

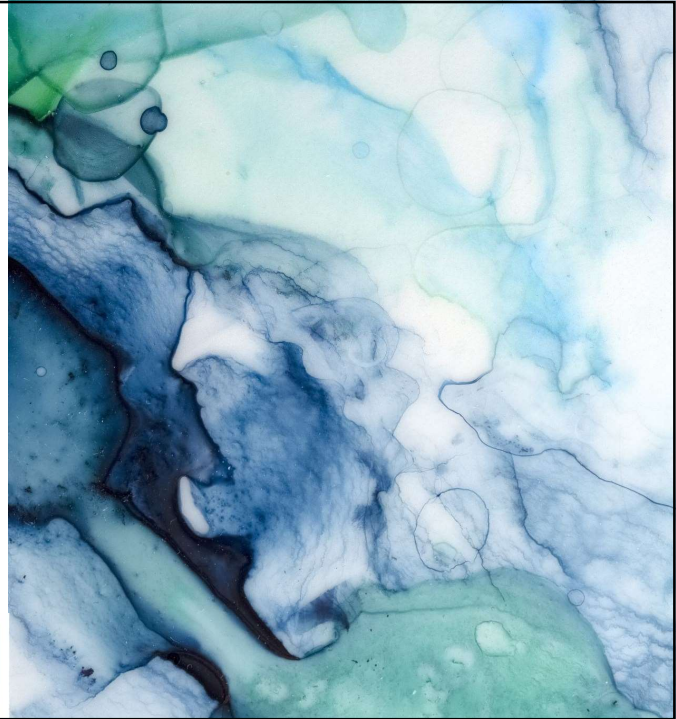
Speech Therapy in Dementia Care

NW GWEC Geriatric Healthcare Series

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1

Overview

Disclosures

Defining the Scope of the SLP

Swallow Function

Constituents of Speech, Language, and Communication

Clinical Syndromes that Impact Communication

Determining the Need for Referral to SLP services

Therapeutic Approaches

Communication Modifications for Providers

2

Disclosures

- My focus is cognitive-linguistic by virtue of training and my own professional experiences.
- Most images are drawn from ParticiPics, available and generated by the Aphasia Institute
- The University of Washington acknowledges the Coast Salish peoples of this land, the land which touches the shared waters of all tribes and bands within the Duwamish, Puyallup, Suquamish, Tulalip and Muckleshoot nations.



Life's a Conversation.

3

Role of the SLP



4

- Assessment
- Intervention
- Counseling
- Advocacy



5

Assessment

- Capture and track behavioral change in domains of swallowing, speech, language and communication
- Evaluate aspects of cognition to characterize its role in SLP capability areas

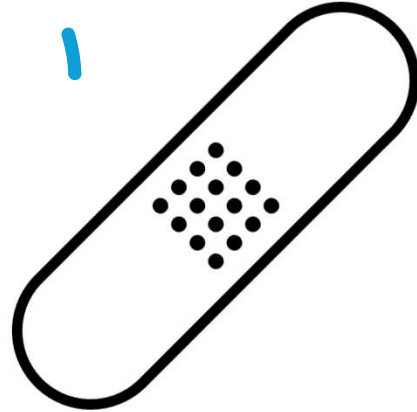


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Intervention

Curate and implement therapeutic intervention

- Restitutive (*improve/maintain*)
- Compensatory (*augment*)
- Palliative (*adapt*)



7

Counsel

Provide informational counseling as it relates to a diagnosis and implications for the:

- 1) Patient
- 2) Care partners
- 3) Family
- 4) Community



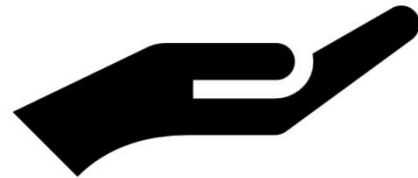
8

Support

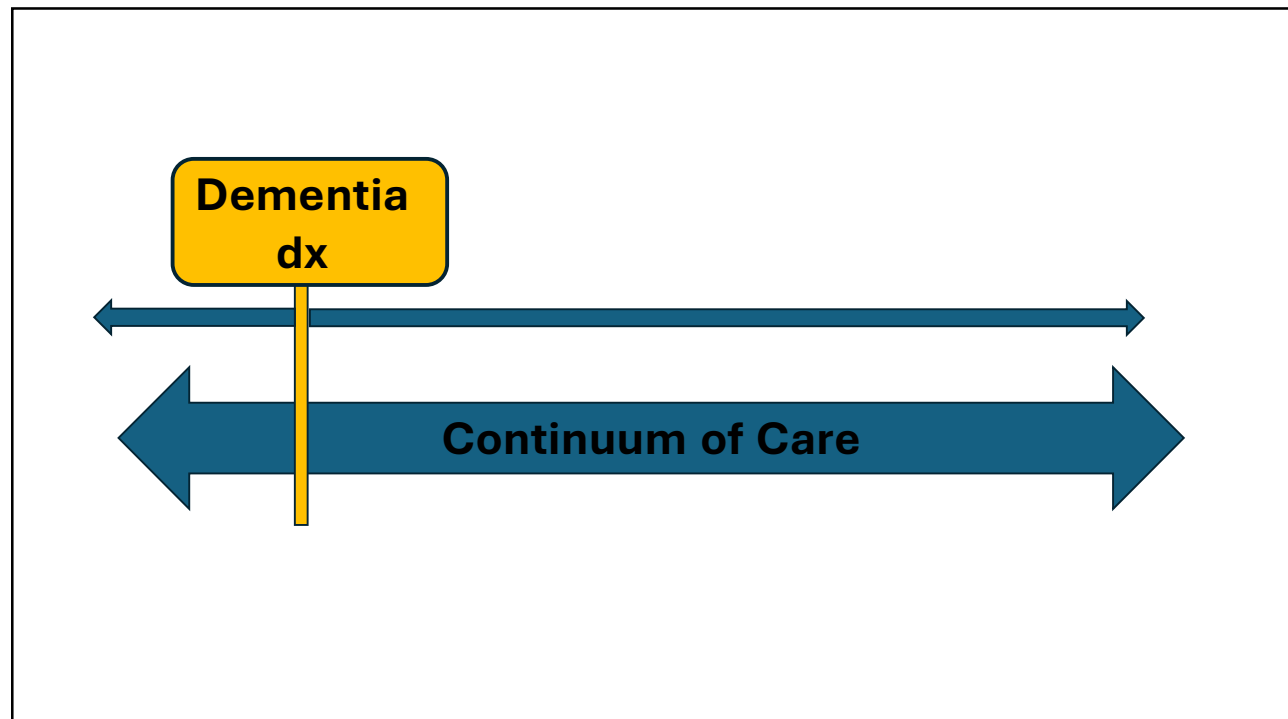
Advocate for and promote patient autonomy across professions

