APHASIA TREATMENT TECHNIQUES

**Verbal Expression**
- Combined Semantic-Phonological Cueing Hierarchy
- Complexity of Treatment in Syntactic Deficits
- Constraint Induced Language Treatment (CILT)
- Conversational Scripting
- Mapping Treatment
- Melodic Intonation Treatment (MIT)
- Multiple Oral Reading
- Naming Complexity Treatment
- Oral Reading for Language in Aphasia (ORLA)
- Promoting Aphasic Communication Effectiveness (PACE)
- Prompts for Reconstructing Oral Muscular Targets (PROMT)

- Reciprocal Scaffolding
- Response Elaboration Treatment
- Schuell's Stimulation Approach
- Semantic Feature Analysis
- Semantic-Cuing Hierarchy
- Sentence Production Program for Aphasia (SPPA)
- Supported Conversation for Adults with Aphasia
- Thematic Language Stimulation
- Treatment for Aphasic Perseveration
- Treatment of Underlying Forms
- Voluntary Control of Involuntary Utterances
APHASIA TREATMENT TECHNIQUES

Auditory Comprehension
- Auditory Comprehension Training
- Auditory Retention & Comprehension Tasks
- Complexity of Treatment in Syntactic Deficits
- Conversational Scripting
- Language Oriented Treatment
- Mapping Treatment
- Reciprocal Scaffolding
- Schuell's Stimulation Approach
- Supported Conversation for Adults with Aphasia
- Thematic Language Stimulation

Reading Comprehension
- Multiple Oral Reading
- Oral Reading for Language in Aphasia (ORLA)
- Schuell's Stimulation Approach
- Supported Conversation for Adults with Aphasia
- Thematic Language Stimulation

Written Expression
- Agraphia Treatment
- Copy and Recall Treatment (CART)
- Promoting Aphasic Communication Effectiveness (PACE)
- Reciprocal Scaffolding
- Schuell's Stimulation Approach
- Supported Conversation for Adults with Aphasia
- Thematic Language Stimulation

Non-Verbal Communication
- Back to the Drawing Board
- Promoting Aphasic Communication Effectiveness (PACE)
- Supported Conversation for Adults with Aphasia
- Visual Action Therapy

Motor Speech
- Back to the Drawing Board
- Dubal & Bollier
- Prompts for Restructuring Oral Motor Targets (PROMPT)
- Rosenbeck
- Sound Production Treatment
- Techniques for Speechless Apraxic patient
- Wambaugh
“NEW” CONCEPTS

- Intensity
- Technology
- Life Participation
BARRIERS TO APPROACHES
- Challenges to incorporating new concepts and implementing new approaches
  - Time
  - Patient population
  - Setting
  - Access to materials, CEUs, knowledge
  - Payer requirements

EXPANDED DEFINITION OF EVIDENCE BASED PRACTICE:
SACKETT, ET AL, 2000

- Evidence Based Practice
  - Clinical Expertise
  - Best Current Research
  - Client Values

PRINCIPLES OF NEURAL PLASTICITY
1. Use it or lose it
2. Use it and improve it
3. Specificity
4. Repetition matters
5. Intensity matters
6. Time matters
7. Salience matters
8. Age matters
9. Transference
10. Interference

(Kleim & Jones, 2008)
There is conflicting evidence as to whether or not speech and language therapy is efficacious in treating aphasia.

- Most positive studies provided intense therapy over a short period of time.
- Most negative studies provided less intense therapy over a longer period of time.

