

# Case Study:

# IPP Team Works With 10-Year-Old Girl to Improve Communication and Social Interaction

SIG 18: Telepractice



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# Summary

Patty is a 10-year-old student with a seizure disorder, attention-deficit hyperactivity disorder (ADHD), receptive and expressive language impairment, and below-average cognitive functioning. A team of professionals at Patty's school created a plan to help Patty improve her daily communication and social interaction with speech-language therapy telepractice services and a speech-generating device (SGD). Patty now uses the SGD to participate more fully in the classroom and continues work on her communication at home.



## Student Info



### **Current Diagnosis:**

seizure disorder, specific learning disability, attention-deficit hyperactivity disorder (ADHD), apraxia of speech, receptive and expressive language impairment, and below-average cognitive functioning

## **Meet The Team**









**Augmentative** and alternative communication (AAC) regional consultant

Intervention specialist

Occupational therapist (OT)

School psychologist



Speech-Language **Pathologist** (SLP)



**Telehealth** paraprofessional



Student



Family

# **Background**

Patty is a 10-year-old student with complex communication needs. She has an individualized education program (IEP), which began at age 5, and has received traditional in-person speech-language therapy for multiple years. Patty's teachers and parents were particularly concerned about her receptive and expressive language, unintelligible speech for daily communication, learned helplessness in challenging tasks, decreased social interaction, and impaired hand/arm coordination. Upon entering her current school district, speech-language therapy became available through a telepractice service. The speech-language pathologist (SLP) did a trial intervention and determined that Patty would benefit from telepractice services.

# **How They Collaborated**

At their initial meeting, the team discussed Patty's case and agreed to an assessment plan. The SLP would assess Patty's language skills and assist with AAC trials via a telepractice service. The AAC regional consultant would provide the AAC devices and collaborate with team members during AAC trials. The school psychologist would assess Patty's cognitive, reasoning, achievement, and attention skills. The OT would evaluate fine motor skills, upper limb skills, and sensory-visual skills. The intervention specialist would assess Patty's academic skills. Patty's parents would provide case history and background information. The team also discussed the AAC options that would best match Patty's current skills and help meet her communication needs and goals, both at home and in the classroom.



# How They Collaborated continued

After each team member completed their assessments, the team met to review their findings. The SLP found that Patty demonstrated the ability to use a hybrid approach to communication, including verbal productions that are intelligible to most listeners (e.g., greetings, yes/no responses), gestures, and messages generated using an AAC device. AAC trials with the AAC regional consultant revealed that Patty would benefit from an SGD that enables her to generate messages using pictures. The school psychologist noted that despite an impairment in cognitive functioning, Patty demonstrated the ability to learn new tasks, including learning how to use an AAC device, and the OT found Patty's fine motor skills adequate for using an AAC device. The intervention specialist revealed that Patty's biggest challenges in the classroom are reading, writing, and spelling, although communication breakdowns do occasionally frustrate Patty.

To address Patty's communication challenges, the team decided to purchase an SGD and developed a plan to help Patty use the device. The SLP taught Patty how to use it, and the AAC regional consultant conducted an in-service on how to integrate the SGD into daily classroom use. The OT worked with Patty on the fine motor skills she needed to use the device, and the intervention specialist provided weekly updates on classroom vocabulary to program into the SGD. The team members all collected data on a weekly basis and met quarterly to report on Patty's progress.

## **Outcome**

Quarterly meetings revealed that Patty consistently used the SGD to make comments and to answer questions after a verbal prompt. She also made considerable gains in fine motor skills and no longer required services from the OT to use her SGD.

The team also noted that although Patty made good progress using the SGD, she was inconsistent in using what she learned in the classroom at home. For this reason, the intervention specialist, along with the parent, developed a home-based plan to help Patty's parent practice at least three times per week. In addition, the team determined that some members were unaware that Patty had a language impairment in addition to a speech disorder. The SLP explained her impairment more clearly, and the team was able to set more realistic expectations regarding what Patty would be able to express with the SGD.

# **On-Going Collaboration**

The team continues to ensure that Patty uses the SGD in the classroom and at home. They now communicate weekly and meet monthly to review Patty's progress and to refine the intervention plan.

