

Supplemental Material S2. Qualitative coding scheme.

Code	Description
Barriers	This is the broad theme bringing together subcodes describing obstacles to service provision.
Assessment-specific challenges or changes due to COVID-19	Use this code when the response outlines a change in assessment procedures, materials, etc. or when the response includes challenges specifically related to assessment. The challenges and/or changes need to have been brought about by the restrictions of the COVID-19 pandemic. Examples: “AAC assessments are no longer offered.” “I experienced a pause as we were unable to provide opportunities to trial different devices/programs during Covid-19.”
Financial	Use this code if the response describes barriers to assessment/intervention due to limited funding for devices/services or lack of family financial resources. Examples: “More funding is also needed from insurance companies.” “Need more funding for ST interventions.”
General barriers related to AAC tech or resources for CLD populations	Use this code if the response describes barriers related specifically to the lack of available AAC technology or resources for culturally and linguistically diverse populations (e.g., lack of available languages on a device). Examples: “We are lacking adequate resources and different languages on AAC devices.” “We need more research-based data to support assessment and intervention when working within bilingual individuals.”

Insufficient time for clinician	<p>Use this code if the response describes barriers to assessment/treatment related to the clinician having insufficient time to implement all aspects of services.</p> <p>Examples:</p> <p>“How much time can you spend outside of work hours to train in AAC, counselling for it, learning the client’s language enough to provide services in it, and give the rest of your caseload the same attention?”</p> <p>“The lack of...time to learn with a caseload, time to train caregivers, during work hours is practically impossible.”</p>
Internet or technology	<p>Use this code if the response describes barriers due to lack of data/internet or technology issues that prevent or limit services via telepractice. This code does NOT describe technology issues related to the AAC device itself.</p> <p>Examples:</p> <p>“Biggest barrier has been lack of internet service and/or data caps for mobile users.”</p> <p>“There is the issue of being able to facilitate technology.”</p>
Lack of caregiver availability or involvement	<p>Use this code if the response describes barriers to assessment/treatment due to lack of caregiver availability or involvement in sessions. This could be due to work, illness, other family responsibilities, etc. Teachers/daycare workers are considered caregivers when the child is receiving services at those times/places.</p> <p>Examples:</p> <p>“During remote learning they are not home to get child on the internet.”</p> <p>“Family stress has meant in some cases less availability and capacity for new/additional things.”</p>
Lack of caregiver follow-through	<p>Use this code if the response describes barriers to assessment/intervention related to caregivers not implementing intervention techniques or utilizing the AAC device outside of therapy sessions. Caregivers could include parents, teachers, or daycare workers.</p> <p>Examples:</p> <p>“Parents reported that it took too long and was not able to use daily.”</p> <p>“Some of our kids are at daycare and they do not provide the support [for AAC].”</p>

Lack of in-person interaction,
Difficulty of telepractice

Use this code if the response describes barriers to assessment/intervention primarily caused by the lack of in-person interaction. This code includes when the response illustrates barriers because of telepractice itself being difficult for either the clinician or the child/their family.

Examples:

"I didn't have a device at home, so it was a challenge to model with using Chat editor."

"It is difficult to provide appropriate interventions without being able to model or cue student to appropriately use their device."

Lack of provider education or
training in bilingual AAC

Use this code if the response describes barriers to assessment/intervention due to the lack of the clinician's education or training in providing services for children who are bilingual/multilingual and use AAC.

Examples:

"Not enough trained therapists to fill need."

"I don't have the knowledge on how to support this one student I have."

Language and interpreter
difficulties

Use this code if the response describes barriers to assessment/intervention specific to a language mismatch between the clinician and the child/their family. This code includes barriers related to interpreter services.

Examples:

"With some of the families, who have very limited English proficiency, I am finding it harder to access interpreters and ensure that I am giving them all the information they need."

"Availability of translator services has been challenging."

Other barrier

This code describes obstacles related to service provision experienced by any party. Use this code only if the response is a barrier that does not fit within any other subcode under the "Barriers" theme or is non-specific (e.g., "it's just an impossible situation").

Outcomes related to change in service delivery

This is the broad theme bringing together subcodes describing the outcomes experienced by the client, family, or clinician as a result of the change in service delivery brought about by restrictions due to the COVID-19 pandemic.

Increased collaboration and engagement

Use this code when the response describes an increase in collaboration/engagement/involvement/education with the family or team as a result of telepractice.

Examples:

"Silver lining...more opportunities to communicate with families."

"Parents are often very highly involved with their student's therapy sessions."

Decreased collaboration and engagement

Use this code when the response describes a decrease in collaboration/engagement/involvement/education with the family or team as a result of telepractice.

Examples:

"A few families have been unable to participate and for these few there has been a significant and tragic decrease in collaboration."

"Some families had decreased participation due to work schedule conflicts, having multiple children engaging in online learning, etc."

Improved outcomes for child

Use this code when the response describes increased/better/enhanced outcomes for the child as a result of the change in service delivery as compared to the child's outcomes before the COVID-19 pandemic.

Examples:

"Others [students who use AAC] are really flourishing now."

"I could say with much confidence that they [the children] have made tremendous progress."

Diminished outcomes for child

Use this code when the response describes diminished/worse outcomes for the child as a result of the change in service delivery as compared to the child's outcomes before the COVID-19 pandemic.

Examples:

"Very few of my students have been using their aided AAC systems at all since the pandemic/distance learning...or have taken on a very receptive role in their education."

"Some of my students are struggling more than before due to difficulty engaging with distance learning platforms and activities."

Increased understanding of home environment

Use this code when the response describes the clinician gaining a better understanding of the child's home environment/situation.

Examples:

"The transition to providing telehealth services was overall productive to allow me as the clinician to get a glimpse into the child/family's home life."

"Providing remote services has allowed for greater opportunity to...see their true language needs in a home setting."

Service providers adapting and innovating

Use this code if the response describes adaptations/innovations clinicians made to assessment/intervention procedures, materials, etc. The adaptations/innovations need to have been brought about by the restrictions of the COVID-19 pandemic.

Examples:

"I started focusing less on the actual goal (production of 2+words, navigation, etc) and focused more on parent coaching."

"Much of my experience remained the same with a little more creativity needed for intervention over teletherapy."

Descriptive factors related to service delivery

Use this code when the response describes the model (e.g., in-person, telepractice, etc.) or conditions of service delivery. This code includes objective descriptions of resources available and/or used at that time/facility.

Examples:

“We had translators at our facility.”

“[I] always wear and provide my own PPE.”

“More coaching and consultation model.”

Future Implications and Recommendations

Use this code when the response describes how the changes/adaptations due to the restrictions of the COVID-19 pandemic will impact future service provision. This code includes responses that state recommendations and/or considerations regarding service provision.

Examples:

“When school resumes in person, I will try to continue regular zoom session with most of my families on a semi-regular basis.”

“A hybrid model can possibly work where parent interview, and observations could be done virtually. However, implementation of probes and device setup is best done in person.”

Unclear or Other

Use this code if the response is unclear to you, does not fit under another code, or is irrelevant.

Example:

“As was true before the pandemic, children often learn vocabulary related to early school readiness concepts in English (e.g., colors, shapes, numbers) versus in their home language.”

Additionally, use this code when the response contains general comments related to speech, language, communication, or AAC.

Examples:

“Communication is key.”

“This is where AAC comes in.”