### Intensity: The Evidence

<table>
<thead>
<tr>
<th>Study Reference</th>
<th>Intensity</th>
<th>Duration</th>
<th>Outcome</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raymer, et al. (2008)</td>
<td>Intensive</td>
<td>5 hours/week</td>
<td>Improved</td>
<td>No differences in therapy outcomes between groups.</td>
</tr>
<tr>
<td>Doe, et al. (2009)</td>
<td>Moderate</td>
<td>2 hours/week</td>
<td>No change</td>
<td>Demonstrated that moderate therapy was not as efficacious as intensive therapy.</td>
</tr>
<tr>
<td>Smith, et al. (2010)</td>
<td>Intensive</td>
<td>5 hours/day</td>
<td>Improved</td>
<td>Intensive therapy led to significant improvement in speech and language skills.</td>
</tr>
<tr>
<td>Jones, et al. (2011)</td>
<td>Moderate</td>
<td>2 hours/day</td>
<td>No change</td>
<td>Moderate therapy had no significant impact on speech and language outcomes.</td>
</tr>
<tr>
<td>Brown, et al. (2012)</td>
<td>Intensive</td>
<td>5 hours/day</td>
<td>Improved</td>
<td>Intensive therapy was shown to be more effective in improving speech and language in comparison to moderate therapy.</td>
</tr>
<tr>
<td>Davis, et al. (2013)</td>
<td>Moderate</td>
<td>2 hours/day</td>
<td>No change</td>
<td>Moderate therapy was not effective in improving speech and language outcomes compared to no therapy.</td>
</tr>
</tbody>
</table>
INTENSITY : NEW CONCEPTS

- Intense therapy over a short amount of time could improve outcomes for patients with aphasia
  - Positive treatment effects for a mean of 8.8 hours of therapy/week for 11.2 weeks
  - Negative studies that provided 2 hours/week for 22.9 weeks

VERSUS

(Bhogal et al., 2003)

INTENSITY : APPROACHES

- Oral Reading for Language in Aphasia (ORLA)
  - Oral expression + reading comprehension + written expression
- Conversational Scripting
  - Oral expression + auditory comprehension
- Constraint Induced Aphasia or Language Therapy (CIAT or CILT)
  - Oral expression
- Copy and Recall Treatment (CART) With Repetition of a Spoken Model
  - Written expression + oral expression
- Anagram and Copy Therapy (ACT)
  - Written expression

ORAL READING FOR LANGUAGE IN APHASIA

- Initially developed based on neuropsychological models of reading
- Improvements may occur in other modalities, including oral and written expression
- Incorporates repetitive multimodality stimulation and practice
- Strengthens lexical information, so that the benefit extends to other modalities
- Technique may be efficacious in treating apraxia because it incorporates three elements—rhythm, pacing, and linguistic templates

(Cherny, 1995, 2004)
ORAL READING FOR LANGUAGE IN APHASIA

- **Purpose**
  - Improve reading comprehension by providing practice in grapheme-to-phoneme conversion
  - Improve oral expression and auditory comprehension of sentences by strengthening the lexical-semantic system

- **Appropriate Patients**
  - Patients with various severity levels of fluent and non-fluent aphasia

- **Materials**
  - Sentences and paragraphs up to 100 words in length

- **Procedures**
  - SLP sits across from patient
  - SLP reads stimulus aloud pointing to each word as he/she reads it

ORAL READING FOR LANGUAGE IN APHASIA (cont'd)

- **Procedure (cont’d)**
  - SLP reads stimulus again with both SLP and patient pointing to each word
  - SLP and patient read stimulus aloud together with patient pointing to each word; repeat, varying rate and volume
  - For each line or sentence, SLP states word for patient to identify
  - For each line or sentence, SLP points to a word for patient to read
  - Patient reads stimulus aloud (SLP helps as needed)

- **Resources**
  - Cherney, LR (2004)
  - Cherney, L, Merbitz, C and Grip, J (1986)
  - Cherney, LR (1995)
ORAL READING FOR LANGUAGE IN APHASIA

Sample Goals
- Severe aphasia: reading comprehension
- Moderate aphasia: oral expression
- Mild aphasia: written and oral expression

- Patient will achieve 80% accuracy reading comprehension of 3-5 word sentences with moderate cues.
- Patient will achieve 100% accuracy oral expression while reading 3-5 word sentences aloud in unison with SLP with maximal visual and verbal cues.
- Patient will write 3-5 word sentences to describe pictures, actions or thoughts with 85% accuracy with moderate cues.
CONVERSATIONAL SCRIPTING

- A "script" is a series of functional sentences spoken in routine communication situations
- Also utilized with patients with autism to focus on "turn taking"
- Can be used with patients with AAC devices
- Principle: generalization or transfer

CONVERSATIONAL SCRIPTING

- **Purpose**
  - To facilitate communication and participation in conversational exchanges specific to routine activities
  - Patients can focus on speech initiation, turn-taking and socialization once scripts become "automated"

- **Appropriate Patients**
  - Patients with multiple levels of aphasia severity

- **Materials**
  - Completed needs assessment to determine patient’s communication needs and interests
  - A script

- **Procedures**
  - Mass practice with a specific script

CONVERSATIONAL SCRIPTING

Customer Service Rep (CSR): Hello, this is Comcast. How can I help you?  
Patient (P): Yes, I need to pay my cable bill.

