



# Navigating Communication Challenges in Parkinson's:

A Guide for Individuals  
and Caregivers

**Lingraphica** 





# Section 1:

## Understanding Parkinson's Disease



# What is Parkinson's Disease?

## Overview of Parkinson's Disease

Parkinson's Disease occurs when nerve cells in the brain, particularly those in an area called the substantia nigra, become damaged or die. These cells produce dopamine, a chemical that helps control movement and coordination. As dopamine levels decrease, individuals experience **motor symptoms** such as tremors, stiffness, and slowed movements. **Non-motor symptoms**, including cognitive and speech difficulties, can also develop.

## Causes and risk factors

It's important to note that not everyone with these risk factors will develop Parkinson's disease. If you are concerned about yours or a family member's risk of developing Parkinson's disease, it's recommended to consult with your primary doctor or neurologist.

### CAUSES

While the cause of Parkinson's disease remains largely unknown, researchers believe genetic and environmental factors play a role. Potential causes:

- **Loss of Dopamine-Producing Cells:** The gradual loss of nerve cells in the substantia nigra area of the brain leads to reduced dopamine levels. Dopamine is a chemical that impacts movement and coordination.
- **Protein Clumps (Lewy Bodies):** Abnormal growth of proteins, called Lewy bodies, have been found in the brains of people with Parkinson's. These Lewy bodies disrupt brain function and may contribute to the loss of dopamine.
- **Genetic Factors:** While most cases are not inherited, some genetic mutations are linked to an increased risk of Parkinson's. Other factors, such as age, environment, and lifestyle, may also play a role.
- **Environmental Factors:** Exposure to certain pesticides, heavy metals, and toxins has been associated with a higher risk of Parkinson's, although no direct cause-and-effect relationship has been proven.

### RISK FACTORS

- **Age:** Most people develop Parkinson's after the age of 60, though early-onset cases can occur.
- **Gender:** Men are more likely to develop Parkinson's than women.
- **Family History:** Having a close relative with Parkinson's slightly increases the risk.
- **Head Injuries:** Traumatic brain injuries may increase susceptibility to Parkinson's.

## Parkinson's at a glance



A neurodegenerative disorder affecting movement, speech, and cognition.



Progressive in nature but can be manageable with the right tools and support.



Affects the dopamine-producing neurons responsible for motor movement, cognition, executive functions, and emotions



The cause remains largely unknown. Scientists believe a combination of genetic and environmental factors are the cause.

