Toss the Workbooks: Evidence-Based Approaches for Person-Centered Dementia Interventions
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Disclosures: B. Khayum, M.S., CCC-SLP

Relevant Financial Relationships
– Owner of a for-profit company, MemoryCare Corporation, which provides therapy services to with dementia. (2010 - present)
– Consultant for Communication Bridge research study at the Cognitive Neurology and Alzheimer’s Disease Center at the Northwestern Feinberg School of Medicine and receives reimbursement for consultation time and treatment sessions for individuals with PPA. (2013 - present)
– Received honoraria from KSHA for this presentation

Presentation Outline
• Dementia syndromes vs Neuropathology
• Care Pathway Model to care
• Impact of the diagnosis on the family/caregiver
• Psychosocial Interventions
• Speech-Language Pathology Assessment
• Person-Centered Cognitive-Communication Strategies
  – Memory Care Pathway
  – Language Care Pathway
  – Visuospatial Care Pathway
  – Behavioral Care Pathway
• Case Study

Learner Outcomes
• Describe the Care Pathway Model to interdisciplinary care and how you might apply this in your healthcare setting
• Describe the importance of psychosocial interventions and how you may collaborate with a social worker in your setting to improve quality of life for individuals with dementia
• Describe person-centered assessment and how to identify meaningful goals when developing a plan of care for persons with dementia
• Describe 5 evidence-based approaches for the treatment of dementia and how to integrate personally relevant stimuli into the plan of care

Holistic Approach to Intervention

A diagnosis of dementia can cause:
• A sense of isolation; social withdrawal
• Decreased participation in meaningful, purposeful activities
• The loss of dignity and sense of self
• The loss of independence and safety

Dementia: An Umbrella Term

• Decline from prior level of functioning in cognition, emotion, and/or behavior
• Progressive worsening over time
• Interferes with independence and daily activities
• There are many causes of dementia
Dementia Syndrome vs Neuropathology

- Dementia syndromes are the **clinical presentation** of symptoms
  - Alzheimer’s dementia – short term memory loss
  - Primary Progressive Aphasia – language
  - Behavioral Variant of Frontotemporal/Dementia – changes in behavior
  - Posterior Cortical Atrophy – visual agnosia
- All dementia syndromes are caused by an underlying neuropathology (protein) in the brain
  - Alzheimer’s Disease (AD), FTLD-T, TDP-43

The CARE Pathway Model for Dementia (CARE-D)

- Tailored Recommendations to the Person with Dementia and Family
- Pharmacological Treatment

NORTHERN CARE PATHWAY MODEL

- Memory
- Behavior
- Patient and Family
- Language
- Visuospatial

NORTHERN CARE PATHWAY MODEL STRATEGIES

- Memory: Medications may slow progression if you have Alzheimer's Disease;
  - You may qualify for research studies
- Behavior: Speech therapy to assist and aid with maximizing communication;
  - Developmental communication, notebooks, “I have PPA” cards
- Patient and Family: Referral to speech and language therapy to provide environmental accommodations,
  - Structure and consistency.
- Language: Referrals to offer services to accommodate visual changes –
  - Reading, cannot see the forest for the trees.
- Visuospatial: Interventions: Interventions: Speech therapy to assist and aid with maximizing communication,
  - Developmental communication, notebooks, “I have PPA” cards

Caregivers for Persons with Dementia

Who are they?

- More than 15 million Americans are caring for person with dementia
- Majority of persons with dementia are community-dwelling.
- Majority (85%) are cared for by family and friends
- Majority are spouse/partners
- Approximately 2/3 are women
- 34% are 65+

Alzheimer’s Association Facts & Figures, 2015
Caregivers

- Often called the invisible second patient
- Integral to quality of life
- Reasons for Caregiving
  - Love and reciprocity
  - Sense of duty, obligation, guilt
- Negative aspects of caregiving get the most attention
- 55-90% of caregivers experience positive effects
  - Enjoying togetherness
  - Sharing activities
  - Feeling a reciprocal bond
  - Spiritual and personal growth
  - Increased faith
  - Feelings of accomplishment and mastery

Impact of Dementia Caregiving on Well-Being: Finding Meaning

- Dynamics of meaning making within the caregiver role have been explored as a way of coping.
- Caregivers who find meaning through caregiving may experience less burden.