# **Case Rubric:**

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## **Current Diagnosis:**

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## **Meet The Team**



Augmentative and alternative communication (AAC) regional consultant



Intervention specialist



Occupational therapist (OT)



School psychologist



Speech-Language Pathologist (SLP)



Telehealth paraprofessional



Student



Family

#### **History and Concerns**

(Share key information gathered from team)

Patty is a 10-year-old student with a seizure disorder, specific learning disability, attention-deficit hyperactivity disorder (ADHD), apraxia of speech, receptive and expressive language impairment, and below-average cognitive functioning. She has an individualized education program (IEP) since the age of 5. As a child with complex communication needs, Patty receives traditional in-person speech-language therapy for multiple years. Upon entering her current school district, speechlanguage therapy is available through a telepractice service delivery model. The Speech-language pathologist conducts a trial of intervention and it is determined that Patty is able to participate in and benefit from telepractice services.

#### Areas of identified concern include:

- receptive and expressive language,
- unintelligible speech for daily communication,
- learned helplessness in challenging tasks,
- decreased social interaction, and
- impaired hand/arm coordination

#### Assessment Plan

(Determine roles/

The speech-language pathologist (SLP) and team facilitator, Mr. B, meets with other members of the interprofessional practice (IPP) team through live interactive video conferencing to discuss assessment for the use of augmentative and alternative communication (AAC) technology. Mr. B starts the meeting with a dialogue about mutual respect and support among team members and collaborative decision making with consensus about interprofessional education/interprofessional practice (IPE/IPP) processes.

All team members agree to the assessment plan, with roles and responsibilities outlined below:



**SLP-** Receptive and expressive language, pragmatic language and speech production skills; assist with AAC trials using a telepractice service delivery model

#### **Assessment Plan**

(Determine roles/



AAC regional consultant- Provide AAC devices and collaborate with IPP team members during AAC trials



**School psychologist-** Cognitive, reasoning, achievement, and attention skills



Occupational therapist (OT)- Fine motor skills, upper limb skills, sensory-visual skills



Intervention specialist- Academic achievement compared to extended academic content standards



**Parent-** Case history and background information

The team discusses a variety of AAC options, including their personal preferences and suggests considerations for the best match for Patty's current skills and what they hope she would achieve. The SLP and AAC regional consultant explain features available for AAC devices. In addition, the SLP responds to concerns about how AAC assessment and training through a telepractice service delivery model will be provided. The SLP explains the results of case studies in which the SLP implements AAC evaluation, use, and training by using a telepractice service delivery model. In addition, he describes advancements in technology that permit AAC device programming through computer access. In fact, online "mirroring" of AAC device displays enables the use of direct instruction and practice with many AAC devices. The intervention specialist and the parent share Patty's specific communication needs for both the classroom and the home environments.

### Assessment Results

(Summarize key diagnostic results)

#### The assessment results were as follows:



**SLP-** Patty demonstrates the ability to use a hybrid approach, including verbal productions that are intelligible to most listeners (e.g., greetings, yes/no responses), gestures, and generates messages using an AAC device to accomplish a variety of communication intents. During the assessment, Patty quickly responds to models and generates two- to three-word utterances.



**AAC regional consultant-** AAC trials indicate that Patty would benefit from a speech-generating device (SGD) that enables her to generate messages using single-meaning pictures, spelling and word prediction, and combining of multi-meaning pictures.



**School psychologist-** Patty demonstrates an impairment in cognitive functioning; however, she demonstrates the ability to learn new tasks, attend to the visual display on the AAC device, locate items on the device, and remember symbol locations. Results suggest that she can learn to use an AAC device for communication in activities of daily living (ADL).



**OT-** Patty shows isolated finger movement and adequate fine motor skills to access 1"  $\times$  1" buttons on an AAC device. She displays the ability to hold and carry a device weighing 6 pounds or less and not exceeding the dimensions of  $9.8" \times 5.9" \times 1.4"$ .



Intervention specialist- The primary areas of concern in the classroom are reading, writing, and spelling. Patty has difficulty being understood in the classroom, but her peers are reportedly very patient with her and try to guess what she is saying when her speech is unclear. Patty attempts to repair communication breakdowns, but she also becomes frustrated and cries when she is not understood.



