Using telehealth to engage teenagers

BY GWEN CARR

Can we use a teenager's love of gadgets to re-engage them with their hearing technology? **Gwen Carr** reports on an innovative use of telehealth to support teenagers who are no longer visiting their hearing healthcare professionals.

Parents of children and young people with hearing loss, their teachers and their audiologists, are all too familiar with the challenges of hearing aid rejection during the teenage years, even when the teens concerned may have been positive and consistent users of their personal amplification in earlier childhood. Adolescence is a key time in life in terms of perception of identity and self-image. Having a hearing loss with the associated need to use hearing technology can pose a challenge to self-confidence and self-esteem, as teenagers strive to establish their independence but at the same time do not want to be seen as different from their peers. It is typically during these years that resistance to the wearing of hearing aids and disengagement from audiological service provision can occur, and whilst some young people may reject their amplification because they may not perceive sufficient benefit, research shows that psychosocial factors - particularly the perception of 'normalcy' or otherwise - feature significantly in teenagers' decisions to discontinue hearing aid use and access to audiological care [1].

Telehealth - "the provision of health services from one location to another using a telecommunications medium" [2] - has in recent years become increasingly practised in a variety of healthcare contexts. Teleaudiology, specifically, has also in the past decade or so become successfully established in a number of countries, in situations where service access is difficult, and has been shown to be effective in overcoming challenges of distance and in reaching under-served communities [3]. However, for a teenage population for whom mainstream communications technology plays a large part in everyday life, with 'peak understanding' of digital communications being at the ages of 14 and 15 according to the Ofcom's 2014 Communications Market report [www.ofcom.org.uk], teleaudiology may confer benefits as a *preferred style* of receiving service delivery rather than as a necessity, and offer advantages beyond those of combating the access barrier of distance.

A currently ongoing Phonak-sponsored project in conjunction with a large NHS Trust paediatric audiology department in England is seeking to explore whether teleaudiology may serve as a motivational tool to re-engage teens who have become detached from traditional clinic-based models of audiological service.

The project has taken part in two phases. In phase one, focus groups were held with teens, parents and clinicians to explore attitudes towards and use of technology, and their perceptions and experiences about traditional audiological service provision and support. Current traditional care pathways were mapped from both user and provider perspectives and potential trigger points for disengagement were identified. This was followed by a pilot period where five audiology departments trialled a distance support prototype (not currently commercially available) with teen hearing aid wearers, to assess issues such as connectivity, reliability and ease of use. The practical experiences of project participants in the initial phase then informed improvements in the performance and management of the equipment, and enabled a more specific focus in phase two. This targeted teens who, unlike those in phase one, had completely disengaged from audiological service provision, as defined by repeated non-attendance at clinic and lack of response to routine approaches to encourage take up of appointments.

Twenty-one young people between the ages of 13 and 19, with bilateral losses ranging from mild to severe, all of whom have had repeated patterns of not attending appointments and who have ceased to be consistent users of their hearing aids, have taken part in the project. All responded to and accepted an invitation to trial the distance support approach despite their histories of non-attendance. Baseline questionnaires were completed by the teens themselves, their parents and their Teachers of the Deaf. These questionnaires explored a range of issues and included such things as attitudes to and familiarity with mobile technology, feelings about their hearing loss, attitudes to and use of amplification, and support from and contact with Teachers of the Deaf. Case notes have provided information on the audiological needs and histories of the participants and of their engagement patterns with services. Twenty of the participants have each undertaken two distance appointments (one declined the second session after experiencing technical problems in the first encounter and preferred not to continue). Structured feedback has been gathered from both teen users and clinicians after each distance appointment, and instant message transcripts from the sessions have also given insight into the conversational exchanges and issues arising during the sessions. Follow-up questionnaires for the teens, parents and teachers after completion of the sessions are being used to assess the immediate impact of the approach. Twelve of the teens have indicated a specific wish to continue to access services over the coming year using teleaudiology, and the longer term impacts will be monitored.

Although exploration of the approach is still ongoing, and longer term effects are as yet not established, some clear learning has been identified:

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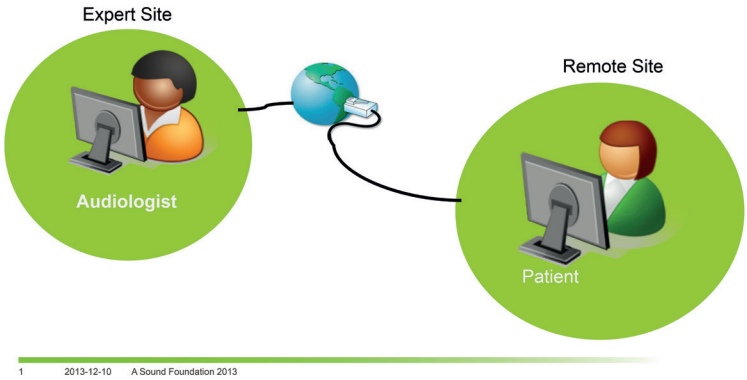

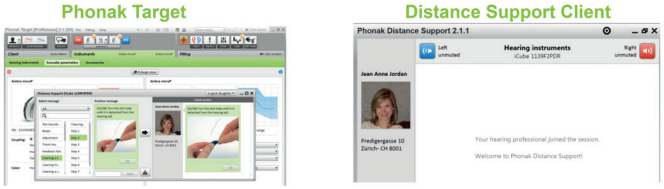

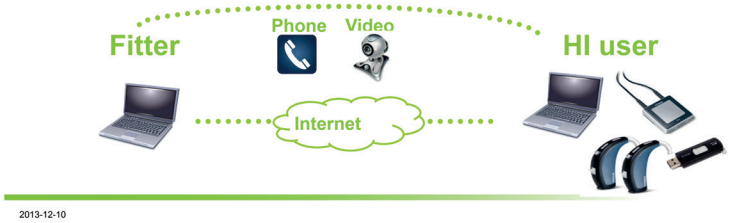

- The offer of the distance technology has, in itself, stimulated interest and proved a catalyst to re-engage, at least in the short term.
- Teens have expressed the view that they feel more in control of the encounter and that the clinician-patient relationship is more balanced, with the teens feeling they have more 'ownership' of the appointment. One participant commented that she felt more comfortable in talking about problems and any negative feelings to the clinician using the technology link rather than being face to face.
- The performance of the software and efficiency and reliability of the session is key to retaining the teens' motivation.
- Keeping some of the teens engaged and committed to attendance (logging on) at the distance appointment has taken effort and perseverance from the clinicians.
- Clinician attitudes to technology affect their perception of the value and satisfaction of tele-appointments as opposed to face to face.
- The teen participants are proactive in their suggestions to enhance the capability of teleaudiology in meeting audiology needs beyond the current capability of the prototype and its software, and are ambitious about what could be achieved in the future.

In addition to trialling the teleaudiology approach with disaffected teenagers, and yielding learning about its potential for future incorporation into routine service delivery, the project has also provided insights into apparent triggers for children and young people's disengagement. This has prompted increased awareness of the need to better identify and understand the signs of potential disengagement, and to consider how use of technology, alongside more traditional methods of counselling and support, may help to empower children to have greater ownership and positive management of their hearing needs.

References

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