's Foundation, 2019; 2023)

32

Social Impacts of Parkinson's

- The communication disorders often associated with Parkinson's disease, such as dysarthria and facial masking, often attribute to insecurity, stigmatization, and social isolation.
- Caregivers may also experience depression and loneliness due to care demands.

(Prenger et al., 2020; McRae et al., 2009)

33

Benefits of Support Groups

- Support groups provide social connectedness with others going through a similar experience. It has been found that peer support cannot be replaced by family, friends, or healthcare professionals.
- Online groups provide connection for those without access to local groups, those with physical disabilities, or transportation barriers.

(Prenger et al., 2020; McRae et al., 2009)

34

joinin^a parkinson's

Join In is a free program that provides virtual conversation and support groups for people with Parkinson's disease and their care partners multiple times per week!

All sessions are hosted by speech language pathologists and other Parkinson's experts. Session topics include general support groups, communication strategies, educational sessions, game night, and more!

35

joinin^a parkinson's

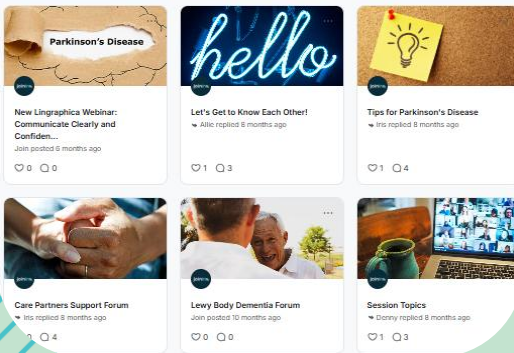
a Lingraphica community

All Tips & Advice Care Partners Lewy Body Dementia

Welcome to Join In Parkinson's Forums!

Join In Administrator
Member since September 11, 2018

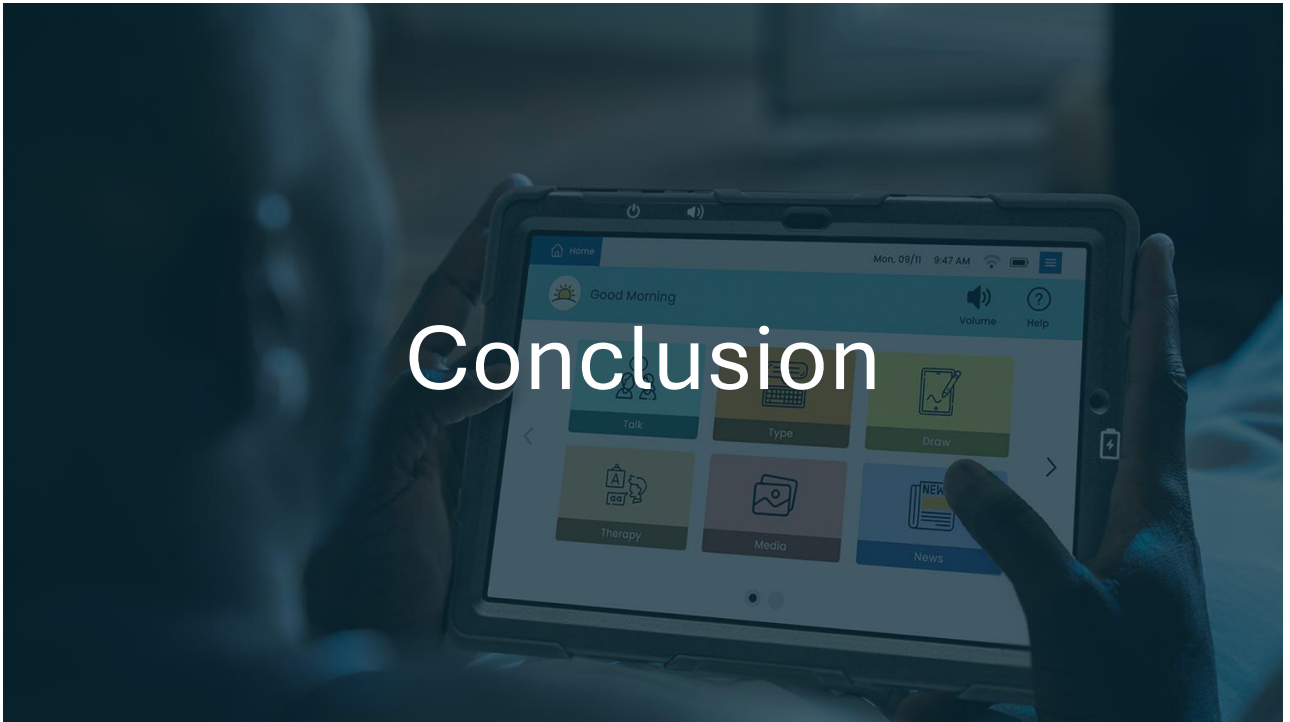
Forums are dedicated conversation spaces for you to post comments, share ideas, and connect with others on the Parkinson's journey. Click on any of the forums below to join the conversation!



