



LSVT Global® Public Webinar Series

Title: **Utilizing technology for safe and effective delivery of LSVT
LOUD®**

Presenters: Elizabeth Peterson, MA, CCC-SLP
Heather Hodges, MA, CCC-SLP

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Contact Us:

Web: www.lsvtglobal.com Email: info@lsvtglobal.com

Phone: 1-888-438-5788 (toll free), 1-520-867-8838 (direct)

Utilizing technology for safe and effective delivery of LSVT LOUD®

Elizabeth Peterson, MA, CCC-SLP
 LSVT LOUD® Training and Certification Faculty
 LSVT Global, Inc.



Heather Hodges, MA, CCC-SLP
 LSVT LOUD® Training and Certification Faculty
 LSVT Global, Inc.



LSVT GLOBAL Innovation in Science. Integrity in Practice.

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Plan for Webinar

- Logistics
- Presentation of Content
- Address your questions
- Survey

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Instructor Biographies

Elizabeth Peterson, MA, CCC-SLP
 Ms. Peterson received her master's degree in Speech, Language and Hearing Sciences from the University of Colorado-Boulder. She began working with Dr. Lorraine Ramig's research team while completing her master's thesis. She has worked as a research associate at the National Center for Voice and Speech-Denver and the University of Texas Health Science Center, San Antonio and primarily delivers LSVT LOUD in a research setting. Ms. Peterson is currently involved in Dr. Ramig's research investigating the short and long-term impact of LSVT LOUD on neural underpinnings of speech in Parkinson disease.

Heather Hodges, MA, CCC-SLP
 Ms. Hodges received her master's degree in Speech, Language, and Hearing Sciences from the University of Colorado. She has been part of Dr. Ramig's research team since 2004. She is a consultant, expert clinician, and training and certification faculty with LSVT Global. In addition to studying neurogenic voice and speech disorders and being LSVT LOUD certified since 2006, Ms. Hodges also worked for 13 years at an outpatient hospital specializing in diagnosing and treating dysphagia, dysphonia, and upper airway disorders.

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Disclosures

- All LSVT® faculty have both financial and non-financial relationships with LSVT Global.
- Non-financial relationships include a preference for LSVT LOUD® as a treatment technique.
- Financial Relationships include:
Ms. Peterson is an employee of LSVT Global and Ms. Hodges is a consultant of LSVT Global. Both receive lecture honorarium and travel reimbursement.

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Information to Report CE Activity

- This LSVT Global webinar is NOT ASHA or state registered for CEUs but it may be used for self-reported CEU credit as a non-registered/non-preapproved CEU activity.
- If you are a speech therapy professional and would like to self-report your activity, e-mail webinars@lsvtglobal.com to request a certificate after completion of the webinar which will include your name, date and duration of the webinar.
- Licensing requirements for CEUs differ by state. Check with your state speech licensing board to determine if your state accepts non-ASHA registered or non pre-approved CEU activities.
- Attendance for the full hour is required to earn a certificate.



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Learning Objectives

Upon conclusion of this webinar, participants will be able to:

1. Discuss the importance of maintaining intensity of treatment in LSVT LOUD
2. Describe how the LSVT Companion System can be utilized to increase accessibility to treatment
3. Explain how LSVT LOUD can be delivered via telepractice: LSVT eLOUD

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Poll #1. Who is joining us?

- Person with Parkinson's
- Family member, friend or care partner
- Physical or Occupational Therapist/Assistant (including students)
- Speech Language Pathologist/Assistant (including students)
- Other

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**LSVT Protocols:
Based on 30 years of federally funded research
and clinical experience**

LSVT LOUD is speech therapy
Delivered by LSVT LOUD Certified Speech-Language Pathologists


LSVT BIG is physical/occupational therapy
Delivered by LSVT BIG Certified Physical or Occupational Therapists

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What do the LSVT Programs Entail?

- Structured, evidence-based, rehabilitative treatment protocols developed specifically for PD but can be used for other conditions
- Adhere to principles of motor learning and activity dependent neuroplasticity
 - Intensive and challenging EXERCISE, specific to the unique features of PD
 - Personalized and specific functional training of voice, mobility and activities of daily living

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Intensive Training and Practice is Key to Motor Learning and Neuroplasticity!

