

## Results

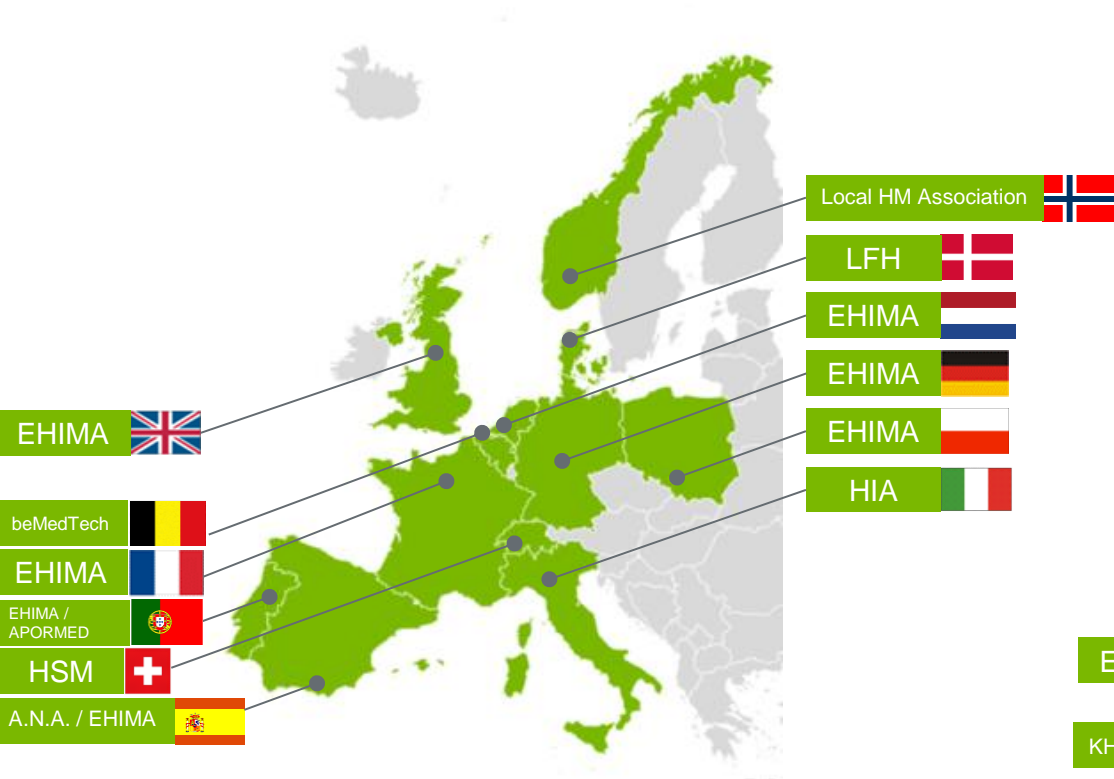
# APAC Trak Korea (KOR) 2024

1. Introduction
2. Market overview
3. Analysis of hearing aid owners
4. Analysis of hearing impaired non-owners
5. Appendix

# Summary

## 1. Introduction

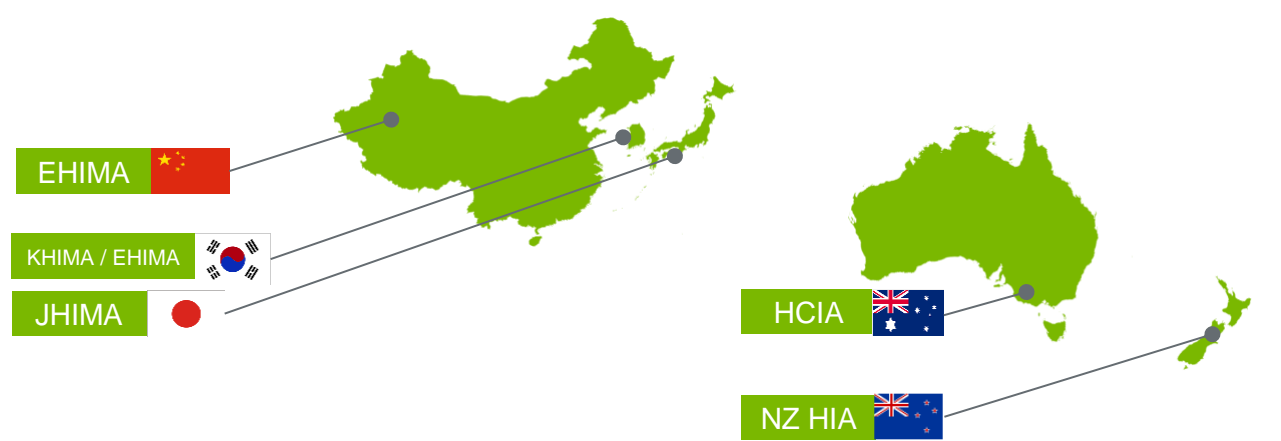
APAC Trak KOR 2024 is part of the EuroTrak / APACTrak studies:



APAC Trak KOR 2024 was designed and executed by Anovum (Zurich) on behalf of EHIMA and KHIMA.

Sample sizes:

Representative sample (sample 1):	n=15'416 people
Hearing impaired (sample 2):	n=1'013 people
Hearing impaired non-owners (HA Non-owner):	n=618 people
Hearing aid owner (HA Owner):	n=395 people



# Detailed Results: Roadmap

## 1. Introduction

- Organisation of APAC Trak KOR 2024
- Recruitment process: In search of hearing impaired people

## 2. Market overview

- Prevalence of hearing loss and hearing aid adoption rate
- Hearing tests and where hearing is tested
- The route to the hearing aid: Sources of information and drop-out rates
- Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive symptoms, sleep quality, co-morbidities

## 3. Analysis of hearing aid owners

- Hearing aid ownership, awareness of hearing loss, lifetime of hearing aids and usage
  - Reasons for getting hearing aids sooner, third party payment
  - Channels for getting hearing aids, recommendation of channel (NPS)
  - Awareness and usage of hearing aid apps, Telecoil
- Satisfaction with hearing aids and drivers, Importance of listening situations
- Positive impact of hearing aids, safety due to hearing aids, quality of life

## 4. Analysis of hearing impaired non-owners

- Reasons for not having hearing aids
- Social rejection because of hearing loss compared to the acceptance of hearing aids
- Most important triggers to buy

## 5. Appendix

- Demographics: Hearing instrument adoption rates and populations

# Summary

## 2. Market overview

- **Stated hearing loss prevalence**
  - Total: 5.3% (2021:5.9%), 18+: 5.9%.
  - Hearing Tests: Hearing Tests: 60% had a hearing test in the last five years, most of which were done by family doctors and ENTs.
- **Hearing aid adoption rate (HA penetration)**
  - 34.4% (2021: 36.6%) of those with self-declared HL.
  - 1.8% of total population.
  - 58% (2021: 51%) of HA owners have binaural treatment.
- **The route to the hearing aid**
  - 69% of the hearing impaired discussed hearing loss with an ENT doctor or family doctor.
  - 51% got hearing aids recommended from the ENT or family doctor (drop out rate=26%).
  - 50% of the GP consultations referred to an ENT, 27% to an Audiologist, and 31% to get hearing aids. 14% recommended no action.
  - 41% of ENT consultations were referred to an Audiologist, 41% recommended getting a hearing aid, and 28% recommended no action.
- **Potential social cost-savings due to the use of hearing aids**
  - Hearing aids are believed to have a positive impact on the job.
  - 51% of employed individuals using hearing aids believe the devices enable them to work longer.
  - Hearing aid owners tend to have a lower risk of being depressed.
  - Hearing aid owners are less are less likely to feel severely physically exhausted.
  - Quality of sleep seems to improve if the hearing impaired use hearing aids.