Caregiving: Relational and Multidimensional

"The experience of care partners in cases of dementia is multidimensional and includes many factors relevant to the culture, context and dynamic in each individual relationship, such as:

- Support structures available within the family and the community,
- Personal coping resources,
- Historical relationship
- The meaning that individuals ascribe to their experiences.”

Timeline and Phases of Illness

Initial Crisis Phase

<table>
<thead>
<tr>
<th>Key Individual/Family Tasks</th>
<th>Key Clinician Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning to cope with symptoms</td>
<td>Family is especially vulnerable at this phase</td>
</tr>
<tr>
<td>Establishing working relationships with health care team</td>
<td>Health care professionals have enormous influence over a family’s sense of competence.</td>
</tr>
<tr>
<td>Create a meaning for illness</td>
<td>Diagnosis disclosure is a “framing event”.</td>
</tr>
<tr>
<td>Grieve loss of “normal life” before illness</td>
<td></td>
</tr>
<tr>
<td>Gradually accept illness as long term</td>
<td></td>
</tr>
<tr>
<td>Pull together as a family to cope with immediate crisis</td>
<td></td>
</tr>
<tr>
<td>Develop flexibility toward future goals</td>
<td></td>
</tr>
</tbody>
</table>

Chronic Phase

- Time span after diagnosis
- “The long haul”
- “Living in limbo”
- An exhausting problem “without end”
- Normal ambivalence / escape fantasies / survivor guilt


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Farran et al., 1997

Copyrighted Material: Do not copy or distribute.

Kindell et al. (2014). Living with semantic dementia: A case study of one family’s experience. Qualitative Health Research, 24(3), 401-411.


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Chronic Phase

**Key Individual/Family Tasks**
- Come to grips with long-term changes
- Devise an ongoing coping strategy
- Maintain semblance of a normal life during heightened uncertainty

**Key Clinician Tasks**
- Help families develop new priorities within a “new normal”
- Help families maintain sense of autonomy
- Normalize emotions of ambivalence and loss to reduce feelings of blame, shame and guilt


Living with Ambiguity

- Uncertainty about the future
- Previous ideal of a close relationship – with clear roles - must change.
- Losing a person while they are still here

(Boss, P., 1997)

What Helps?

**State of the Science**
- 30 years of 200+ intervention studies
- 7 meta-analyses, 17 systematic reviews suggest a strong evidence exists for translating research into practice

**Family Caregiver Intervention**

**Treatment Modalities**
- Professional Support
- Psychoeducational
- Behavior management/skills training
- Counseling/psychotherapy
- Self-care/relaxation techniques
- Environmental redesign
- Multicomponent


Evidence based caregiver interventions

**Outcomes**
- Increased caregiver knowledge and understanding of memory problems
- Decreased caregiver stress and depression
- Better behavioral symptom management

**Limitations**
- Lack of diversity / generalizability
  - Demographic subgroups underrepresented
    - Men, minority populations, rural, long-distance, multiple carers
  - Non-Alzheimer’s dementia not represented
- Long-term effectiveness


What is the purpose of your assessment?

Are you part of a diagnostic team to evaluate and provide a diagnosis for your client?

*Or...*

Is the client/family coming to you out of concerns about their impairments or dementia diagnosis in hopes that you can help them to participate more fully in daily life?
Key Principles of Person-Centered Assessment

- The person and family members are at the center of the care.
- Think beyond the diagnosis and impairments: who is the person underneath?
- Do things WITH your client, not TO your client.
- What are your client’s main concerns? How are their impairments impacting daily activities?
- What are the family member’s concerns?
- What are their areas of interests?
- What are their preserved strengths? (rather than focusing solely upon the weaknesses)
- Establish a profile of functioning across domains.
- Plan for each client individually.

Time to test your partner!

1. What is today’s date?
2. Where are you right now?
3. Count backwards from 100 by 7’s.
4. Name as many words that you can think of that start with the letter F.
5. Raise your hand, touch your nose, then point to me.

