

## Overview

Speech-to-text services can be provided onsite or remotely. Onsite speech-to-text services refers to the service provider and consumer being in the same location. Remote speech-to-text services refers to the service provider and consumer being 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 over the Internet so 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. While 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 required to utilize 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 the greatest reliability as compared to wireless connections (WiFi).
- *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 individual who is deaf or hard of hearing. It is important to 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 programs to transmit audio (e.g. Adobe Connect, Skype, Vidyo):* 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 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 being presented.
- *Internet browser or speech-to-text client/reader software:* CART, C-Print®, and TypeWell are all capable of being viewed in an Internet browser such as Chrome, FireFox, Internet Explorer, or Safari. C-Print® and TypeWell have their own proprietary software.

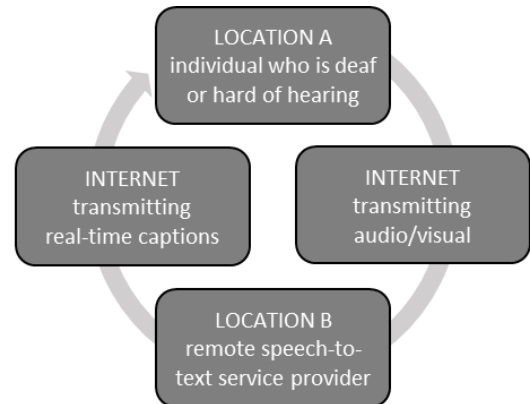
Setting up new technology takes time. The technology and equipment will need to be in place so that testing can occur prior to the service being used.

### 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 back-up 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?

### Speech-to-Text Services: An Illustration of Real-Time Captioning



For more information regarding Speech-to-Text, please peruse pn2 Fast Facts *Speech-to-Text Services: An Overview of Real-Time Captioning and Speech-to-Text Services: Hiring Qualified Speech-to-Text Providers*.

### Resources

CART Website-

<http://alacarteconnection.com/how-works/>

C-Print Website- <https://www.rit.edu/ntid/cprint/>

Typewell Website- <http://typewell.com/>

Alternative Communication Services (ACS) White Papers on Remote CART and Remote Text Interpreting - (please note that pn2 does not endorse specific companies or products)  
[http://www.acscaptions.com/subpages/ACS\\_White\\_Papers.asp](http://www.acscaptions.com/subpages/ACS_White_Papers.asp)

Remote speech-to-text services in surgical rotation at UC Davis School of Medicine -  
<https://www.youtube.com/watchv=AwDvgFrbY5w>

Visit [www.pepnet.org](http://www.pepnet.org) for additional information and resources

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