Provide community tools, such as Aphasia Identity Cards

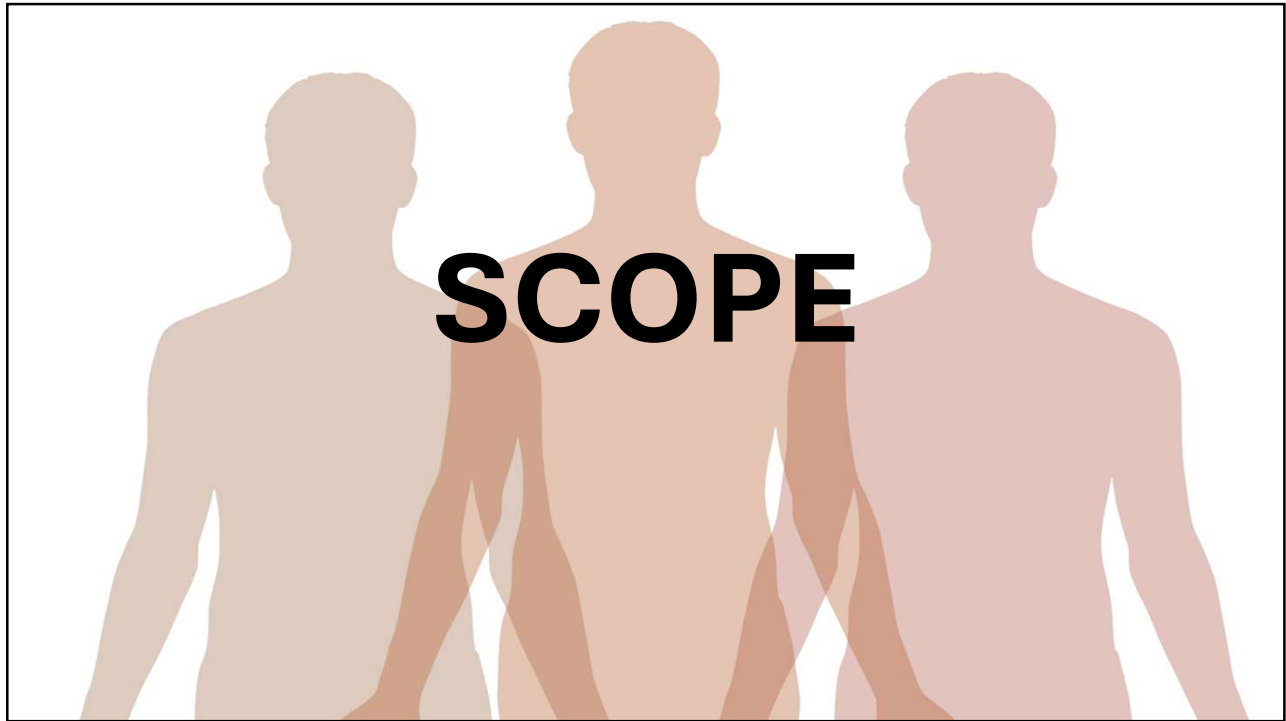
Connect patients and families with others facing the same or similar conditions



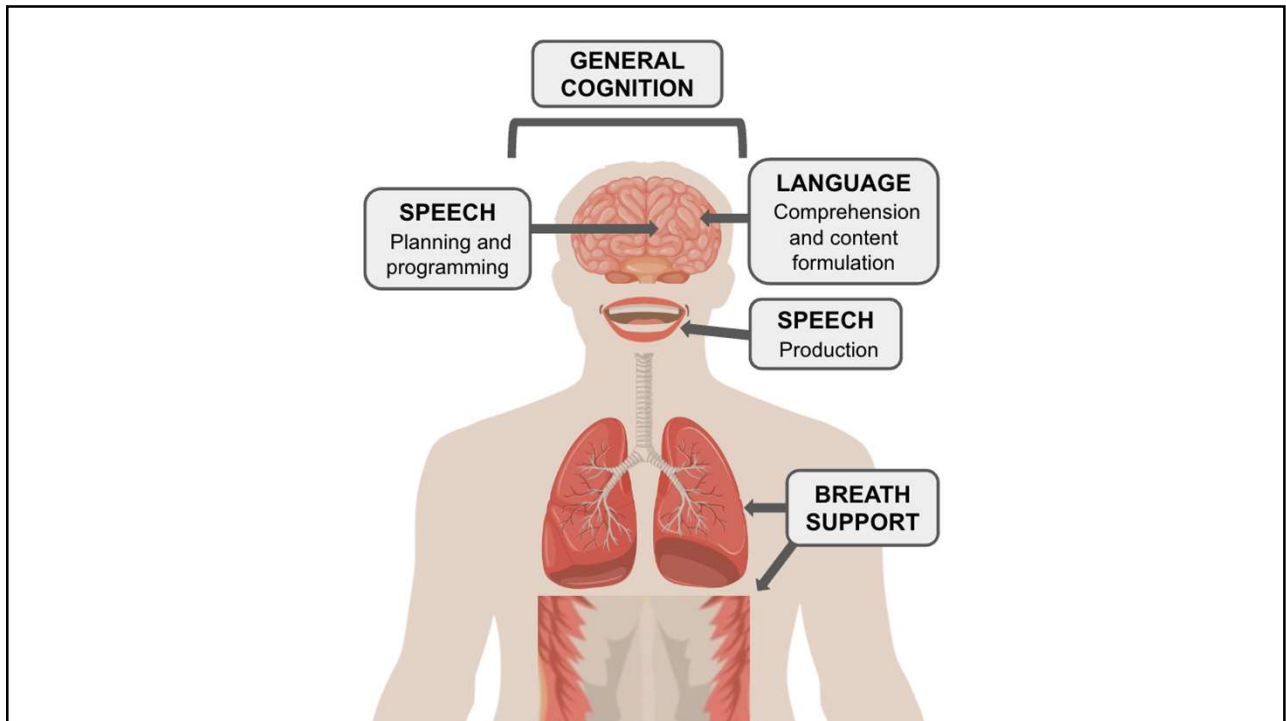
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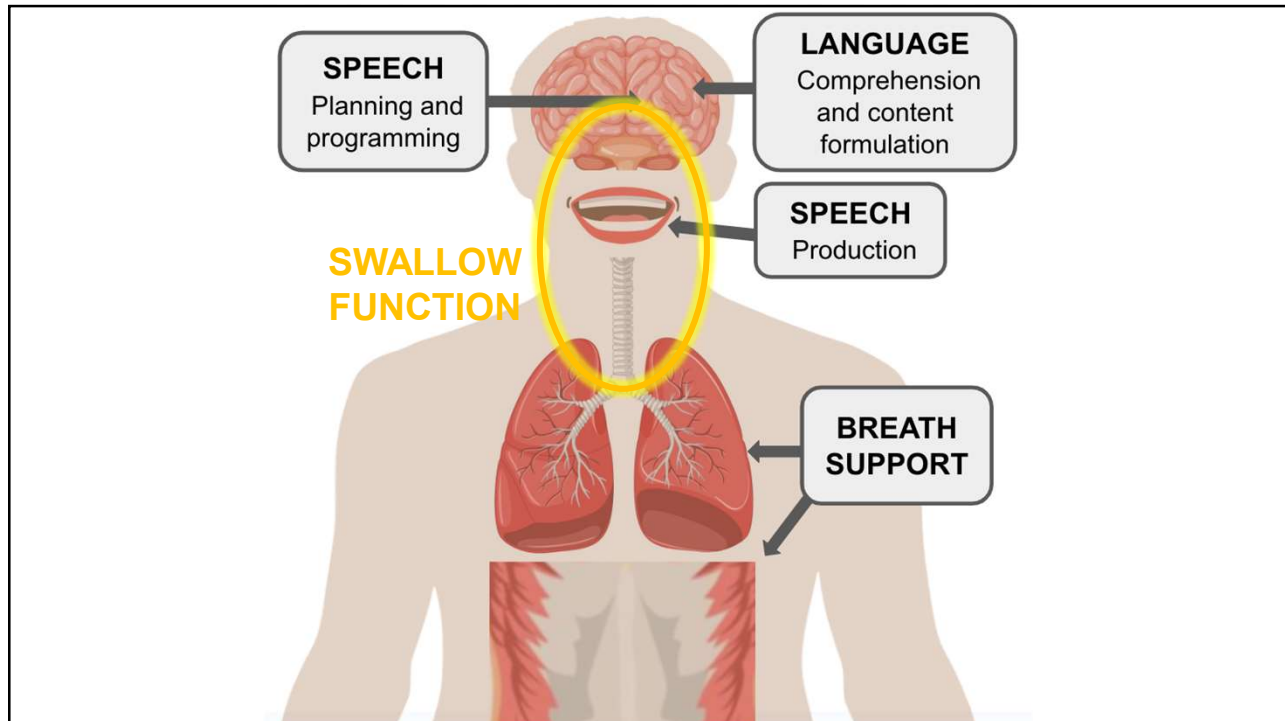
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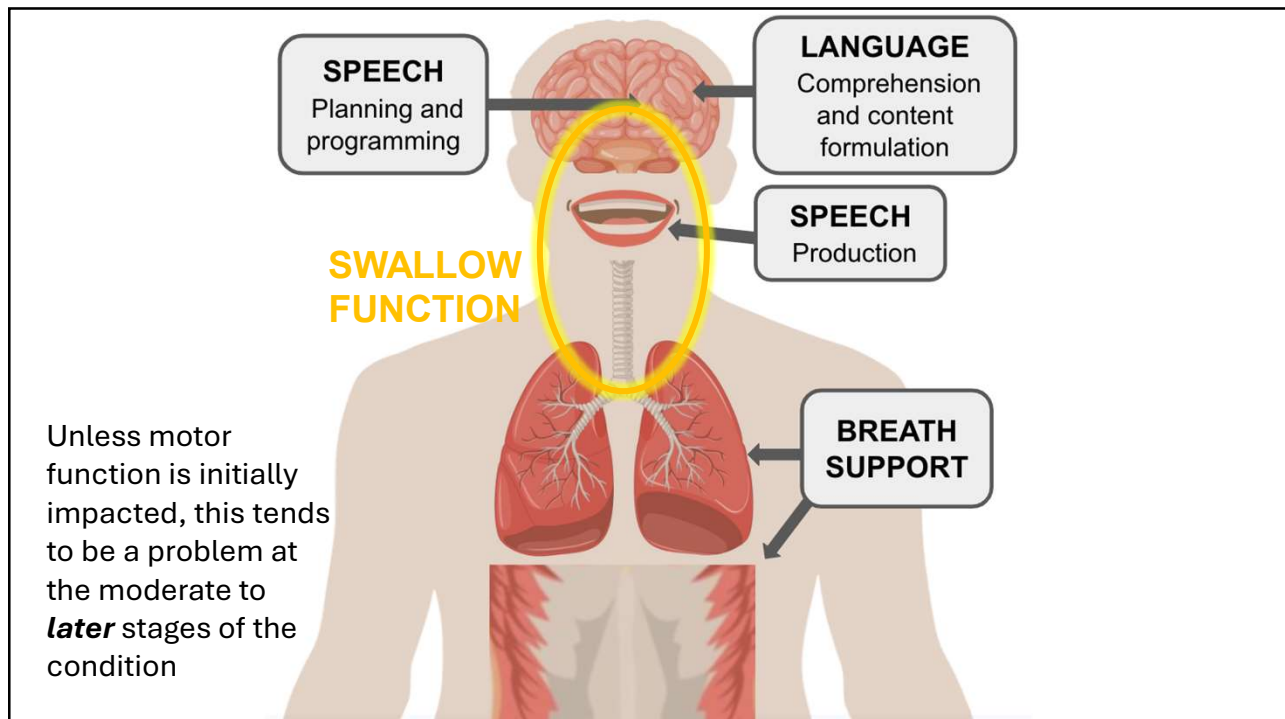
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12



