1. MANAGEMENT
   COUNSELING & INTERVENTION

2. WHAT IS THE PROGNOSIS FOR PPA?
   • Logopenic
   • Semantic
   • Agrammatic/ nonfluent
   • PPAOS
     • Prosodic
     • Phonetic

3. INTERVENTION
   • No curative or stabilizing options for the underlying neurodegenerative process
   • That’s where we come in!
     • To help compensate for the progressive loss

4. COUNSELING
   • Early planning allows for patients to become adept with modifications for communication, before they are fully necessary
   • Helps minimize frustrations or unsafe situations
   • Many are young and still working
     • Unplanned retirement
     • Disability resources

5. RESTORATIVE REHABILITATION
   • Stroke
   • TBI
   • Tumor

6. PROGRESSIVE CONDITIONS
   • PPA
   • PPAOS
   • Parkinson’s disease
   • ALS

7. CLINICAL DECISION MAKING
   • Focus on functional impairment in therapy
   • Prioritize accordingly
   • Plan for progression

8. MEET PATIENTS WHERE THEY ARE AND FACILITATE
   • Varying levels of baseline understanding
   • Different levels of acceptance
     • Current effects
     • Future effects

9. THERAPY OBJECTIVES
WHAT ARE THE GOALS?
• Restoration is not a reasonable goal.
  • Maintenance and slowing of progression seems to be (hard to measure!)
• Optimizing activity, participation, quality of life
  • Comprehensibility strategies
  • Home and work modifications
  • Conversation partner training
• Identifying or establishing reliable mode of communication

SETTING EXPECTATIONS

STAGED APPROACH TO INTERVENTION
• Assessment-treatment-assessment-treatment
• Ongoing monitoring of abilities and needs
• Incorporating restitutive and compensatory treatments
  Fried-Oken (2008)

WHAT DOES THE LITERATURE SAY?
• Treatment may maximize communication
• Mild-moderate stages
• “No change” or apparent slowing of language decline is a positive response to treatment
• Questions
  • Durability
  • Generalization

INTANGIBLE BENEFITS
• Routine
• Empowerment
• Structure

MAXIMIZING POTENTIAL

SMARTER GOALS
• Shared
• Monitored
• Accessible
• Relevant
• Transparent
• Evolving
• Relationship-centered
  Hersh, Worrall, Howe, Sherratt, & Davidson, 2012

OUTCOME ASSESSMENT
• Challenges
  • Level of assessment
  • Repeatable measures (no or minimal learning effect)
• Sensitivity to change
  • May index symptom severity, but not adaptation/ compensatory strategies

19 □ OUTCOME MEASURES

20 □ COMMUNICATION PARTICIPATION
  Baylor, Yorkston, Eadie, Kim, Chung, and Amtmann, 2013

22 □ GOAL ATTAINMENT SCALING
  • Patient helps create a 5-point scale
  • Personalized definitions of progress
  • Successive progress ranging from -2 to +2
  • Example:
    • -2 (e.g., the target is much worse)
    • -1 (e.g., the target is somewhat worse)
    • 0 (e.g., the current level of performance)
    • 1 (e.g., I am making some improvement)
    • 2 (e.g., I am making big improvement)
  Kiresuk and Sherman (1968)

23 □ MANAGEMENT IN PROGRESSIVE SPEECH AND LANGUAGE DISORDERS

24 □ CLIENT-CENTERED TREATMENT
  • Life participation
  • Work as a team with patient and care partners
    • concerns and priorities
    • collaborative treatment goals
  • Modify goals as the disease progresses
  • Client centered treatment doesn’t mean only “work” for the client!

26 □ ORGANIZATION
  • General approaches to aphasia intervention
  • I will talk about different variants of PPA
    • to help organize information
    • because underlying mechanism matters for education and counseling
  • Remember
    • generally speaking, treatment should be directed symptomatically
    • not all patients will fit any one or any single variant

27 □ WHAT APPROACHES CAN WE “BORROW” FROM THE STROKE-BASED APHASIA LITERATURE?