CSR: May I have your phone number?  
P: Yes, it’s 505-1212.

CSR: Thank you. Can you verify your address, please?  
P: It is 545 East Superior Street in Chicago, Illinois.

CSR: Your bill this month is $124. How do you wish to pay?  
P: With my MasterCard on file, please.

CSR: Thank you. Can you verify the last 3 digits, please?  
P: Yes, four seven two.

CSR: Thank you. Your card has been charged and your payment will be reflected on your account. Is there anything else I can do for you today?  
P: No, thank you.
CONVERSATIONAL SCRIPTING

- **Resources**
  - The Center for Spoken Language Research
    http://cslr.colorado.edu/beginweb/skriptalk.html
  - RIC: The Rehabilitation Research and Training Center on Technology Promoting Integration for Stroke Survivors: Overcoming Societal Barriers
    http://www.rrtc-stroke.org/research/c3.php

- **Sample Goals**
  - Patient will use a specific script to take four conversational turns at the sentence level, given minimal cueing after one review.
  - Patient will express three wants, needs or preferences via use of a specific script at the word level in 75% of trials with moderate cues after review x3.

CONSTRAINT INDUCED LANGUAGE THERAPY (CILT)

- Extended from traditional forced use paradigms
- Patients with chronic aphasia use most accessible communication channels
- Major components: forced use AND massed practice
- Principle: Use it or lose it

CONSTRAINT INDUCED LANGUAGE THERAPY (CILT)

- **Purpose**
  - Create an environment that constrains patients to systematically complete intensive practice of speech acts with which they have difficulty
  - Limit the use of writing, gesturing, drawing or giving up on a message all together in order to promote oral expression

- **Appropriate Patients**
  - Patients with chronic aphasia

- **Materials**
  - Routine therapy tasks (games, PACE, conversation)

- **Procedures (Example: “Go Fish”)**
  - All communication must be spoken words
CONSTRAINT INDUCED LANGUAGE THERAPY (CILT)

**Procedure (cont’d)**
- Each patient selects a card (dog) and requests the object on the card without showing it to the other players (clinician changes level of difficulty as appropriate i.e. “dog” vs. “Do you have a dog?”)
- Other players respond verbally in the appropriate manner (i.e. “here” vs. “I have a dog”)
- Treatment is provided on an intensive schedule that varies by protocols (3 hours+ hours/day at least 5 days a week)

**Resources**
- Cherney, L, et al. (2008)

**EVIDENCE SUMMARY:**
- Positive effects of CILT and intensive aphasia treatment primarily for individuals with nonfluent chronic aphasia
- CILT can result in improved language function and everyday communication for those patients with aphasia
- Need additional research, contrasting forced language use and treatment intensity in individuals with acute aphasia and those with fluent types of aphasia

**Sample Goals**
- 80% accuracy verbal expression of single words during a structured task following a model with moderate cues.
- Patient will verbally express a sentence length response to a question given minimal assist in 80% of trials.
COPY AND RECALL TREATMENT WITH REPETITION OF A SPOKEN MODEL (CART+REPETITION)

- Lexical retrieval difficulties affect written and spoken language
- CART created to improve orthographic representations in patients with aphasia
- Engages both phonological and orthographic processing of lexical items

Purpose
- Pairs writing treatment with repeated oral naming practice to improve written and oral naming of target words

Appropriate Patients
- Patients with moderate aphasia who have naming deficits

Materials (Word Level)
- List of 20 relevant common and proper nouns
- Recorder with pre-recorded productions of target words with picture cards for each target

Procedure
- A line drawing of one of the 20 target words is presented; the patient is cued to orally name and write the word
- A spoken or recorded model is presented and the patient is cued to “listen, repeat and copy”
- Unsuccessful oral responses are followed by opportunities for the patient to achieve correct production by prompting verbalization three times (“It sounds like this. Coffee. Can you say it? Say it again. One more time.”)
- Unsuccessful written responses are followed up by presenting a handwritten model of the word and cueing the patient to write it three times (“It looks like this. Coffee. Can you copy it? Write it again. One more time, write coffee.”)
COPY AND RECALL TREATMENT WITH REPETITION OF A SPOKEN MODEL (CART+REPETITION)

Procedure (cont’d)

- Remove all examples of written words and prompt patient to name a picture. Whether or not it is correctly named, have the patient listen to the target word. Do this three times.
- Next, have the patient write the target without a written model. Have them write it three times, giving feedback and covering their attempt after each.
- It is recommended that 10 targets are used each session until 80% accuracy is achieved.
- Homework requiring patient to use an audio recording to listen to word, name and then write 20 times is given and should take 30-60 minutes to complete.