# Summary

## 3. Analysis of hearing aid owners

- **Hearing aid ownership, usage, and accessories**
  - 53% of all HA owners received some 3rd party reimbursement.
  - 53% of the currently owned HAs were acquired in 2022 or later.
  - The median age of hearing aids before replacement is five years.
  - On average, HAs are worn 5.9 hours a day.
  - ITEs are the most often purchased type of HA.
  - Cochlear Implants: 29% of the HA owners with severe/profound HL have been informed about CIs by a medical professional.
  - 33% of HA owners use a hearing aids app, and 47% are satisfied.
  - 18% of the HAs are (to the knowledge of the owners) equipped with Telecoil. The main usage of Telecoil is the phone.
- **Importance of listening situations and satisfaction with HAs**
  - 70% of the hearing aid owners say their hearing aid works better than or as expected.
  - 52% of the HA owners are satisfied with their hearing aids.
  - Satisfaction with newer hearing aids is higher than with older hearing aids.
  - The more hours worn per day, the higher the satisfaction with the HA.
  - The most important listening situations are conversations in large groups, interactions at home with family members, and phone conversations
- **Positive impact of HAs**
  - Hearing aids positively impact overall communication effectiveness, a sense of safety, and many other aspects of life.
  - 76% of hearing aid owners feel more confident moving in a city since wearing hearing aids.
  - 95% of hearing aid owners declare that their hearing aids improve their quality of life at least sometimes.
  - 64% of all HA owners think they should have gotten their HAs sooner.

# Summary

## 4. Analysis of hearing impaired non-owners

- **Reasons not to own/use HAs**

- Only 19% of the hearing impaired without hearing aids think that a third party would pay for any part of hearing aids.
- The main reason for not having hearing aids is perceived discomfort.
- 7% who own hearing aids don't use them (0 hours); 25% use them less than one hour/day (0-1 hour).

- **Social rejection and triggers to buy**

- 36% of hearing aid owners feel that people never make fun of or reject them because of their hearing aids. It is more likely that somebody makes fun of or rejects a hearing impaired without a hearing aid.
- Key factors for hearing aid ownership were ENT advice, worsening hearing loss, and audiologists, while non-owners found financial considerations and word-of-mouth relatively more important for potential purchases.

# 1. Introduction

# Organisation of APAC Trak KOR 2024

## Organisation

- Principal of the project APAC Trak KOR 2024 are: EHIMA and KHIMA.
- Anovum Zurich developed the concept of APAC Trak KOR, designed the questionnaire and conducted the fieldwork in cooperation with a panel company. Furthermore, Anovum analyzed the data and prepared the presentation.
- The European Hearing Instrument Manufacturers Association [EHIMA] approved the questionnaire.

## Use of the data

- The principal may use the anonymous delivered tables, charts, reports and conclusions of the survey for further research projects, for archiving and publication in any form whatsoever.
- The raw dataset remains at Anovum. If the principal uses the anonymous data (delivered tables, charts, reports) and conclusions of the survey for publications the source of the data needs to be mentioned in the following way:  
**“Source: Anovum – APAC Trak KOR/2024/n=[relevant sample size]”**
- Member companies of the principal can ask Anovum to further analyse the raw data in specific ways at their own expense.



# Recruitment process: In search of hearing impaired people

## Step 1: Screening interviews

Objective: Prevalence of hearing loss and hearing aid ownership

Process:

1. Representative sample with strict quotas that represent the overall population (Age/Gender interlocked; soft quota on region)
2. Contacts from large panellist pools
3. Screening questionnaire: Stated hearing loss and hearing aid usage + demographics
4. Result: Representative sample of **n=15'416** people based on census data.

## Step 2: Target population interviews

Objective: Details about satisfaction with hearing aids and reasons for non-adoption

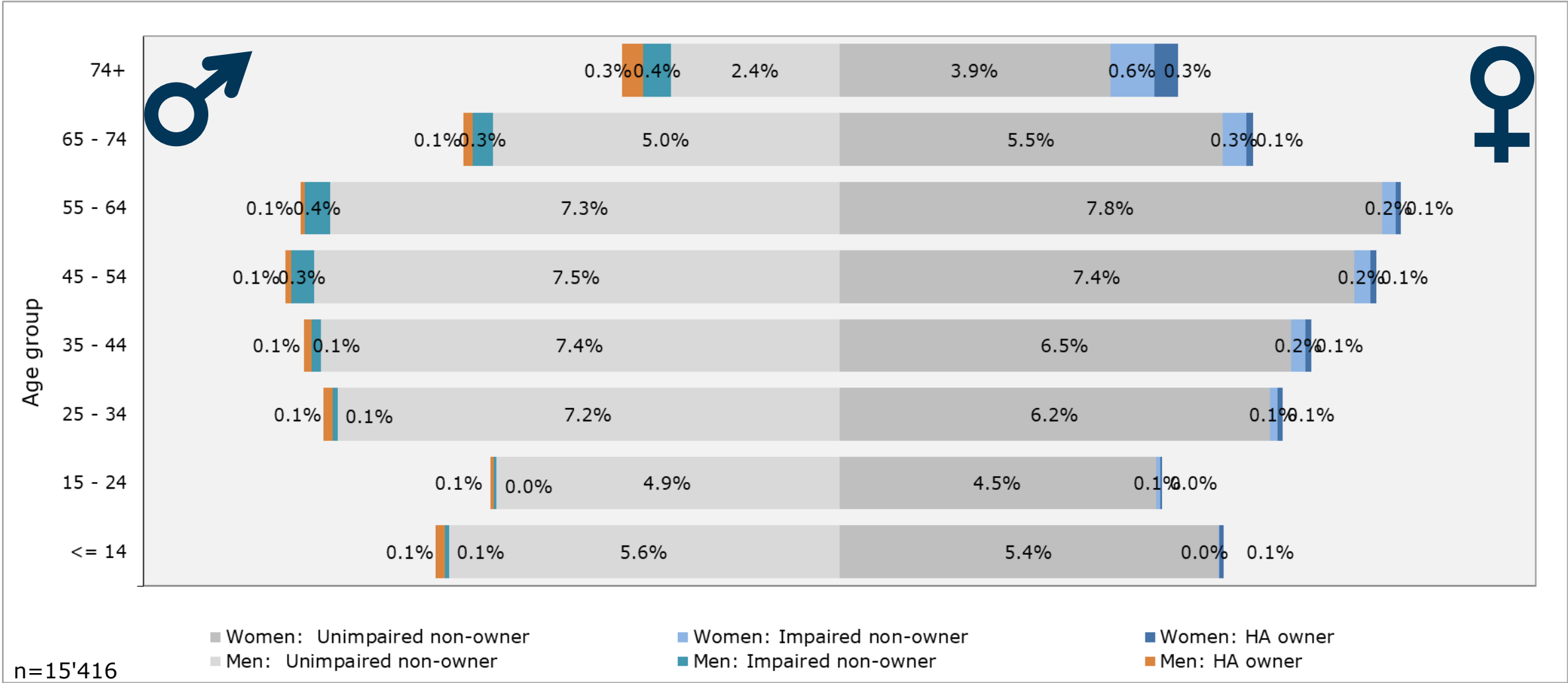
Process:

1. Main questionnaires: Owners and hearing impaired non-owners
2. Balancing through weighting according to representative screening interviews
3. Resulting sample: **n=618** hearing impaired non-owners and **n=395** hearing aid owners