28 □ APPROACHES TO INTERVENTION
  • Stimulation
  • Psycholinguistic
• Reorganization
• Treat underlying functions
• Written Language
• Targeting Communicative Participation

29

STIMULATION APPROACH
• Basic Assumptions
  • Linguistic competence
  • Activation of neural pathways will increase probability of future activation
• Typical Approach
  • Auditory stimulation
  • Correct and incorrect responses (although error-free learning may be emphasized)
  • Multimodality
  • Drill

30

PSYCHOLINGUISTIC APPROACH
• Basic Assumptions
  • Basic linguistic competence is impaired
  • Specific linguistic processes can be trained
• Typical Approach
  • May include receptive and expressive activities
  • Specific linguistic processes are targeted
  • May involve more complex forms (generalization to simpler forms)
  • Drill

31

REORGANIZATION APPROACH
• Basic Assumptions
  • Linguistic competence
  • Disrupted neural pathways can be bypassed
  • Exploits intact neural processes to activate and compensate for impairments
• Typical Approach
  • May target right hemisphere processes (e.g., prosody)
  • May emphasize multimodality stimulation (e.g., using drawing to activate verbal responses)

32

Examples of Treatments for Underlying Functions

33

TREATMENTS ADDRESSING EXPRESSION
• Constraint-Induced Aphasia Treatment
• Melodic Intonation Training
• Phonological and Semantic Cueing
• Promoting Aphasics’ Communicative Effectiveness
• Response Elaboration Training
• Script training
• Semantic Feature Analysis
• Verb Network Strengthening Treatment

34

CONSTRAINT-INDUCED APHASIA TREATMENT
• An intense treatment approach explicitly to improve spoken output
• Principles of Constraint-Induced Language Therapy
  • Constraint: avoiding the use of any compensatory strategies (for example, drawing or pointing)
  • Forced use: talking is the only means of communication
  • Massed practice: many opportunities to produce responses

35 MELODIC INTONATION TRAINING
• Recommended most often for severe “nonfluency,” likely with concomitant apraxia of speech
• Incorporates rhythm and pitch changes to facilitate song-like spoken output
• Utilizes decreasing levels of cueing to elicit the spoken/intoned target

36 PHONOLOGICAL AND SEMANTIC CUEING
• Classic stimulation therapy
• Phonologic cues
  • Initial sound of the word (“it starts with mmm…”)
  • Initial syllable (“it’s a man….“)
• Number of syllables and stress pattern
• Rhymes with…

37 PHONOLOGICAL AND SEMANTIC CUEING
• Classic stimulation therapy
• Semantic cues
  • Function
  • Category
  • Sentence completion
  • Gestures

38 PROMOTING COMMUNICATIVE EFFECTIVENESS
• Emphasizes the use of multiple modalities to enhance comprehension and expression
• Often incorporates barrier activities where a speaker communicates information to allow the listeners to identify a picture from a set of several choices
• Easily employed in group activities

39 RESPONSE ELABORATION TRAINING
• Goal is to increase the length and complexity of spoken utterances
• Clinician models elaborated versions of the patient’s response, then asks successive questions to elicit additional information
• Patient is encouraged to repeat clinician’s model during early levels of cueing

40 SCRIPT TRAINING
• Goal is to improve speed, accuracy, and effectiveness of communication in specific, repeatable situations
• Examples
  • Answering the telephone
  • Greeting guests
  • Making an appointment
• Uses classic cueing hierarchies to support increasing independence
• Requires many repetitions
SEMANTIC FEATURE ANALYSIS

VERB NETWORK STRENGTHENING TREATMENT (VNEST)
• Focuses on verbs
• Patient generates related semantic information
  • Who performs the actions
  • Objects or people the actions are performed on
• Select transitive verbs
  • Familiar
  • Distinctive

TREATMENTS ADDRESSING COMPREHENSION
• Generally considered more challenging to treat than expressive deficits
• Almost always include simplifying messages and taking advantage of non-language cues
• Some of the treatments already discussed address underlying functions for comprehension and expression
  • Stimulation treatments
  • VNeST
  • SFA
  • Script Training

Treatments for Written Language

ORAL READING FOR LANGUAGE IN APHASIA (ORLA)
• Focuses on reading full sentences
• Clinician and patient read sentences together initially, then level of support is gradually reduced until the patient can read it independently.
• Encourages appropriate prosody

COPY AND RECALL TREATMENT (CART)
• Written expression treatment targeting the single word level
• Steps
  • Present picture for patient to name aloud (provide model as necessary)
  • Ask the patient to spell the word
    • Cue with written model for copying
    • Cover the written model and ask them to write it from memory
• Approach emphasizes many repetitions, including daily homework.

