# Remote care apps: comparing the options

# **BY ABRAM BAILEY**

With much of the world in full or partial lockdown and social-distancing measures in full swing, the COVID-19 crisis has sparked renewed interest in remote teleaudiology services.

odern teleaudiology platforms, now offered by all major hearing aid brands, offer audiologists a convenient way to maintain service continuity at a time when in-office follow-ups are no longer possible, or desirable, for many. I recently reviewed the teleaudiology platforms offered by Signia, Phonak, Widex, Starkey, ReSound, and Oticon, and compiled a Remote Care Brand Comparison to catalogue my findings, which I have summarised here.

### Identifying remote care clients

Before COVID-19, most audiologists did not offer teleaudiology services, either because they were not "equipped" to provide remote services, or because they felt such services were not "applicable or effective" for their client base [1]. However, prolonged social distancing has led to increased adoption of teleaudiology services [1], and many audiologists are only now starting to identify which of their existing patients may be targets for remote care.

While any patient with a smartphone and internet connection may receive face-toface counselling via Zoom, Skype, Google Meet, etc, patients that wish to receive a remote hearing aid adjustment will need to have the right hearing aids and a compatible Android or iOS device.

To determine whether a patient is a candidate for receiving remote adjustments, you'll need to consult the manufacturer's published requirements (or my table at the end of this article) to

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"Given the lockdown situation, upgrading hearing aid firmware remotely seems like a nice capability" ensure that the patient has an appropriate smartphone (or tablet) and compatible hearing aids. For example, to use Signia's remote care solution, the patient would need to have Xperience or Nx hearing aids, and an iPhone or iPad with iOS version 9.3 or higher, or an Android device running 5.0 or higher.

#### **Comparing the options**

Remote care platforms are available from every major hearing aid brand in 2020. In each case, a desktop-based application is used by audiologists to connect remotely with their patients via a companion smartphone app. While this general technological approach is similar across the board, there are many notable differences from one brand to the next.

#### Real-time adjustments over video

Five out of six major hearing aid brands (all but Starkey) now offer remote care solutions that support video teleconferencing and real-time fine-tuning capabilities. This means audiologists can make real-time adjustments to their patients' hearing aids while counselling remotely via face-to-face video chat. Signia, Widex, and ReSound also offer remote feedback calibration and Phonak, Widex, and ReSound offer remote in-situ threshold testing capabilities. Most manufacturers now support real-time adjustments over video on Android and iOS devices, with ReSound currently limited to iOS devices.

#### Asynchronous adjustments

Some practitioners prefer to engage their patients in a more asynchronous manner. With the asynchronous approach, a patient uses their hearing aid's app to submit a request for assistance, and after some time, the patient receives a response from their audiologist. The response typically comes in the form of a downloadable hearing aid adjustment, which the patient downloads and applies to their hearing aids. ReSound and Starkey offer full fine-tuning asynchronously, and Signia offers limited fine-tuning asynchronously. Signia and ReSound are the only two brands to offer both real-time and asynchronous options.

#### **Communication capabilities**

There are four primary means of communication offered by today's remote care apps. As discussed, video calls are the primary communication method, but Signia, Phonak, and Oticon offer audio-only calls as well. Signia, Phonak, ReSound, and Oticon also offer text-based chat systems. Starkey is currently limited to asynchronous service requests as the only means of communication.

#### Hardware accessories

When using the Widex Remote Care app, the patient needs to have a hardware accessory (the REMOTE LINK) in order to conduct remote programming sessions. No other brand currently requires an accessory. However, this limitation is also a strength, as it allows the audiologist to do real-time fine tuning, feedback calibration, and in-situ audiometry with almost every patient, regardless of whether the patient has an Android or iOS device. No other brand offers this level of flexibility.

#### **Other factors**

When evaluating the available remote care solutions, I found a few differences worth mentioning. Given the lockdown situation, upgrading hearing aid firmware remotely seems like a nice capability. This is currently possible with Widex (Android and iOS) and ReSound (iOS only). Widex and Starkey also offer a very interesting feature, which is the ability to diagnose hardware faults via an automated hearing aid self-check. Currently both offer mic, speaker, and internal noise checks.

While most brands have added remote care functionality to their existing generalpurpose apps, Widex and Oticon have both "Remote care is a relatively new and rapidly changing area of audiology, and the COVID-19 pandemic is only accelerating the rate of change"

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created separate consumer apps to deliver remote care functionality. This means the patient will have one app for remote control functionality and another for remote care sessions.

## In summary

Remote care is a relatively new and rapidly changing area of audiology, and the COVID-19 pandemic is only accelerating the rate of change. Aside from offering remote care solutions, many manufacturers have partnered with the likes of HearX and SHOEBOX to offer audiologists a way to screen hearing remotely. And, taking it a step further, Signia recently launched a new initiative that offers to send pre-programmed hearing aids directly to a patient's home following an online screening and consultation.