13



14



Swallow Function

15

REFERRAL

- Insufficient lip closure/drooling
- Atypical time to chew, form bolus
- Insufficient clearance following swallowing
- Coughing while eating or drinking
- “Wet” sounding voice
- Repeated chest infections
- Significant and unexplained weight loss
- Discomfort at the proposition of eating or drinking

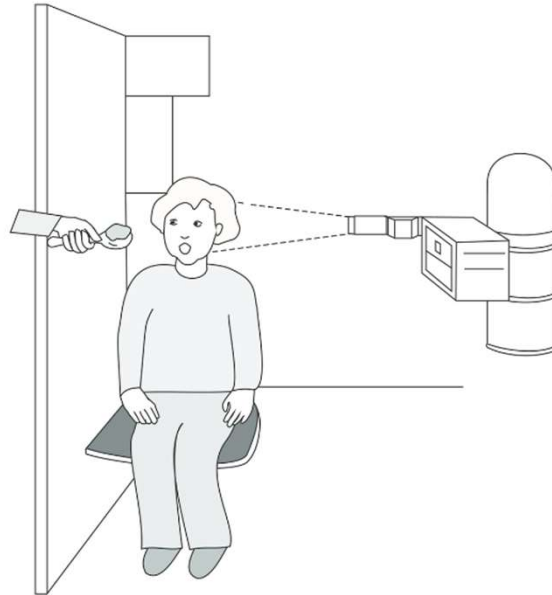


16

ASSESSMENT

Endoscopic assessment – laryngeal movement is visualized through camera that is inserted through nose.

Modified barium swallow – imaging of food or liquid consumed with barium in it to show swallow safety and efficiency.



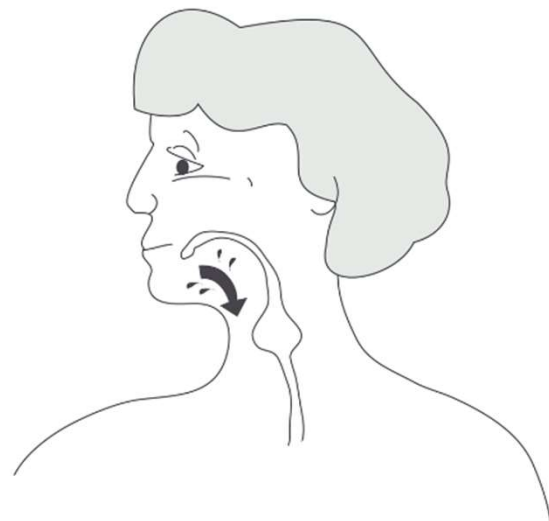
17

THERAPEUTIC APPROACHES

Exercises to build strength and coordination

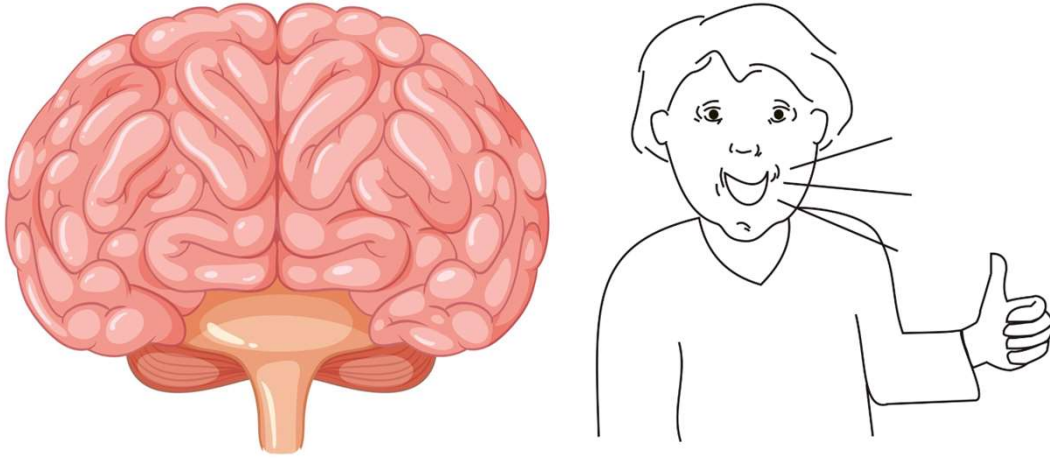
Modifications to alignment of head, body, and overall positioning

Compensatory strategies, such as eating softer foods or drinking thicker drinks to help make swallowing easier

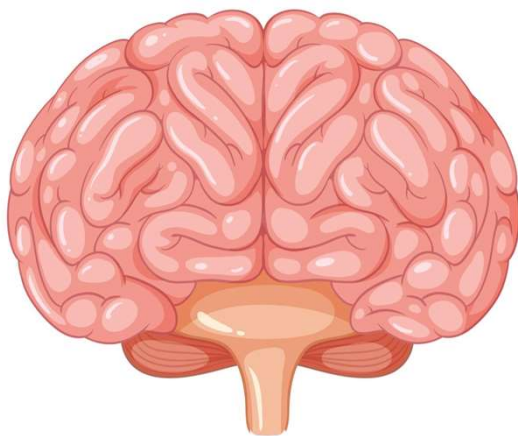


18

COMMUNICATION



19



SPEECH PLANNING AND
PRODUCTION

LANGUAGE RETRIEVAL AND
COMPREHENSION

SOCIAL-PRAGMATIC
CONVENTIONS

ELEMENTS OF **COGNITION**

20



CLINICAL SYNDROMES RESULTING IN COMMUNICATION CHANGE

21

INITIAL SYMPTOM

Condition

Amyotrophic lateral sclerosis*
 Logopenic variant primary progressive aphasia
 Nonfluent variant primary progressive aphasia
 Primary progressive apraxia of speech
 Semantic variant primary progressive aphasia

*when bulbar onset

Areas of Impact

Speech and communication
 Speech and language
 Speech and language
 Speech
 Language and communication

Adapted from Gallée, Crane, & Domoto-Reilly, *under revision*

22

SECONDARY SYMPTOM

Condition

Amyotrophic lateral sclerosis

Typical Alzheimer's disease

Posterior cortical atrophy

Corticobasal syndrome

Dementia with Lewy Bodies

Behavioral variant frontotemporal dementia

Huntington's disease

Parkinson's disease

Progressive Supranuclear Palsy

Areas of Impact

Speech and communication

Speech, language, and communication

Speech and language

Speech

Speech, language, and communication

Communication

Speech and communication

Speech

Speech

Adapted from Gallée, Crane, & Domoto-Reilly, *under revision*

23

Case 1: Parkinson's disease

A 72-year-old man with a diagnosis of Parkinson's disease raised concerns about fluctuating control over his speech.

