



CONFIDENTIAL

Summary of Progress – Spring 2018

Date of Report: 5/3/18	
Name: Zachary Holm	
Address: PO Box 4501, Incline Village, 89450	
DOB: 3/1/1972	
Age: 46	
Referred By: Emily Smith	
SLP: Rachael Walden, M.S., CCC-SLP	
ICD-10 Code(s): 169.320 Aphasia following cerebral infarction, 169.390 Apraxia following cerebral infarction	✓
CPT Code: 92507	✓
Clinician: Emily Harris, B.S., Angelle Bala, B.A.	
Alternate Telephone: 775-772-0398	
Telephone: 775-671-0955	
Parent/Spouse: Sara Holm	
Dates of Service: 2/5/18, 2/6/18, 2/7/18, 2/8/18, 2/12/18, 2/13/18, 2/14/18, 2/15/18, 2/26/18, 2/27/18, 2/28/18, 3/1/18, 3/5/18, 3/6/18, 3/7/18, 3/8/18, 3/12/18, 3/13/18, 3/14/18, 3/15/18, 3/27/18, 3/28/18, 3/29/18, 4/2/18, 4/3/18, 4/4/18, 4/5/18, 4/9/18, 4/10/18, 4/11/18, 4/12/18, 4/16/18, 4/18/18, 4/19/18, 4/20/18, 4/23/18, 4/24/18, 4/25/18, 4/26/18, 4/30/18, 5/1/18, 5/2/18, 5/3/18	✓

I.

Current Status:

Mr. Zachary "Zack" Holm is a 46 year old male who has been receiving speech therapy at the University of Nevada, Reno Speech and Hearing Clinic since April 28th, 2017. Mr. Holm was initially referred by Dr. Emily Smith and was diagnosed with nonfluent aphasia, anomia, and apraxia of speech (AoS) following cerebral infarction.

Mr. Holm works as the owner and manager of his own contracting company and lives with his wife Sara in Reno, Nevada.

Mr. Holm has a history of being highly motivated during therapy sessions and continues to look for ways to challenge himself. It has also been reported that writing is a relative strength that Mr. Holm uses often to compensate for his apraxia of speech. This is Mr. Holm's 6th treatment period. This treatment period focused on goals and objectives that are the most functional in relation to Mr. Holm's lifestyle, such as increasing speech intelligibility and expressive language skills.

II.

Summary of Progress:

- o Goal 1: Mr. Holm will increase the percentage of CIU's in his connected speech.
- o Objective 1: Mr. Holm will increase %CIUs in procedural tasks by answering How-to questions within 5-steps using nouns that are accurate in relation to the topic being discussed in 8/10 opportunities, with minimal (1-3) clinician assistance, across 3 sessions.
- Baseline Measures: During baseline assessment, Mr. Holm produced an average of 70 percent CIU's (%CIU) across three tasks.
- Approaches/Strategies Used: Visual cues and phonemic cues
- Progress/Final Data: Mr. Holm provided 10/10 nouns with minimal to no cues.



- Objective met. Mr. Holm did not exhibit difficulties in naming subjective nouns. Topics chosen were those that were of Mr. Holm's interest (i.e., skiing, construction work). Objective nouns should be addressed.

Objective 2: Mr. Holm will increase %CIUs in procedural tasks by answering How-to questions within 5 steps using verbs that are accurate in relation to the topic being discussed in 8/10 opportunities, with minimal (1-3) clinician assistance, across 3 sessions.

- **Baseline Measures:** During baseline assessment, Mr. Holm produced an average of 70 percent CIU's (%CIU) across three tasks.
- **Approaches/Strategies Used:** Visual cues and phonemic cues
- **Progress/Final Data:** Mr. Holm provided 10/10 verbs with minimal to no cues.
- **Objective met.** It is likely that Mr. Holm met this objective due to using ambiguous verbs that are appropriate in informal conversation. However, his verb vocabulary was limited to "went," "go," and "did." A new objective (Objective 5), was made addressing verb variety that were context-appropriate.