Reactions

- How did you feel being tested?
- How do you think it would feel if you have just been diagnosed with a fatal and devastating disease, and the first thing your clinician does is test you?
- From the questions asked:
  - Can you answer any of these questions...
  - How are the person’s impairments impacting their daily life?
  - Can they participate in the activities they enjoy?
  - How is the person coping with their diagnosis?

It’s Time to Flip the Rehab Model!
(M. Bourgeois, 2015)

- Put the client and family members at the center of the evaluation.
- Identify their concerns.
- Administer standardized tests or subtests of standardized tests to further assess areas concern.
  - (e.g., Asking repetitive questions, administer story retell test of ABCD to assess short term episodic memory loss)
- All goals are then written to address their concerns and are focused upon personally relevant stimuli.
  - CLIENT-DIRECTED, NOT CLINICIAN-DIRECTED

Other Assessment Considerations

1. Speech-Language Therapy is a team sport, and the care-partner/staff members are essential players.
2. Use dynamic assessment (e.g., teach-test-retest methods, trial therapy) and objectively document responsiveness to each therapeutic technique or procedure (Bourgeois & Hickey, 2009).
3. Ask questions related to personally relevant topics (“Can you tell me about your grandchildren?” or “What are some of your favorite foods?” instead of, “Name as many animals as you can in one minute”).
4. Determine new strategies that will be needed as symptoms progress.
5. Complete education and counseling throughout the evaluation.
6. Determine if standardized testing is needed.
   - Is this evaluation part of the diagnostic process?
   - Does insurance reimbursement require standardized testing?

6 Steps for a Person-Centered Assessment

• BUILD RAPPORT: WHO IS YOUR CLIENT AS A PERSON?
• OBSERVE COMMUNICATION/ENVIRONMENT
• INTERVIEW: ASK YOUR CLIENT/FAMILY MEMBERS ABOUT THEIR CONCERNS/FRUSTRATIONS
• DETERMINE IMPACT ON LIFE PARTICIPATION IN DAILY ACTIVITIES
• EDUCATE AND COUNSEL
• ADMINISTER SHORT STANDARDIZED ASSESSMENT, IF NEEDED
A quick thought about staging....

- Does assigning a stage to your client help you with the following questions:
  - Understanding who they are as a person?
  - Understanding how their unique set of strengths/weaknesses are impacting life participation in desired activities?
  - Understanding their family dynamics, level of support, and how these variables will impact their participation in therapy?
  - Understanding how they are coping with their diagnosis and their motivation to participate in therapy?

These are the critical questions that need to be answered to develop a person-centered plan of care and tailored goals to meet individual needs.

Does staging someone help to answer these questions?

Functional Standardized Tests: Cognition

Other resources

Goal Writing

- Always include the individual's and family's input
- Goals should be individualized and should focus on functional outcomes
- Goals should be realistic; may need adjust the level of cueing as the disease progresses so that goals can be met

Example Goals for Aphasia:

PWA will retrieve names of 9/10 personally relevant people and places in response to open-ended questions with use of communication wallet, given minimal verbal and gestural cues, to increase ability to participate in conversations with family and friends.

PWA will pronounce personally relevant multisyllabic words with 80% acc during structured tasks, with use of syllable segmentation, orthographic cues, and verbal fading cues hierarchy for apraxia of speech provided with moderate cues from spouse to increase ability to participate in conversations with family and friends.

Cognition Goal Examples

- Individual will plan weekly menu with use of weekly menu template and with organization of simple recipes that she can still prepare, with 90% acc, given min verbal cues from ST, to increase ability to independently prepare meals.
- Individual will locate 3/3 functional objects around the home with use of organizational strategies/external memory aids, given min verbal cues, to increase independence in ADL function.
- Individual will sequence 3/3 steps to operate cell, TV remote, and computer with use of visual memory aids, given min verbal cues, to increase sequencing ability for operating complex devices around the home.
- Individual will decrease frequency of perseverative questions regarding daily schedule to <3x/session x 1 week with use of memory wallet, given min verbal cues, to increase functional recall regarding daily schedule and activities.
**Person-Centered, Evidence-Based Treatment Approaches**

- Memory Care Pathway
- Language Care Pathway
- Visuospatial Care Pathway
- Behavioral Care Pathway

**Treatment Approaches**

- Impairment-based Approach
  - Focuses improving individual's weaknesses
  - Drill-based
  - Clinician-directed

- Life-Participation Approach (Simmons-Mackie et al, 2001)
  - “LPAA emphasizes the attainment of reengagement in life by strengthening daily participation in activities of choice.”
  - Takes advantage of individual's strengths
  - Focuses upon functional activities that are meaningful to the individual
  - Client-directed

**Life Participation Approach to Treatment**

Interventions are person-centered and focus on much more than the individual's impairments, also taking into account participation in meaningful life activities and how the impairments impact the individual's identity and feelings.