Treatment Targeting Communicative Participation

FUNCTIONAL/PARTICIPATION APPROACHES
• Basic Assumptions
  • Communication (transactional and interactional) is the goal
  • Any means of communication is acceptable
  • Emphasis on functional activities
PHILOSOPHY OF PARTICIPATION APPROACHES

- Valuing social roles
- Empowerment
- Normalization
- Interdependent model of service
- Consumer-driven
- Ecological validity

FUNCTIONAL/ PARTICIPATION APPROACHES

- Typical Approach
  - Incorporates functional stimuli
  - Feedback is based on whether the message was communicated, not whether specific linguistic forms or modalities were used
  - Often involves family members or groups

TREATMENT TARGETS

- Personally relevant and meaningful
  - Support participation
- Target categories
  - Personal facts and stories (inc. disease)
  - Work
  - Family, friends, and pets
  - Hobbies and interests
  - Personal belongings
  - Grocery list
  - May inform communication book (multi-modality!)

LIFE PARTICIPATION APPROACH TO APHASIA (LPAA)

- Explicit goal is life participation
- Assessment and interventions address personal and environmental factors
- All treatment stimuli, activities, and outcome measures relate directly to functional goals of life participation

LPAA ILLUSTRATION

- Identify potential goals
  - LIV Cards
    - Picture-based
    - Sort functional activities into “current activities” and “activity preferences”

LPAA ILLUSTRATION

- Determine which activities will be targeted
- Identify the barriers to participation
- Address patient-centered interventions
  - Select functional vocabulary & scripts based on targeted activities
  - Incorporate compensatory strategies
- Address factors external to the patient
  - Accommodations (aphasia-friendly books, newspapers, podcasts, etc.)
• Partner training

57 C.A.P.E.

58 APHASIA CONVERSATION PARTNER TRAINING
• Communication/Conversation Partner Training (CPT) teaches communication partners (e.g., family members, friends, healthcare workers) how to best support conversation
• Appropriate regardless of aphasia severity
• Examples of who might be trained
  • Spouse/partner & family members
  • Friends and community members
  • Activity staff & coworkers
  • Healthcare workers
  • Volunteers

APHASIA CONVERSATION PARTNER TRAINING
• Training may be specific to a single person with aphasia or more general strategies more communicating with all people with aphasia
• Incorporating
  • Optimizing the setting for communication
  • Incorporating multiple modality supports
  • Simplifying language
  • Asking questions
• Training may involve lecture, reading materials, video examples, live demonstrations, role-play, practice with feedback

59 APHASIA CONVERSATION PARTNER TRAINING
• Designed to help people who “know more than they can say”
• Goals
  • Acknowledge the competence of the adult with aphasia.
  • Help the adult with aphasia to reveal his or her competence.

SCAATM STRATEGIES
• Acknowledge Competence
  • “I know that you know”
  • Acknowledging that communication is a two-way street
  • Communicating directly with the patient with aphasia

SCAATM STRATEGIES
• Acknowledge Competence
  • “I know that you know”
  • Acknowledging that communication is a two-way street, “You know I’m not good at explaining these things clearly!”
  • Communicating directly with the patient with aphasia

60 SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCAATM)
• Revealing Competence
  • Getting the message in when comprehension is impacted
  • Getting the message out when expression is impacted
• Verifying the message has been communicated correctly

64  SCAA™ STRATEGIES
• Revealing Competence
  • Getting the message in when comprehension is impacted
    • Using short, simple sentences and an expressive voice.
    • Using gestures when conversing.
    • Writing down keywords or topics, so that you can both see them together – e.g., PAIN, in large, bold print.
    • Using pictures to illustrate an idea; focusing on one picture at a time.
    • Eliminating distraction – noises, other people, or multiple visual materials.
    • Observing the person’s facial expression, eye gaze, body posture or gestures to determine their level of comprehension.

65  SCAA™ STRATEGIES
• Revealing Competence
  • Getting the message out when expression is impacted
    • Asking yes or no questions.
    • Asking one question at a time.
    • Asking fixed choice questions such as, “Do you want water or coffee?”
    • Phrasing yes or no questions from general to specific.
    • Asking him/her to gesture, point to objects or pictures, or write key words, such as “Can you show me…”
    • Giving him/her sufficient time to respond.

66  SCAA™ STRATEGIES
• Revealing Competence
  • Verifying the message has been communicated correctly
    • Adding gestures or written key words.
    • Repeating the person’s message.
    • Expanding on what you think the person might be trying to say.
    • Recapping the conversation if it was a long one.