Objective 3: Mr. Holm will increase %CIUs in procedural tasks by answering How-to questions within 5-steps by appropriately using temporal concepts (first, second, third/next/then, last) in 8/10 opportunities, with no more than 1 clinician assistance, across 3 sessions.

- **Baseline Measures:** During baseline assessment, Mr. Holm was not observed to use temporal terms.
- **Approaches/Strategies Used:** Visual cues (i.e., "first," "second," "next," "then," "last") and initial reminders to use the temporal terms were provided.
- **Progress/Final Data:** Mr. Holm used temporal concepts in 9/10 opportunities, with no more than 1 clinician assistance.
- **Objective Met.** It is likely that Mr. Holm met this objective due to the large number of repetitions during the semester.

Objective 4: Mr. Holm will increase %CIUs to 85% in descriptive tasks using unfamiliar stimuli across two sessions with minimal clinician support.

• **Baseline:**

TASK:	Words Per Minute	CIU Per Minute	Percent CIU
Picture Description	27	15	56%
Stroke Story	43	22	51%
Advice	49	34	69%

• **Progress/Final Data:**

TRIAL 1:

TASK:	Words Per Minute	CIU Per Minute	Percent CIU
Picture Description	29	22	76%
Stroke Story	32	22	69%
Advice	36	21	58%

TRIAL 2:

TASK:	Words Per Minute	CIU Per Minute	Percent CIU
-------	------------------	----------------	-------------



Picture Description	29	22	76%
Stroke Story	30	19	63%
Advice	26	18	70%

- Mr. Holm's ability to verbalize numbers, associate months with the correct number, and use past tense verbs were also assessed as these are aspects of Mr. Holm's speech that contribute to his expressive language.
- Baseline: Mr. Holm was shown a picture and asked "What did they/he/she do?" He produced 0/10 (0%) past tense verbs when provided with 10 opportunities.
 - Progress/Final Data: Mr. Holm was shown a picture and asked "What did they/he/she do?" He produced 7/10 (70%) past tense verbs when provided with 10 opportunities.
 - Probes used:
 - Drank, Rode/Played/Pedaled, Brushed, Took, Ate, Read, Mixed, Cut, Drew, Flew
- Baseline: Mr. Holm's ability to verbalize numbers written on a whiteboard was assessed using times, money, and random numbers. Mr. Holm achieved 1/10 (10%) accuracy when assessing his ability to vocalize times, 2/10 (20%) when assessing his vocalization of money amounts, and 5/10 (50%) when assessing his vocalization of random numbers.
 - Progress/Final Data: Mr. Holm's ability to verbalize numbers written on a whiteboard was reassessed using times, money, and random numbers. Mr. Holm achieved 8/10 (80%) accuracy when assessing his ability to vocalize times, 8/10 (80%) when assessing his vocalization of money amounts, and 8/10 (80%) when assessing his vocalization of random numbers.
 - Times:
 - 10:30, 1:46, 4:32, 9:15, 7:22, 8:59, 2:52, 5:18, 6:05, 3:47
 - Money:
 - \$1.56, \$2.10, \$1.25, \$3:47, \$5.45, \$4.75, \$1.69, \$8.25, \$6.50, \$1.80
 - Random Numbers:
 - 42, 58, 27, 85, 34, 93, 14, 79, 54, 61
- Baseline: Mr. Holm's ability to match the correct number with a random month was assessed. He achieved 9/10 (90%) correct responses by first writing the number on the board and then verbalizing it.
 - Probes Used:
 - June, March, September, May, January, August, October, July, February, April
 - Progress/Final Data: Mr. Holm's ability to match the correct number with a random month was reassessed. He achieved 9/10 (90%) correct



- **Approaches/Strategies Used:** Modified V-NEST and modified melodic intonation therapy (MIT) techniques were used. Mr. Holm was asked to verbalize a time or combination of numbers written on the whiteboard at the sentence level. The time was drilled in isolation using hand tapping techniques to keep the rhythm of the production consistent. Use of this technique for numbers led to increased correct productions during therapy activities.
- **Not Met, Continue:** This objective was not met. However, Mr. Holm showed significant improvement in production of numbers which indicates that this goal should be continued in therapy.