## 2. Market overview

# Prevalence of hearing loss and adoption rate

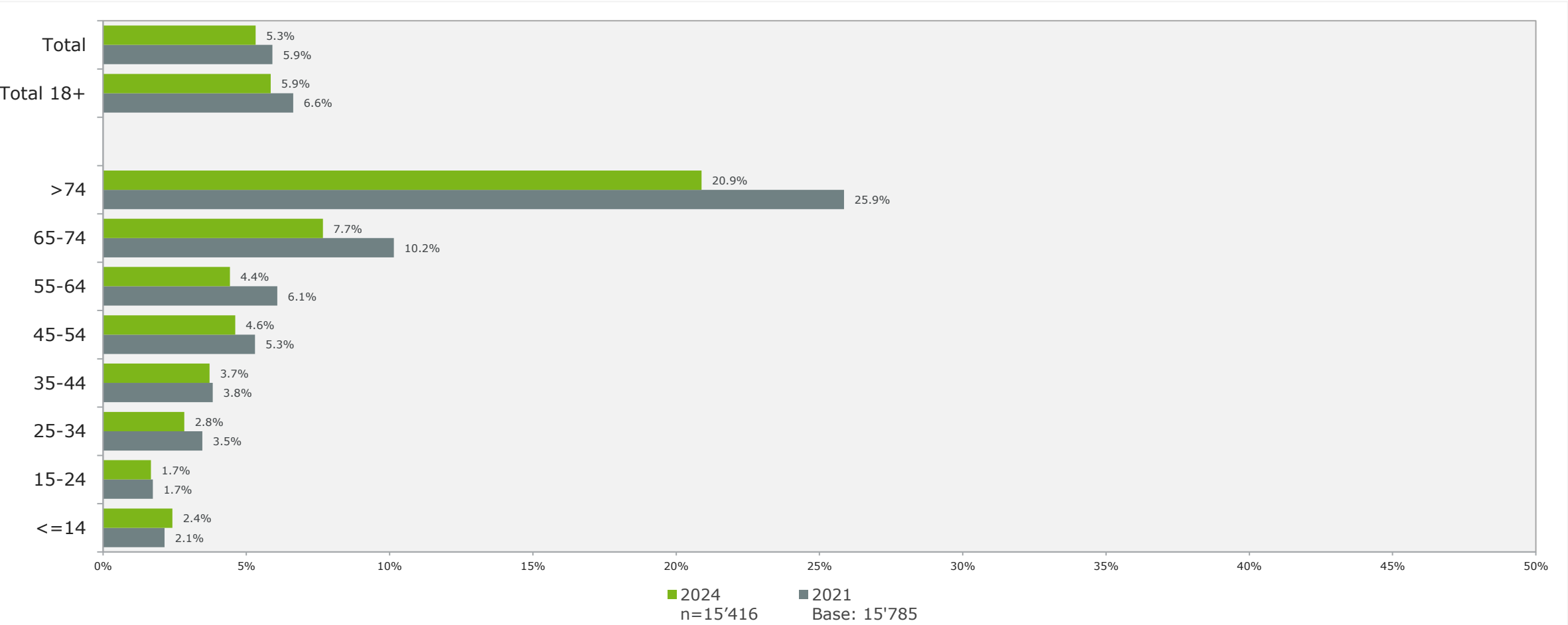
# Hearing loss and hearing instrument ownership by gender/age



# Hearing loss prevalence KOR

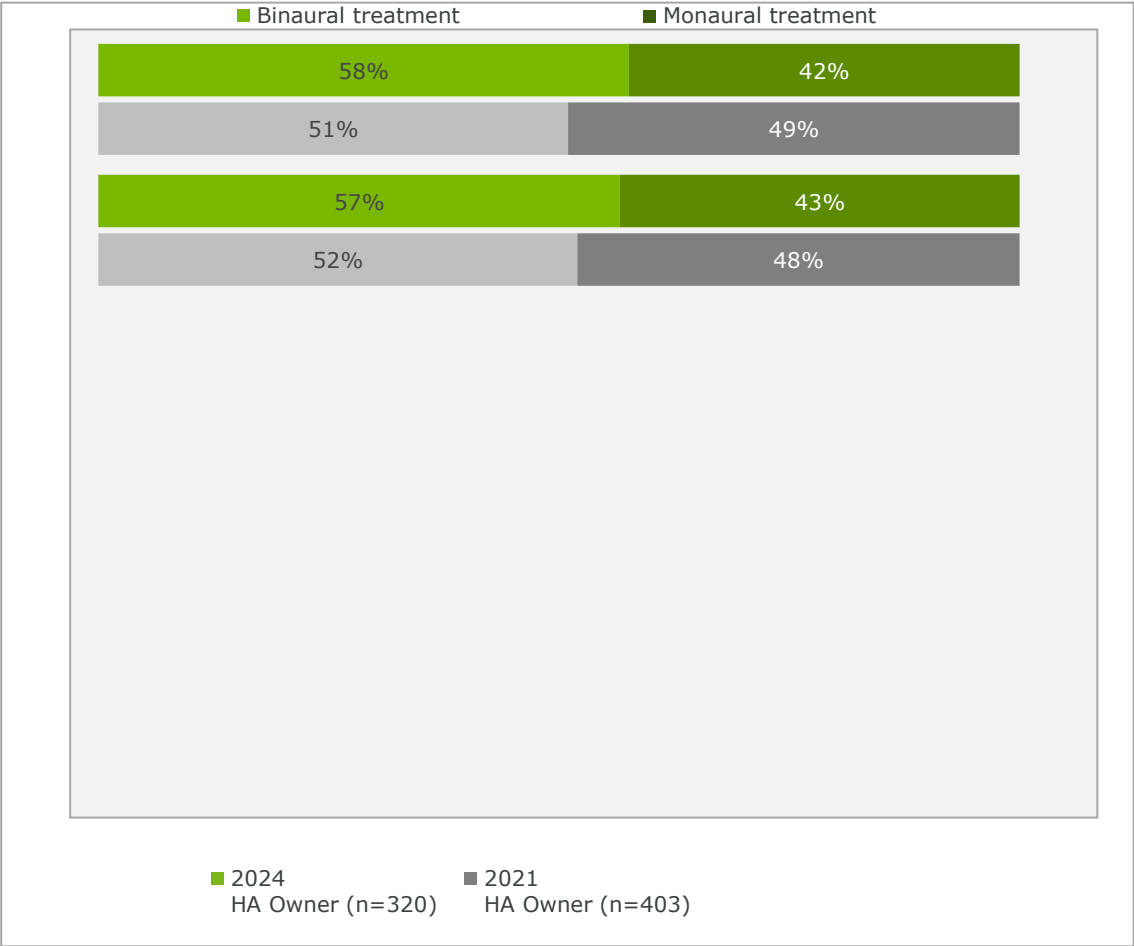
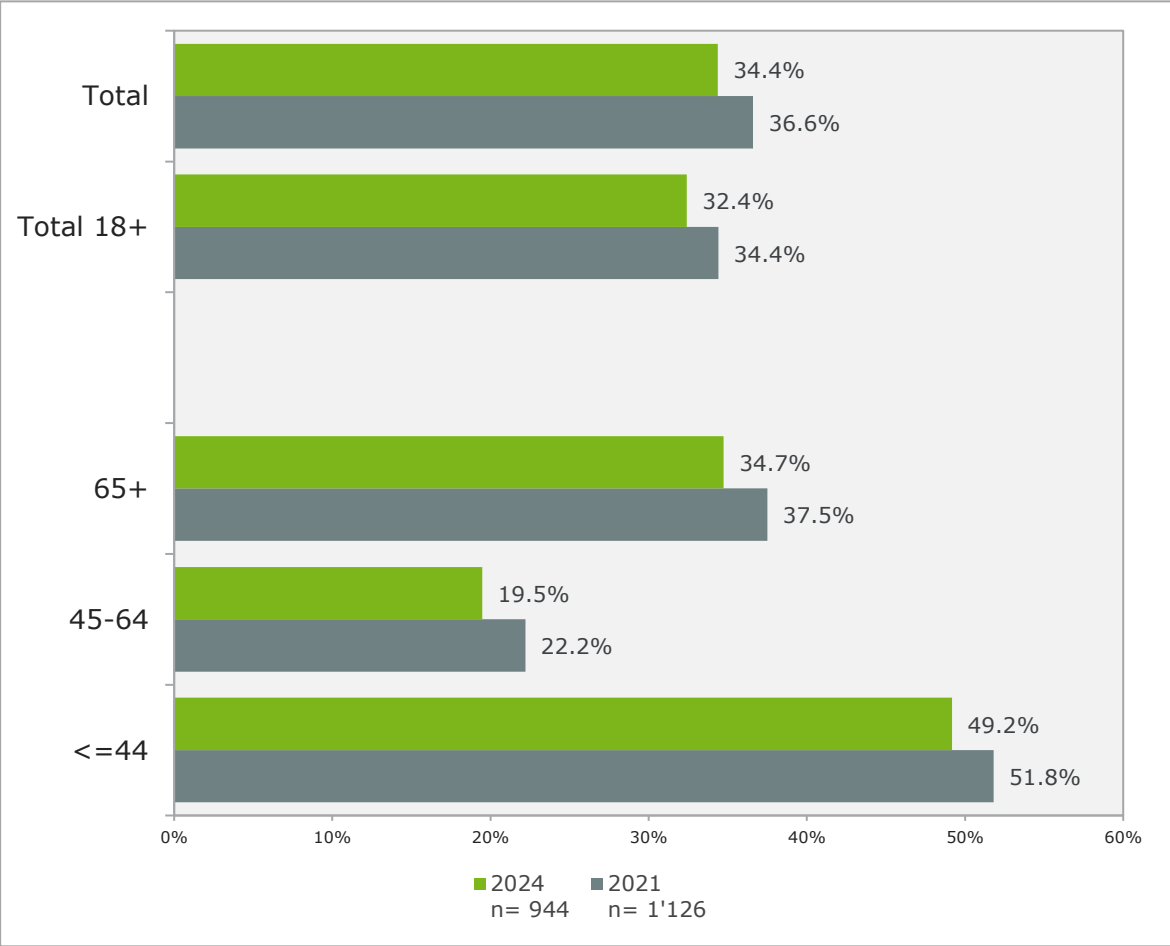
## Self-declared hearing loss