67  SCAA™ STRATEGIES
• Helpful Materials
  • Blank paper – for writing key words and making functional drawings
  • Markers or pencils – use a medium black marker to write key words.
  • For those with aphasia, writing with a pencil is often easier. Make sure to place the pencil and paper right in front of him/her.
  • Cut out window, created from construction paper – use this to frame one picture at a time.
  • Flashcards – whether letter-sized or smaller cards, flashcards can be used to write keywords (e.g., TOOTHBRUSH) or to introduce or change a topic.
  • Pictures or pictographic illustrations

68  PARTNER TRAINING
• May improve
  • Communication
  • Participation
• Quality of life
• Care partners
  • Provide structured environmental support
    • increase predictability and regularity (e.g. brand loyalty)
    • maximize independence, participation, and safety
  • Foster an interactive environment

69  COMMUNICATION PARTNER TRAINING
• Receptive language strategies
  • Rephrase what the patient said
    • opportunity to clarify
  • Encourage utilization of other communication modalities
• Expressive language strategies
  • Slow down their own rate of speech
  • Use concise and simple sentence structures
  • Break down complicated information
  • Write down key words
  • Point to items
  • Look for signs of frustration or confusion

70  SLOW RATE TO ENHANCE FORMULATION AND SELF-MONITORING
• ... and opportunities for support.
• ... and improved motor speech functioning.

  • Reminder to us to model this behavior!

71  AUGMENTATIVE AND ALTERNATIVE COMMUNICATION
• Low Tech
  • Drawing
  • Writing
  • Word lists
  • Communication books & boards
  • Picture dictionaries
  • Universal gestures
• Communication may shift to entirely nonspeaking approaches
  • pointing to pictures in a communication book
  • nod to simple yes/no questions

72  COMMUNICATION BOOK
• A personally relevant, meaningful communication system
• Can include
  • Photos
  • Writing
  • Drawing

73  AUGMENTATIVE AND ALTERNATIVE COMMUNICATION
• High Tech
• Apps for personal mobile devices
  • Communication apps
    • Snap Core First with Aphasia Page Set (iOS)
    • AlphaTopics – AAC • App2Speak (iOS/Android)
    • EESpeech (iOS/Windows)
    • SpeechAssistant (iOS/Android)
    • ChatAble
    • SmallTalk by Lingraphica (iOS)
    • Alexicom (iOS/Android)
    • Touch Chat - Communication Journey: Aphasia (iOS)

**WHAT DO WE KNOW FROM STUDIES OF PPA SPECIFICALLY?**

**SUPPORTED COMMUNICATION APPROACHES**

- Group treatment (n = 5)
  - Low-tech means AAC
  - “Built-in” mobile technology
  - Personally relevant scripts
  - Increased use of nearly all of the compensatory strategies in daily communication
  - Satisfaction with the group treatment model
    Mooney, Beale, & Fried-Oken 2018

**HIGH AND LOW-TECH AAC (N = 3)**

- Six-week group training program
  - Multimodal communication
  - Conversation partner training
  - Low-tech AAC use
  - Mobile technology
- Group treatment is effective
  - Facilitate use of multimodal communication for individuals with PPA and their partners;
  - Improve confidence and participation
    Mooney et al., 2018

**GROUP TREATMENT?**

- Individuals with aphasia due to stroke
  - Improve conversational skills
  - Build community
- Integrate individuals with PPA into existing aphasia groups for stroke survivors?
  - May not provide appropriate support network

**ACTIVITY-BASED GROUPS**

- If community demands allow, consider creating a PPA patient-care partner support group
  - Supportive communication approaches
  - Sense of community

- Do not focus directly on communication
- May also be beneficial
• general “cognitive stimulation”
• improved mood
• Hobbies or interests that do not require talking (e.g., gardening, swimming)
  • reduce frustration
  • improve mood
• Not even necessarily a group!