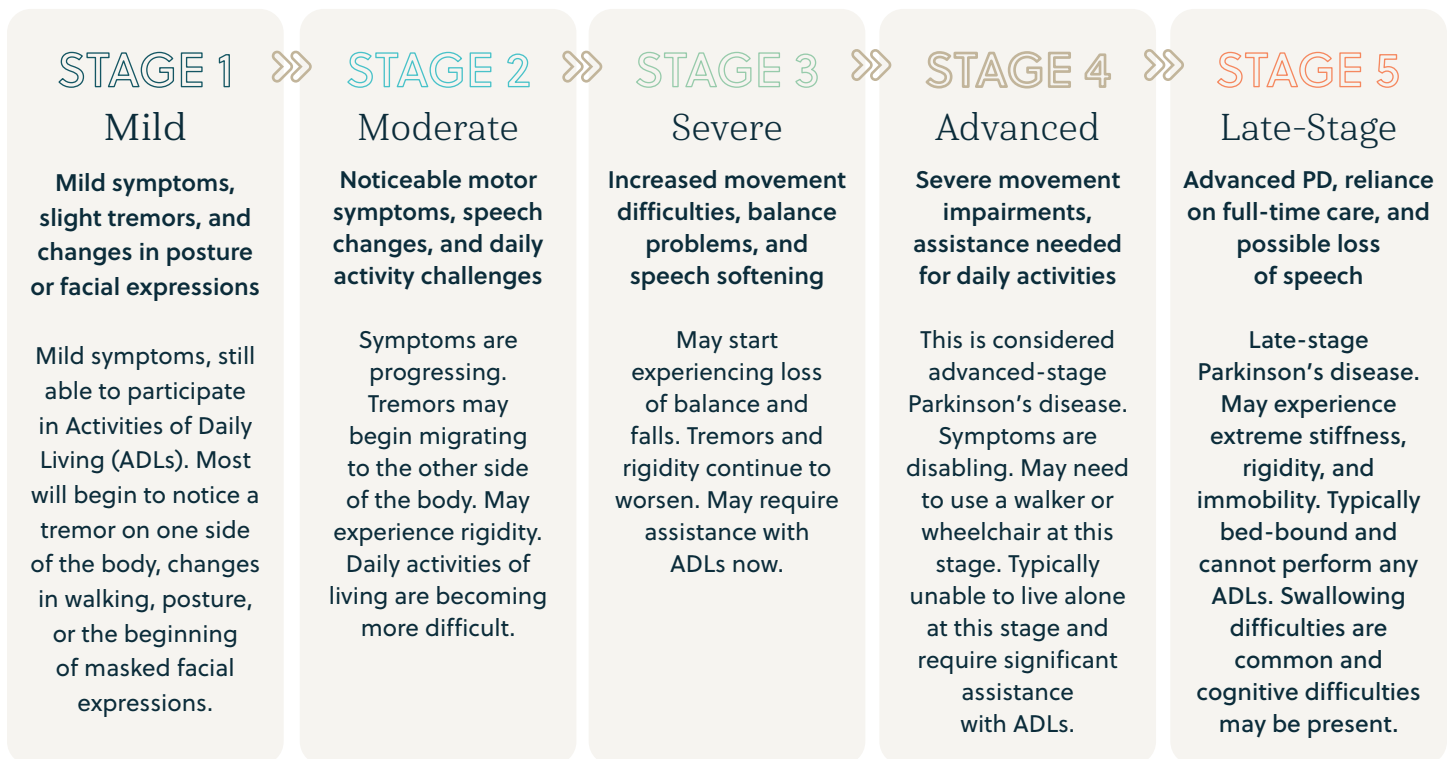


## Who is affected?

- Parkinson's disease affects approximately **11 million people worldwide**, with about **90,000 new cases diagnosed each year in the U.S. alone**.<sup>1</sup> While the disease is more common in older adults, there is a small percentage of people diagnosed before the age of 50, known as young-onset Parkinson's.
- **People from all regions, backgrounds, and ethnicities** can develop Parkinson's, though some populations may have slightly higher or lower risks.
- **Caregivers and families** of individuals with Parkinson's are also affected, as they must adapt to the changing needs of their loved ones.

<sup>1</sup> Luo, Y., Qiao, L., Li, M., Wen, X., Zhang, W., & Li, X. (2025). Global, regional, national epidemiology and trends of Parkinson's disease from 1990 to 2021: Findings from the Global Burden of Disease Study 2021. *Frontiers in Aging Neuroscience*, 16. <https://doi.org/10.3389/fnagi.2024.1498756>

## Stages of Parkinson's Disease





# Symptoms of Parkinson's Disease

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).

## Motor Symptoms

The most well-known signs of Parkinson's and often the first visible indicators of the disease.

1. Bradykinesia (slowness of movement)
2. Tremor
3. Rigidity
4. Postural instability (trouble with balance and falls)
5. Decreased arm swing when walking
6. Difficulty turning over in bed and difficulty getting out of bed, a deep chair, or a car seat
7. **Speech Issues:**
  - a. **Dysarthria** (slurring of speech)
  - b. **Hypophonia** (soft, sometimes breathy and hoarse, voice)
8. Swallowing issues
9. Dyskinesia: involuntary, erratic writhing movements of the face, arms, legs or trunk
10. Dystonia: sustained or repetitive muscle cramping, twisting or tightening
11. **Masked face/flat affect** and decreased blink rate
12. Freezing: a sensation of being stuck in place, especially when beginning a step, turning or navigating through doorways or other narrow passages
13. **Micrographia:** small, crowded handwriting due to bradykinesia
14. Shuffling gait
15. Stooped posture

## Non-Motor Symptoms

Non-motor symptoms often begin before motor symptoms become obvious and can significantly impact daily life.