**Activity**

Make a list of 10 personally relevant words that are important to you in daily conversations.

**Activity**

Toss the Work Books!

- Join the “Toss the Workbook” movement!
- Before you can apply the person-centered, Care Pathway model to your setting, you must be actively using the established evidence-based approaches for people with dementia.

How else will we get buy-in for the services we can provide?
Interventions: Memory Care Pathway

A Quick Overview: Evidence-Based Interventions for Amnestic Dementia

- Creation of graphic and visual cueing systems: e.g., visual memory aids, memory books, and memory wallets—to help individuals recall any type of information that is important to them (Bourgeois, 1990).

- Use of spaced retrieval training (SRT) to promote use of graphic cueing systems (Camp & Stevens, 1990).

Interventions: Memory Care Pathway

A Quick Overview: Evidence-Based Interventions for Amnestic Dementia

- Vanishing cues: technique in which cues or prompts are gradually faded in relation to the learning progress (Sohlberg, Ehlhardt, & Kennedy, 2005)

- Errorless learning: memory intervention technique where clinicians use cues or instruction to prevent or reduce the likelihood of individuals making mistakes during learning trials (Clare & Jones, 2008)

Interventions: Memory Care Pathway

A Quick Overview: Evidence-Based Interventions for Amnestic Dementia

- Environmental Modifications: Assessing lighting, color schemes, flooring, furniture and hangings, and noise/sound — and then make the appropriate adaptations so the individual can function more independently and safely (Bruce, Brush, Sanford, & Calkins, 2013).

- Communication Strategies: Training family members and caregivers to use positive communication patterns, such as avoiding questions that rely on short-term memory and asking choice questions instead of open-ended questions.

Interventions: Memory Care Pathway

Single most effective way to facilitate functional recall:

- Signs
- Written reminders
- Schedule Board
- Memory Wallet
- Memory Book
- Visual sequencing aids

*Must be combined with caregiver education and training to be effective (Egan et al, 2010)

The use of written or electronic aids to prompt memory has been associated with increasing:

- Prospective memory (Oriani et al. 2003)
- Positive ADL learning outcomes (Lancioni et al., 2010)
- Reduction of repetitive questions (Hopper et al., 2013)

Graphic Cueing System: Memory Station

- Creation of Memory Station: Schedule board
- Large display clock with date
Memory/Communication Wallet

- Drinks
  - Decaf coffee
  - Iced tea
  - Diet Coke
- Martinis
- Gin
- Gin and tonic

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Memory Book: Reminiscence Therapy

**SALZBURG, GERMANY**
- Beautiful Architecture
- Metal Work
- Bought BBQ at stands on side of road

**CENTRAL ITALY**
- Stayed on farm in mountains - Antonio's grandmother
- Chased by a pig

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Memory Book: Visual Supports

**Creative Arts Discussions**
- Claude Monet (1840-1926)
- Marc Chagall
- Impressionism

**History Discussions**
- John F. Kennedy
- Jackie Kennedy
- 35th president
- Cuban missile crisis
- Civil rights movement
- Civil rights movement

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Visual Sequencing Aids: Technology, Recipes

**Sending an Email**
1. Tap email button
2. “Compose” button
3. Type email address here
4. Type in your subject
5. Type message
6. Tap “Send” button

**S’mores**
- Graham crackers
- Chocolate bars
- Marshmallows
- Put 2 graham crackers on plate
- Add chocolate bars
- Add marshmallows
- Place in microwave
- Press 1, 5, start

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Visual Sequencing Aids for Volunteer Work