Intensity across sessions:

- Treatment delivered 4 consecutive days a week for 4 weeks
- Daily homework practice (all 30 days of the month)
- Daily carryover exercises (all 30 days of the month)
- Develops life-long habit of practice

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Intensive training *within* sessions:

High effort:

- Amplitude
- Repetitions
- Force/resistance
- Accuracy
- Fatigue

What does the research say?
Intensive practice is important for maximal plasticity
(Kleim & Jones, 2008)

Intensive EFFORT is needed to OVERRIDE bradykinesia and hypokinesia!



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LSVT LOUD Treatment Session

<p><u>Daily Exercises</u></p> <ol style="list-style-type: none"> 1. Maximum Duration of Sustained Vowel Phonation (Long Ahs) – 15+ reps 2. Maximum Fundamental Frequency Range (High/Low Ahs) – 15 reps each 3. Maximum Functional Speech Loudness (Functional Phrases) – 5 reps of 10 phrases 	<p><u>Hierarchy Exercises</u></p> <p>Structured reading and spontaneous speaking – 25 min</p> <p>Build complexity across 4 weeks of treatment</p> <div style="display: flex; align-items: center; margin: 5px 0;"> <div style="text-align: center; margin-right: 10px;"> ↑ ↓ </div> <div style="flex: 1;"> <p style="margin: 0;">Week 1 – words, phrases</p> <p style="margin: 0;">Week 2 – sentences</p> <p style="margin: 0;">Week 3 – reading</p> <p style="margin: 0;">Week 4 – conversation</p> </div> <div style="margin-left: 10px;"> <p style="margin: 0;">Shorter, simple</p> <p style="margin: 0;">Longer, complex</p> </div> </div> <p><u>Homework</u></p> <p>Includes all daily exercises and hierarchy exercises. Assigned all 30 days</p> <p><u>Carryover Exercises</u></p> <p>Use loud voice in real life outside of the treatment room. Assigned all 30 days</p>
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Calibration Training



LSVT LOUD addresses a **MISMATCH** between one's perception of their vocal loudness and how others perceive it.



"I feel like I'm shouting."

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LSVT LOUD Goal!

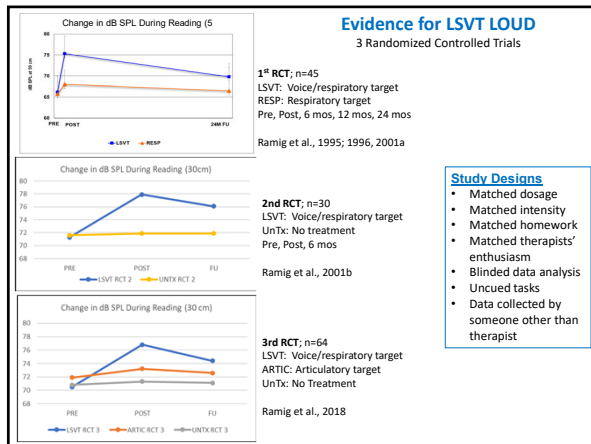


Treatment Exercise: "long ah", "high/low ah" Treatment Goal: louder voice in conversation

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LSVT LOUD – 25+ years of **EFFICACY DATA**
Established importance of
LSVT LOUD **FOUR TIMES A WEEK FOR FOUR WEEKS**
(**GOLD STANDARD**)

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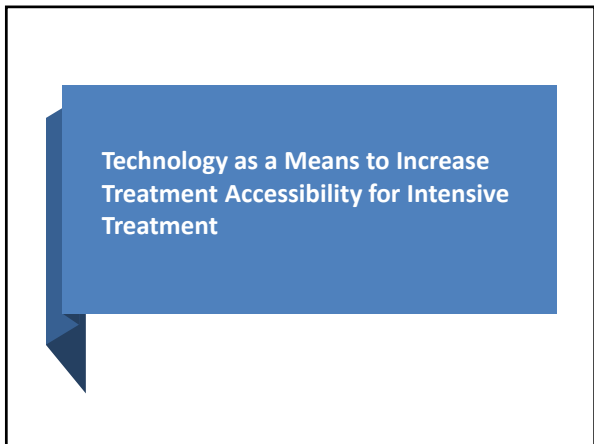
Challenges to Intensive Treatment

- COVID-19
- Distance from an LSVT LOUD Certified Clinician
- Issues with mobility
- Limited transportation options
- Expense of travel
- Fatigue/Effort that can accompany getting out of house for appointments


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How Can We Make LSVT LOUD More Accessible?

