

The supplementary material includes the instructions given the participants, the questions asked, and a tabulation of the responses. Where applicable, the responses of all participants are summarized, along with a breakdown according to whether participants discontinued hearing aid use or continued hearing aid use.

**Questionnaire: Use of hearing aid after cochlear implantation**

Instructions: Some people who have received a cochlear implant continue to use a hearing aid in the opposite ear and others do not. Through these questions we are trying to learn more about the reasons people decide whether or not to use a hearing aid with the cochlear implant.

Please answer each question by checking the appropriate box.

**Your Experience With Hearing Aids Before You Received Your Cochlear Implant**

Q1--Before receiving your cochlear implant, how many hearing aids did you use?								
	Total			Discontinued hearing aid			Continued hearing aid	
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
one	27	28.72		3	21.43		24	30.00
two	67	71.28		11	78.57		56	70.00
Total	94	100.00		14	100.00		80	100.00
Q2-- Who dispensed your hearing aids?								
Q3--Do you continue to go to your hearing aid dispenser for follow-up care now that you have an implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
yes	64	71.11		1	7.69		63	81.82
no	26	28.89		12	92.31		14	18.18
Total	90	100.00		13	100.00		77	100.00

Q4--At the time you received your cochlear implant, how old were your hearing aids?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
less than 2 years old	28	30.77		2	14.29		26	33.77
2-4 years old	27	29.67		4	28.57		23	29.87
4-6 years old	21	23.08		5	35.71		16	20.78
more than 6 years old	12	13.19		2	14.29		10	12.99
I do not remember	3	3.30		1	7.14		2	2.60
Total	91	100.00		14	100.00		77	100.00
Q5--How much did you wear your hearing aid(s) before you received your implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
more than 10 hours/day	79	85.87		11	78.57		68	87.18
5-10 hours/day	12	13.04		2	14.29		10	12.82
less than 5 hours/day	1	1.09		1	7.14		0	0.00
never	0	0.00		0	0.00		0	0.00
Total	92	100.00		14	100.00		78	100.00
Q6--All in all, how helpful was your hearing aid(s)?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
very helpful	31	33.70		2	14.29		29	37.18
somewhat helpful	49	53.26		10	71.43		39	50.00
rarely helpful	10	10.87		2	14.29		8	10.26
not at all helpful	2	2.17		0	0.00		2	2.56
Total	92	100.00		14	100.00		78	100.00

Q7--How do you feel that you coped with your hearing loss before you received your implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
well all of the time	8	8.70		1	7.14		7	8.97
well much of the time	26	28.26		2	14.29		24	30.77
well some of the time	34	36.96		5	35.71		29	37.18
not well at all (it really affected me negatively)	24	26.09		6	42.86		18	23.08
Total	92	100.00		14	100.00		78	100.00

### **Your experience with your cochlear implant**

Q8--How long have you been using your cochlear implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
0-1 months	0	0.00		0	0.00		0	0.00
2-5 months	16	17.02		0	0.00		16	20.00
6-11 months	13	13.83		2	14.29		11	13.75
1-2 years	28	29.79		3	21.43		25	31.25
more than 2 years	37	39.36		9	64.29		28	35.00
Total	94	100.00		14	100.00		80	100.00

Q9--How do you feel that you cope with your hearing loss now that you have your implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
well all of the time	23	25.27		4	30.77		19	24.36
well much of the time	56	61.54		8	61.54		48	61.54
well some of the time	10	10.99		0	0.00		10	12.82
not well at all (it really affects me negatively)	2	2.20		1	7.69		1	1.28
Total	91	100.00		13	100.00		78	100.00

Q10--How well do you hear with your cochlear implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
about the same as with my hearing aid(s)	4	4.40		0	0.00		4	5.19
better than with my hearing aid(s)	80	87.91		14	100.00		66	85.71
worse than with my hearing aid(s)	7	7.69		0	0.00		7	9.09
Total	91	100.00		14	100.00		77	100.00

**Your decision process about using a hearing aid with your cochlear implant**

Q11--Had you made a decision before your surgery about whether you would use your hearing aid with your cochlear implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
yes	76	82.61		9	64.29		67	85.90
no	16	17.39		5	35.71		11	14.10
Total	92	100.00		14	100.00		78	100.00
Q12--Did your audiologist encourage you to try wearing your hearing aid with your cochlear implant?								
Response	Frequency	Percent		Frequency	Percent		Frequency	Percent
Yes, before my surgery	22	24.18		2	14.29		20	25.97
Yes, after my surgery	5	5.49		0	0.00		5	6.49
Yes, both before and after my surgery	47	51.65		10	71.43		37	48.05
No	10	10.99		2	14.29		8	10.39
I can't remember	7	7.69		0	0.00		7	9.09
Total	91	100.00		14	100.00		77	100.00