% hearing loss prevalence

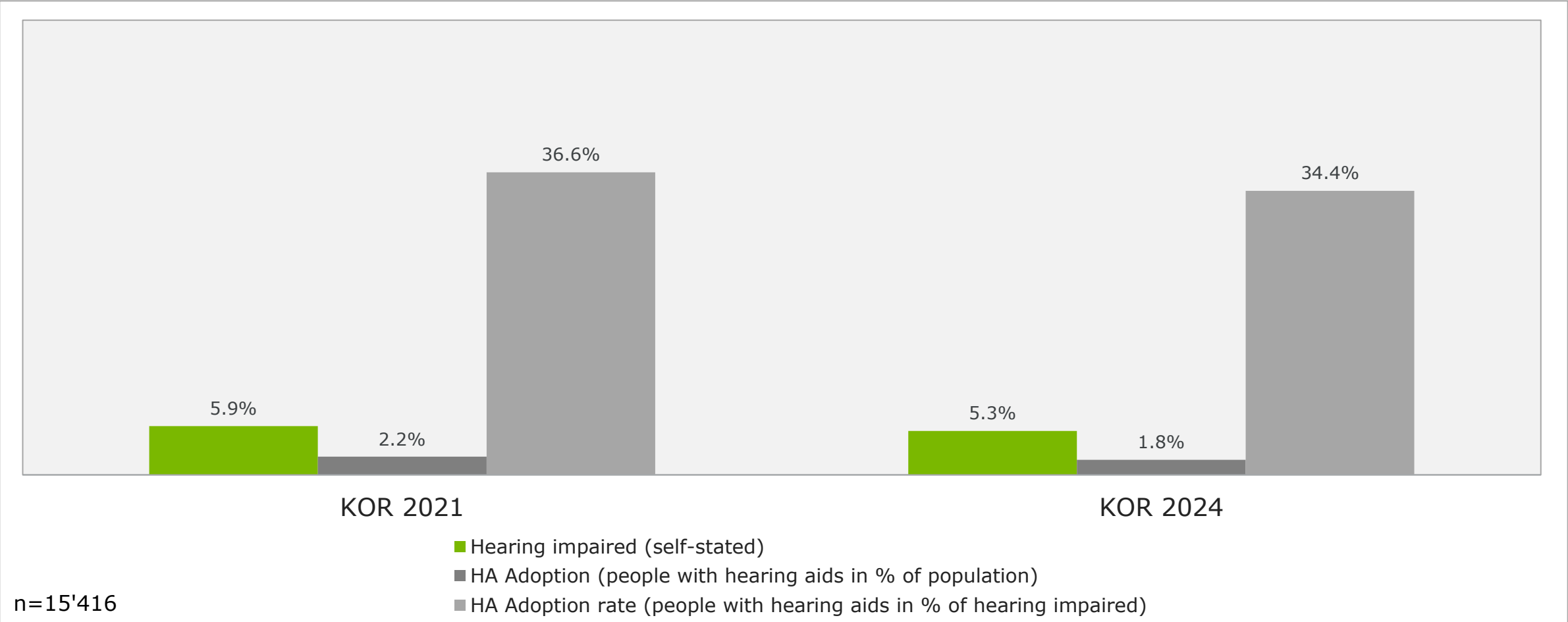


# Hearing aid adoption rate: 34% of the hearing impaired have hearing aid(s), and 58% of them have binaural treatment

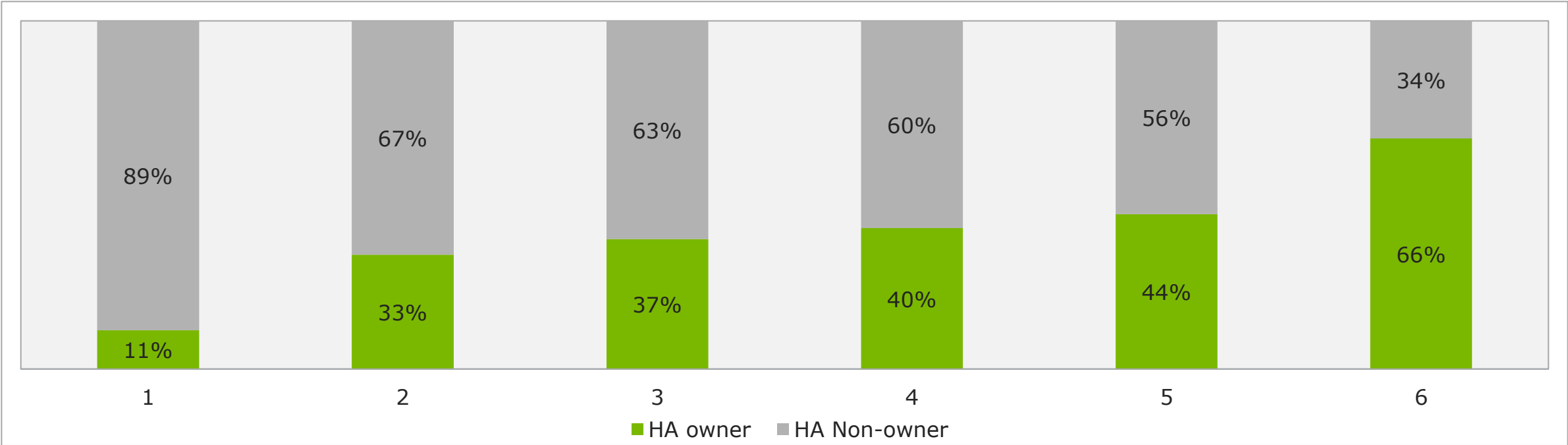
% of hearing impaired



# Overview of hearing loss prevalence and hearing aid adoption



# The more severe the hearing loss, the higher the adoption rate



**Hearing loss sixtile-groups**

\* Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:

- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC – like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

→ People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).

