Remote Speech-to-Text Services

Overview

Speech-to-text services can be provided onsite (service provider and consumer in same location) or remotely (service provider and consumer in different locations).

With remote speech-to-text services, the provider—often referred to as a captioner, captionist, or transcriber—accesses audio content via a telephone line or video-conferencing software. The service provider and consumer use software to connect their computers online so that what is typed is viewed on both screens. Many systems allow the consumer to use any device that can connect to the internet: laptop, tablet, or smartphone.

In what environments are remote speech-to-text services appropriate?

In general, remote speech-to-text services can be used in any situation where an onsite service provider would be used. However, some environments and situations can present more challenges than others.

- Not all settings have reliable access to the required technology and internet connections.

- Highly interactive settings challenge the service provider, who cannot see who is speaking, discern overlapping conversations, or clearly hear a speaker situated farther away from the microphone.

- Highly visual settings, as opposed to highly auditory settings (i.e., large lecture hall), when what is spoken is only part of the overall message can result in only part of the message being conveyed. Though not ideal, one solution to minimize the loss of visual information is to connect a portable webcam to the consumer's computer, which is then directed around the room to capture visual information.

What equipment and connections are needed to use remote speech-to-text services?

- **High-speed and reliable internet connection:** An internet connection is required to transmit audio and visual information between users. Wired connections presently offer greater reliability than wireless connections (Wi-Fi).

- **High-quality microphone to capture auditory output:** Echo- and noise-canceling features in high-quality microphones may enhance the audio quality for a remote provider. Full duplex audio is a feature that may prevent disruptions in the audio feed and is especially useful if the remote provider is voicing for the deaf individual. Consider the type (e.g., omnidirectional or unidirectional) and placement (i.e., auditory range) of the microphone for the most effective sound quality.

- **Audio- or video-conferencing software to transmit audio (e.g., Adobe Connect, Skype):** Audio can be transmitted through a cell phone or landline. However, the input is limited to the individual holding the receiver unless a conference telephone is used. An internet connection is needed to transmit speech-to-text services back to the

National Deaf Center
on Postsecondary Outcomes

consumer. Thus, using audio- or video-conferencing software with a good-quality microphone is another option for transmitting the audio feed. The addition of an external webcam will allow the provider to view visual information.

- **Internet browser or speech-to-text client/reader software:** Communication access real-time translation (CART), C-Print, and TypeWell are all capable of being viewed in an internet browser. C-Print and TypeWell have their own proprietary software.

Setting up new technology takes time. The technology and equipment will need to be in place so that testing can occur prior to the service being used.

Special Considerations for Remote Speech-to-Text Services

To encourage a successful remote speech-to-text experience, it is important to establish guidelines that address the following questions before implementing the service.

- Who is responsible for setting up the equipment, establishing the connections, and taking down the equipment?
- What is the backup plan for access when technology fails?
- Who is responsible for informing the remote provider and the consumer of an absence or late arrival?
- How long will the remote provider and consumer wait if one is late to log in?
- Who is the contact person in case the consumer needs assistance?

Related Resources

- Speech-to-Text Services: An Introduction: **www.nationaldeafcenter.org/introstt**
- Hiring Qualified Speech-to-Text Providers: **www.nationaldeafcenter.org/hiringstt**
- CART: **http://alacarteconnection.com/how-works**
- C-Print: **www.rit.edu/ntid/cprint**
- TypeWell: **www.typewell.com**
- Alternative Communication Services white papers on remote CART and remote text interpreting: **www.acscaptions.com/subpages/ACS_White_Papers.asp** (please note that NDC does not endorse specific companies or products)
- Remote speech-to-text services in surgical rotation at UC Davis School of Medicine: **https://youtu.be/AwDvgFrbY5w**

Additional resources on this subject may be available at **www.nationaldeafcenter.org/resources**