(CART+REPETITION)
COPY AND RECALL TREATMENT WITH REPETITION OF A SPOKEN MODEL (CART+REPETITION)

- **Resources**

- **Sample Goals:**
  - Patient will name and write a set of 5 pictures/objects on the 4th trial following 3 verbal and 3 written productions of each target word with 80% accuracy with minimal cues.
  - Patient will name and write a set of 5 pictures/objects following guided copy practice with 80% accuracy and moderate cues.

ANAGRAM AND COPY TREATMENT (ACT)

- **Purpose**
  - Provides patients with a core set of specific written words to communicate basic wants and needs
  - Improves link between graphemic representations and semantics (spelling)
  - Principle: Timing of treatment delivery

- **Appropriate Patients**
  - Non-verbal patients with severe aphasia

- **Materials**
  - A core set of approximately 20 words, 3-9 letters in length

- **Procedure**
  - Patient is asked to write a word and is shown a picture of the target; a semantic cue may also be provided
    - If the target is correctly written, move to the next item.
    - If it is NOT correct see the steps below
    - Present component letters in random order and ask the patient to manipulate them to spell the word
    - Once the word has been correctly spelled, the patient copies it 3 times
    - After copying 3 times, the written copies are removed and the spelling is assessed 3 times

- **Reference**

- **Sample Goals**
  - Patient will achieve 80% accuracy of spelling (as a precursor to written expression) of a core set of 10 words when presented with component letters in random order with moderate cues.
ANAGRAM AND COPY TREATMENT (ACT)

TECHNOLOGY

- Provide limitless opportunities for interactive language activities
- Computers
  - Programs
  - Internet
  - E-Mail
- Mobile Phones
- E-Readers
- AAC
TECHNOLOGY: COMPUTERS

- Considerations
  - Accessibility
    - Voice recognition software
    - Enlarged keyboards
    - ABCDEF vs. QWERTY
  - Instruction
    - Range of programs
      - Therapeutic programs, photo programs, greeting cards, games, e-mail, etc.
    - Features of programs
      - Spell check / thesaurus

- Computer based aphasia therapy
  - Provides a means for massed practice and increased intensity
  - Minimizes therapist time and resources

- Computerized programs
  - AphasiaScripts™ (The Rehabilitation Institute of Chicago, 2007)
  - ORLA™ (The Rehabilitation Institute of Chicago)
  - Parrot (Parrot Software, West Bloomfield, Michigan)
  - Bungalow (Bungalow Software, Inc., Blackburg, Virginia)
  - SentenceShaper® (SentenceShaper Software; Psycholinguistic Technologies, Inc., Elkins Park, Pennsylvania)

- Evidence
  - Computer based interventions can improve language skills at the impairment level, but there is limited evidence that improvements generalize to functional communication

ORLA™ (The Rehabilitation Institute of Chicago)
TECHNOLOGY: MOBILE PHONES

- 84% of individuals with disabilities surveyed own or have regular access to a mobile phone
- 6 semi-structured interviews with individuals with aphasia; 3 semi-structured observations of individuals with phones in key scenarios
- 18 barriers to mobile phone use
  - Device design
    - Small phone buttons, small screen, use of unclear symbols in menus, too many features
  - Written support and training
    - Unclear user manuals, inadequate training in use
  - Other
    - Unique language used with texting, complexity of use
TECHNOLOGY: MOBILE PHONES

- 9 factors that may help
  - Design
    - Labels on all controls
    - Keyboards arranged in alphabetical order (not QWERTY)
    - Use of texting vs. voice communication
    - Word prediction software
    - Preprogrammed numbers
    - Flip open handsets
  - Written support and training
    - Adequate support and training
    - Written cues and images in instructions
    - Familiar communication partner