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LSVT Companion	LSVT eLOUD
Funded by: NIH-NIDCD & Michael J. Fox Foundation	Telepractice
www.LSVTGlobal.com	

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LSVT Companion® Client Edition

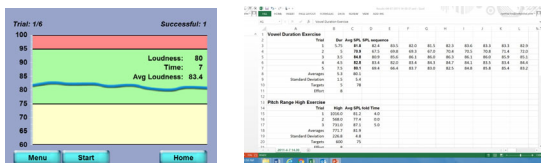


Funded by: NIH-NIDCD & Michael J. Fox Foundation

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LSVT Companion Key Features

- Provides real-time audio and visual feedback based on goals set by the clinician
- Automatically documents calibrated sound pressure level (SPL), frequency and duration for treatment and/or homework practice
- Spreadsheet with data can be shared with your therapist



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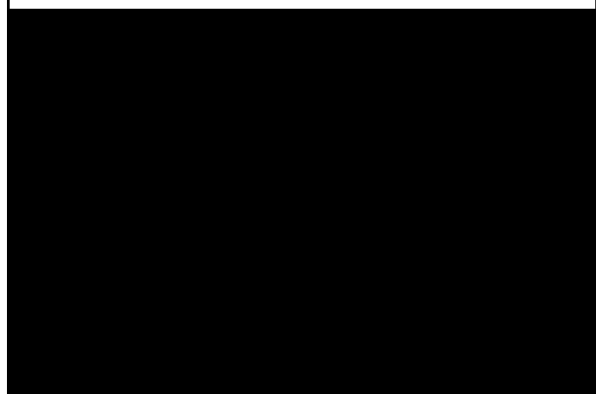
LSVT Companion Key Features

- FDA-cleared medical device
- Must be used under care of an LSVT LOUD Certified Clinician (prescription)
- Text and conversation practice can be personalized by your clinician
- Available in English and German

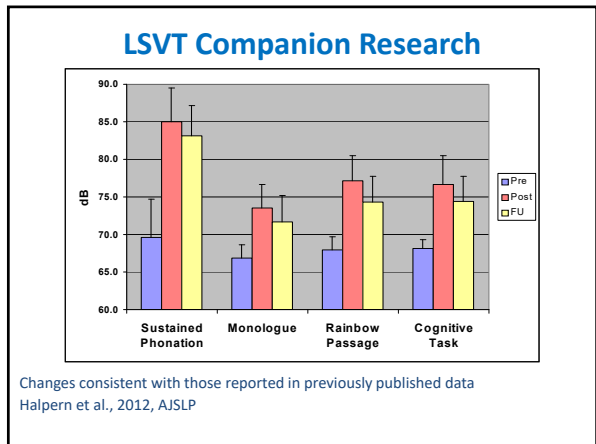


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Video: LSVT Companion, Client Edition



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Potential uses of the LSVT Companion System to Increase Accessibility

- Independent treatment sessions at home, for a portion of the sessions
- Homework practice during LSVT LOUD
- Continued practice after the end of LSVT LOUD therapy

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How to purchase the LSVT Companion System

- Purchase online at: www.lsvtglobal.com and click on "Store/Cart". Select "LSVT Client Edition" from dropdown menu.
 - Clinician name will need to be verified prior to purchase
- Call or e-mail LSVT Global: 1-888-438-5788 or info@lsvtglobal.com
- Ask your clinician if he/she has a "loaner" LSVT Companion System

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Reimbursement for LSVT Companion, Client Edition

- Private Health Insurance
 - Explore options within health plan
 - Clinicians have had success (e.g., Cigna)
- Veterans Administration
 - Good success in select facilities for providing the Client editions
- Vocational Resources
 - Success with getting funding for client

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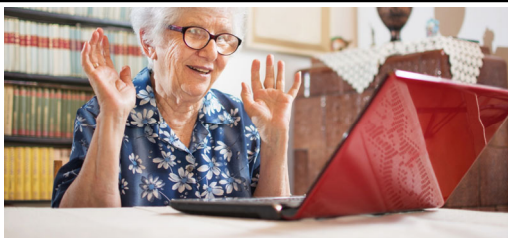
Resources

- LSVT Companion User Guide
- lsvtc@lsvtglobal.com technical support
- LSVT Companion Video Tutorials (YouTube: Search LSVT Companion, Client Edition)
- Ask the Expert info@lsvtglobal.com
- Review webinars on demand

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**Telepractice delivery of LSVT LOUD:
LSVT eLOUD**

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Telepractice is an acceptable mode of delivery

For example, the American Speech Language Hearing Association (ASHA), Speech Pathology Australia (SPA), and Royal College of Speech-Language Therapists (RCSLT) recognize telepractice as acceptable service delivery mode

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Telepractice definition from SPA:

Telepractice is the application of telecommunications technology to deliver clinical services at a distance by linking clinician to client, caregiver, or any person(s) responsible for delivering care to the client, for the purposes of assessment, intervention, consultation and/or supervision.