Speech

He shared that he couldn't control his loudness or overall precision of speech, with his family and colleagues often asking him to repeat himself.

Language

No changes to comprehension, naming, and grammar were observed in the context of this session.

Communication

Typical social behaviors were noted and reported by the patient's family. The patient expressed frustrations about needing to repeat himself and resulting withdrawal from conversation-based interactions.

24

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25

Case 2: bvFTD

A 53-year-old woman living with a diagnosis of behavioral variant frontotemporal dementia (bvFTD) attends a biannual appointment with her neurologist. Her husband attends and reports significant concerns for her communication.

Speech

No changes to articulation, fluency, or breath support were reported or noted.

Language

No changes to comprehension, naming, or grammar were reported or noted.

Communication

Her husband reported significant decline in initiation, pragmatic cue processing (including vocal intonation indicating emotion), and expression blunting. Upon prompting, the patient indicated awareness of her spouse's frustrations and current behaviors that could intensify these.

26

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27

Case 3: lvPPA

A 62-year-old female is diagnosed with logopenic variant primary progressive aphasia (lvPPA) after confirmation of clinical presentation, left hemisphere parietal atrophy, and positive amyloid PET scan consistent with AD. This diagnosis is consistent with what she has experienced for years: challenges in word-finding and repeating back provided information, requisite abilities for her career as a librarian.

Speech

Errors in her speech and many self-corrections were noted.

Language

Substantial word-finding difficulty

Communication

Her husband reported decline in social participation and withdrawal from any task that required significant stretches of speaking.

28

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Language

Substantial word-finding difficulty observed and reported.

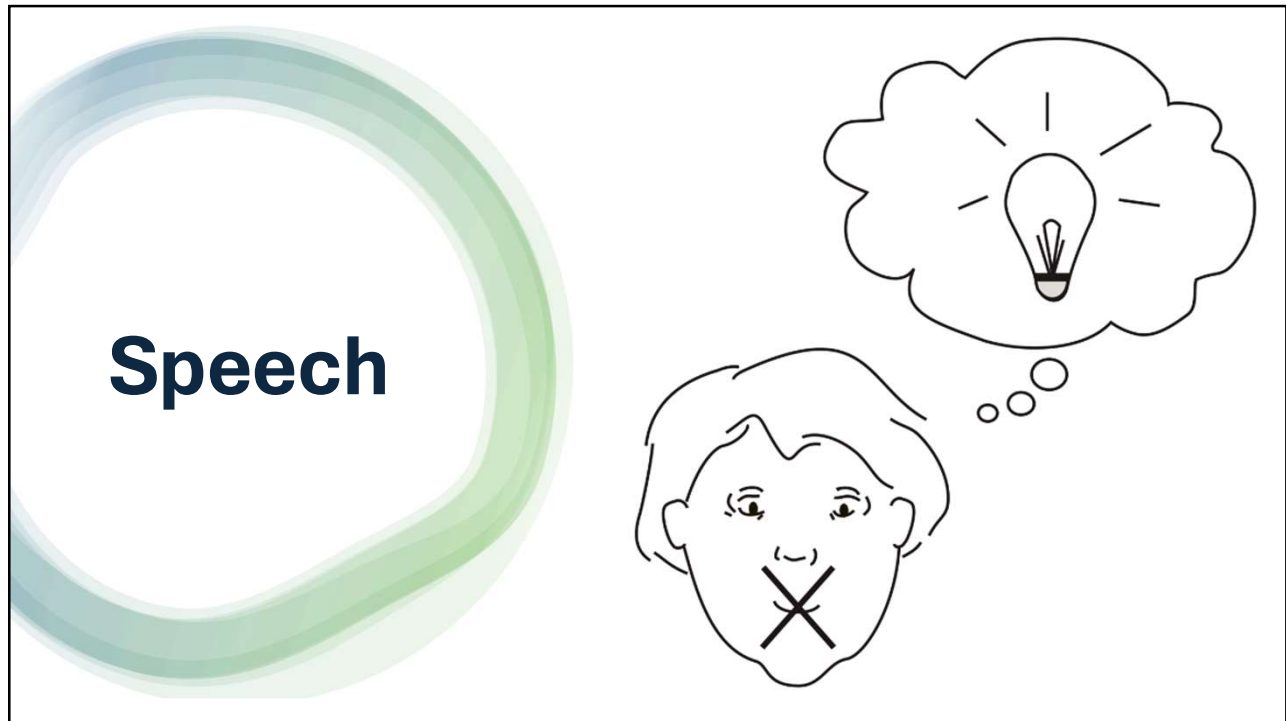
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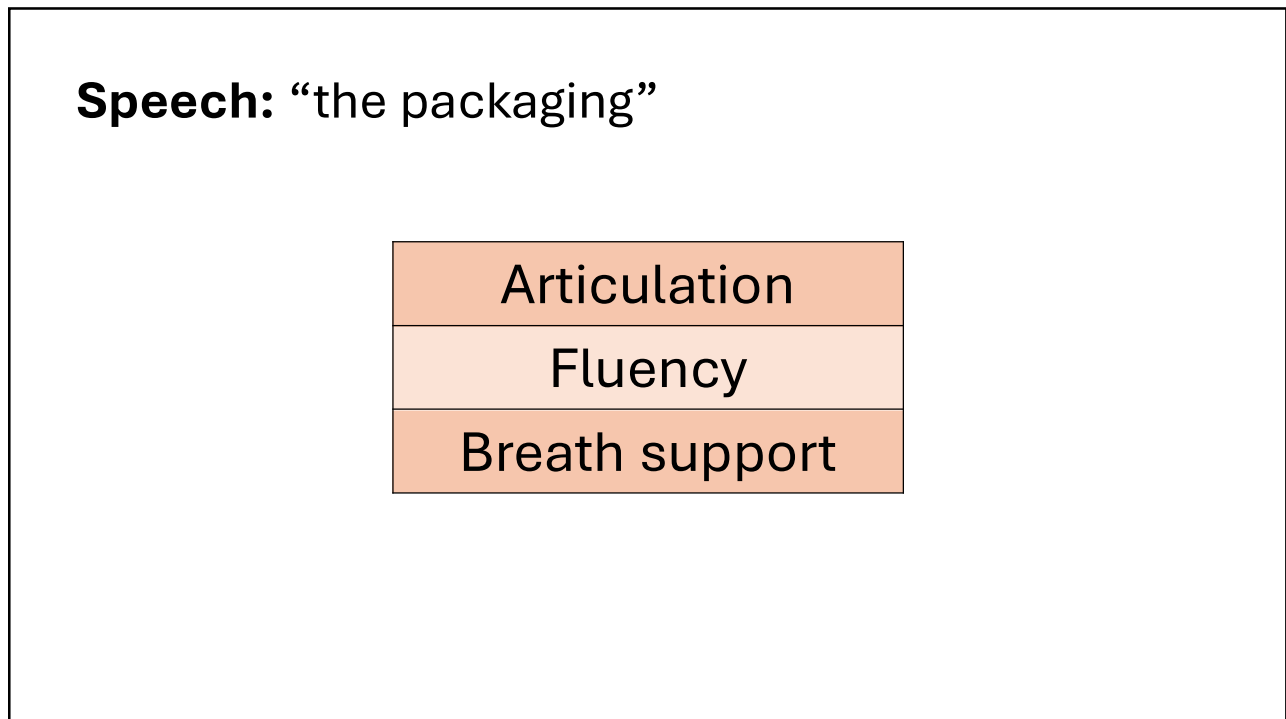
29

SPEECH, LANGUAGE, & COMMUNICATION

30



31



32

Speech: “the packaging”

What is it?