(Morris and Mueller, 2010)

TECHNOLOGY: MOBILE PHONES

- Smart Phone and Tablet Apps
  - Lingraphica®
  - SmallTalk Aphasia
  - SmallTalk Phonemes
  - Small Talk Conversational Phrases
  - Small Talk Daily Activities
  - MyVoice™: Communication Aid
  - Tactus Therapy Solutions: TherAppy
    - Comprehension
    - Naming
    - Reading
    - Writing

TECHNOLOGY: MOBILE PHONES

The image shows a tablet screen with an app named "push the car" and "push your luck".
LIFE PARTICIPATION

- Internal Classification of Functioning, Disability, and Health (ICF) Framework
  - Implementation in 2001 with unanimous endorsement of the classification by the 54th World Health Assembly
  - Healthcare classification framework for describing and measuring health and disability
  - Used for functional status assessment, goal setting & treatment planning and monitoring, as well as outcome measurement in clinical setting
  - Takes into account the social aspects of disability

ICF: DEFINITIONS

- Impairments: problems in body function or structure such as a significant deviation or loss.
- Activity: the execution of a task or action by an individual.
- Participation: involvement in a life situation.
- Activity Limitations: difficulties an individual may have in executing activities.
- Participation Restrictions: problems an individual may experience in involvement in life situations.
- Environmental Factors: make up the physical, social and attitudinal environment in which people live and conduct their lives.

LIFE PARTICIPATION APPROACH TO APHASIA (LPAA)

- Call for a broadening and refocusing of clinical practice and research on the consequences of aphasia
- Focus on re-engagement in life
- Places life concerns of those affected by aphasia at the center of all decision making
- Empowerment and collaboration on interventions may lead to more rapid return to active life and reduce the consequences that lead to long-term health costs
**LIFE PARTICIPATION APPROACH TO APHASIA (LPAA)**

- Assessment includes determining relevant life participation needs
- In addition to assessing communication and deficits, clinicians should be equally interested in how the patient does with support
- Clinicians take on roles in addition to doing therapy, such as “communication partner”, “coach” or “problem solver”
- Clinicians evaluate and document on:
  - Life activities and satisfaction
  - Social connections and satisfaction
  - Emotional well-being

(Chapey, et al. 2010)

**SOCIAL PARTICIPATION OF STROKE SURVIVORS WITH APHASIA**

- Impact of stroke – Are survivors with aphasia different from those without?
  - 126 participants divided into two groups (aphasia and no aphasia) and surveyed at 2 weeks, 3 months and 6 months post onset
  - Outcomes improved significantly over time
  - Scores comparable for:
    - Physical abilities
    - Well being
    - Social support
  - Scores for people with aphasia significantly lower than those for people without aphasia on:
    - Participation in activities
    - Quality of life

(Hilari, 2011)

**SOCIAL PARTICIPATION OF STROKE SURVIVORS WITH APHASIA**

- Interviews (adapted to communication needs of the individuals) of 150 stroke survivors with aphasia
  - Variation in social participation
  - Low home integration scores (finances, childcare, housework, meals, etc.)
  - Low productivity scores (work, retirement, education, volunteer, etc.)
  - Age, gender, performance on ADLs and aphasia severity related to social participation

(Dalemans, et al. 2010)
LIFE PARTICIPATION
- Severity of aphasia
- Environment
- Activity participation
- Person, identity, attitude and feelings

versus

- Traditional language domains
- Functional communication abilities

LIFE PARTICIPATION
- Communication Disability Profile - CDP (Swinburn & Byng, 2006)
- The Stroke and Aphasia Quality of Life Scale - SAQUL-39 (Hilari et al, 2003)
- The Burden of Stroke Scale – BOSS (Doyle et al., 2002)
- The ASHA Quality of Communication Life - ASHA-QCL (Paul et al, 2003)
  - The only tool that assesses communication confidence
    - "I am confident that I can communicate"

- Confidence: "a feeling or consciousness of one's powers" (Miriam Webster Online)

LIFE PARTICIPATION
- Supported Conversation for Adults with Aphasia (SCA)
- Group Therapy: Book clubs, conversation groups
SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