**Parent-** Mrs. J provides case history information and supports Patty's use of an AAC device to augment communication at school as well as at home.

#### **IPP Treatment Plan**

(Discuss, reflect, and modify recommendations to develop a coordinated plan) As a result of the assessment, the IPP team agrees to purchase an SGD for Patty and also provides these additional recommendations:



**SLP-** The SLP should provide additional language intervention services focusing on learning and using the SGD for a variety of communication purposes (e.g., requesting, commenting, answering questions). The SLP agrees to this.



**AAC regional consultant-** The AAC regional consultant should conduct an in-service on how to integrate the SGD into daily classroom use. The AAC regional consultant agrees to this.



**OT-** The OT should address deficits in fine motor skills. The OT agrees to this.



Intervention specialist- The SLP and the intervention specialist should provide weekly vocabulary relating to the classroom lessons so that the SLP could program those words and provide the teacher with "cheat sheets" for accessing the words. Both the SLP and the intervention specialist agree to this proposal.

The SLP, intervention specialist, parent, and telehealth paraprofessional should collaborate to support Patty's learning and use of the SGD in the classroom, at home, and with other communication partners. This collaboration should include the telehealth paraprofessional doing the following tasks: (a) practicing an AAC carryover activity with Patty; (b) providing the lesson to the classroom teacher and to the study hall aid; and (c) sending a copy home. The regional consultant disagrees with the third part of the proposal (i.e., Item C), stating that the parents need a face-to-face lesson. The team identifies this viewpoint as a resource issue (i.e., time, effort level) and ultimately agrees with the regional consultant.



#### **Treatment Outcomes**

(Discuss results of treatment)

The team collects data weekly and reports progress quarterly, with the following results:



**SLP-** In speech-language therapy, Patty consistently uses the SGD to make comments and to answer questions after a verbal prompt. She readily found vocabulary on her SGD and combines subject + verb + modifier to provide more information in her messages. Patty can use her SGD to answer questions, retell a story, and participate in book discussions.



**AAC regional consultant-** The AAC regional consultant returned to the school district to provide additional instruction in how to use the SGD.



**OT-** Patty has made considerable gains in fine motor skills and no longer requires occupational therapy services to access the SGD in order to make gains in her adapted curriculum.



Intervention specialist- Patty has made considerable progress in using the SGD, but she is inconsistent regarding carryover into the classroom and into the home. The SLP provides weekly carryover lessons for the classroom and for home; however, the parent and the intervention specialist report that lessons are not being practiced at home with Patty. The intervention specialist, along with the parent, developed a home-based plan to help the parent more consistently practice carryover lessons with Patty—at minimum, 3 times per week.

# **Treatment Outcomes** (Discuss results of treatment)

After a meeting and an extended discussion, the IPP team determines that some team members did not recognize that Patty has a language impairment in addition to a speech disorder. These members expect that once Patty received the SGD, she would be able to immediately and independently produce sentence-length utterances. They did not expect that Patty would need to learn to use the device and would require prompting and support for classroom use. Also, given the time constraints of the classroom, faculty found it more efficient to "guess" what Patty was saying verbally rather than prompting her to use the SGD. In spite of Patty's demonstrated skill with using the SGD, she is still not consistently using the device in the classroom or at home. Once understanding this perspective, the SLP was able to explain Patty's language impairment and to set more realistic expectations regarding what Patty would be able to express with the SGD.

The team develops a revised treatment plan, which included the following:

- Ensuring that the SGD is charged and available for use each day in the classroom.
- Revising language intervention to include having Patty use the device to mirror her current verbal attempts. The SLP is working to have Patty consistently use two-word phrases—including a noun and a verb, when appropriate—and working to have Patty use more specific words to express more content.
- Ensuring that Patty uses the SGD to complete classroom writing assignments.
- Instituting an incentive program to reward Patty for using the SGD in the classroom setting.
- Sending the parents, a reminder of their scheduled appointment for a face-to-face AAC carryover lesson.

### Team Follow-Up

(Determine meetings & communication plan)

The team considers ongoing follow-up plans and agrees on an intervention plan. The IPP team now communicates weekly and meets monthly to review Patty's progress and to refine the intervention plan.