Integral to telepractice is the delivery of clinical services over any distance that are guided, monitored, or modified by a speech pathologist for each unique client or clinical purpose.

Other terms: telehealth, telerehabilitation, telespeech, or teleSLP

SPA Position Statement, Telepractice in Speech Pathology



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ASHA Telepractice Statement:

Use of telepractice must be equivalent to the quality of services provided in person and consistent with adherence to:

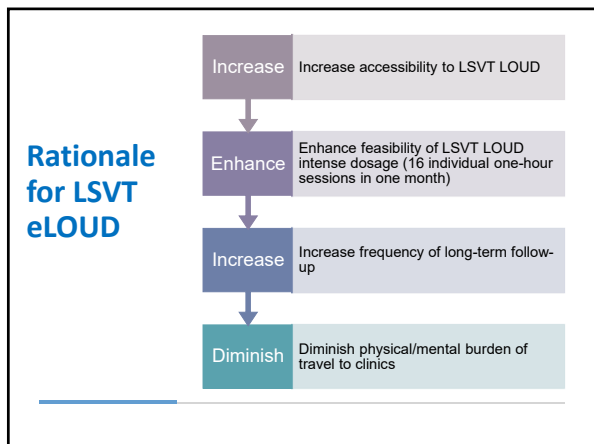
- The [Code of Ethics](#) (ASHA, 2016a)
- [Scope of Practice in Audiology](#) (ASHA, 2018), [Scope of Practice in Speech-Language Pathology](#) (ASHA, 2016b)
- State and federal laws (e.g., licensure, Health Insurance Portability and Accountability Act [HIPAA; U.S. Department of Health and Human Services, n.d.-c])
- ASHA policy

There are no inherent limits to where telepractice can be implemented, as long as the services comply with national, state, institutional, and professional regulations and policies.

ASHA Practice Portal, Professional Issues, Telepractice



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Goal of LSVT eLOUD Training: Optimize Essential Outcomes


- Maintain fidelity of LSVT LOUD
- Comparable treatment outcome data to in-person LSVT LOUD
- Growing number of national speech-language pathology associations require that clinicians are trained and competent in telepractice delivery

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CORONAVIRUS
COVID-19

- Extreme circumstances where in-person delivery of services is not possible
- Telepractice may be our only way to reach clients
- Allows us to not interrupt services for clients already enrolled
- Allows us to offer services to those in need
- Allows us to keep in touch with maintenance groups and potentially minimize feelings of social isolation, apathy and depression

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- Our requirement to see three clients for LSVT LOUD in-person before telepractice has been amended during COVID-19
- It is *recommended* to see three clients for LSVT LOUD in-person before telepractice, but not *required*

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Research supporting LSVT LOUD in Telepractice

- Theodoros et al., 2006
- Tindall et al., 2008
- Howell et al., 2009
- Constantinescu et al., 2010
- Constantinescu et al., 2011
- Theodoros & Ramig, 2011
- Theodoros et al., 2016
- Theodoros et al., 2018

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LSVT LOUD Typical Outcomes
(change in dB SPL from pre to post)

	Number of participants	Sustained vowel	Reading	Conversation
Ramig et al., 1995 Live face-to-face efficacy study	26	14.1	9.1	4.7
Ramig et al., 2001 Live face-to-face efficacy study	14	13.3	6.6	5.5
Ramig et al., 2018 Life face-to-face efficacy study	22	9.3	6.3	5.2
Halpern et al., 2012 LSVTC outcome data; 9 sessions live; 7 with LSVTC at home	16	16.0	9.0	7.0
Theodoros et al., 2006 Telepractice delivery with web-cam and eREHAB box feasibility study	10	10.8	7.5	5.5
Tindall et al., 2008 Telepractice delivery with videophone feasibility study	24	13.4	5.8	3.6*
Theodoros et al., 2016 Face-to-Face	16	10.5	9.6	7.5
Metropolitan Online	15	8.8	7.5	6.2
Non-Metropolitan Online	15	9.2	8.0	6.2