1. Loss of smell
2. Constipation and digestive issues
3. Blood pressure changes
4. Excessive sweating
5. Depression
6. Anxiety
7. Apathy or loss of motivation
8. Breathing & respiratory problems
9. Fatigue
10. Pain
11. Insomnia or fragmented sleep
12. Sleep disorders
13. Vivid dreams or nightmares
14. **Cognitive changes**
15. **Trouble finding the right words in conversation**



Items in **bold** in both lists above are **communication-specific** symptoms.





## Section 2:

# Communication Challenges in Parkinson's Disease



# How Parkinson's Affects Communication

Parkinson's disease (PD) is primarily known for its effects on movement, but it also significantly impacts communication. Changes in speech, voice, and cognitive function can make it difficult for individuals with Parkinson's to express themselves clearly — leading to frustration, social withdrawal, and a reduced quality of life. These communication challenges can begin early in the disease and typically worsen as Parkinson's progresses. However, speech therapy, assistive technology, and communication strategies can help individuals maintain their ability to communicate effectively for as long as possible.

1

## Soft or Weak Voice (Hypophonia)

- Many individuals with Parkinson's experience a decrease in vocal volume, making their speech sound soft or whispered, even if they feel they are speaking normally.
- Others may have trouble projecting their voice in quiet or noisy environments.

### HOW IT AFFECTS COMMUNICATION:

- Conversations become difficult because others struggle to hear.
- The individual may repeat themselves frequently, leading to frustration and fatigue.
- Phone conversations or speaking in group settings can become especially challenging.

2

## Monotone Speech, Flat Affect, and Reduced Expression

- Parkinson's can cause a loss of vocal inflection, making speech sound flat, robotic, or emotionless.
- Facial stiffness can also contribute to a lack of nonverbal communication, such as facial expressions or gestures.

### HOW IT AFFECTS COMMUNICATION:

- Listeners may misinterpret tone and emotion (e.g., assuming the person is uninterested or upset when they are not).
- Difficulty engaging in expressive conversations, especially in social or emotional discussions.

3

## Slurred or Mumbled Speech (Dysarthria)

- Parkinson's can impact the muscles in the lips, tongue, and jaw, making it harder to articulate words clearly.
- Speech may sound slurred, mumbled, or rushed, especially as the disease progresses.

### HOW IT AFFECTS COMMUNICATION:

- The individual may have to repeat themselves often for others to understand.
- Communication breakdowns can lead to frustration and withdrawal from conversations.

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## Speech Freezing and Difficulty Initiating Speech

- Some individuals with Parkinson's experience speech freezing, where they suddenly stop speaking mid-sentence or struggle to initiate speech.
- Words may come out in short bursts.

### HOW IT AFFECTS COMMUNICATION:

- Conversations may feel slow and effortful.
- The person may struggle to jump into a discussion or respond quickly in social situations.

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## Cognitive Difficulties

- Parkinson's can slow processing speed, making it harder to find words or follow fast-paced conversations.
- Some individuals experience word-finding difficulties, similar to aphasia.
- Memory and attention challenges can affect staying on topic or remembering details in a conversation.

### HOW IT AFFECTS COMMUNICATION:

- The person may lose their train of thought or struggle to keep up with conversations.
- Conversations may take longer and they may feel frustrated trying to recall words.

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## Sensory Changes

- Parkinson's can cause impaired auditory feedback causing a reduced self-awareness of vocal volume and speech pattern.