Objective 5: Mr. Holm will increase procedural %CIUs as evidenced by context-appropriate verb + object agreement in answering a 5-step how-to question with 80% accuracy with minimal clinician support (1-3) across 3 sessions.

- **Baseline Measures:** During baseline assessment, Mr. Holm produced an average of 70 percent CIU's (%CIU) across three tasks.
- **Approaches/Strategies Used:** The following strategies were used but were not limited to a multimodal approach including written, reading, and repetition and V-Nest. Phonemic cues and semantic cues (i.e., first word of a compound word or the function of a word) were employed.
- **Progress/Final Data:** During reassessment, Mr. Holm used context-appropriate verb + object agreement with an average of 90% accuracy across 4 tasks (i.e., by answering the following prompts a) from start to finish, what you did from when you woke up until you arrived at UNR; b) from start to finish, how you get ready to ski up until you arrive at the mountain; c) from start to finish, how do you make your favorite sandwich; d) what happened in the American Ninja Warrior 2 minute video clip) with minimal clinician support.
- **Objective Met.** It is likely that Mr. Holm met this objective due to the large number of repetitions, and use of a multi-modality approach. It is recommended that this objective be addressed with a higher criteria.

Objective 6: Mr. Holm will increase procedural CIUs by using appropriately conjugated verbs that are context-related in answering a 5-step How-to question with 80% accuracy, with minimal clinician support (1-3) across 3 sessions.

- **Baseline Measures:** During baseline assessment, Mr. Holm produced an average of 70 percent CIU's (%CIU) across three tasks.
- **Approaches/Strategies Used:** The following strategies were used but were not limited to a multimodal approach including written, reading, and repetition. Verbal prompts were also provided such as ""since it happened already, instead of present-progressive verb Zack provided, what would the verb be?").
- **Progress/Final Data:** During reassessment, Mr. Holm used appropriately conjugated verbs that are context-related with an average of 90% accuracy across 4 tasks (i.e., by answering the following prompts a) from start to finish, what you did from when you woke up until you arrived at UNR; b) from start to finish, how you get ready to



- ski up until you arrive at the mountain; c) from start to finish, how do you make your favorite sandwich; d) what happened in the American Ninja Warrior 2 minute video clip] with minimal clinician support.
- Objective Met. It is likely that Mr. Holm met this objective due to the large number of repetitions, and use of a multi-modality approach. It is recommended that this objective be addressed with a higher criteria

- Goal 2: Increase accuracy in recognition of high frequency sight words
- Objective 1: Mr. Holm will independently demonstrate recognition of high frequency sight words by accurately pointing to the word requested by clinician within 5 seconds with 80% accuracy.
- Baseline Measures: Mr. Holm demonstrated recognition of 7/10 high frequency sight words during initial probe.
- Approaches/Strategies Used: Fry's high frequency sight words were used during this semester. Repeated reading. Drills in field of 5-12 words at a time.
- Progress/Final Data:

Fry's first 50 high frequency sight words	Score	Accuracy
List 1 (#1-25)	23/25	92%
List 2 (#26-50)	15/23	65%

It must be noted that "their" and "there" were omitted on list 2 due to being homonyms.

- Partially Met. Continue. It is likely that Mr. Holm had difficulties on the words included on list 2 due to this list being addressed near the end of the semester. It is recommended that Mr. Holm continue to target the words he missed on list 1 and list 2 and also address list 3, to broaden his recognition of high frequency sight words which will help his reading fluency and reading comprehension.

Objective 2: Mr. Holm will orally read high frequency sight words with minimal clinician support (1-3) with 80% accuracy.