HA Owner n=395  
HA Non-owner n=618



# Hearing loss

Hearing loss characteristics: Owners compared to non-owners

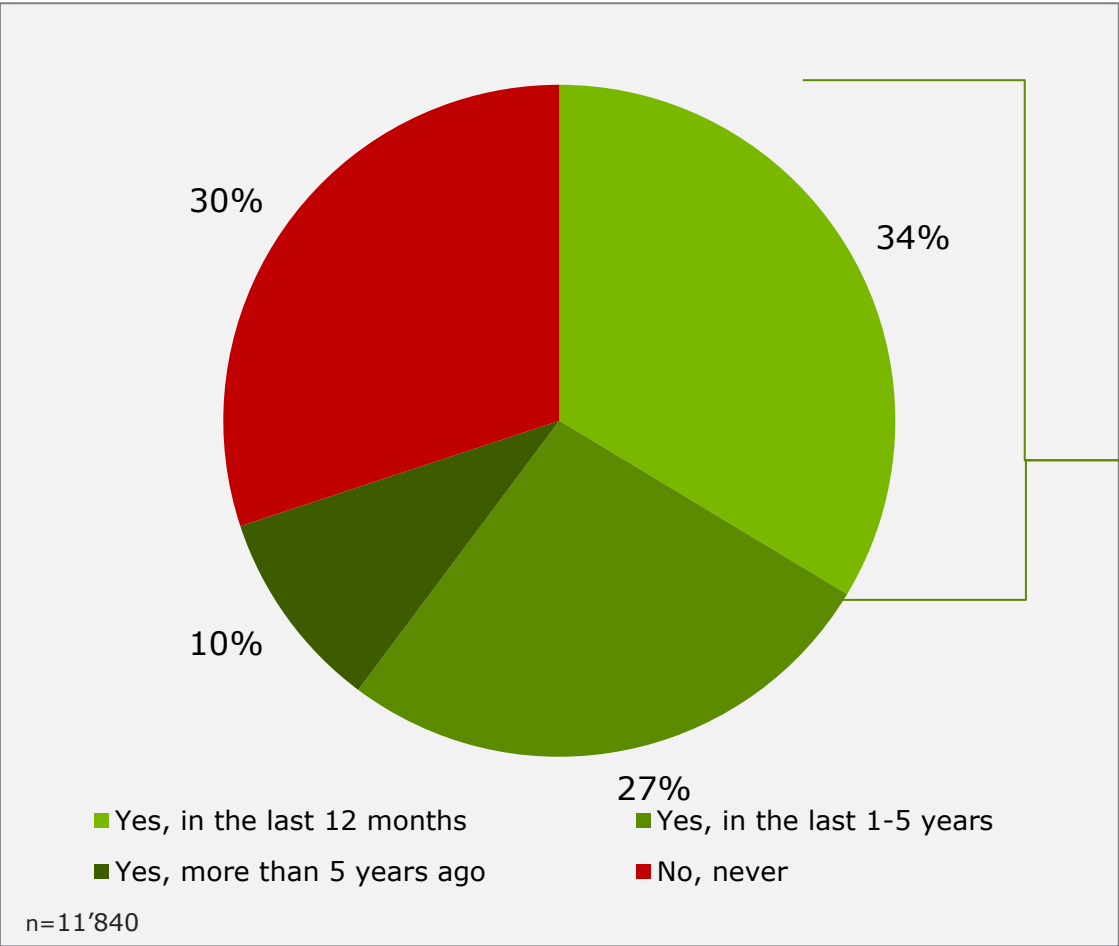
	HA Non-owner n=618	HA Owner n=395	Hearing Aid Adoption (%)
Ears impaired (stated)			
Unilateral loss	59%	33%	27%
Bilateral loss	41%	67%	52%
Perceived loss			
Mild	51%	17%	16%
Moderate	30%	40%	43%
Severe	15%	32%	56%
Profound	4%	11%	

\* combined “severe” and “profound” because n is too small

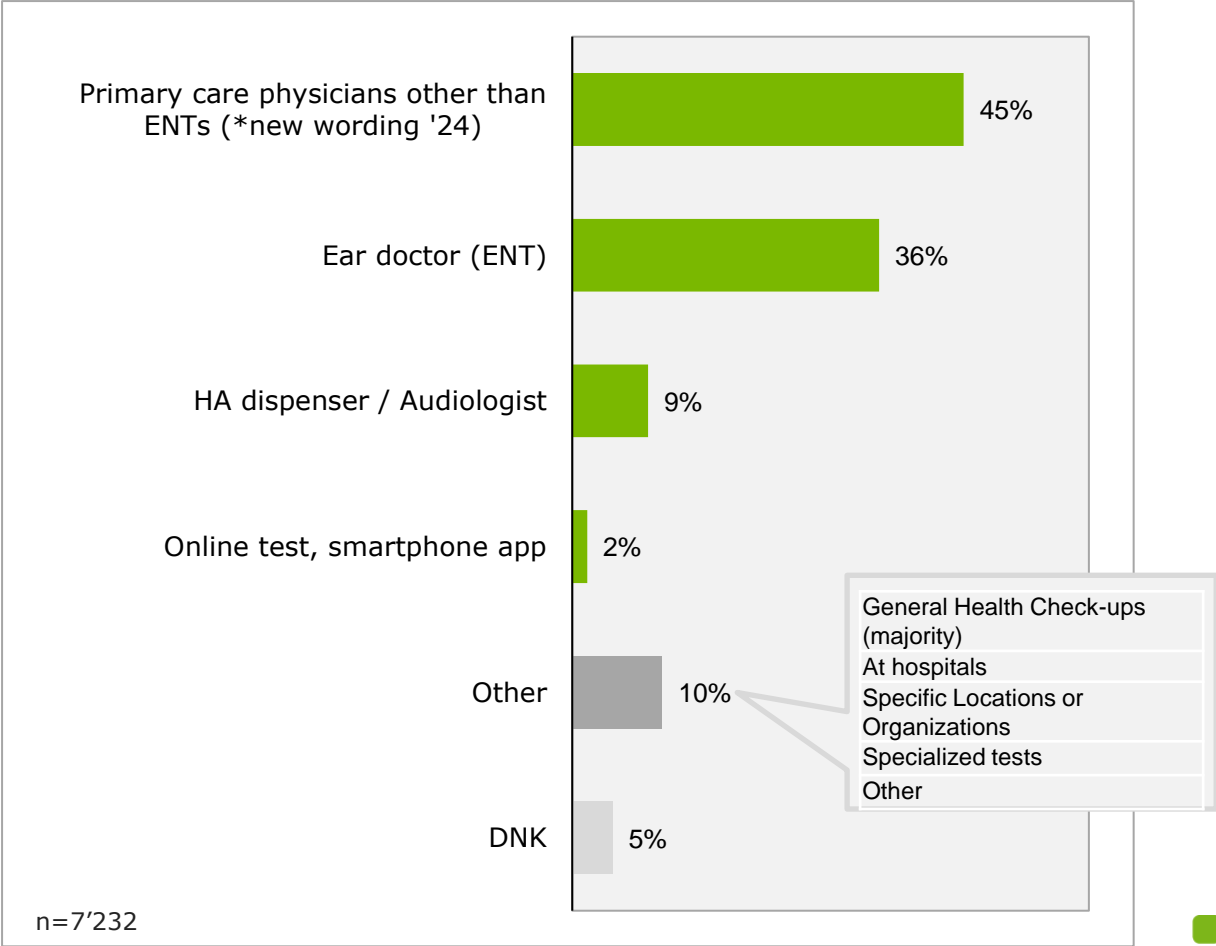
# Hearing tests and where hearing is tested

# Hearing Tests: About 60% had a hearing test in the last five years, most tests done by Family doctors

Have you ever taken a hearing test?



