

---

Your source for the latest research news

MobileFollowSubscribe

**Breaking News:**

- [Archaic DNA Rewrites Human Evolution Story](#)
- [No Link Found Between Pets, Kids' Health](#)
- [Why Do Mouth Wounds Heal Fastest?](#)
- [CubeSat Propulsion System: Water as Propellant](#)
- [Women Have More Active Brains Than Men](#)
- [Record for Fastest Light Pulse Set](#)
- [Youthful Plasticity Restored in Brains of Mice](#)
- [New Battery Is Activated by Your Spit](#)
- [Sleep Helps Babies Link Words With Content](#)
- [Black Holes Pervade the Universe: Study](#)

Follow all of ScienceDaily's [latest research news](#) and [top science headlines!](#)

## Science News

*from research organizations*

---

## Similar improvements between speech language therapy delivered online and in-person

July 20, 2017

*Date:*

Baycrest Centre for Geriatric Care

*Source:*

A recent study found that patients who accessed speech language therapy over the Internet saw large improvements to their communication abilities that were similar to those of patients doing in-person therapy.

*Summary:*

*Share:*

### FULL STORY

---

Telerehabilitation helps healthcare professionals reach more patients in need, but some worry it doesn't offer the same quality of care as in-person treatment. This isn't the case, according to recent research by Baycrest.

The study, published in the journal *Aphasiology*, found that patients who accessed speech language therapy over the Internet saw large improvements to their communication abilities that were similar to those of patients doing in-person therapy.

This finding encourages greater adoption of telerehabilitation to treat patients living in remote communities who are recovering from post-stroke communication disorders as a way to improve the use of limited healthcare resources.

"People with communication disorders, such as aphasia, are often provided with therapy only for the first few months after they have been diagnosed, despite evidence that therapy can benefit them for years," says Dr. Jed Meltzer, lead author and neurorehabilitation scientist at Baycrest's Rotman Research Institute. "Location can limit a patient's access to a speech-language pathologist, especially for individuals living in rural areas. Our study shows that telerehabilitation can remove this geographic barrier since participants saw similar recovery results."

Despite these comparable improvements, an unexpected finding was that patients who did telerehabilitation therapy weren't as confident in their communication abilities compared to those who did in-person treatment.

"Low confidence can lead to continued isolation and it is important that patients be encouraged to find other ways to socially engage with others beyond their therapy," says Dr. Meltzer.

Based on the study's findings, Dr. Meltzer suggests that speech-language pathologists continue to play a critical role in the creation and supervision of treatment for patients and computer-based or tablet-based applications can help handle day-to-day treatment exercises.

The study analyzed the recovery of 44 patients who had a communication disorder caused by a stroke at least six months prior to recruitment. All patients received an in-person assessment and participated in a language skills test in the first week of therapy. They were then assigned either telerehabilitation or in-person treatment for 10 weeks. Once treatment was completed, each patient completed a language skills test and a questionnaire. Their partners also provided feedback about the patient's recovery.

As the only Ontario hospital offering one of the few clinically validated, gold standard telerehabilitation programs for Parkinson's patients, the Lee Silverman Voice Treatment (LSVT®) eLOUD Clinic, offering telerehabilitation services at Baycrest allows clinicians to help more patients. "Older adults may face mobility issues and have a difficult time travelling to a specific location for treatment," says Maria Piccini, a Baycrest speech-language pathologist who runs the LSVT® Clinic. "Telerehabilitation makes it easier for these individuals to access the therapy they need and improves their chances of completing the treatment."

These findings support Dr. Meltzer's next steps which involve combining telerehabilitation technology with other therapies, such as medication or brain stimulation, to explore ways to provide more efficient treatment to patients.

---

### **Story Source:**

[Materials](#) provided by [Baycrest Centre for Geriatric Care](#). *Note: Content may be edited for style and length.*

---

## Journal Reference:

1. Jed A. Meltzer, Allison J. Baird, Richard D. Steele, Stephanie J. Harvey. **Computer-based treatment of poststroke language disorders: a non-inferiority study of telerehabilitation compared to in-person service delivery.** *Aphasiology*, 2017; 1  
DOI: [10.1080/02687038.2017.1355440](https://doi.org/10.1080/02687038.2017.1355440)
- 

## Cite This Page:

- [MLA](#)
- [APA](#)
- [Chicago](#)

Baycrest Centre for Geriatric Care. "Similar improvements between speech language therapy delivered online and in-person." ScienceDaily. ScienceDaily, 20 July 2017. <[www.sciencedaily.com/releases/2017/07/170720142332.htm](http://www.sciencedaily.com/releases/2017/07/170720142332.htm)>.

- **RELATED TOPICS**

- [Health & Medicine](#)
  - [Patient Education and Counseling](#)
  - [Today's Healthcare](#)
  - [Wounds and Healing](#)
  - [Personalized Medicine](#)
- [Mind & Brain](#)
  - [Language Acquisition](#)
  - [Behavior](#)
  - [Child Development](#)
  - [Caregiving](#)

- **RELATED TERMS**

- [Therapy dog](#)
- [Communication](#)
- [Maggot therapy](#)
- [Chinese food therapy](#)
- [Language](#)
- [Body language](#)
- [Nuclear medicine](#)
- [Great Ape language](#)

## RELATED STORIES

---

[First Aid in the Brain: When Language Suddenly Fails](#)

July 12, 2017 — After a stroke a person often suffers from language problems. In some cases certain linguistic abilities can be regained, whereas others are lost forever. Now scientists have found one possible ... [read more](#)

