

# Case Study:

# Interprofessional Practice (IPP) Team Develops Rehabilitation Plan for Patient Recovering from Stroke

SIG 15: Gerontology

## **Summary**

A team of professionals collaborated across specialties to help a 78-year-old woman recovering from a stroke. The team developed and implemented a plan to (a) help the woman increase participation in activities of daily living (ADLs) and (b) improve her ability to communicate by using an augmentative and alternative communication (AAC) board.

#### **Patient Info**



### **Current Diagnosis:**

Cerebral Infarction/163.9

### **Meet The Team**



Occupational therapist (OT)



Physical therapist (PT)



Speechlanguage pathologist (SLP)



Social worker



**Patient** 



**Family** 



## **Background**

Three weeks ago, Ms. Riddle, age 78, went to the emergency department with an acute infarct to the left middle cerebral artery. Initially, Ms. Riddle's prognosis was poor, and her family elected hospice. However, Ms. Riddle's condition improved, and she became awake and alert. She was transferred to a nursing home and no longer qualified for hospice care. Ms. Riddle's niece decided to pursue skilled therapy services for her aunt.

Ms. Riddle had right hemiplegia, dysphagia, and aphasia, as well as suspected apraxia of speech. She was a retired registered nurse who was widowed with no children. Ms. Riddle had been completely independent, but after the stroke, she needed assistance with all ADLs. Her nurse reported that her weight loss and skin turgor suggested dehydration, so Ms. Riddle was on a puree diet with nectar liquids.

## **How They Collaborated**

At the initial meeting, the IPP team discussed and agreed on a plan to assess Ms. Riddle's needs. The PT and OT would assess her mobility issues and ability to complete daily tasks. The SLP would complete a speech-language evaluation and set up a low-tech AAC system for Ms. Riddle to use. The RN would continue to assess Ms. Riddle's tolerance of medications and monitor her symptoms. The team would also reach out to a social worker about obtaining the medical equipment that Ms. Riddle needed and would contact Ms. Riddle's niece with any questions.

After the initial assessments, the team better understood Ms. Riddle's needs; they devised a rehabilitation plan. The PT reported that Ms. Riddle lacked function in her right leg, and her left leg had natural muscle loss due to aging. Ms. Riddle was unable to self-propel her wheelchair, so the PT and SLP discussed mounting the AAC system on her wheelchair. The OT's evaluation determined that Ms. Riddle could complete some basic daily tasks with maximum assistance. He followed up with the social worker about ordering a tray for the wheelchair. The SLP's evaluation revealed that Ms. Riddle could follow one-step directions with occasional repetitions. She did not have functional speech but could use a low-tech AAC communication board.



#### **Outcome**

After 1 month of occupational therapy and speech-language pathology services, Ms. Riddle required moderate assistance to self-feed and required maximum assistance with toilet and bed transfers. She was successfully using the AAC board to communicate.

After 2 months, Ms. Riddle's ability to participate in favorite activities had improved. She was able to feed herself 50% of the time. Her wheelchair enabled her to access her AAC communication board. Ms. Riddle did not have functional speech, but the SLP and the social worker collaborated to determine the viability of a speech-generating device.

At this point, the physical therapy department signed off with the plan to reevaluate Ms. Riddle after mounting the AAC device. The SLP signed off on the dysphagia aspect of treatment. The team felt that Ms. Riddle had maximum potential for chewing and swallowing. Rehabilitation would now center around helping Ms. Riddle better accomplish daily tasks and communicate using the AAC board.

### **Ongoing Collaboration**

As Ms. Riddle's rehabilitation continues, the OT and SLP continually reevaluate her care. They share their observations with one another and make recommendations to the team. The OT and SLP have weekly check ins and update Ms. Riddle's niece regarding her feeding and swallowing status. The full team meets quarterly.

# **Case Rubric:**

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**Patient** 

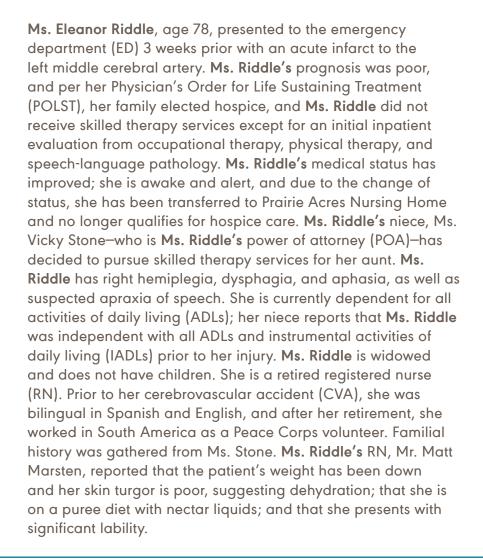


**Family** 



#### **History and Concerns**

(Share key information gathered from team)



#### **Assessment Plan**

(Determine roles/

At the initial meeting, the therapy team discussed and mutually agreed regarding the following assessment needs:



PT: Wheelchair selection; assessment of (a) residual function and (b) potential for improvement of right lower limb (RLL) and ambulation



**OT:** Assessment of residual function and potential for improvement of right upper limb (RUL) and ability to complete ADLs, including obtaining adaptive equipment for feeding and assisting the SLP with positioning of augmentative and alternative communication (AAC) system



**SLP:** Speech-language evaluation, with implementation of low-tech AAC for the short term. Assessment of swallow function and determination of least restrictive diet and appropriate adaptive equipment and strategies.