**If you continue to use a hearing aid go to question 13.**

**If you do not use a hearing aid with your cochlear implant, go to question 32.**

**Your experience with hearing aids after you received your cochlear implant**

<b>Continuing HA users</b>		
Q13--Has the hearing in your un-implanted ear changed since you received your cochlear implant?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Don't notice any difference	38	48.10
seems a little worse	22	27.85
seems a little better	8	10.13
seems a lot worse	7	8.86
seems a lot better	4	5.06
Total	79	100.00
Q14--Are you using the same hearing aid now as when you first received your cochlear implant?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
yes	59	74.68
no	20	25.32
Total	79	100.00
Q15--What is the manufacturer and model of your hearing aid?		
Q16--How old is the hearing aid?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Less than 2 years old	30	38.96
2-4 years old	29	37.66
4-6 years old	12	15.58
More than 6 years old	6	7.79
I do not remember	0	0.00
Total	77	100.00

Q17--How much do you wear your hearing aid with your cochlear implant?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
More than 10 hours a day	64	81.01
5-10 hours a day	14	17.72
Less than 5 hours a day	1	1.27
Never	0	0.00
Total	79	100.00
Q18--Do you ever use only your cochlear implant?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Never	33	41.25
Sometimes	42	52.50
Often	5	6.25
Almost Always	0	0.00
Total	80	100.00
Q19--Do you ever use only your hearing aid?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Never	43	53.75
Sometimes	35	43.75
Often	2	2.50
Almost Always	0	0.00
Total	80	100.00

Q20--When did you start using your hearing aid and cochlear implant together?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Right away	68	85.00
Within 1-3 months of the implant	10	12.50
Within 3-6 months of the implant	1	1.25
After the first 6 months of the implant	1	1.25
Total	80	100.00
Q21--How fast did you adapt to using your hearing aid and cochlear implant together?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Right away	45	56.96
within 1-3 months of the implant	23	29.11
Within 3-6 months of the implant	4	5.06
After the first 6 months of the implant	5	6.33
I still have not adapted to using both together	2	2.53
Total	79	100.00
Q22--In the past year, did you need to have your hearing aid adjusted?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Not at all	36	46.15
1-3 times	37	47.44
3-6 times	3	3.85
More than 6 times	2	2.56
Total	78	100.00

Q23--How do you set the volume on your hearing aid and on your cochlear implant when you wear both?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
My hearing aid does not have a volume control	15	18.75
I always keep my hearing aid at the same volume	20	25.00
I usually keep the same HA volume but adjust the CI volume	17	21.25
I usually keep the same CI volume but adjust my HA volume	17	21.25
I usually adjust my HA and CI to different volume settings for different situations	11	13.75
Total	80	100.00
Q24--If your hearing aid has multiple programs (or memories), do you always wear it at the same program?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
My hearing aid only has one program	24	30.77
I always keep my hearing aid on the same program, with or without the CI	38	48.72
I usually change hearing aid programs with the use of my CI	12	15.38
I usually change both my hearing aid and my implant processor when I am using both devices	4	5.13
Total	78	100.00
Q25--In quiet listening situations, you hear better with your:		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Cochlear implant only	3	3.75
Hearing aid only	2	2.50
Cochlear implant + hearing aid	73	91.25
No difference with any of the above	2	2.50
Total	80	100.00



Q26--In a noisy situation, you hear better with your:		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Cochlear implant only	4	5.06
Hearing aid only	2	2.53
Cochlear implant + hearing aid	62	78.48
No difference with any of the above	11	13.92
Total	79	100.00
Q27--In places with an echo, you hear better with your:		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Cochlear implant only	2	2.78
Hearing aid only	5	6.94
Cochlear implant + hearing aid	50	69.44
No difference with any of the above	15	20.83
Total	72	100.00
Q28--Music sounds best with your:		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Cochlear implant only	1	1.33
Hearing aid only	11	14.67
Cochlear implant + hearing aid	51	68.00
No difference with any of the above	12	16.00
Total	75	100.00