Articulation	Coordination and regularity of articulatory movements; phonological short-term memory
Fluency	Presence of emotive and grammatical prosody
Breath support	Efficacy of breath support and use of compensatory strategies

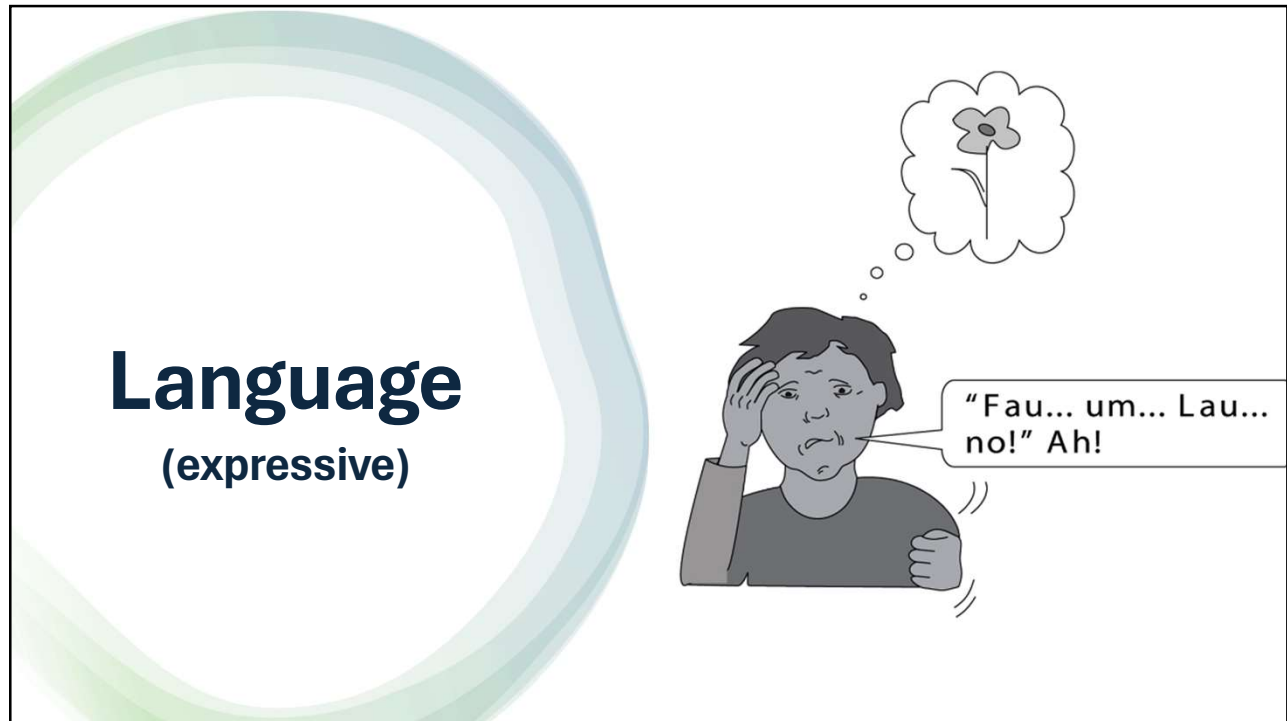
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Speech: “the packaging”

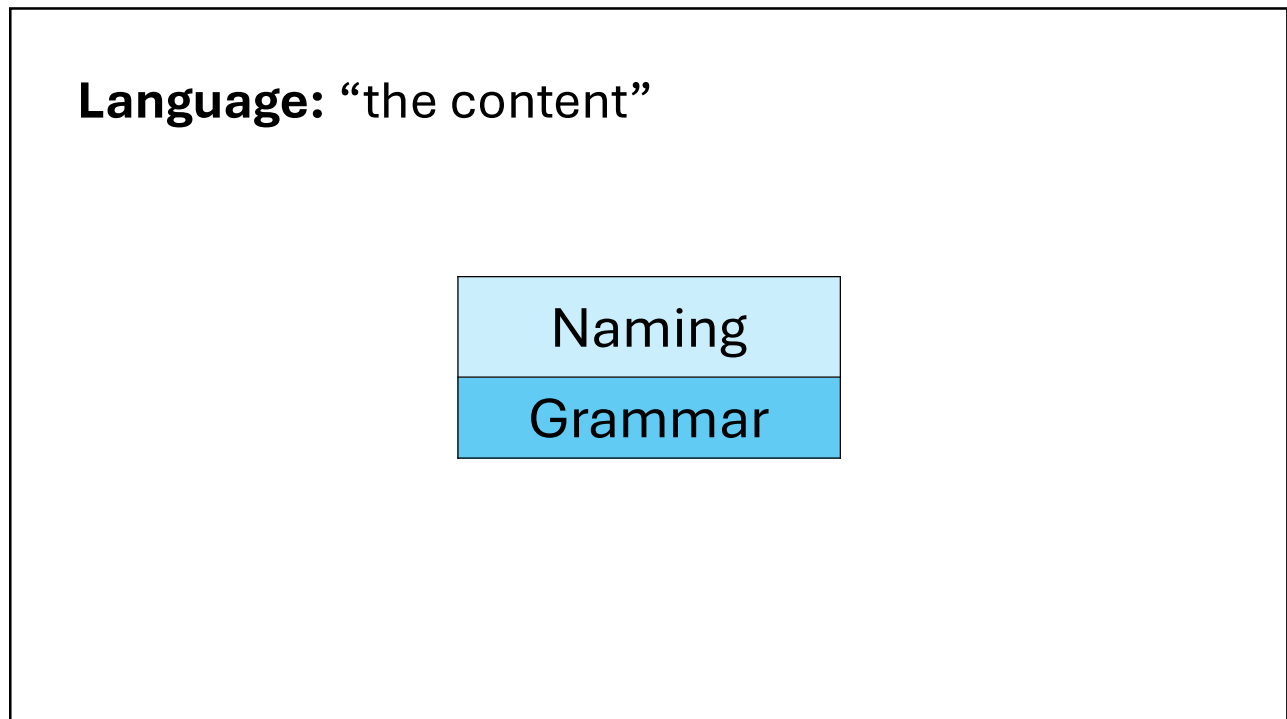
What to look for

Articulation	Accuracy, overall intelligibility, and perceived effort in conversation
Fluency	The perceived naturalness and “melodic line” of speech
Breath support	The strength and control over verbal expression, measured by loudness and breathiness

34



35



36

Language: “the content”

What is it?