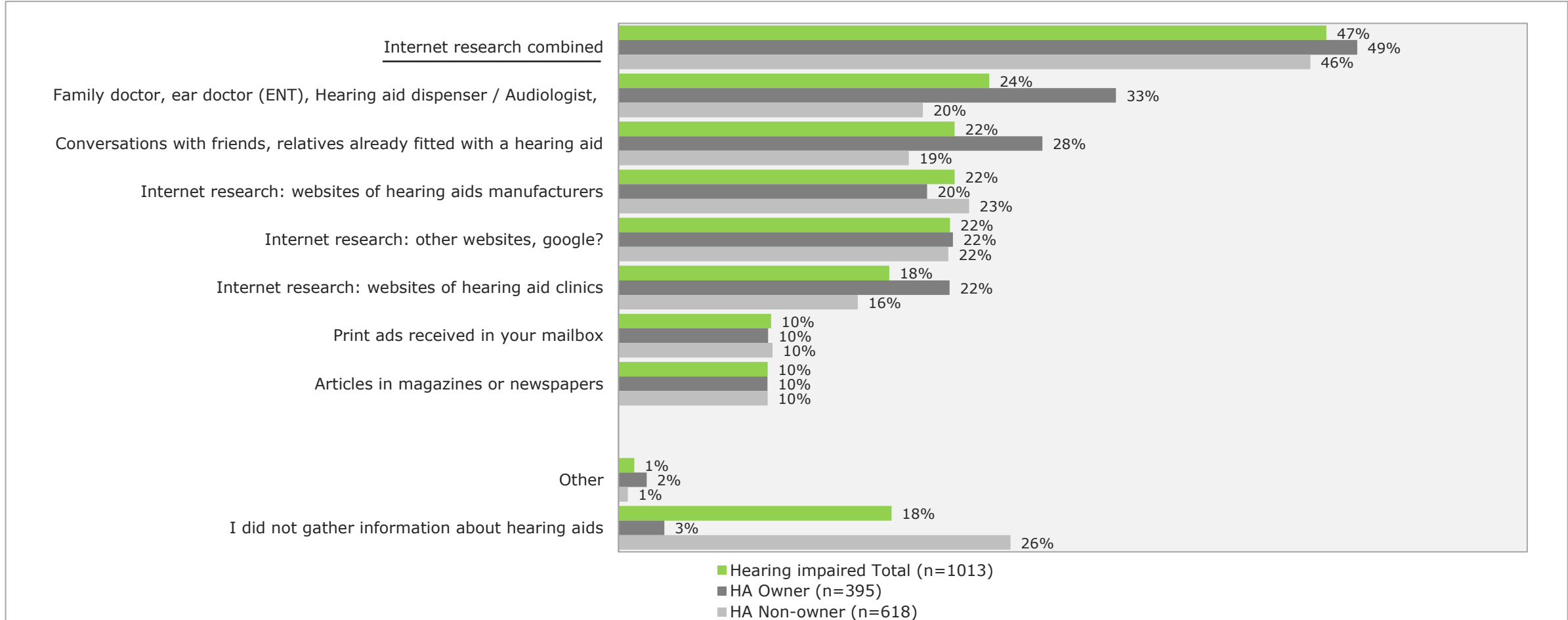
Where/how was your hearing tested?



# The route to the hearing aid: Sources of information and drop-out rates

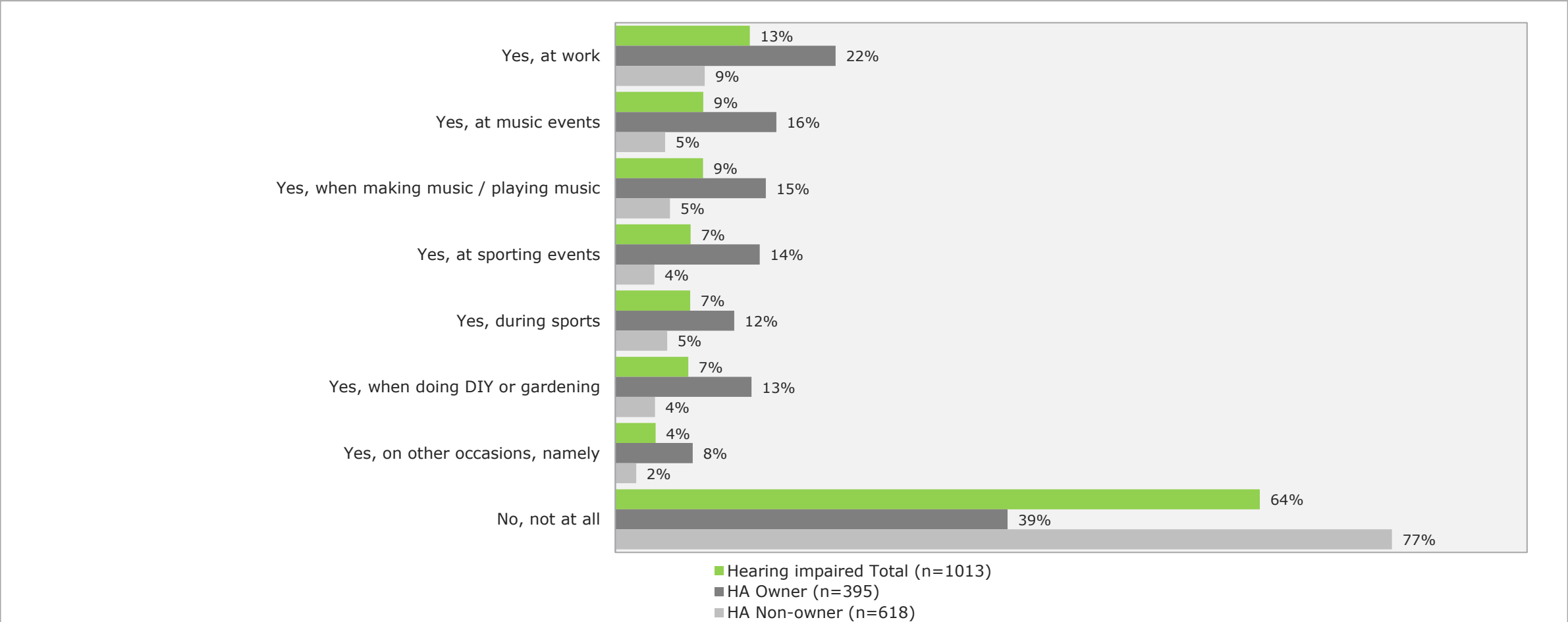
# Internet research emerges as the primary source for hearing aid information, followed by medical professionals and other hearing aid users

Where did you gather information about hearing aids?