### HOW IT AFFECTS COMMUNICATION:

- Individuals may not realize they are speaking too softly, leading to underestimation of communication breakdowns.
- Difficulty processing how their voice sounds can affect their ability to self-monitor and adjust speech patterns.



# The Emotional and Social Impact of Communication Challenges

Living with Parkinson's Disease can have a profound effect on a person's emotional and social wellbeing. This can manifest as frustration and withdrawal from conversations, feelings of isolation and anxiety, and changes in relationships as well as caregiver stress.



Parkinson's disease symptoms and perceived stigma can lead to social withdrawal.<sup>2</sup>



Over 79% of people with Parkinson's report at least one additional health condition, such as depression or anxiety.<sup>3</sup>



About 90% of people with Parkinson's experience changes in voice and speech.<sup>4</sup>



50% of individuals with PD reported avoiding public outings due to discomfort.<sup>2</sup>



Social engagement & maintaining relationships are linked to:

- life participation
- life satisfaction
- physical & emotional health
- quality of life<sup>2, 3</sup>

<sup>2</sup> Ahn et al., 2022

<sup>3</sup> Islam et al., 2022

<sup>4</sup> Atalar et al., 2023





## Section 3:

# Tools and Strategies for Better Communication



# Speech Therapy for Parkinson's Disease

Speech therapy is one of the most effective ways to maintain and improve communication for individuals with Parkinson's disease. Speech therapy techniques focus on breathing, voice strengthening, articulation, and pacing to improve volume, clarity, and confidence in communication. By participating in speech therapy, individuals with Parkinson's can preserve/maintain their ability to speak clearly for longer and reduce frustration during communication.

You may consider:

- Breathing and voice exercises to strengthen vocal projection
- Specialty voice therapy programs with research proving their effectiveness for people with Parkinson's disease (e.g., Lee Silverman Voice Treatment - LSVT LOUD, SPEAK OUT!® Therapy)
- Speech pacing and articulation techniques

Consult a speech therapist to determine best exercises for the individual.

## Breathing Techniques for Speech Improvement

### DIAPHRAGMATIC (BELLY) BREATHING:

- Focuses on deep breathing from the diaphragm rather than shallow breathing from the chest.
- Helps increase breath support for louder, clearer speech.
- How-To: Breathe in deeply through the nose, expanding the belly, then exhale slowly while counting aloud.

### SUSTAINED PHONATION EXERCISES:

- Helps strengthen the vocal cords by holding sounds for longer.
- How-To: Take a deep breath and say "Ahhh" for as long as possible, gradually increasing duration.

## Specialty Voice Programs

Lee Silverman Voice Treatment (LSVT LOUD) & SPEAK OUT!® Therapy are therapy programs designed to improve the loudness and intelligibility of your speech. These evidence-based treatments require the SLP to be certified in the program and therapy follows a strict protocol. While highly effective, these are not curative treatments and you may need to repeat the program as the disease progresses.

## Articulation and Pacing Techniques to Improve Speech Clarity

### PACING BOARDS & TAPPING TECHNIQUES

- Helps control speech rate by encouraging pauses between words.
- How-To: Tap one finger for each syllable while speaking to maintain a steady rhythm.

### EXAGGERATED ARTICULATION (OVER-ARTICULATION)

- Encourages intentional pronunciation of consonants and vowels.
- How-To: Say words slowly and with emphasis, exaggerating mouth movements



#### READING ALOUD WITH PAUSES

- Improves sentence structure and breath control.
- How-To: Read a passage aloud, pausing after each phrase to slow speech and improve clarity.

#### USING VISUAL AND AUDITORY FEEDBACK

- Watching yourself speak in a mirror or using apps with real-time feedback (e.g., voice recorder, decibel meter) can help you adjust volume, rate, and articulation.