Naming	Retrieval and production of the phonological, or sound-based, form of a word to identify an agent, object or concept, that can be representative of a sound-based or language-based concern
Grammar	Implementation of the rules that structure our language and modifies words to indicate quantity, ownership, and tense

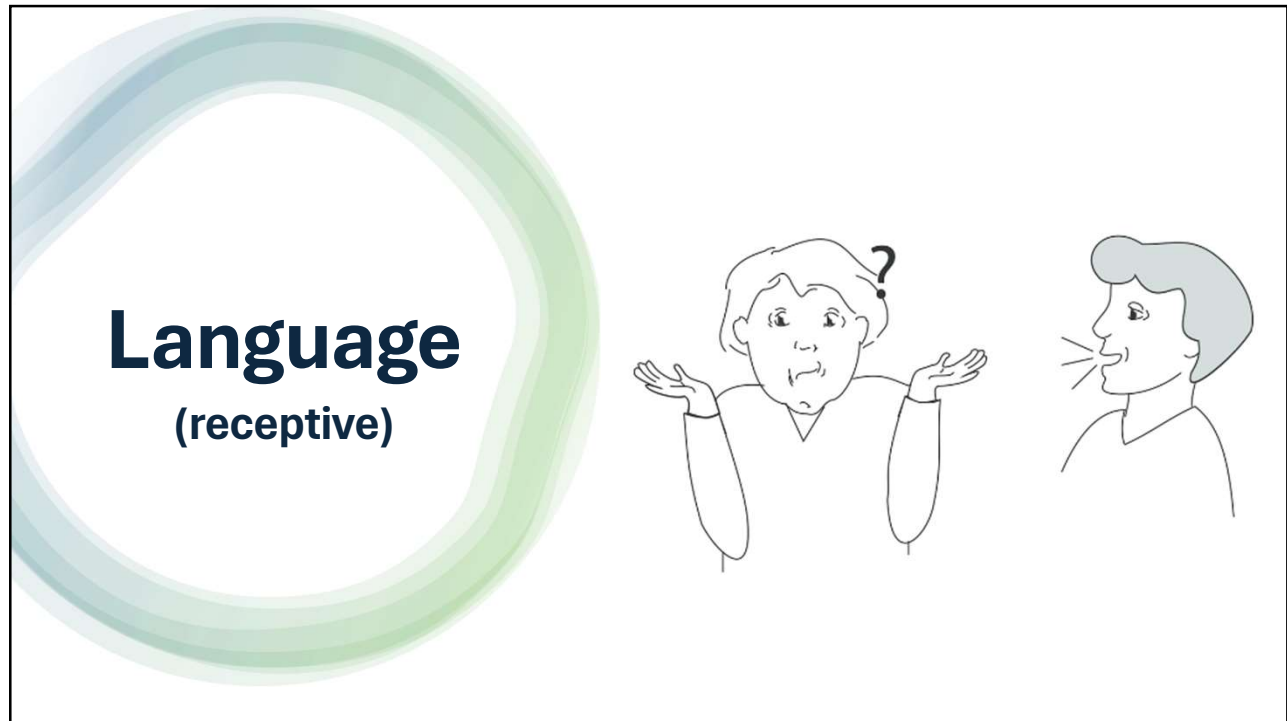
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Language: “the content”

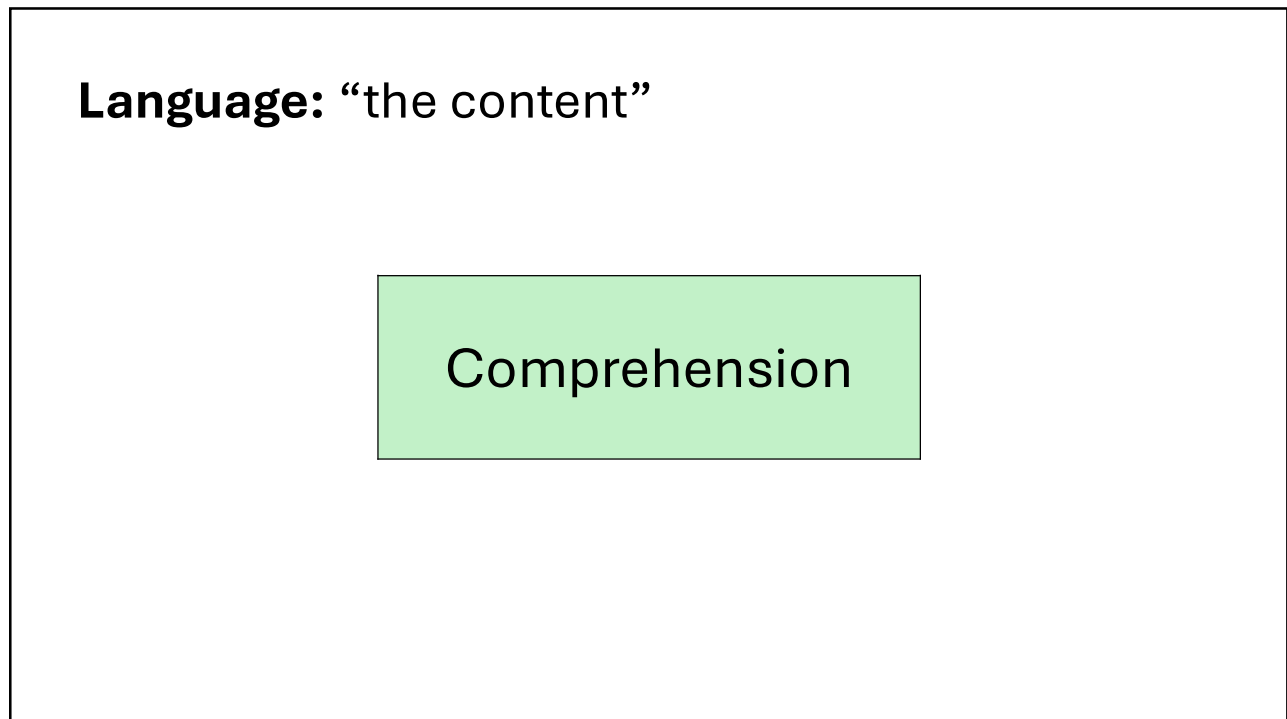
What to look for

Naming	Use of appropriately specified words in conversation Labeling pictures or items -word naming (“What is this called?”)
Grammar	Accuracy of word order and length of spoken or written utterances

38



39



40

Language: “the content”

What is it?

<p>Comprehension</p>	<p>Conceptual knowledge of actions, behaviors, events, features, objects, and properties divorced from word representations and personal associations (semantics³³)</p>
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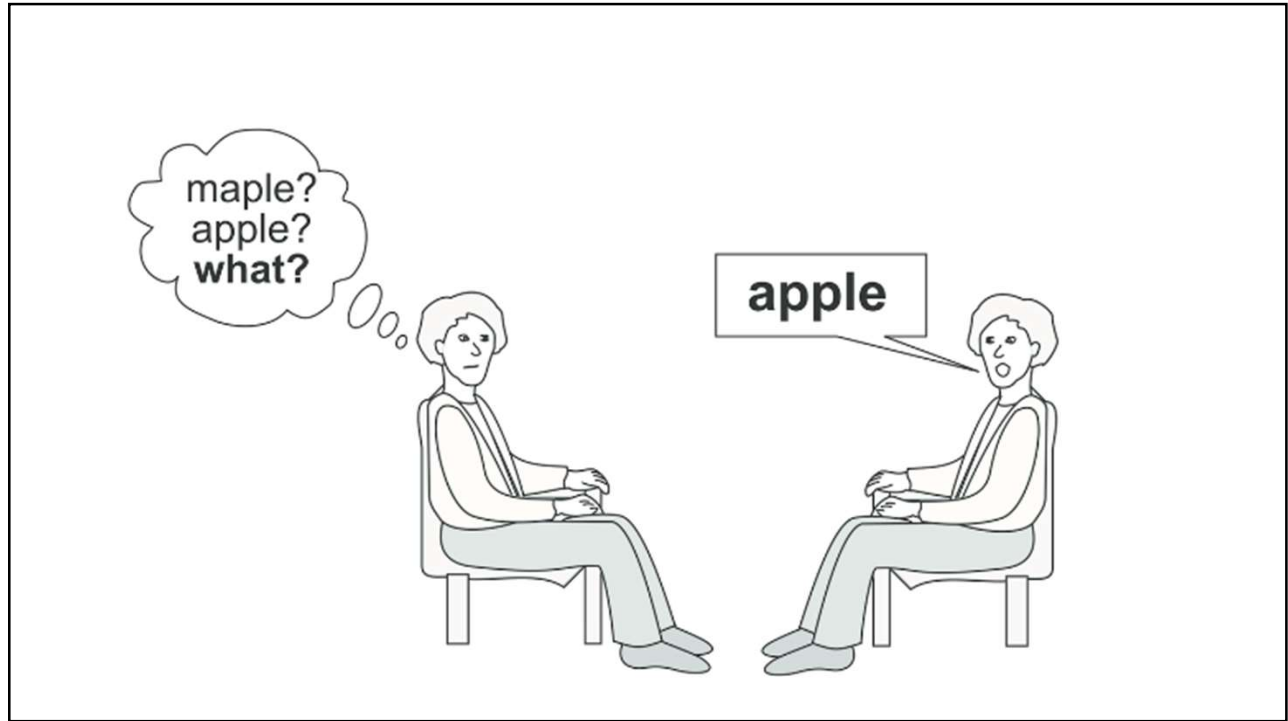
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Language: “the content”