OT, PT, and SLP will communicate with the social worker about durable medical equipment that is required for Ms. Riddle. The team will call Ms. Stone with any questions that arise. The RN will continue to assess tolerance of medications, assess patient's intake/output, and monitor lability symptoms. He will communicate with the certified nursing assistants (CNAs) about patient preferences and status in order to enhance patient's low-tech AAC system.

#### **Assessment Results**

(Summarize key diagnostic results)

Due to challenges establishing baseline function, Ms. Stone volunteered to be present for the therapy evaluations. Mr. Jones (the PT) reported that Ms. Riddle currently lacks function in RLL. Left lower limb presents with mild sarcopenia (the natural loss of muscle tissue due to aging). Mr. Jones said that, at the time of evaluation, Ms. Riddle was unable to self-propel the wheelchair and that he would confer with Ms. Lane (the SLP) to discuss wheelchair mounting for the AAC system. The evaluation by Mr. Arents (the OT) revealed that Ms. Riddle is able to complete some basic ADLs with maximum assistance. The feeding aspect of the OT's evaluation provided insight into Ms. Riddle's preferred menu items. The OT followed up with Ms. Matos (the social worker) regarding ordering equipment for the wheelchair to include a hemi-tray.

The speech-language evaluation by Ms. Lane (the SLP) revealed that Ms. Riddle follows one-step directions with increased time for task and occasional repetitions. She does not have functional speech but attends to an 8" × 4" low-tech AAC communication board. Clinical dysphagia assessment indicated a potential for a less restrictive diet.



#### **Treatment Outcomes**

(Discuss results of

After 1 month of occupational therapy and speech-language pathology services, Mr. Arents (the OT) reported that Ms. Riddle requires moderate assistance to self-feed and maximal assistance with toilet and bed transfers. The SLP reported that Ms. Riddle is using the low-tech AAC board with minimal assistance to communicate wants/needs. The SLP recommended a full AAC evaluation for a speech-generating device, given Ms. Riddle's success with the low-tech AAC board.

Now, after 2 months of therapy, Ms. Riddle's ability to participate in preferred activities has improved. Her meal intake is >75% with mechanical soft solids and thin liquids, with selffeeding approximately 50% of the time. Her wheelchair allows for increased safe posturing with meals and access to the lowtech AAC communication board, which has been designed per recommendations from nursing, Ms. Stone, and the activities department. Ms. Riddle does not have functional speech at this time but successfully uses her low-tech AAC communication board, which is  $8'' \times 4''$ . The SLP and the social worker are collaborating to determine the viability of a speech-generating device.

Today, during their daily morning meeting to discuss patients, the team collaboratively decides that the physical therapy department would sign off at this time-but with the recommendation to reevaluate when mounting equipment was required for the AAC device. The SLP signs off on the dysphagia aspect of treatment, as the team opined that Ms. Riddle has maximum functional potential at this time for chewing/ swallowing. The occupational therapy and nursing departments are provided a checklist of any chewing/swallowing changes in function to look out for. The team now indicates that rehabilitation should center around Ms. Riddle's immediate needs to increase participation in ADLs as well as her need to communicate immediate wants/needs using the low-tech AAC board.

#### **Team Follow-Up**

(Determine meetings & communication plan)

As Ms. Riddle continues to make progress with ADLs, occupational therapy will re-evaluate the plan of care for ADLs, and speech-language pathology will re-evaluate the plan of care for communication. During the time that the OT and SLP are actively providing intervention services, feeding and meal monitoring will be shared so as to not duplicate services. The OT and the SLP will share their observations with one another and will make recommendations to the team. The OT and SLP will continue to make weekly communication checks, update Ms. Stone regarding feeding and swallowing status, and discuss Ms. Riddle's case weekly. The full team will meet quarterly to discuss her care.

#### Acknowledgement

ASHA extends its gratitude to the subject matter expert(s) who were involved in the development of the original version of this IPP case:

Clarion Mendes, MA, CCC-SLP/L Special Interest Group 15 (SIG 15): Gerontology

#### **Citations**

American Speech-Language-Hearing Association. (n.d.). Interprofessional practice (IPP) team develops rehabilitation plan for patient recovering from stroke. www.asha.org/practice/ipe-ipp/case-studies/case-study-4/

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