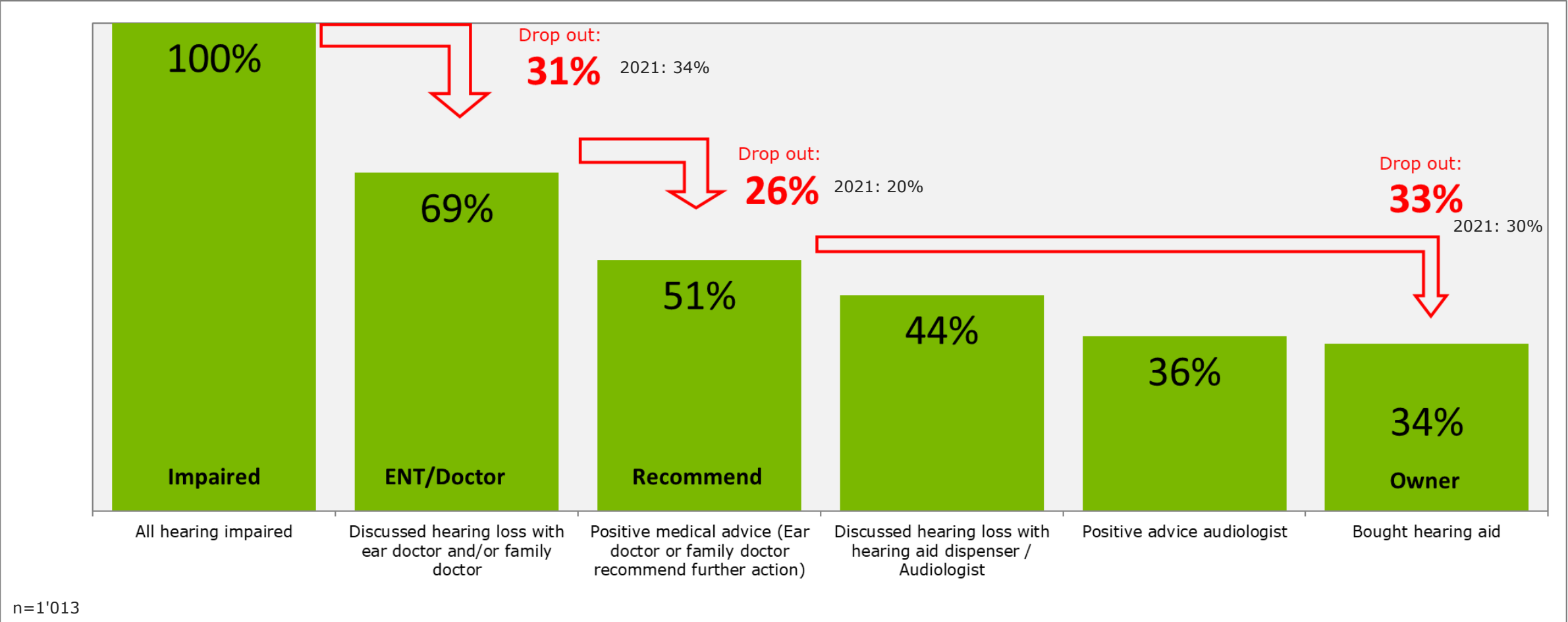


# Usage of hearing protection by hearing impaired

Do you use hearing protection at least occasionally?

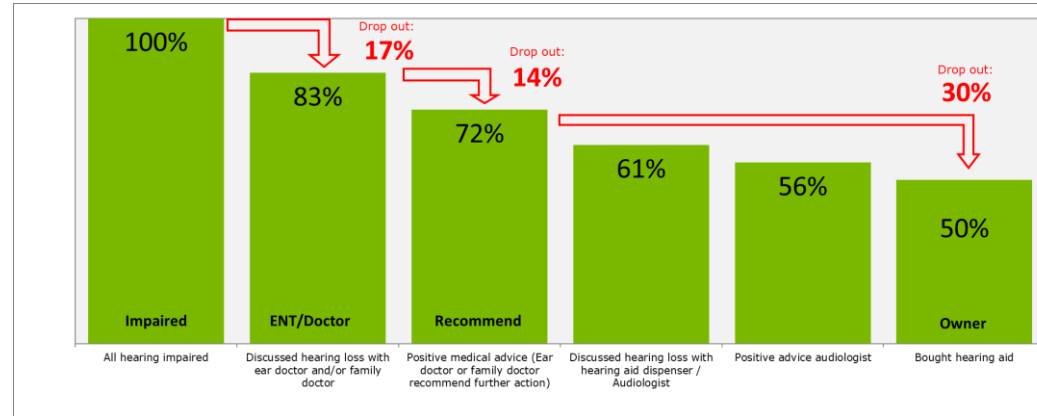


# The route to the hearing aid

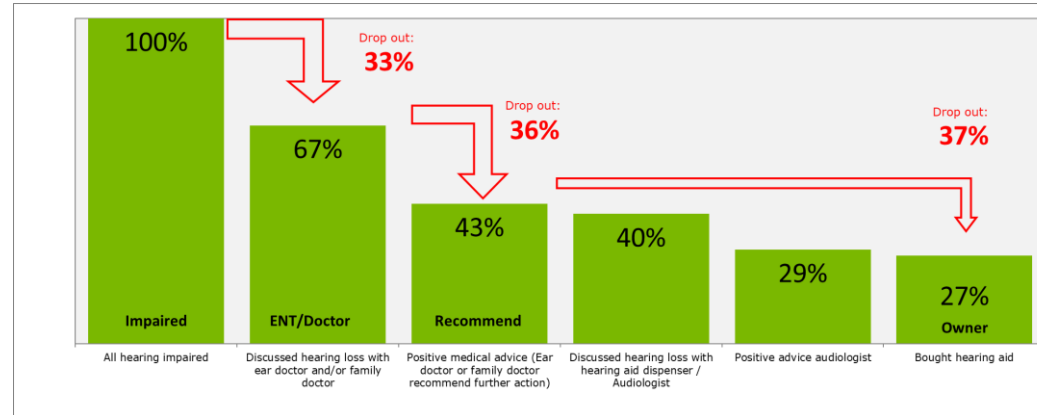


# Much higher drop-out-rates for the lower hearing loss segments

## Top 50% hearing loss\*



## Low 50% hearing loss\*



\* Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:

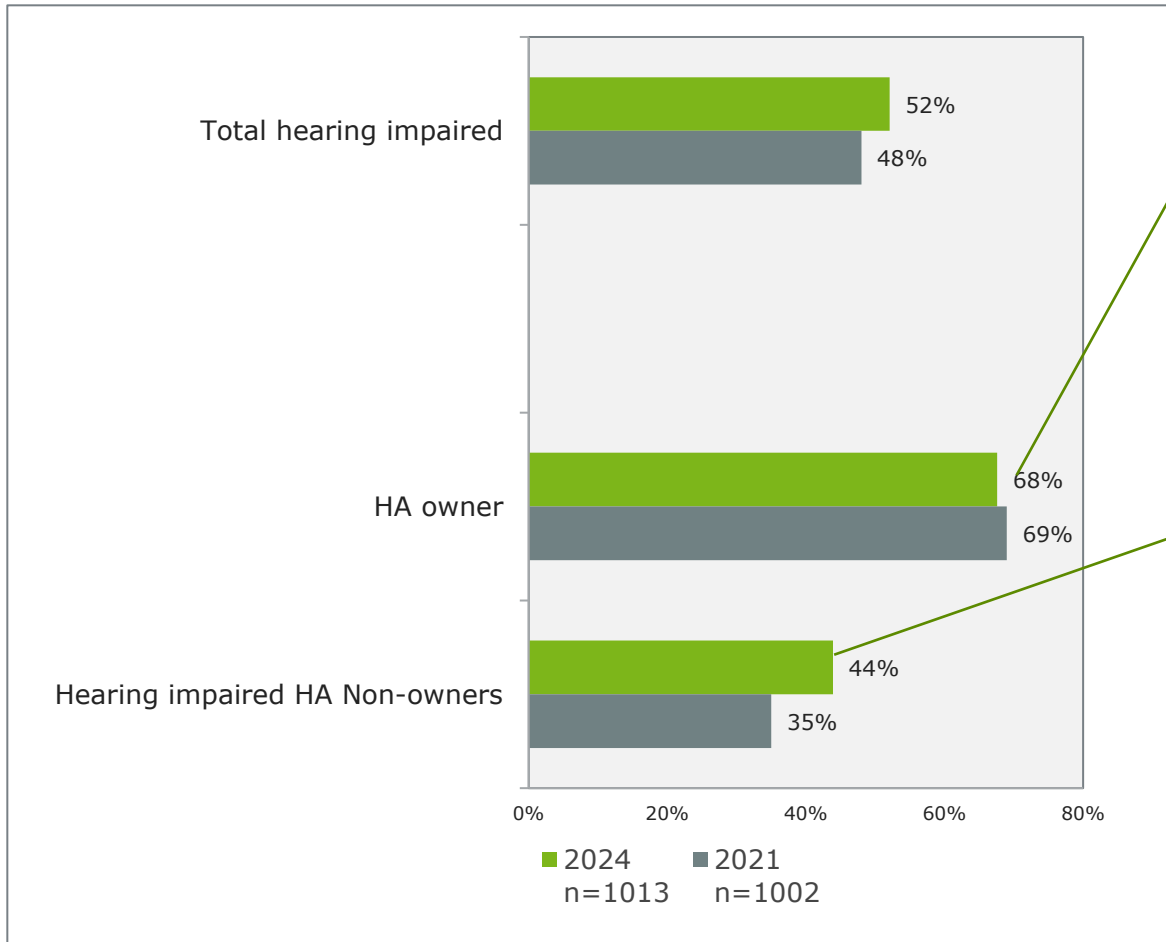
- Number of ears impaired (one or two)
  - Stated hearing loss (Mild to Profound)
  - Scores on 6 APHAB-EC - like questions (Scaled 1-5)
  - When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise
- People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).