**Humane Society**
- Tuesdays from 9-11 am

**Turkey Craft**
- You need:
  - Cupcake
  - Jack
  - Money
- I visit:
  1. Cut out turkey body
  2. Cut out turkey eyes, beak, legs
  3. Glue on eyes, beak, legs
  4. Glue on popcorn sticks
Electronic Memory Aids

- Large display clock with date
- Automatic pill dispenser
- Memory Phone
- Object locator

Electronic Graphic Cueing Systems

- Reminders/Alerts
  - Listastic
  - Personal Assistant
  - ListPro
  - MindMate
- Short term episodic memory
  - DayOne
  - Momento
- Memory book
  - PicCollage
  - Memory-Garden
  - MindMate
- Word recall
  - FlipCard Pro
Simulated Presence Treatment

Treatment focuses upon recording and re-playing videos of familiar persons or persons in position of authority (e.g., physician), to elicit desired behavior:

• Bathing
• Exercising
• Decreasing risk of elopement
• Discussing events from the past to promote engagement
• To provide comfort or reassurance
• To stimulate conversation between two people

Language Care Pathway

• Review of Primary Progressive Aphasia
• Person-Centered Treatment for Communication
• Reading/Writing Strategies
Primary

Impairment is prominent in a single domain (language) with relative sparing of other domains early on (e.g., memory, personality and perception)

Progressive

The impairment will get worse over time, since its caused by a neurodegenerative disease

Aphasia

A language impairment

PPA comes in different flavors

PPA-L (logopenic)  
Preserved Grammar  
Preserved Word Comprehension  
Impaired word-finding (or retrieval)  
Impaired repetition

PPA-G (agrammatic)  
Preserved Grammar  
Preserved Word Comprehension  
Impaired word-finding

PPA-S (semantic)  
Preserved Grammar  
Impaired Word Comprehension  
Impaired word-finding

PPA Subtypes & Clinico-pathologic correlations

Clinical Subtypes

PPA-L (logopenic)  
PPA-G (agrammatic)  
PPA-S (semantic)

Anatomy

AD  
FTLD-T  
TDP-43

PPA Subtypes & Clinico-pathologic correlations

Clinical Syndrome

Identified PPA as a clinical dementia that was unique from clinical Dementia of the Alzheimer’s Type (DAT) and from aphasias caused by stroke

Neuroanatomic Features

Established the anatomical selectivity of PPA for the left hemisphere perisylvian language network

Neuropathologic Features

Identified neuropathologic features associated with PPA are variable

Pathology

Identified the pathologic features associated with PPA are variable

Interventions: Language Care Pathway

• Self-cueing strategies:
  – Semantic circumlocution
  – Phonemic self-cueing
  – Writing
  – Gestures
  – Visualization

• Reinforce positive self-cueing or word retrieval strategies that individual and care partner are already using

• Should others fill in the word for people with PPA or other dementia syndromes?

Pharmacological interventions for individuals with PPA

– No FDA-approved disease modifying treatments for PPA
– Past clinical trials for individuals with PPA:
  • Bromocriptine [Parlodel, Cycloset] (Hed et al. 2004)
  • Dopamine agonist, used in Parkinson’s and shown to improve speech production in stroke-induced aphasia cases
  • Galantamine® [Razadyne] (Martinez et al. 2003)
    • A cholinesterase inhibitor acts to increase acetylcholine in the brain
  • Memantine® (Namenda)
    • Acts on the glutamatergic system by blocking NMDA receptors
  • Future pharmacological interventions will need to target specific forms of disease based on the suspected neuropathology
Lexical Retrieval/Motor Speech Production Program

Rehearsal of Personally Relevant Words

PWA should make a list of words or phrases that are important and used on a daily basis, especially those that are difficult for them to retrieve or pronounce

- Family members, friends, political figures
- Street names, stores, restaurants, places traveled
- TV shows, sports terminology
- Words related to their hobbies: gardening, woodwork, exercise, music, theater
- Personal facts: address, phone number, email address, date of birth, last 4 digits of social security number
- Household objects

Example of Personally Relevant Word List

Lexical Retrieval of Personally Relevant Words

- Rehearsal Program
  - Home program designed to increase the individual's lexical retrieval of words that they frequently use during daily conversation