Provides free, online forums where individuals with Parkinson's disease can engage in dedicated conversations, share experiences, exchange ideas, and connect with others on the PD journey.

Topics include tips for living with PD, care partner support, and more!

36



37

Conclusion

- AAC can help people with PD preserve and strengthen their voice.
- Lingraphica's Hub can be fully customized to support people with PD, including custom folders and cards, accessibility settings, and supportive accessories.
- Depression and anxiety are common in patients with PD, but in-person and virtual support groups can improve psychosocial well-being.

38

Resources



Download course handouts
<https://lingraphica.com/asha-2025/>

39

Thank you!

Lingraphica[®]

40



Questions & Answers

41

References

- American Parkinson's Disease Association. (2020). *Let's talk about augmentative and alternative communication and Parkinson's disease*. American Parkinson's Disease Association. <https://www.apdaparkinson.org/article/alternative-communication-and-parkinsons/>
- Colman, K. & Bastiaanse, R. (2011). *Diagnostics and rehabilitation of parkinson's disease*. InTech.
- Fried-Oken, M., Mooney, A., & Peters, B. (2015). Supporting communication for patients with neurodegenerative disease. *Neurorehabilitation*, 37(1), 69-87. <https://doi.org/10.3233/NRE-151241>
- Gerritzen, E. V., Lee, A. R., McDermott, O., Coulson, N., & Orrell, M. (2022). Online peer support or people with parkinson's disease: Narrative synthesis systematic review. *JMIR Aging*, 5(3), 1-16. <https://doi.org/10.2196/35425>
- McRae, C., Fazio, E., Hartsock, G., Kelley, L., Urbanski, S., & Russell, D. (2009). Predictors of loneliness in caregivers of persons with parkinson's disease. *Parkinsonism & Related Disorders*, 15(8), 554-557. <https://doi.org/10.1016/j.parkreldis.2009.08.002>
- Parkinson's Foundation. (2019). *Combatting Depression & Parkinson's Disease* [Fact sheet]. Parkinson's Foundation. <https://www.parkinson.org/sites/default/files/documents/combating-depression.pdf>
- Parkinson's Foundation (2023). *Anxiety and Parkinson's Disease* [Fact sheet]. Parkinson's Foundation. <https://www.parkinson.org/sites/default/files/documents/anxiety-parkinsons.pdf>
- Parkinson's Foundation. (n.d.). *Stages of parkinson's*. Parkinson's Foundation. <https://www.parkinson.org/understanding-parkinsons/what-is-parkinsons/stages>
- Prenger, M. M., Madray, R., Van Hedger, K., Anello, M., MacDonald, P. A. (2020). Social symptoms of parkinson's disease. *Parkinson's Disease*, 2020, <https://doi.org/10.1155/2020/8846544>
- Smith, K. M. & Caplan, D. N. (2018). Communication impairment in parkinson's disease: Impact of motor and cognitive symptoms on speech and language. *Brain and Language*, 185, 38-46. <https://doi.org/10.1016/j.bandl.2018.08.002>
- Sousa-Fraguas, M. C., Rodriguez-Fuentes, G., & Conejo, N. M. (2022). Frailty and cognitive impairment in parkinson's disease: A systematic review. *Neurological Sciences*, 2022(43) 6693-6706. <https://doi.org/10.1007/s10072-022-06347-7>

42