Q29--Does wearing both hearing aid and cochlear implant help you decide which direction sounds are coming from?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
Never	20	25.32
Sometimes	35	44.30
Often	16	20.25
Almost Always	8	10.13
Total	79	100.00
Q30--When you use your cochlear implant and hearing aid together, where do you hear the sound?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
In the middle of my head	24	32.43
Closer to the ear with implant	27	36.49
Closer to the ear with the hearing aid	7	9.46
Separately in both ears	16	21.62
Total	74	100.00
Q31--When you use your cochlear implant and hearing aid together, where is the sound louder?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
In the implant ear	41	58.57
In the hearing aid ear	11	15.71
It is the same in both ears	18	25.71
Total	70	100.00

**Please answer these questions if you do not use a hearing aid with your cochlear implant**

**Your experience with hearing aids after your cochlear implant surgery**

<b>Discontinued HA users</b>		
Q32--After receiving your implant, how long did you use your hearing aid in the other ear?		
<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
I did not use my hearing aid at all	0	0.00
I used my hearing aid for less than 1 day	0	0.00
I used my hearing aid for less than a week	0	0.00
I used my hearing aid for 1-4 weeks	0	0.00
I used my hearing aid for 1-6 months	7	50.00
I used my hearing aid for 6-12 months	1	7.14
I used my hearing aid for more than 1 year	6	42.86
Total	14	100.00
Q33--In which of the following settings did you wear your hearing aid with your cochlear implant?		
<b>Please check ALL that apply.</b>		
<b>Response</b>	<b>Frequency</b>	
I wore my hearing aid at work only.	1	
I wore my hearing aid at home only.	2	
I wore my hearing aid at home and work	1	
I wore my hearing aid everywhere I went.	9	
I did not wear my hearing aid.	0	

Q34--In which of the following listening conditions did you wear your hearing aid with your cochlear implant? <b>Please check ALL that apply.</b>		
<b>Response</b>	<b>Frequency</b>	
I did not wear my hearing aid at all.	0	
I wore my hearing aid only in noisy situations.	1	
I wore my hearing aid only in quiet situations.	0	
I wore my hearing aid in both noisy and quiet situations.	11	
I wore my hearing aid when listening to music.	2	
Other	0	
Q35--How did speech sound when you used your hearing aid with your cochlear implant? <b>Please check ALL that apply.</b>		
<b>Response</b>	<b>Frequency</b>	
Speech was not clear	3	
Speech was too loud.	0	
There was interference between the cochlear implant and the hearing aid.	3	
Other (see below)	6	
Sound was more natural when only using CI Speech was clearer. Then started to diminish. Initially was fine using both, but my hearing declined and I relied only on the implant Speech sounded normal in my ear with the hearing aid. Although speech sounded normal, I could not understand many words. Speech was fine		

Q36--When you used your hearing aid with your cochlear implant, did you use the same hearing aid as before your surgery?		
Response	Frequency	Percent
yes	13	92.86
no	1	7.14
Total	14	100.00

Q37--How old was the hearing aid you used with your cochlear implant?		
Response	Frequency	Percent
More than 10 years old	0	0.00
5-10 years old	4	28.57
3-5 years old	3	21.43
<3 years old	7	50.00
Total	14	100.00

Q38--Did your audiologist make any adjustments to your hearing aid with your cochlear implant?		
Response	Frequency	Percent
yes	4	30.77
no	9	69.23
Total	13	100.00

Q39--Why did you decide not to continue to use a hearing aid with your cochlear implant? Please check ALL that apply.		
Response	Frequency	Percent
The hearing aid was not helpful.	9	
The sound from the hearing aid interfered with the sound from the implant.	2	
Sound was too loud.	0	
The added expense in using the hearing aid.	1	
It was too much bother to use both the implant and the hearing aid.	1	

I did not like the way it looked to wear both the implant and the hearing aid.	0	
Other (see below)	7	
<p>Received CI in other ear after 3 yrs of having CI in right ear.                  I could not understand many words with my hearing aid although I could hear the words.                  I had a very severe loss and had to keep the volume very high. The feedback was more of a problem than aid was of help.                  Experienced severe vertigo/dizziness from HA six months after CI activation.                  ENT Dr. told me to quit using the HA. He said it was garbage in/garbage out and that I was 85% deaf in the left ear.                  Due to tinnitus as well                  Hearing got worse</p>		