Use of Writing Treatment to Facilitate Lexical Retrieval

Personally Relevant Word Rehearsal: Writing practice to facilitate spelling and retrieval

Lexical Retrieval: Flashcards
Motor Speech Production of Personally Relevant Words

- Strategies to increase pronunciation of personally relevant multisyllabic words
- Syllable segmentation
- Phonetic orthographic cues
- Fading cues hierarchy (a modified version of Rosenbek’s 8 steps for apraxia of speech; Rosenbek, 1973)
- Rhythmic and Intonation strategies
  - Modified Version of Melodic Intonation Therapy

Motor Speech Production
Apps to Practice Word Rehearsal

- Quizlet (free)
  - Good audio cues
  - No picture cues on free version
- FlipCards Pro ($3.99)
  - More difficult to initiate audio cues
  - Allows you to insert photographs

Script Training

- Script Training
  - Individual and care-partner are trained to formulate and rehearse scripts, to increase ability to speak via telephone, tell stories or jokes, order food at a restaurant, say prayers, or explain their condition to others (Youmans et al., 2005)

No rehearsal. PWA reads off script at dinner and is able to say prayer much more fluently.
Script Training

Additional Examples of Script Topics
• Talk to a family member or friend over the telephone and in other environments (e.g., with grandchildren)
• Order food at a favorite restaurant/drive-thru, schedule an appointment, or ask for directions over the telephone
• State personal information or biographical facts
• Explain the condition of “aphasia/PPA” and asking listeners to be patient
• Telling jokes or stories
• Giving a lecture or speech
• Saying prayers

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Script Training

Conversation Scripts
How to make:
• Put all scripts in page protectors in 3-ring binder
• Can also laminate and include in Communication Wallet
• Best if typed up and printed out (but can also be handwritten)
• Type up individual’s joke, story, or responses
• Try using landscape instead of portrait
• Try to keep one sentence per line.
• Assess most appropriate font size/spacing

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Script Training

Use of Technology for Script Rehearsal: VAST
http://www.speakinmotion.com/

What is VAST?
“VAST is an innovative application of video technology to facilitate and improve communication abilities for speech-impaired individuals. Following close-up video of mouth movements allows these individuals to speak full sentences. The simultaneous combination of visual, auditory, and, in some cases, written cues, allows these individuals to readily produce speech. VAST facilitates live communication and individualized, mobile speech practice.”

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Personal Picture Description Task

Structured description of personally-relevant pictures as a home exercise. Content may be used in daily conversations.

• Jonamac’s Apple Orchard
• Gala apples were ripe.
• Apple cider slushies
• Pumpkin donuts
• Hayride
• Corn maze

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Communication Wallet

– Portable word- or picture-based aid to facilitate daily conversations
– Helpful apps:
  • Microsoft PowerPoint

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Communication Wallet

– Determine appropriate font size
• Can PWA easily read the information?
– Determine how much information to include on each page
– Decide on content
• Should be words, phrases, or sentences that individual may need to frequently communicate in conversation

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**Communication Wallet**

**How to use**
- PWA can use for reference during conversation when unable to think of a word or question.
- PWA can study particular names before going to a social event.
- Communication partner can remind PWA to pull out wallet to help find missing word.

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**PPA Card - Generic**

![Generic PPA Card Image]

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**PPA Card - Personalized**

![Personalized PPA Card Image]

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**Communication Boards/Books**

- Word or picture-based aids to facilitate daily conversations in the home.
  - Helpful Apps: Pic Collage

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**MY ACTIVITIES**

- Exercise
- Pets
- Cooking
- Music
- Art
- Outside

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Use of Smart Phone/Tablet Pictures

- Develop system of taking pictures during daily activities; integrate pictures into daily conversations.