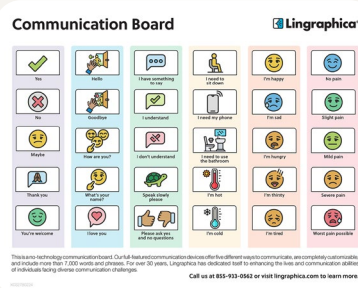


## Augmentative and Alternative Communication (AAC) Options

As Parkinson's disease progresses, speech and communication challenges can become more difficult to manage. While speech therapy can help strengthen the voice and maintain function, some individuals may still experience soft speech, slurred words, or difficulty initiating speech.

Augmentative and Alternative Communication (AAC) tools provide essential support by offering alternative ways to communicate when speech becomes too difficult. AAC devices can serve as a “back-up plan” for when you’re having a bad communication day, or for later when the disease progresses. Devices can be fully customized and personalized to your needs. Some AAC devices also provide therapy activities.

AAC tools range from simple, low-tech solutions (like printable, paper communication boards) to high-tech devices (like speech-generating devices and voice amplifiers) that help individuals express themselves more clearly and maintain independence.



# Low Tech

Low-tech AAC tools are non-electronic solutions that can be used by people with Parkinson's, especially when speech is unreliable or inconsistent. These tools are easy to carry, require no batteries, and are always accessible.

EXAMPLES:

- Communication Boards
- Pen and Paper / Dry-Erase Boards
- Alphabet Boards
- Gesture-Based Communication  
(e.g., thumbs up/thumbs down,  
head nods, sign-language)



# High Tech

High-tech AAC tools are electronic solutions for people with Parkinson's who struggle with voice and/or speech. These tools offer more advanced and customizable solutions compared to low-tech AAC. Your speech-language pathologist can help you explore high-tech AAC options and complete an evaluation for a speech-generating device.

EXAMPLES:

- Speech-generating devices (SGDs)
- Mobile apps
- Voice amplifiers





## Lingraphica's Speech-Generating Devices

Lingraphica's devices are designed for people with communication challenges. These devices are often called speech-generating devices (SGDs) or "AAC devices."

Lingraphica's devices offer multiple ways to express yourself, ensuring that you can communicate through any stage of Parkinson's disease. These devices combine communication, therapy, and community into a simple platform so you can express yourself and connect with the world around you.

## Key Features of Lingraphica AAC Devices for People with Parkinson's



### Multiple Communication Modes

- **Talk:** Tap to share preset or custom messages your device will "speak" aloud.
- **Type:** Use a keyboard to type messages that are instantly read aloud.
- **Draw:** Use a digital whiteboard to write messages or draw pictures.
- **Media:** Store pictures, downloads, drawings, and voice recordings.



### Personalized Speech Output

- User can choose from a variety of high-quality, natural-sounding voices.
- Customizable phrases and vocabulary allow for quick access to frequently used messages.
- Use the built-in voice recorder to monitor how loud your speaking voice is.



### Speech Therapy Integration

- Built-in therapy apps include speech and cognition exercises.
- Provides practice with word-finding, articulation, and voice strengthening.



### Portable & Easy To Use

- Lightweight and easy to carry, allowing for communication at home or in public.
- Touchscreen interface is simple to navigate
- Accessories, like a weighted stylus or wheelchair mount to help those with motor difficulties – like tremors.



### Connectivity & Digital Access

- Allows users to send emails and texts directly from the device.
- Connected to Zoom and Chrome.



## How AAC Devices Benefit People with Parkinson's

- Reduces frustration by providing an alternative way to communicate.
- Maintains independence by allowing users to express thoughts without assistance.
- Ensures continued communication as Parkinson's symptoms progress.
- Strengthens relationships by allowing for meaningful conversations with loved ones.

By incorporating both low-tech and high-tech AAC tools, individuals with Parkinson's can overcome communication barriers and remain active in daily life.

Lingraphica devices can be personalized and adapted to meet your specific needs, on good days and on bad days.

Adding icons and phrases that are meaningful to you is easy. Prioritize your needs, whether that's connecting with friends and family, practicing your speech, or maintaining your voice.