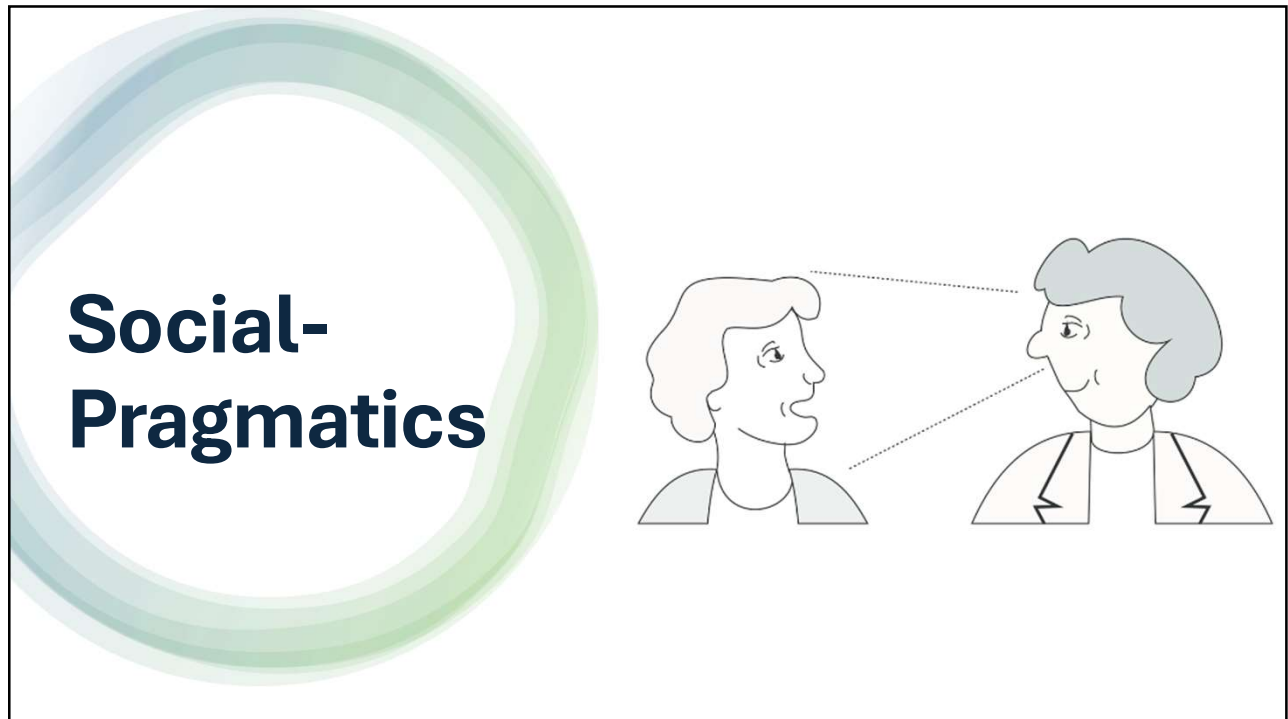
What to look for

<p>Comprehension</p>	<p>Reliable responses to “Yes/No” questions</p> <p>Appropriate or expected responses to picture-based, verbal or written prompts</p> <p>Confusion about the meaning of more common concepts or references that were once familiar</p>
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42



43



44

Communication: “the performance”

Functional Communication

Social-Pragmatic Functioning

45

Communication: “the performance”

What is it?

<p>Functional Communication^{18, 40-42}</p>	<p>Independent implementation of circumlocution or other repair strategies as a strategy to compensate for reduced linguistic function and care partner support</p>
<p>Social-Pragmatic Functioning^{42,43}</p>	<p>Source of possible barriers or strength in social-pragmatic communication, which can range from disinhibition to the misinterpretation of paralinguistic cues</p>

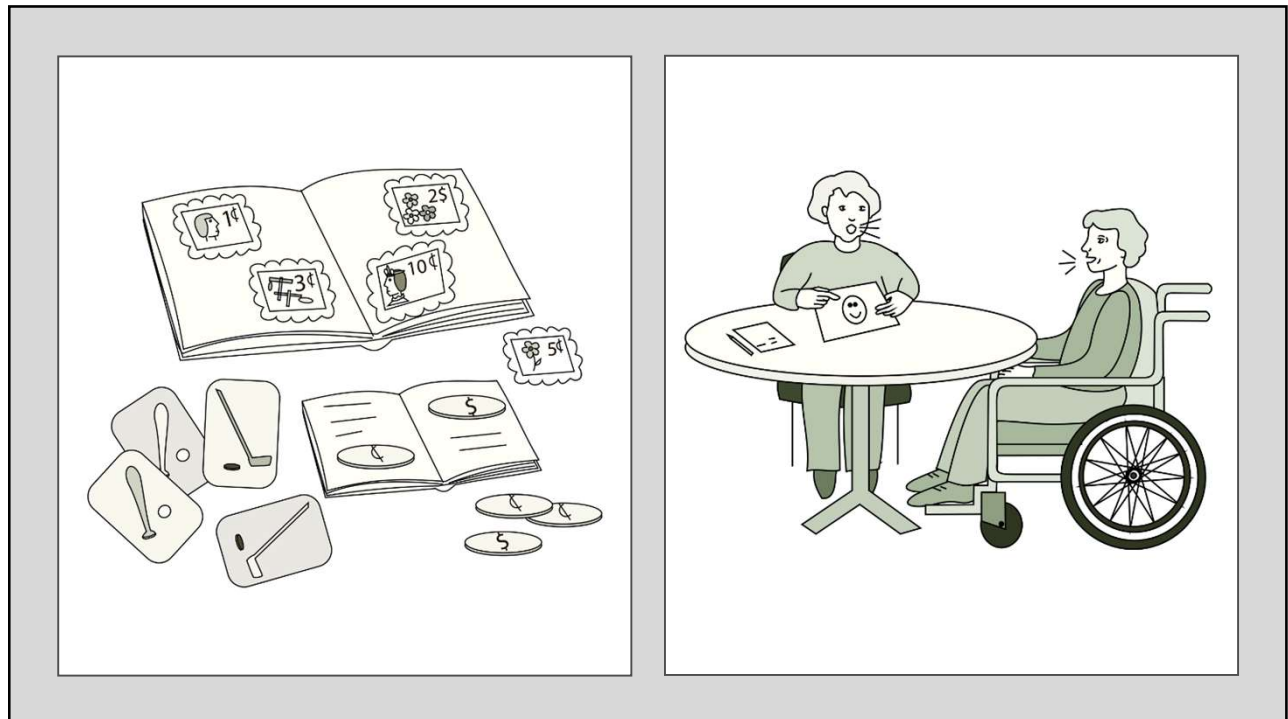
46

Communication: “the performance”

What to look for

<p>Functional Communication</p>	<p>How successful the speaker is in communicating their thoughts, needs, and desires, regardless of how they get there</p>
<p>Social-Pragmatic Functioning</p>	<p>Adherence to the predominantly non-verbal rules of communication that enhance social participation</p>

47



48



49

Cognition: “the implementation”

What to look for

Perception	Identification and processing of relevant stimuli in immediate environment
Selective attention	Attention to conversation partner and tasks
Sustained attention	Maintenance of attention to conversation partner and tasks in this context)

50

Cognition: “the implementation”

What to look for

Initiation	Purposeful and independent initiation of communicative participation
Inhibition	Purposeful, voluntary restraint and adherence to expectations and sharing of content
Working memory	Maintenance and use of information provided in and relevant to current context
Long-term memory	Maintenance, retrieval, and use of information prior to current context