Electronic Communication Aids:
Pictures of daily activities on iPhone/iPad
Speech Generating Devices

• Must consider the following factors:
  • Individual’s motivation to use an AAC device
  • Individual’s fine motor and sequencing skills (Can he successfully operate a computer, TV remote or cell phone?)
  • Individual’s level of family support, as someone will be needed to help individual program and effectively use the device as the disease progresses
  • Out of pocket cost for the individual
  • Trialing the use of a device in the individual’s home environment during functional situations

• MULTI-MODALITY APPROACH: Consider using different types of low-tech vs. high-tech communication aids in different contexts

Speech Generating Device

GoTalk20+ ($200)

– Simple device
– Easy to use
– Allows user to record his/her own voice for 100 short utterances.
– 5 levels, with overlays
– Computer software for images

Speech Generating Apps

• GoTalk Now app ($79.99)
  • For the iPad
  • Ability to insert personal pictures and record own speech

Speech Generating Apps

Lingraphica SmallTalk

Speech Generating Apps

Story Creator by Alligator Apps (free)

For the iPhone and iPad

• Simpler version of Pictello
• You can create a sequenced, narrated slideshow using your own pictures
• Unique feature: adding videos
• No text to speech option
• Displays spectrogram of your recorded messages
• Easier to program compared to Pictello
• Fewer editing options than Pictello

Speech Generating Apps

Story Creator
Speech Generating Apps

Scene&Heard ($50)
(for the iPhone and iPad)
• Users can import their own photographs to create scenes
• Users can then record stories and messages to go along with different parts of the picture
• Easy to use and navigate
• Great for customized communication needs

Speech Generating Apps

Locabulary ($130)
(for the iPhone & iPad)
• Allows users to combine location and vocabulary to communicate
• Can use current GPS location to associate with a category
• NOT picture based
• Requires user to construct own sentences
• Can use pre-stored messages
• Can record own voice

Auditory Comprehension

• Facilitating auditory comprehension:
  – Training communication partners to use the following strategies:
    • eliminating distractions
    • simplifying sentence structure
    • slowing rate
    • increasing use of nonverbal cues
    • use of written or picture cues
Agraphia Strategies
- Use of speech recognition and word prediction features to facilitate spelling
- Use of spelling or grammar check apps to facilitate functional writing tasks
- Written aids/templates for emails or lists

Alexia Strategies
- Use of speech recognition apps to look up pictures/word descriptions to facilitate single word comprehension
- Use of digital books with embedded links to Wikipedia or a Dictionary to increase single word comprehension
- Use of audio books + paperback book for increased comprehension of novels

Number Strategies
- Use of written aids to facilitate reading/writing of phone numbers and addresses or taking phone messages
- Written aid for TV/radio stations
- Templates for check-writing
- Tip calculator apps

Applications to Other Dementia Syndromes
- Considerations when applying communication strategies:
  - Alzheimer's dementia
    - Early-onset AD often has prominent aphasia in early stages
    - Late-onset AD communication deficits typically present in moderate-severe stages
    - Due to amnestic symptoms, involvement of family or caregiver will be critical for generalization of strategies
    - Focus on activity/participation-based strategies
  - Behavioral Variant of Frontotemporal Dementia (bvFTD)
    - Due to decreased insight into deficits, involvement of family or caregiver will be critical for generalization of strategies
    - Focus on activity/participation-based strategies
  - Corticobasal Degeneration (CBD)
    - Consider intelligibility strategies if dysarthria is present
    - Education regarding dysphagia due to early onset of motor symptoms
    - Start formulation of communication aids quickly
  - Progressive Supranuclear Palsy (PSP)
    - Consider intelligibility strategies if dysarthria is present
    - Education regarding dysphagia due to early onset of motor symptoms
    - Start formulation of communication aids quickly
    - Consult with Occupational Therapy regarding visual deficits and how they may impact communication aids

Interventions: Visuospatial Care Pathway
- Refer to an Occupational Therapist who specializes in low vision
- SLP can also assess:
  - Lighting
  - Color schemes
  - Flooring
  - Furniture and hangings
  - Noise and sound

Strategies:
- Decluttering
- Use of organizers
- Clear labeling
- Increased contrast
- Establishing location for specific items
- Vanishing cues to implement use of system

Misplacement of Functional Objects
**Interventions: Behavioral Care Pathway**

Treatment should Focus upon Care Partner Training:

- Don’t reason or argue
- Redirect
- Distract
- Validate
- White Lie
- Comfort

(Coste, J.K., 2003)

**Behavior Log**

- A great tool for determining what may be triggering a challenging behavior
- Record the behavior, the time of day, exact location, description of environmental factors (odors, sights, sounds)
- Look for a pattern after a week of recording the behavior