80 □ TREATMENT IN LOGOPENIC PPA
• Most common studies
  • promote restitution of lexical retrieval skills
• Immediate treatment gains
  • for nearly every participant
• Generalization and maintenance
  • highly variable

81 □ “STIMULATION” APPROACHES
• Improve naming through repeated exposure
  • spoken repetition
  • rehearsal of pictured stimuli
  • sometimes paired with reading/writing
• Effective approach for improving naming
  • generalization and/or maintenance is unclear

82 □ STIMULATION APPROACHES- WHICH ONE?
• Meyer and colleagues (2016, 2018)
  • verbal repetition
  • oral reading and copying written word
• Both were effective in improving naming of targeted items
  • Long term treatment effects were more robust in the orthographic treatment
• Another study showed the combined strategy was more effective

83 □ LEXICAL RETRIEVAL CASCADE
• Trains self-cueing strategies for word retrieval by leveraging residual phonological, orthographic, and semantic knowledge
• Complemented by homework:
  • repeated repetition
  • copying

84 □ SELF-CUEING: LEXICAL RETRIEVAL CASCADE
• Semantic self-cue
  • general or personal
• Orthographic self-cue
  • write first letter
• Phonemic self-cue
  • SLP writes first letter, asks them to say the sound it makes
• Oral reading
SLP writes word and asks them to say it
Repetition
write/ say word 3 times

Henry, 2013; Rising, 2014

85 WHAT WOULD IT LOOK LIKE?
- Pelican
  - Pre: Up in the ocean
  - Post: A bird you see by the ocean. Begins with a ‘p’
- Asparagus
  - Pre: We’re going to have this for dinner.
  - Post: We have this for dinner. It’s a vegetable, green. Begins with an ‘a’.

86 DOES IT WORK?
- Significant improvements in spoken and/or written naming of target items
- Maintenance above baseline performance for up to a year
- Generalization to untrained items
- Even if naming is not improved, communication is!

87 DOES IT IMPACT DISCOURSE?
- Varied outcomes
  - no change
  - positive changes

88 TO IMPACT DISCOURSE, TARGET DISCOURSE
- Novel Approach to Real-life communication: Narrative Intervention in Aphasia (NARNIA; n = 2)
  - lexical retrieval
  - sentence formulation
  - explaining procedures and expressing opinions
- No change in confrontation naming
- Increase in total spoken output, lexical usage

89 TREATMENT IN SEMANTIC PPA:
RELEARNING WORDS
- Verbal naming (repeating)
- Picture/object/word naming (repeated naming of different images, objects)
- Generative naming (naming a category)
- Semantic attributes (describing features)
- Semantic cueing hierarchy (a sequence of guided tasks, from self or others)
- Downside
  - gains are not stable
  - requires constant rehearsal

90 RESIDUAL SEMANTIC KNOWLEDGE
- Increased retrieval of words when their meaning is still retained
- Utilize the stronger systems
  - Intact knowledge can help a weaker system
    - phonological (e.g., first sound, rhyme)
visual perceptual skills
Maximize treatment gains
Facilitate maintenance

91  MULTIPLE MODALITIES
• Presenting both spoken (e.g., phonemic cues) and written (e.g., orthographic cues) modalities may help access words
• But beware of surface dyslexia

92  SURFACE DYSLEXIA/ DYSGRAPHIA
• Phoneme-to-grapheme conversion
• External aids
  • auditory and visual output (e.g., audiobooks)
  • verbal input (e.g., talk to text for e-mails)
• Spelling/grammar check
• Word prediction

93  SAFETY
• Safety devices
  • Identification bracelets
  • Personal locator and tracking devices
  • Home monitoring devices
  • Supervision at home and in the community
• Education
  • Community police
  • Other emergency services

94  TREATMENT IN NONFLUENT/AGRAMMATIC PPA
• Language
• Motor speech disorder- to be discussed next

95  SCRIPT TRAINING
• Goal is to improve speed, accuracy, and effectiveness of communication in specific, repeatable situations
• Examples
  • Answering the telephone
  • Greeting guests
  • Making an appointment
• Uses classic cueing hierarchies to support increasing independence
• Requires many repetitions

96  SCRIPT TRAINING (N = 10)
• Personalized scripts recorded as videos, spoken by a healthy adult model at a tailored rate and with over-articulated speech gestures
  • “speech entrainment” practice: watched and listened to videos and were instructed to speak in unison with the mouth model
• Improvements in speech intelligibility and grammaticality
  • immediately following
• maintained performance up to one-year post

97 WHAT ABOUT MOTOR SPEECH FUNCTIONING?

98 TREATMENT: PREPARE
• Anticipate future needs
• AAC prior to dependence of non-speaking means of communication

99 TREATMENT PRINCIPLES: MAINTAIN
• Given the relatively recent recognition of PPAOS, there are not many targeted treatment studies
• Look to:
  • current models of motor programming
  • approaches successful in stroke-related AOS
  • treatment studies of patients with the nonfluent/agrammatic variant of PPA (many have AOS)