51

**SHOULD I REFER TO SPEECH-
LANGUAGE PATHOLOGY?**

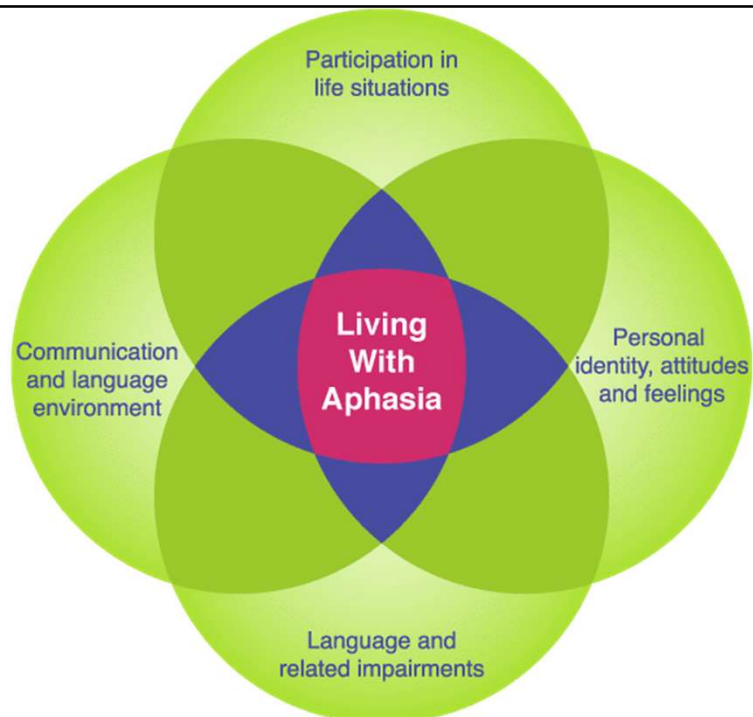
52

Any noticeable or reported change in communicative success warrants follow-up assessment with a SLP

Providers in your area can be located at <https://www.asha.org/profind/>

53

Life Participation Approach to Aphasia (LPAA)



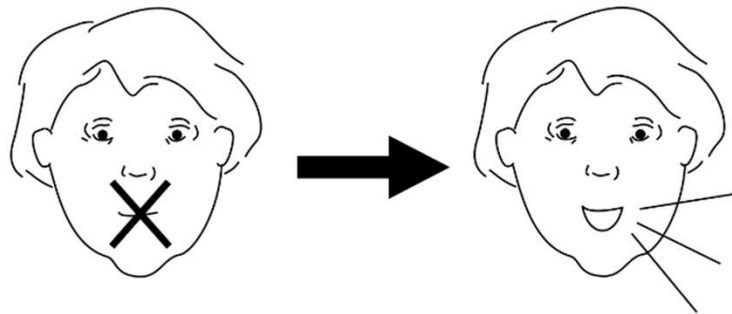
54

THERAPEUTIC APPROACHES TO COMMUNICATION CHANGE

55

FOCUS

- Restitutive
- Compensatory
- Palliative



56

Restitutive

Focus: Restoring or maintaining function of specific skills impacted by condition

Emphasis: Functionality and relevance to the patient

Examples: Retraining functional words, the retrieval of object features or descriptions, grammatical constructions, or scripts, targeted strength training

57

Compensatory

Focus: Compensating for lost function with alternative strategies or modes of communication

Emphasis: Comfort and ease to the patient

Examples: Circumlocution techniques (e.g., talking *around* a word or concept), augmentative and alternative communication (AAC) devices (high [iPad app], medium [microphone] or low tech [gestures and facial expressions]), communication partner training

58

Palliative

Focus: Adapting approaches to evolving symptoms and expressed needs, counseling, involving the interprofessional team, and advocating for the prolongation of patient autonomy

Emphasis: Interdisciplinary and responsive care to enhance quality of life and overall well-being

Examples: Connecting the patient, care partners and families with local support networks and groups, identifying moving targets and ways in which to maintain connection

59

APHASIAID

A free online tool for people with aphasia.

Create a personalized Aphasia ID that you can print and start carrying right away. This is a great way to ease communication awkwardness, especially for people who are unfamiliar with aphasia.



Make yours today!

I am a:

<http://aphasiaid.com/>



National
Aphasia
Association

60

STRUCTURE

- One-on-one
- Partner-based
- Group sessions
(private or community)



61

Multiple approaches are often positively indicated

Restitutive	Compensatory	Palliative
One-on-One	Group Session	Partner-Based
Targeted naming practice of a subset of important and functional words to the patient	Multimodal strategy training for the successful implementation of AAC in group conversations	Informational counseling and relationship building to appropriately adapt intervention based on evolving needs

62

Case 1: Parkinson's disease

Structured Program for Voice Amplification

- 1) Exercises to enhance breath support, muscle coordination and strength to augment his vocal volume and stamina
- 2) Education on alternative techniques to compensate for limited vocal capacity, such as the use of a personal microphone

63

Case 2: bvFTD

Informational Counseling and Communication Partner Training

- 1) Joint sessions to learn and practice communication enhancement techniques
- 2) One-one-one sessions for the spouse for more intensive training and informational counseling
- 3) Group support network sessions to connect with local community

64

Case 3: lvPPA

Restitutive and Compensatory Approaches to Reduce Communication Breakdowns

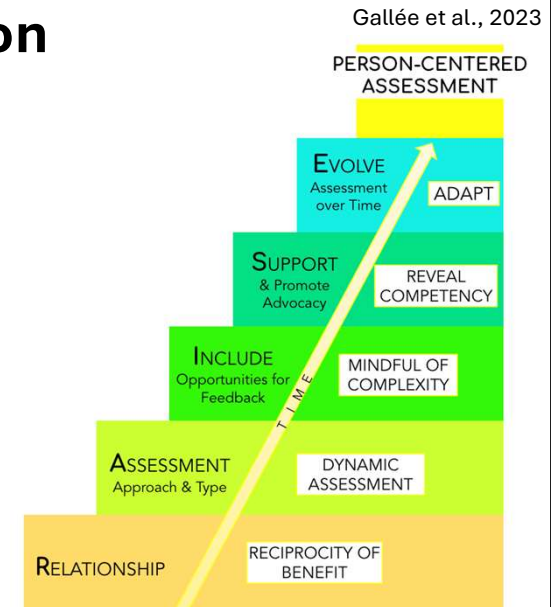
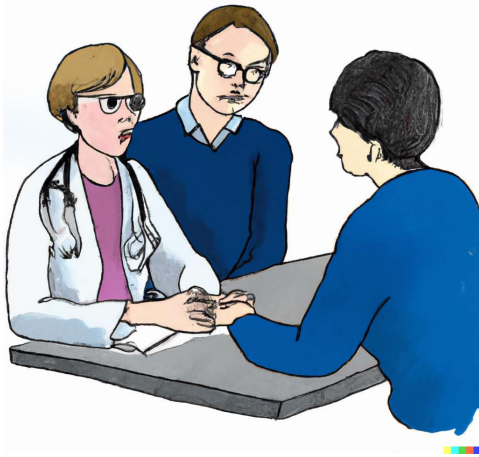
- 1) One-on-one restitutive approach to target naming, with home practice
- 2) Group-based session to practice the use of compensatory strategies, such as circumlocution and low tech ACC (e.g., gesturing, drawing, picture boards)
- 3) One-on-one session target reintroduction to working part-time at her library with accommodations

65

COMMUNICATION MODIFICATIONS FOR PROVIDERS

66

The Power of Conversation



67

General Principles

- 1: Ask simple and direct questions
- 2: Provide multiple avenues for communication
- 3: Help, when asked
- 4: Acknowledge frustrations
- 5: Speak clearly and slowly
- 6: Provide choices
- 7: Provide time to process and answer
- 8: Clarify when needed
- 9: Do not make assumptions

68

Environmental Modifications

- 1: Reduce background noise
- 2: Limit visual distractions
- 3: Face the patient
- 4: Limit technical jargon
- 5: Augment your communication
- 6: Involve care partners and family members

69

Additional Resources



<https://aphasia.org/>



<https://speechtherapypa.builtbyknights.com/>



<https://www.asha.org/>



<https://www.ancds.org/>

70

References



71

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72