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Equipment: Specific to Telepractice Delivery

- **Computer**
 - Consider age of computer - if older and slower processing, will not work well for telepractice
- **High-speed internet connection - BEST**
 - Hard-wired connection
 - Wi-Fi
 - Dedicated Wi-Fi if possible
 - Minimize other users on wi-fi during session
- **Webcam – many built-in**
- **Microphone: built-in or external**
- **Speakers: computer speakers or external speakers**

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Considerations for client set-up



Safe Water Position



Camera Position: See Face And Upper Chest



Tape Measure Mouth-to-microphone Distance



Phone As A Back Up For Tech Issues



Quiet, Distraction Free Room



"THINK LOUD" Sign Loudness Diagram



Optional: Printer – For Readings And Homework



Optional: Typing Stand – For Phrases And Readings

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Considerations for LSVT eLOUD

- Comfort with technology (do you have IT access – Geek squad, tech savvy friend or family member?)
- Discuss with clinician ratio of in-person to telepractice sessions
 - e.g. eval in-person? All sessions via telepractice?
 - Different regulations per state
 - Licensed in my state?
- Test session prior to first live session or assessment (no adjustments after assessment!)

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Is an LSVT LOUD treatment session different with telepractice?

No.
It is all the same!



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LSVT eLOUD Locations

CLINICIAN:

- Institutional clinic
- Private practice
- Home office

CLIENT:


- Home
- Office
- Senior center
- Nursing home



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Implementation Options

1. LSVT LOUD in-person assessment and treatment
 - LSVT eLOUD follow-up
2. A combination of LSVT LOUD in-person assessment and LSVT eLOUD treatment
 - Some in-person treatment sessions alternate with LSVT eLOUD
 - Follow-up with LSVT eLOUD
3. LSVT LOUD assessment, treatment and follow-up delivered by LSVT eLOUD



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Exercise classes for LSVT LOUD graduates

teleLOUD for LIFE™

Mondays, 3:30-4:30 p.m. Eastern
 Fridays, 2:00-1:00 p.m. Eastern

teleBIG for LIFE, Fridays at 10:30-11:30 a.m. Eastern

****You Must be an LSVT LOUD or LSVT BIG graduate to participate in these EXERCISE classes****

Contact info@lsvtglobal.com for more details!

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Pediatric Telepractice

- Option for delivering intensive therapies, such as LSVT LOUD
- Eases burden of scheduling
- Kids love the medium of computers/screens and may be even more motivated
- Data are limited specifically for LSVT LOUD, but telepractice for children is well established
- Now is an ideal time with kids "at home" as well
- *"We conducted sessions using telepractice. This consisted of using a HIPPA compliant telepractice platform so each family and therapist could attend the sessions with no, or limited, travel and preparation. The 16-session format would have been much more difficult for school-age children without the telepractice option. - Jennifer Gray, MS, CCC-SLP"*


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Reimbursement for Telepractice

United States: Pre COVID-19

- Private Health Insurance
 - Some states have passed laws mandating coverage of telepractice
 - Check ASHA State-by-State for more information
 - <https://www.asha.org/Advocacy/state/>
- Medicare
 - SLPs not covered providers for telepractice coverage
 - Medicare beneficiaries may not pay for telepractice privately
- Medicaid
 - Determined on a state level (check ASHA State-by-State)
- Private Pay
 - In the US would need to work with clients who do not have Medicare as primary insurance

https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589934956§ion=Key_Issues



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CORONAVIRUS

COVID-19

Reimbursement – Medicare Check for Updates

Latest information from ASHA (July 23, 2020)

“In response to the spread of COVID-19, the Centers for Medicare & Medicaid Services (CMS) now allows audiologists and speech-language pathologists (SLPs) to provide telehealth services to Medicare Part B (outpatient) beneficiaries, retroactive to March 1, 2020, and for the duration of the public health emergency, which has been extended for an additional 90 days, effective July 25, 2020. CMS announced the telehealth expansion in an April 30, 2020, [press release](#) and its [COVID-19 Emergency Declaration Blanket Waivers for Health Care Providers](#) [PDF]. ASHA and its members participated in extensive advocacy with Medicare to achieve this expansion.

Medicare Part C (Medicare Advantage plans) may also reimburse for telehealth services provided by audiologists and SLPs during the public health emergency. Check with the plan directly for coding and billing guidelines.”