[Aphasia Recovery Via Speech Therapy Related to Structural Plasticity of the Ventral Stream](#)

July 10, 2017 — Strengthening the inferior longitudinal fasciculus (ILF) via speech therapy is associated with significant semantic error reductions in aphasic stroke patients, report investigators. These findings ... [read more](#)

[Sign Language May Be Helpful for Children With Rare Speech Disorder](#)

Sep. 1, 2016 — Using sign language with intensive speech therapy may be an effective treatment for children with a rare speech disorder called apraxia of speech, according ... [read more](#)

[Use of Oxygen Therapy Investigated Among COPD Patients](#)

Apr. 23, 2015 — A new study about the use of oxygen to treat chronic obstructive pulmonary disease has found that the majority of patients receiving oxygen therapy were low-income, non-Hispanic white females about ... [read more](#)

## FROM AROUND THE WEB

1. [Ear-worn device helps Parkinson's patients to improve their voice](#)

Daniel M. Keller, Internal Medicine News, 2016

2. [Technology misuse hinders development in very young](#)

Judith L. Page, PhD, Pediatric News, 2015

3. [Parents Given Lead in Treating Preschool Stuttering](#)

MedPage Today, 2005

4. [Telerehabilitation: Review of the State-of-the-Art and Areas of Application](#)

Alessandro Peretti et al., JMIR Rehabil Assist Technol, 2017

1. [Evaluation of an Expert System for the Generation of Speech and Language Therapy Plans](#)

Vladimir Robles-Bykbaev et al., JMIR Med Inform, 2016

2. [New Stroke Guidelines Recommend Multidisciplinary Rehab](#)

MedPage Today, 2005

3. [Toward Patient-Centered Telerehabilitation Design: Understanding Chronic Pain Patients' Preferences for Web-Based Exercise Telerehabilitation Using a Discrete Choice Experiment](#)

Karlijn Cranen et al., J Med Internet Res, 2017

4. [Deep-Brain Stimulation Restores Awareness After Six Years](#)

MedPage Today, 2007

[Powered by TrendMD](#)

[Print](#) [Email](#) [Share](#)

---

## Most Popular

*this week*

---

### HEALTH & MEDICINE

[Breakthrough Device Heals Organs With a Single Touch](#)

[Protein-Rich Diet May Help Soothe Inflamed Gut](#)

[On the Early Human's Menu: Mammoth and Plenty of Raw Vegetables](#)

[For White Middle Class, Moderate Drinking Is Linked to Cognitive Health in Old Age](#)

### MIND & BRAIN

[Brain Cells Found to Control Aging](#)

[Lutein, Found in Leafy Greens, May Counter Cognitive Aging](#)

[Insufficient Sleep May Be Adding to Your Waistline](#)

[Green Tea Ingredient May Ameliorate Memory Impairment, Brain Insulin Resistance, and Obesity](#)

#### **LIVING & WELL**

[Health Benefits of the Mediterranean Diet Are Confirmed, but Just for the Upper Class](#)

[Walnuts May Promote Health by Changing Gut Bacteria](#)

[Spanking Can Be Detrimental for Children's Behavior, Even 10 Years Later](#)

[Women Have More Active Brains Than Men](#)

### **Strange & Offbeat**

---

#### **HEALTH & MEDICINE**

[Breakthrough Device Heals Organs With a Single Touch](#)

['Origami Organs' Can Potentially Regenerate Tissues](#)

[Sticky When Wet: Strong Adhesive for Wound Healing](#)

[Diet Choice, Reproduction of Fruit Flies Affected by Gut Bacteria](#)

**MIND & BRAIN**

[Manipulating Brain Network to Change Cognitive Functions: New Breakthrough in Neuroscience](#)

[Why Humans Find Faulty Robots More Likeable](#)

[Magic Helps Unmask How the Brain Works](#)

[To Pick a Great Gift, It's Better to Give AND Receive](#)

**LIVING & WELL**

[System Automatically Retouches Cellphone Images in Real-Time](#)

['Are We There Yet?' Explaining ADHD Science to Children](#)

[Do All People Experience Similar Near-Death-Experiences?](#)

[Talking to Yourself in the Third Person Can Help You Control Emotions](#)

- **SD**
- [Health](#)

- [Tech](#)
- [Enviro](#)
- [Society](#)
- [Quirky](#)
- 

[A-AA+](#)

## Free Subscriptions

Get the latest science news with ScienceDaily's free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- [Email Newsletters](#)
- [RSS Feeds](#)

## Follow Us

Keep up to date with the latest news from ScienceDaily via social networks:

- [Facebook](#)
- [Twitter](#)
- [Google+](#)
- [LinkedIn](#)

## Mobile Apps

Get the latest news from ScienceDaily via our free mobile apps, available for download on the following platforms:

- [iPhone/iPad](#)
- [Android](#)

## Have Feedback?

Tell us what you think of ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

- [Leave Feedback](#)
- [Contact Us](#)

[About This Site](#) | [Editorial Staff](#) | [Awards & Reviews](#) | [Contribute](#) | [Advertise](#) | [Privacy](#)

[Policy](#) | [Terms of Use](#)

Copyright 2017 ScienceDaily or by third parties, where indicated. All rights controlled by their respective owners.

Content on this website is for information only. It is not intended to provide medical or other professional advice.

Views expressed here do not necessarily reflect those of ScienceDaily, its staff, its contributors, or its partners.