100 SCRIPT TRAINING
• Promotes automaticity of trained stimuli
  • selected with a focus on functional communication interactions

101 SCRIPT TRAINING
• Patients with stroke-related AOS
  • felt more confident, spoke with less effort, and felt their speech was more natural
  • carryover noted over 6 months
• Patients with nonfluent/agrammatic PPA who also had AOS
  • lasting (up to one-year follow up) and generalized gains in intelligibility

102 TO TREAT OR NOT TO TREAT
• Participation in speech therapy may not be possible for a number of reasons, e.g. financial, practical or logistical, or patient preference
  • “It reminds me of what I can’t do”
  • “It reminds me it’s getting harder to speak”
  • “I want to spend my time doing other things”

103 THAT IS A REAL QUESTION!
•
  •

104

105 RECOMMENDATION

106 Not all AOS is the same
Treating the Communication Disorder

107

108 ARTICULATION DISRUPTIONS
• Slowing speech rate
  • increased time for motor planning and programming
• Over-emphasizing articulation of each sound or syllable
• Intentionally pausing between each word
• If words or phrases are practiced intensively, it is possible to increase the automaticity with which they are produced (script training)

109 □ PROSODIC DISRUPTIONS
• Patients often voice concerns over the “unnatural” quality of speech or taking “too long” to express their needs
  • It is generally not recommended to increase rate because it often results in increased articulation errors and reduced intelligibility
  • Inability to increase speaking rate
  • Stress patternning, using pitch or loudness
  • May facilitate the naturalness of speech

110 □ AS TIME GOES ON...
• The distinction among features of AOS diminishes over time
  • AOS becomes more severe
  • Dysarthria develops
  • Reduced verbal output

111 □ TREATMENT: REPAIR
• Teach circumlocution or word replacement
• AAC
• Listener strategies
• Communication environment

112 □ TEACH CIRCUMLOCUTION OR WORD REPLACEMENT
• Describe a word
  • Where do you find it? What does it look like? How big is it? What color is it?
  • Gesture
• Replace with a shorter, less complex word
  • Doctor for physician
  • TV for television
  • Stats for statistics

113 □ AAC
• Boogie boards
• Alphabet board
• Message banking
• Voice banking
• Tablets
• Speech generating devices

114 □ TABLETS/ SPEECH GENERATING DEVICES
• Typical approaches would be appropriate
• Be mindful
  • # of options on page
  • amount of clicks (nested options)
  • adaptive styluses for motoric impairment

115 □ PREPARE TO REPAIR
• Prepare orders for a restaurant
• Conversations/questions for dinner parties
• Event-specific pages (consolidate!)

116 DON’T BE AFRAID TO GO LOW TECH
• Low tech can be best tech
• Increasing aphasia and NCCD
• And increased dependence for ADLs
  • Bath time!

117 HELP FAMILY UNDERSTAND INCREASING LIMITATIONS
• Avoid saying “what?”
• Glossing
  • May not work if someone becomes distractible
• Educate to help them recognize signs and changes
• They may become frustrated because “this has been helpful... but isn't anymore!”

118 GENERAL SUGGESTIONS TO OPTIMIZE COMMUNICATION
• Communicate in a quiet, well-lit room, while face-to-face with communication patterns
• Minimizing environmental noises
  • Turn off TV
  • Close the door
  • Move away from the noisy dishwasher!

119 WORKING WITH PPAOS
• Many patients continue to work during the early stages
  • Demands for verbal communication
• May become increasingly difficult with the onset of motor, language, or cognitive/behavioral symptoms
• Communicate with co-workers and supervisors about the nature of their difficulties
• Allows for appropriate planning to maintain, modify, or relinquish responsibilities

120 Bringing it all together

121 PHARMACOLOGICAL INTERVENTIONS
• No FDA-approved pharmacological treatments
• Medications to treat concomitant neuropsychiatric and motoric features
  • Apathy
  • Depression
  • Agitation
  • Pseudobulbar affect
  • Motor symptoms
• We are the primary source of management

122 APHASIA TREATMENT
• Many options for targeting underlying impairments, functional communication, and participation in desired activities
• An eclectic approach is probably warranted for most patients
123  AS TIME GOES ON...
124  AS TIME GOES ON...
125  AS TIME GOES ON...
126  YOU ARE THE MOST WELL-EQUIPPED MEMBER OF A PATIENT’S TEAM TO BETTER DESCRIBE AND MANAGE COMMUNICATION DIFFICULTIES!
127  QUESTIONS??