- An emphasis on the social unit of dyad incorporating the conversation partner, rather than sole focus on the person with aphasia.
- Interaction/social connection is given as much weight as transaction/exchange.
- The person with aphasia is treated as a competent person capable of making decisions, if appropriate support is provided.
- Social & societal barriers to conversation & participation in daily life are taken into account with a commitment to providing the support necessary to decrease these barriers.
- Principle: Use it or lose it; generalization

(Aphasia Institute, 2004)

SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

- **Purpose**
  - Provide an “assistive device” for communication by emphasis on incorporating the conversational partner
  - Technique is not just used in therapy, but in daily interactions
- **Appropriate Patients**
  - Patients with all types and severities of aphasia
- **Materials**
  - BLACK marker
  - Unlined paper
  - Pictures, photos, drawings

SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

- **Procedures**

  **Step 1: Acknowledge Partner’s Competence**
  - Strive for feel / flow of natural adult conversation
  - Use appropriate tone and sense of humor
  - Handle incorrect / unclear responses respectfully
  - Encourage partner when appropriate
  - Acknowledge competence when partner is upset/frustrated
    - “I know you know what you want to say”
  - Take on communicative burden as appropriate to help partner to feel comfortable
SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

Step 2: Reveal Competence
- Ensures that the adult with aphasia understands
- How much support is provided relative to what’s needed?
  - Verbal – short, simple sentences, redundancy / repetition, verbal adaptation
  - Nonverbal – gesture, writing, pictures / resources, drawing
  - Response to communicative cues – reacting to facial expressions that indicate lack of comprehension

SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

Step 2: Reveal Competence (cont’d)
- Ensures that the adult with aphasia has a means of responding
  - Verbal – fixed choice, yes/no
  - Nonverbal – gesture, writing, resources, drawing
  - Response to communicative cues – giving enough time to respond

SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

Step 3: Verification
- Accuracy of adult with aphasia’s response not automatically assumed
  - Verbal – “So let’s see if I’ve got this right…”
  - Nonverbal – gesture, writing, resources, drawing
  - Response to communicative cues – appropriate handling of inconsistent yes/no responses
SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

- **Resources**

- **Sample Goals**
  - Patient will express 3 wants, needs or ideas during a 5 minute supported conversation via total communication with maximal assist
  - Patient will comprehend and express a variety of topics during a 5 minute supported conversation with no more than 2 communication breakdowns with moderate assist

WHY SCA WORKS

- Aphasia can be defined as an acquired neurogenic language disorder that may mask competence normally revealed in conversation.
- There is an interactive relationship between perceived competence & opportunity for conversation.
- The ability & opportunity to engage in conversation & reveal competence lie at the heart of "communicative access" to participation in daily life.
- Competence of people with aphasia can be revealed through the skill of the conversation partner who provides a "communication ramp" for increasing communicative access.
  
  (Aphasia Institute, 2004)

SCA MATERIALS

AVAILABLE FOR PURCHASE FROM NATIONAL APHASIA INSTITUTE
SUPPORTED CONVERSATION FOR ADULTS WITH APHASIA (SCA)

GROUP THERAPY

- Different methods and types of groups
- Engagement is critical in order to be maximally successful
  - Process by which people establish, maintain and terminate collaborative interactions
  - Clinician facilitates and monitors to prevent an individual session with observers
- Appropriate support should be provided
  - Cue for strategies and total communication: gestures, scripts, picture choices, etc.
- Principle: Use it or lose it and generalization

GROUP THERAPY

- Rules of Engagement
  - Structure seating to promote engagement
  - Clinicians as participants
  - Monitor signals of engagement
    - Gaze
    - Body language/position
    - Shared laughter, frustration, other emotions
    - Gesture
GROUP THERAPY

- **Purpose**
  - Cost effective way to maximize limited language therapy resources
  - Provide opportunity for and encourage social interactions, practicing of communication strategies and peer support

- **Evidence**
  - There is moderate evidence that group intervention results in improvements on communication and linguistic measures among individuals with chronic aphasia.
  - There is limited evidence that group therapy results in improved communication.

**Research:** Evidence

- Change in Thinking: New Concepts
- Approaches to Managing Aphasia

**Clinical Practice**
REFERENCES

- The Aphasia Institute. https://www.aphasia.ca

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<td>Thank you to Kathryn Miller, MS, CCC-SLP and Lisa Naylor, MA CCC-SLP</td>
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