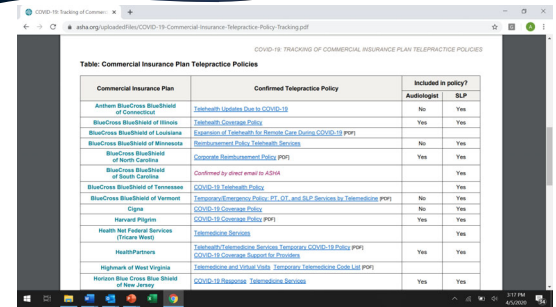
<https://www.asha.org/Practice/reimbursement/medicare/Providing-Telehealth-Services-Under-Medicare-During-the-COVID-19-Pandemic/>

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CORONAVIRUS


COVID-19

Reimbursement – Other Insurance Check for Updates



<https://www.asha.org/uploadedFiles/COVID-19-Commercial-Insurance-Telepractice-Policy-Tracking.pdf>

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Reimbursement – International

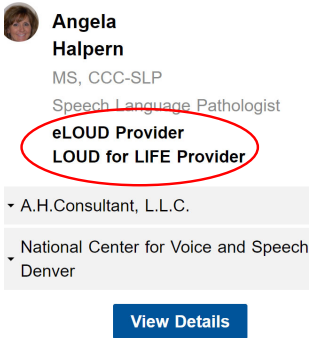
Just as in US, information changes rapidly, always check with governing body/specific insurance for the latest information

Germany
Insurance is no longer reimbursing for telepractice (as of June 30, 2020)

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Finding a provider for LSVT eLOUD and/or LOUD for LIFE

- Go to www.lsvtglobal.com
- Click “Find LSVT Clinicians”
- Select desired provider type (LSVT LOUD or LSVT BIG)
- Type in your location information in the search bar
- Choose the distance you would like to search
- Look for the designation of “eLOUD Provider” or “LOUD for LIFE Provider” under title
- Ask if they provide “teleLOUD for LIFE”




Angela Halpern
MS, CCC-SLP
Speech Language Pathologist
eLOUD Provider
LOUD for LIFE Provider

▾ A.H.Consultant, L.L.C.
▾ National Center for Voice and Speech
Denver

View Details

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Questions to ask an LSVT eLOUD clinician

*Are you currently accepting patients? If so, move on to these five questions:

1. Do you deliver the gold standard dosage of LSVT LOUD?
 - Four days a week for 4 weeks
 - Individual 60-minute sessions
 - Daily homework and carryover assignments
2. How many clients have you seen face-to-face? (typically require minimum of 3, but our policy is amended during COVID-19 restrictions)
3. What telepractice platform do you use?
4. Do you have a HIPAA BAA (business associate agreement) with the platform to ensure protection of my personal data?
 - e.g. Skype and FaceTime are NOT HIPAA compliant
5. Do you have a follow-up or maintenance plan for your clients?

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If the "LSVT" treatment is anything other than the dosage, exercises, homework and carryover described-

It is NOT actually LSVT.

There are no modified versions.

Treatment fidelity is KEY!

If a clinician offers any modified version, don't do it!
 You will not receive the benefits of treatment we have established in our 30 years of research.

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Summary

Intensity of treatment is essential to maintain treatment fidelity but there are real world challenges such as the current global pandemic, distance to a clinician, time, mobility issues, or expense of travel.

Technology may be utilized to make intensive treatment more feasible.

The LSVT Companion may be used to supplement a portion of treatment sessions and/or homework practice and maintenance in a client's home or office.

LSVT eLOUD makes it possible to receive live treatment from a clinician in real-time without the expense, time, or mobility required to travel.


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LSVT LOUD® in pediatric settings: Real world applications

Date: Tuesday, November 17, 2020
Time: 8:00 PM – 9:00 PM Eastern Standard Time (EST)

As research continues to evolve on pediatric applications of LSVT LOUD more clinicians are conducting LSVT LOUD with their pediatric clients. Tune in to hear stories of success and lessons learned from clinicians conducting LSVT LOUD with clients 18 years old and younger.


<https://blog.lsvtglobal.com/public-webinars/>



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How to ask questions

1. Type in the question box on your control panel
2. Raise your hand! (click on the hand icon in your control panel)
 - Your name will be called out
 - Your mic will be unmuted, then you can ask your question out loud.
3. Email info@lsvtglobal.com if you think of questions later!



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Thank you!

info@lsvtglobal.com
www.lsvtglobal.com

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