- Baseline Measures: 2/10
- Approaches/Strategies Used: Fry's high frequency sight words were used during this semester. Repeated reading. Drills in field of 5-12 words at a time.
- Progress/Final Data:

Fry's first 50 high frequency sight words	Score	Accuracy
List 1 (#1-25)	21/25	84%
List 2 (#26-50)	17/25	68%

- Partially Met. Continue. It is likely that Mr. Holm had difficulties on the words included on list 2 due to this list being addressed near the end of the semester. It is recommended that Mr. Holm continue to target the words he missed on list 1 and list 2 and also address list 3, to broaden his recognition of high frequency sight words which will help his reading fluency and reading comprehension.

- Goal 3: Increase accuracy in production of parts of speech in spontaneous sentence production.

- 9



- **Not Met, Continue:** Mr. Holm showed significant improvement in his understanding and production of determiners at the sentence level. This is an identified area of weakness for Mr. Holm, and the objective should be continued during his next treatment period.
- **Objective 4:** Mr. Holm will increase accuracy in production of present progressive verbs to 90% at the sentence level with moderate clinician support across two sessions.
 - **Baseline:** 6/10 = 60% accuracy
 - **Approaches/Strategies Used:** A modified V-NEST approach in which the client produced variations of sentences with different present-progressive verbs was used. Minimal to moderate clinician support was provided using phonemic, orthographic, and articulatory placement cues as necessary.
 - **Progress/Final Data:** Trial 1: 10/10 (100%); Trial 2: 10/10 (100%)
 - **Probes Used:**
 - Swimming, Reading, Drinking, Building, Knocking, Playing, Whispering, Dancing, Jumping, Swinging
 - **Met:** Reassess at beginning of next treatment period to ensure maintenance of skill.

III.

Analysis/Clinical Judgment: Mr. Holm's strengths included production of parts of speech and numbers (e.g. times, money). Mr. Holm's strength also included production of subjects and objects in a sentence, occasionally requiring phonemic assistance. However, continued intervention is still needed to improve consistency in these productions and generalization to conversational speech. Although Mr. Holm's %CIV's for descriptive tasks did not show substantial improvements, it was observed that he used more self-corrections of pronouns (he/she) and overall his descriptions of both the picture and his stroke story were more understandable to the clinician. Mr. Holm is very motivated and responds well to a variety of supports, including phonemic, orthographic, and articulatory placement cues as well as positive reinforcement.

IV.

Recommendations: It is recommended that Mr. Holm continue skilled speech therapy in order to improve his expressive language skills. Future goals should focus on improving production of numbers, parts of speech, use of appropriate subject + verb + object, appropriate verb tenses and agreement CUs across various tasks. Upon reassessment, past-tense verbs should be considered as a replacement for present-progressive verbs, which Mr. Holm showed mastery of during this treatment period.

V.

Recommended Frequency and Duration of Therapy: Mr. Holm should return for the summer 2018 treatment period. Upon his return, production of parts of speech, use of appropriate subject + verb + object agreement, and %CIVs in both descriptive and procedural tasks, and context-appropriate verb tenses should be reassessed. Skilled intervention is recommended 4 times a week for 1 hour sessions for the duration of the treatment period.



Speech Pathology and Audiology

VI.

Prognosis Statement: Based on Mr. Holm's ability to make consistent gains observed across therapy sessions, prognosis is reported as good. Mr. Holm has high levels of motivation, a strong support system, and is driven to achieve high levels of success. While he is likely to continue to make gains in therapy, it is unknown if he will be able to obtain complete premorbid status.

Date Report Completed: 5/3/18

Name: Rachael Walden, M.S., CCC-SLP
Speech-Language Pathologist/Supervisor

Rachael Walden, M.S., CCC-SLP

Name: Emily Harris, B.S.
Graduate Student Clinician

Emily Harris

Name: Angelle Fe Bala, B.A.
Graduate Student Clinician

Angelle Fe Bala

Cc:

Name: Zachary & Sara Holm

Address: PO Box 4501, Incline Village, NV 89450

Name: Emily Smith, M.D.

Address: 10085 Double R Blvd #120, Reno, NV, 89521