**Ready to find out if a Lingraphica AAC device is right for you or a loved one?**

Call 888-274-2742 or [click here](#) to start a free device trial.



# Tips for Everyday Conversations

Small adjustments in how conversations are structured can make communication easier and more successful for both the individual and their conversation partners.

The following strategies focus on breaking down messages, improving clarity, and reducing distractions to create better communication experiences.

## 1. Break Messages into Short, Clear Sentences

Many people with Parkinson's struggle with long or complex sentences because of impaired cognition or comprehension. Using short, simple statements makes it easier to be understood.

- Keep sentences brief and to the point
- Pause between sentences
- Use keywords and gestures

## 2. Over-Articulate and Slow Down Speech

Parkinson's can cause slurred, rushed, or monotone speech, making it difficult for others to understand. Over-articulating words and slowing down speech rate can improve clarity.

- Exaggerate mouth movements
- Use pacing techniques
- Take deep breaths before speaking
- Practice speech therapy exercises

## 3. Creating Quiet Environments to Reduce Distractions

Background noise and distractions can make it much harder to hear and process speech. Creating a calm, quiet space helps individuals with Parkinson's focus on communication.

- Turn off background noise
- Move to a quieter room when speaking
- Face the person when speaking
- Use good lighting
- Be mindful of the timing of conversations  
(Is person fatigued? Alert? In pain? On/off medication time?)



# Caregivers and Communication

Caregivers play a crucial role in supporting communication, so self-care and stress management are essential.

## Caregiver Tips & Self-Care Strategies

- Be patient and allow extra time
- Pause and wait if they struggle to find words
- Encourage, don't correct
- Instead of pointing out mistakes, repeat what they meant to say as a confirmation
- Encourage gestures, writing, or AAC tools if speech is difficult
- Keep a notepad or communication board nearby for quick messages

## Coping with Emotional and Physical Stress as a Caregiver

Caring for someone with Parkinson's can be physically and emotionally exhausting. Taking care of yourself is just as important as supporting your loved one.



Take breaks when possible and ask for help



Join a support group to connect with other caregivers



Seek home health aide assistance, respite care, or ask family members for assistance if possible



Exercise, meditation, or hobbies help reduce caregiver burnout



Schedule time for yourself each week



Educate yourself about Parkinson's and AAC tools





## Section 4:

### Resources for Support & Therapy



# Working With your Care Team

Managing Parkinson's disease requires a team-based approach, as symptoms affect movement, speech, cognition, and daily living. Each provider plays a unique role in enhancing quality of life for individuals with Parkinson's and their caregivers.



## Speech-Language Pathologist (SLP)

- Helps individuals maintain and improve speech clarity, volume, swallowing, and cognition.
- Provides speech therapy, specialized voice programs (LSVT, SPEAK OUT!®), AAC tools, and voice strengthening techniques.



## Occupational Therapist (OT)

- Helps individuals maintain strength, dexterity, and balance to complete daily tasks, such as dressing, eating, and handwriting.
- Recommends adaptive tools to maintain independence.



## Physical Therapist (PT)

- Helps with balance, posture, and mobility to reduce the risk of falls and improve pain management.
- Uses exercise-based therapies, like LSVT BIG, to improve movement.



## Neurologist

- A doctor specializing in brain and nervous system disorders who diagnoses and manages Parkinson's.
- Prescribes medications, monitors symptoms, and adjusts treatment as the disease progresses.



## Movement Disorder Specialist

- A neurologist with advanced training in Parkinson's and related disorders. They can also assess candidacy and provide programming for specialized treatments, such as deep brain stimulation (DBS).

## Who's on the Team?

- Neurologist/Parkinson's Specialist
- Speech-Language Pathologist
- Occupational & Physical Therapists
- Movement Disorder Specialist
- Social Worker / Care Coordinator
- Nurse Practitioner
- Nurse
- Mental Health Therapist
- Home Health Aide
- Recreational Therapist
- Art Therapist
- Music Therapist
- Faith-Based Leaders
- Dietitian / Nutritionist



# Community and Support Networks



## The Importance of Community

Everyone deserves a safe place to feel supported and heard.