**Use of Montessori Approaches to Increase Participation in Meaningful Activities**

- Modifying activities/hobbies individual enjoys so participation is still possible
- Music, Art, Theater, Dancing
- Intergenerational activities
- Pet therapy
- Reminiscence

**Importance of Meaningful Activities**

- Water color painting
- Playing piano
- Gardening
- Cooking
- Hiking in mountains
- Golfing
- Mosaics
- Sudoku
- Water aerobics
- Carpentry
- Ballroom dancing
- Pets
- Movies – Documentary festivals
- Travel
- Watching sports
- Volunteering at food pantry
- Raising sheep
- Surfing

**Meaningful Activity Example**

- Playing the piano
Meaningful Activity Example

- Water color painting

Implementation in Your Setting

YOU can take a leadership role in helping to implement an interdisciplinary team in your setting!

“Rebrand” the role of the SLP
We do more than just treat swallowing!

*If we don’t take action in helping people with dementia across healthcare settings, who will?*

Implementation in Your Setting

Arguments:
- Productivity requirements don’t permit enough time to start this type of program for frequent collaboration with other professionals
- It’s too difficult to communicate with family members; they are never around when I am there
- It’s too hard to develop a relationship with the nursing staff; they are too busy and there is a lot of turnover

Establish Monthly Inservices

How to structure a 30 minute inservice:
5 minutes: Summarize the role of the SLP and the types of treatment we can provide
10 minutes: Elaborate upon Cognitive-Communication Strategies for people with dementia
5 minutes: Review positive communication strategies for people with dementia
5 minutes: Provide a “case study” – example of a person you have worked with in this setting
5 minutes: Q & A

Establish Weekly “Rounds”

- Encourage your setting to start a weekly “Rounds” to increase collaboration between disciplines and coordination of care
- For each case:
  - Review diagnosis, psychosocial variables, progress in therapy
  - Other referrals or resources that are appropriate

Case Study: Ben (Memory Care Pathway)

History

- 65 year old man former stockbroker handling financial accounts with 2-3 year history of mild progressive decline in cognition.
- Married to wife Diane for 13 years
- MMSE 30/30
- Continues to be active, rides bike, plays tennis, takes classes.
- Mood, appetite, sleep - good
- Unable to manage finances – wife has taken over for the past 2 years
- Wife maintains active lifestyle and resents the loss of their future plans as a couple.
- 2nd marriage of 13 years
- No children – Ben was a ‘bachelor’ until age 50
Case Study: Ben (Memory Care Pathway)

Symptoms

- Hygiene decline – does not change underwear, wash hair or shower without reminders
- Difficulty navigating while driving
- Turns on the AC but leaves windows open
- Used to play bridge, but can no longer “keep up”
- Does not eat lunch when wife not home
- Returns with groceries but forgets to unpack items and put them away
- Got mixed up about the set-up of wife's daughter's studio apartment
- Forgot the plays he had seen in the prior 6 months.
- Misunderstood a question friend had asked and answered in a slightly tangential way
- Mixed up words – called Lake Michigan an 'ocean'; called a fork a 'spoon'.

Interventions: Ben (Memory Care Pathway)

Social Work

- Education and support for patient and wife
- Counseling for wife on loss of reciprocity in relationship and future plans
- Encourage wife to seek out emotional support
- Reinforce helpful communication strategies
- Encourage driving evaluation
- Help evaluate decision-making, judgment and safety over time
- Help prepare wife to take on more responsibility over time while balancing her own needs

Speech-Language Pathology

- Hygiene:
  - Placed visual aid on laundry basket “DIRTY LAUNDRY” and placed basket in walk-in closet where he changes clothes each day
  - Made visual sequencing aid (laminated) for shower, with reminders for each step
  - Established “bathing routine” for Mondays/Wednesdays/Fridays. Spouse trained to place sticky note visual aid on his bathroom mirror on days he needs to shower
- Air Conditioning:
  - Bright green visual aid placed on wall next to A/C control, which states: “GO CLOSE WINDOWS IMMEDIATELY”. Reminder also written on dry erase board in kitchen

Partner Activity

What evidence-based interventions would you use? Write one person-centered goal for each intervention: