



Clinical insights

No boundaries: Perspectives of international Skype delivery of the Lidcombe Program

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Given the barriers that influence many clients' access to stuttering treatment, clinicians and researchers are seeking effective alternative treatment delivery models. Positive outcomes from trials reporting the telehealth delivery of stuttering treatment has meant clients can avoid many of these access issues and conveniently receive treatment. Despite little reported evidence to support the use of Skype, evidence for delivery methods such as using a telephone would seem to indicate that it is a viable alternative to face-to-face treatment. This clinical insight reports the perspectives of experienced stuttering clinician Dr Brenda Carey and her client about the use of Skype to deliver the Lidcombe Program internationally.

While data regarding the incidence and prevalence of stuttering are limited, most studies have suggested that around 1% of people stutter (e.g., Craig, Hancock, Tran, Craig, & Peters, 2002). Typically developing before the age of four, stuttering has been observed in all cultures, races, historical periods, and languages (Ardila, 1994). The current consensus is that ideally stuttering should be treated in the preschool years (Jones et al., 2005). This is primarily based on the fact that neural plasticity decreases with age and as such stuttering becomes less tractable. Early, effective intervention appears crucial in preventing the significant impact of stuttering, with the potential for it to become a chronic condition by adulthood, significantly disrupting life on a daily basis (Onslow, 2000).

Presently, the Lidcombe Program (Onslow, Packman, & Harrison, 2003) is the most efficacious treatment for children who stutter. Randomised controlled trials have shown that this parent-delivered, behavioural treatment is most effective with children younger than 6 years of age (Jones et al., 2005). Traditional delivery requires parents to travel weekly to clinics specialising in this treatment.

Access to treatment is a significant issue for many clients who stutter and their families. Doolittle and Spaulding's (2006) review of the importance of telemedicine health care identified that many people do not have access to appropriate services for their needs. Major disparities exist

between and within countries due to economic, political and in particular, geographical factors. Lifestyle factors also present as a barrier for clients, with significant direct costs such as transportation and accommodation, and indirect costs including time off work for clients and family members or even childcare costs (Doolittle & Spaulding, 2006).

While the Lidcombe Program has gained widespread acceptance among speech pathologists in Australia (Onslow et al., 2003), this isn't necessarily the case around the world. The treatment has been introduced and accepted by clinicians in the United Kingdom, South Africa, Canada, New Zealand, and Germany. Additionally, there is some uptake by clinicians in other European countries like Denmark and the Netherlands. However, client access in some countries (including the United States) has likely been affected by a preoccupation with treatments influenced by the diagnosogenic theory of stuttering (that it is caused by parents inappropriately drawing attention to their child's dysfluencies) which directly opposes the principles of the Lidcombe Program.

To combat access issues, speech pathology services in other areas of the profession have been delivered via telehealth for more than three decades. However, published data regarding telehealth implementation in the field of stuttering is limited and only dates back to 1999. Harrison, Wilson, and Onslow's (1999) single case study successfully adapted the Lidcombe Program to be delivered over the telephone for a family isolated from treatment services. The positive outcome has more recently been confirmed by phase I and phase II trials of telehealth delivery of the Lidcombe Program (Lewis, Packman, Onslow, Simpson, & Jones, 2008; Wilson, Onslow, & Lincoln, 2004). Presently, a randomised controlled trial is underway comparing in-clinic delivery of the Lidcombe Program with Internet delivery using Skype.

In Melbourne, experienced speech pathologist Dr Brenda Carey has delivered the Lidcombe Program via Skype when families were unable to access in-clinic sessions. This has resulted in clients from places like China, United States, India, Singapore, Italy, and indeed rural Australia receiving this treatment. One such client is Jenny (pseudonym) and her son Tom (pseudonym) who live in South Africa. The following are the perspectives of Dr Carey and Jenny about their experiences of the Skype-delivered Lidcombe Program.

Establishing contact

Jenny (J): I read about the Lidcombe Program on the Internet. It just sounded so child centred and positive. I

emailed Professor Mark Onslow (of the Australian Stuttering Research Centre) to ask him if he knew of Lidcombe therapists in South Africa. He gave me a few ideas but also said the option of telehealth was available.

Dr Brenda Carey (BC): As a specialist stuttering clinician and member of the Lidcombe Program Trainers' Consortium I have used the Lidcombe Program in clinic for many years, and am aware of the outcomes from telehealth trials. My doctoral and subsequent research has involved the delivery of stuttering treatments using telehealth models. When approached by this family experiencing access barriers to the Lidcombe Program, I was willing to provide this service. I had previously treated adults who stutter using the Camperdown Program, over the phone, and a few children living internationally who were unable to access the Lidcombe Program.

Access to the Lidcombe Program in South Africa

J: I chatted to two speech therapists in South Africa. The first one saw the Lidcombe Program as simply "good speech therapy" rather than a distinct approach. I then spoke to another therapist who didn't seem specifically trained in the Lidcombe Program either. I did try making further enquiries but couldn't find anyone who described themselves as a Lidcombe therapist.

BC: I know she had difficulty finding a clinician who had Lidcombe Program training, and when she did, the program was offered as an adjunct to another treatment, not as recommended by the "Clinician's Guide to the Lidcombe Program" (http://sydney.edu.au/health_sciences/asrc/docs/lidcombe_program_guide_2011.pdf).

Advantages of Skype delivery

BC: For some clients telehealth may be the only service delivery model available. It may also be the only opportunity to access treatment that has randomised controlled trial evidence (Jones et al., 2005). A telehealth service is also timesaving as there is no need to drive to a clinic or wait in the clinic waiting room. Finally, children and parents are more likely to feel comfortable to receive treatment in their own homes.

The clinician achieves greater insight into the child's world. The treatment is conducted in the child's environment, and it's not unusual for the child to bring into the session toys, family members, and pets. As a result, the clinician also sees a larger and more representative sample of the child's speech.

J: Well, I think it allowed me direct access to someone like Brenda (even though she was on the other side of the world) who is obviously so highly skilled and respected in delivering the Lidcombe Program.

Tom's initial presentation

BC: Jenny described Tom (age 4;0 years) as a highly communicative, creative, and imaginative child. She expressed concern about Tom's stuttering which had been present for more than a year, and the possible impact it may have on him in the future, should it become "entrenched". Jenny had read extensively about stuttering and was well informed about the varied treatment approaches. She did not feel that Tom was aware of his stuttering, and in line with what she had read, had made

every attempt not to draw attention to it, fearing this might make it worse. She described a close, supportive family with a positive family history of stuttering.

Recordings of Tom confirmed that his stuttering was frequent and he displayed a range of repetitive stuttering behaviours. His percentage of syllables stuttered in a 10-minute conversation with his father was 20 %SS, Severity Rating (SR) of 7.

J: I first noticed that Tom was struggling with certain words when he was nearly three. Initially I hoped it would just go away and certainly there were periods when it improved; however, it never disappeared completely. Over a number of years I read up as much as I could about stuttering, but was fairly ambivalent about what therapy, if any, to embark on. This was exacerbated by the fact that sometimes his speech would improve, only to worsen a little later.



Building a relationship

J: From the very start of treatment I felt Brenda was right there in the trenches with us – not managing the issue in a detached way. Of course the irony of it was that she was actually thousands of miles away yet we had this sense of real partnership with her. In fact, my husband even found that he was no longer allowed to insult the Australian nation during rugby matches on the TV – he had to qualify his comments by adding "except Brenda of course" or get dirty looks from Tom and me!

BC: I felt a constructive and supportive relationship was quickly established that was not impeded by the delivery model. Jenny was clearly engaged in her son's treatment. Parental motivation, creativity, persistency, and belief in the treatment are always contributors to success and this parent had all of these qualities in spades!

Delivering treatment via Skype

BC: While Tom was present at every consultation, he usually only remained on camera for a short time. During these times severity ratings were discussed and confirmed and I demonstrated aspects of therapy. To augment this, Jenny recorded and emailed weekly speech samples of Tom's spontaneous and treatment conversations. Jenny's excellent compliance afforded me the opportunity to hear his speech in a variety of commonly occurring situations.

J: I think telehealth has a huge amount to offer. I found it so convenient and incredibly stress free. My son and I were in our own home so there was none of the settling in period that might occur when working in a therapist's rooms. My son is also terribly interested in technology so the idea that he got to chat to an interested (and interesting!) adult via Skype on a weekly basis was a huge treat for him.

Dr. Brenda Carey providing Skype treatment to a pre-school child who stutters

I never really had any doubts – as soon as the process of telehealth was explained to me, it seemed like such a viable, sensible option. I had read a lot about Brenda via the Internet and during an initial conversation felt that she completely “got” our situation – she was so obviously highly skilled and incredibly empathetic too.

Treatment delivery difficulties

J: We had a few times when technical difficulties arose. Luckily my husband is very au fait with IT so we were usually able to resolve any problems quickly. When we started the therapy I hadn't really used Skype before but lots of people use it to stay in touch with friends and family. Previously, I would have advised others considering telehealth to make sure they have access to good technical help; however, now that the technology is so mainstream I think this is less important as so many people have access to Skype at home and it seems less complex.

BC: Parents might find it a little harder to learn Lidcombe Program practices when demonstration is restricted. The clinician needs to rely on effective verbal communication even more. For example, during an in-clinic session a clinician typically demonstrates with toys or books how to provide the contingencies to the child. This is more difficult over Skype. Additionally, extra flexibility in scheduling client appointments may be required if treating clients in the northern hemisphere, due to time differences. Finally, there are technological issues, for example poor Internet connection.

Tom's progress

BC: Overall, Tom has reduced his stuttering markedly. However, this has taken many weeks longer than the mean from in-clinic outcome studies. While this is consistent with Tom's high pre-treatment severity, it is also possible that the delivery model may have been a contributor. As can be common to Lidcombe Program clients, there have been small exacerbations along the way, and weeks during which severity ratings (SR) have plateaued. Tom currently sits at a SR 2 (0.7 %SS), and we continue to aim for SR 1 (no stuttering).

J: His progress was really fast at first. After that, we did have a few plateaus which Brenda managed by changing strategy or sometimes suggesting a short therapy holiday, to give us more energy to tackle the issue later on.

Face-to-face versus telehealth for Tom?

BC: Of course this is impossible to know. Children with high severity typically take longer to complete the Lidcombe Program, and Skype delivery might have extended this further.

J: I found the Skype-delivered treatment so convenient and stress free that I think it's superior! Had we embarked on the treatment in South Africa, I would have needed to drive at least an hour to access treatment. Engaging with a therapist via Skype was new for me; however, I felt such a sense of trust in Brenda, certainly on a professional level, as it was clear that she was a highly esteemed and qualified practitioner.

Required clinician skills

BC: Clinicians need a high degree of in-clinic experience with the Lidcombe Program, and must be confident that they have met the program's clinical benchmarks for a large number of clients. They also need to be confident with the technology.

I would suggest that clinicians first exhaust all other avenues to access the Lidcombe Program in-clinic. Outcomes from an RCT of the Lidcombe Program delivered over the phone (Lewis et al., 2008) show it is a less efficient delivery model, and takes on average three times longer to reach stage 2. Until research outcomes are available for the Lidcombe Program over Skype, we should be very conservative in its use.

The last word...

J: I think Skype has incredibly exciting potential in allowing clients to access health care that simply wouldn't be an option otherwise. I am just so grateful that we were able to find the exact help that Tom needed.

BC: I think and hope that there will be an increasing range of evidence-based treatment delivery alternatives for people who stutter. I see the potential benefits might be greatest if webcam Internet treatments can be developed for adolescents. Computers are such an integral part of their lives, and viewed so favourably by them. We are working on this at the Australian Stuttering Research Centre at present and hope to have our phase I trial results published soon.

References

- Ardila, A. (1994). An epidemiologic study of stuttering. *Journal of Communication Disorders, 27*, 37–48.
- Craig, A., Hancock, K., Tran, Y., Craig, M., & Peters, K. (2002). Epidemiology of stuttering in the community across the entire lifespan. *Journal of Speech, Language, and Hearing Research, 45*, 1097–1105.
- Doolittle, G. C., & Spaulding, R. J. (2006). Defining the needs of a telemedicine service. *Journal of Telemedicine and Telecare, 12*, 276–284.
- Harrison, E., Wilson, L., & Onslow, M. (1999). Distance intervention for early stuttering with the Lidcombe Programme. *Advances in Speech Language Pathology, 1*(1), 31–36.
- Jones, M., Onslow, M., Packman, A., Williams, S., Ormond, T., Schwarz, L., & Gebski, V. (2005). Randomised controlled trial of the Lidcombe programme of early stuttering intervention. *British Medical Journal, 331*(7518), 659–667. doi: 10.1136/bmj.38520.451840.E0
- Lewis, C., Packman, A., Onslow, M., Simpson, J. M., & Jones, M. (2008). A phase II trial of telehealth delivery of the Lidcombe Program of Early Stuttering Intervention. *American Journal of Speech Language Pathology, 17*(2), 139–149. doi: 10.1044/1058-0360(2008/014)
- Onslow, M. (2000). Stuttering treatment for adults. *Current Therapeutics, 41*(4), 73–76.
- Onslow, M., Packman, A., & Harrison, E. (2003). *Lidcombe program of early stuttering intervention: A clinician's guide*. Austin, Texas: Pro-Ed.
- Wilson, L., Onslow, M., & Lincoln, M. (2004). Telehealth adaptation of the Lidcombe Program of Early Stuttering Intervention: Five case studies. *American Journal of Speech-Language Pathology, 13*, 81–93.

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