We wanted to create an online space for people with Parkinson's disease and their care partners to learn from others, share their unique life experiences, and connect with others who understand.

That's why we created:



Scan the QR code to learn more!



More support for people with Parkinson's and caregivers:



Parkinson's Foundation: [parkinson.org](https://parkinson.org)

American Parkinson Disease Association: [apdaparkinson.org](https://apdaparkinson.org)

Michael J. Fox Foundation: [michaeljfox.org](https://michaeljfox.org)

Other sources of support to explore:



### Local Resources

Local support groups, faith-based centers, home care or outpatient, day centers



### Therapy

Rock Steady Boxing, SPEAK OUT!, LSVT



### Assistive Technology

Lingraphica, voice amplifiers, communication board



# Apps and Tools for Communication Practice



## **TalkPath Therapy™**

Access 13,500+ online speech, language, and cognitive-communication therapy exercises developed by speech-language pathologists



## **TalkPath News™**

Access a variety of current news articles with built-in features to support listening and reading comprehension



## **SmallTalk™ apps**

Use these apps to communicate your daily needs or start conversations





**Conclusion:**  
**Empowering Communication  
for a Better Quality of Life**



# Next Steps and Getting Started

## Getting Started with AAC tools

Despite many pervasive AAC myths, there are no specific prerequisite skills or requirements that you or the person with Parkinson's must meet. Lingraphica devices are built to be accessible even to those who have language and/or cognitive impairments, or who have never used technology before. There's no minimum amount of time after being diagnosed with Parkinson's disease that you need to wait – traditional therapy and AAC can work together to maximize communication and maintain independence.

### Is a low-tech device for me?



#### YES

- Low commitment: easy and inexpensive to make
- Fast: ideal when you need a way to communicate immediately
- Great way to introduce the idea of a communication device
- Good for people who are not comfortable with technology



#### NO

- No voice output – must have communication partner to interpret
- Limited in scope: difficult to add words/phrases on the spot
- Large or multiple boards can be cumbersome, further limiting the number of messages available
- Not designed to be a long-term, comprehensive communication system

### How do I know if a high-tech AAC device could help me??



#### Motivated

It helps when the user is motivated to increase their communication and life participation.



#### Moderate-severe

**communication impairment** in any communication situation (like out in public, calling the pharmacy, or talking with your doctor)



#### Physical abilities

With Lingraphica devices, users who are physically impaired have the option to use any of several different device accessories.



#### Communication partner

Although Lingraphica AAC devices are simple to use, the reality is that many users will continue to need help using the device. Having a supportive family member or communication partner helps to bridge the gap between what the user would like to do but might be unable to. Additionally, they may help to motivate the user to continue to use the device consistently.



# Monitoring Your Communication

Sample communication tracker:

## Rate each observation:

1 = Rarely

2 = Occasionally/Sometimes

3 = Often

4 = Always

Communication or Cognition Concern	Rating			
Forgetting names or faces	1	2	3	4
Struggling to follow instructions	1	2	3	4
Losing train of thought mid-conversation	1	2	3	4
Confusion about familiar tasks	1	2	3	4
Difficulty articulating or being understood	1	2	3	4
Struggling to retrieve common words or phrases	1	2	3	4
Needing to repeat oneself, or others asking, "Can you speak louder?"	1	2	3	4
Forgetting recent conversations or appointments	1	2	3	4
Easily distracted or unable to follow conversations	1	2	3	4
Repeating oneself often, unaware of having already said something	1	2	3	4

*\*\*Mostly 2s/3s/4s, would benefit from speech therapy and AAC consultation*





Find out if a Lingraphica AAC device  
is right for you or a loved one!

Call 866-404-2806 or [click here](#) to start a free device trial.

Lingraphica<sup>®</sup>