At Hearing Tracker, we have a behindthe-scenes view of what the manufacturers are working on, and I can assure you, more changes are on the way. We will be updating our page on remote hearing care as the field develops.

#### Reference

 The Hearing Review. Results of the Covid-19 Impact Survey #2 (April 9-17) for Hearing Healthcare Practices. www.hearingreview.com/practice-building/marketing/ surveys-statistics/results-of-covid-19-impact-survey-2-april-8-16-for-hearing-healthcare-practices Last accessed May 2020.

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	<b>Signia</b> Signia app	Phonak myPhonak app	Widex Widex Remote Care	Starkey Thrive Hearing app	Resound ReSound Smart 3D™	Oticon Oticon RemoteCare App
Fine Tuning						
Real-time remote tuning	✓ (full fine-tuning)	✓ (full fine-tuning)	✓ (full fine-tuning)		✓ (full fine-tuning, iOS only)	✓ (full fine-tuning)
Asynchronous remote tuning	✓ (limited tuning)			✓ (full fine-tuning)	✓ (full fine-tuning)	
Communication						
Video call support	✓ (Xperience and Nx)	1	1		✓ (iOS only)	1
Audio-only call support	✓ (Xperience and Nx)	1				1
Chat support	✓ (All models)	1			1	1
Support ticket system				✓	1	
Fitting support						
Feedback measurement	✓ (Xperience and Nx)		✓ (iOS and Android)		✓ (iOS only)	
In-situ audiometry		✓ (iOS and Android)	✓ (iOS and Android)		✓ (iOS only)	
Customer feeback		. (			. (,)	
					✓ (rate first fit and program)	
Satisfaction surveys	✓ (rate listening situations)	1		✓ (rate program changes)	changes)	
Other						
Check battery charge		1	✓ (low power alert)	<ul> <li>✓ (sent with patient request)</li> </ul>	✓ (iOS only)	✓ (for rechargeable models)
				✓ (sent with patient		
Wearing time stats / data logging	1	✓ (wear time/day)	✓	request)	1	1
No accessory required	1	1	REMOTE LINK required	$\checkmark$	1	✓
Remote control functionality	1	1	<ul> <li>✓ (available in separate app)</li> </ul>	1	1	<ul> <li>✓ (available in separate app)</li> </ul>
Remote firmware upgrade	V	V	dpp) ✓	V	✓ (iOS only)	app)
Hardware fault diagnosis				✓ Can identify mic, speaker, and internal noise issues		
Hearing aid models						
	Real-time and Video call	Audéo™ M	MOMENT™	Livio (all levels)	LiNX Quattro	Opn S™
	Xperience models	Bolero <sup>™</sup> M	EVOKE™	Livio Edge (all levels)	Enzo Q	Opn™
	Nx models	Virto M	BEYOND™	Entio Edge (dil levela)	LiNX 3D	Xceed
	Async and chat	Naida M	UNIQUE™		Enzo 3D	Opn Play™
	All other models	Audéo™ B-Direct	DREAM™		21120 30	Xceed Play
	All other models	Audeo B-Direct	DREAW			-
			*Except CIC-M models			Siya
Requirements			Except CIC-IN models			
•					( (asuma anhi)	
Remote care available on Android	1	1	1	1	✓ (async only)	1
Remote care available on iOS	✓ 	✓ 	✓ •	1	✓ (async and real-time)	✓ •
Minimum Bluetooth version	4.2	4.2	?		5.0 for audio streaming	?
Minimum Android version	5.0	6.0	6.01	7.0	7.0, or 10.0 for audio streaming	
Minimum iOS version	9.3	10.3	12.0	13.0	10.0	12.0
On the web				M ( ) ( )		M ( ) 01
Manufacturer site	Manufacturer Site	Manufacturer Site	Manufacturer Site	Manufacturer Site	Manufacturer Site	Manufacturer Site
iOS download	iOS download	iOS download	iOS download	iOS download	iOS download	iOS download
iOS app rating	2.2/5	2.5/5	2.8/5	2.7 / 5	2.4 / 5	3.5 / 5
iOS app review count	22 reviews	213 reviews	4 reviews	63 reviews	1,301 reviews	11 reviews
Android download	Android download	Android download	Android download	Android download	Android download	Android download
Android app rating	3.1/5	2.9 / 5	No reviews yet	2.5 / 5	2.8 / 5 2,042 votes	3.7 / 5 28 votes
Android app review count	302 votes	1,837 votes	No reviews yet	310 votes		

To suggest updates and/or corrections to this comparison table, please email info@hearingtracker.com