# The route to the hearing aid: GP/Family doctor

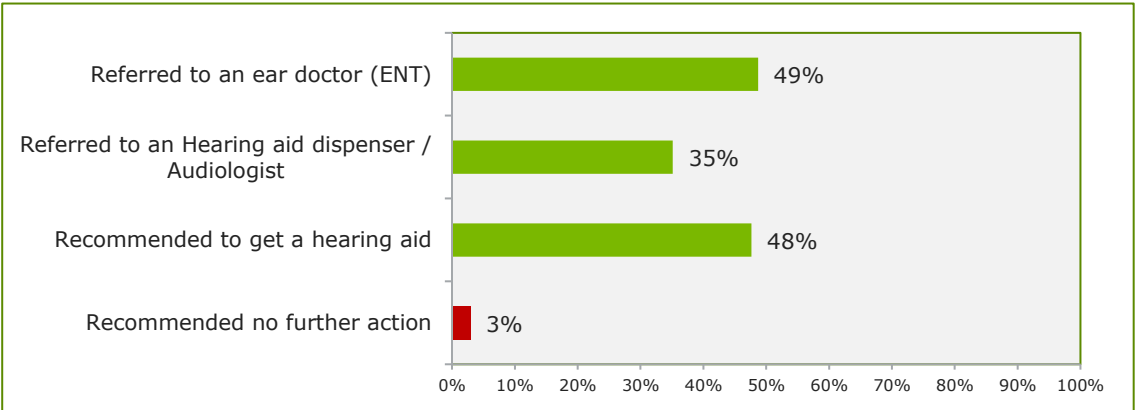
## Have you discussed your hearing problem with your family doctor?

% Discussed with GP

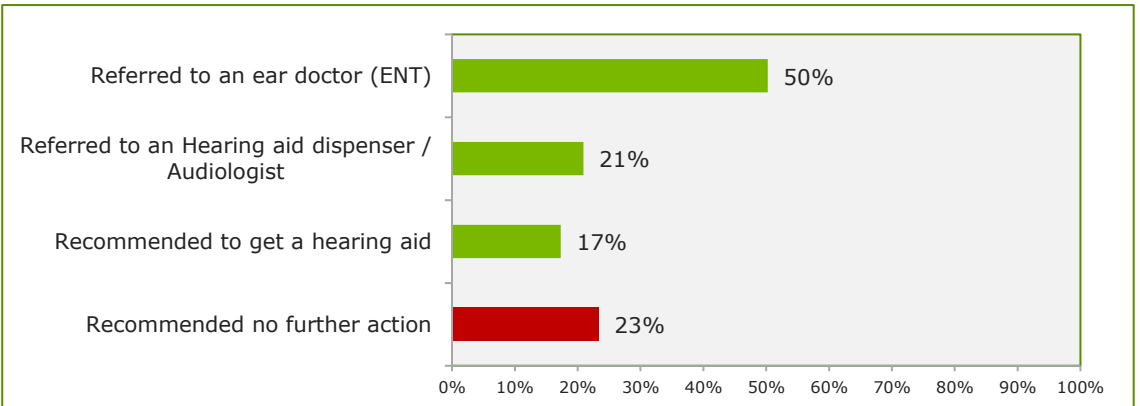


What did he/she recommend ?

HA Owner (n=263)



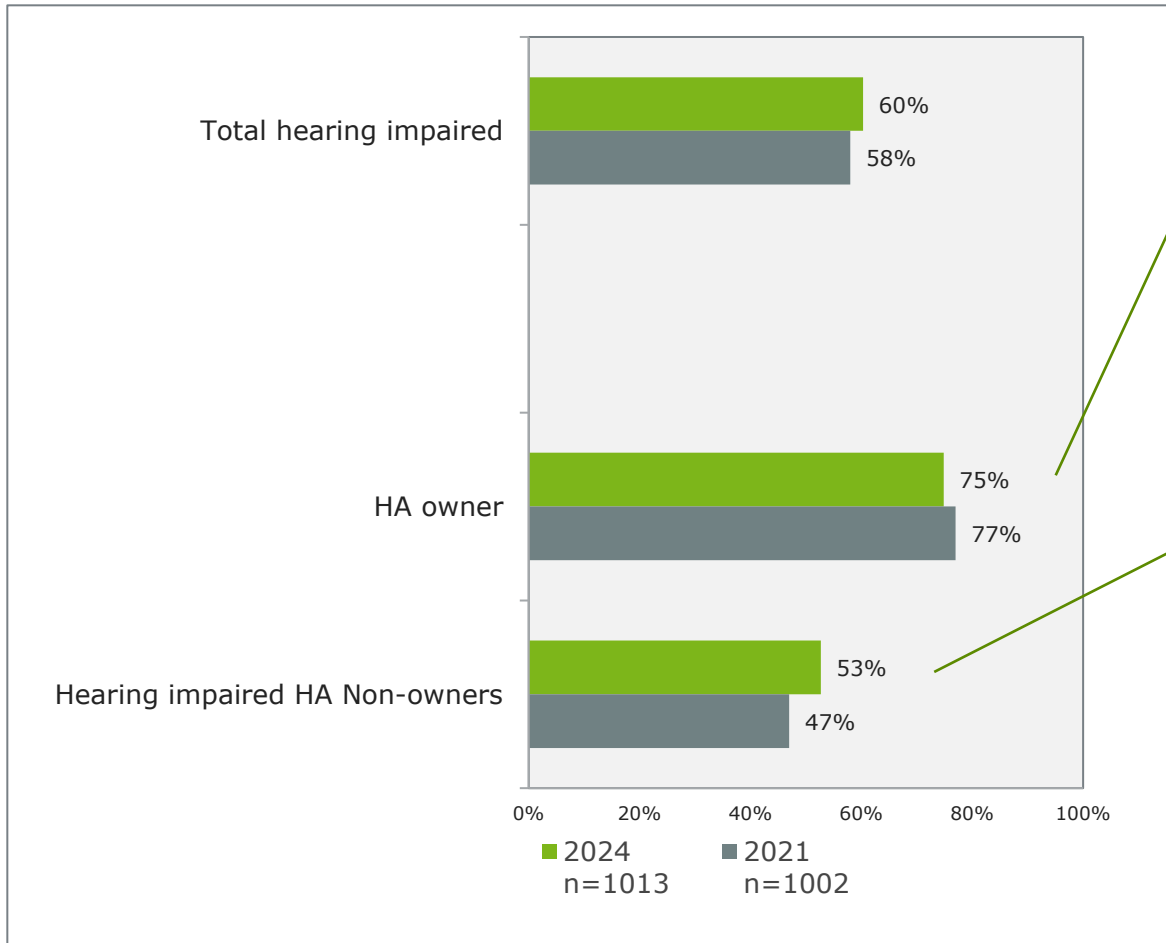
Impaired HA Non-owner (n=251)



# The route to the hearing aid: ENT

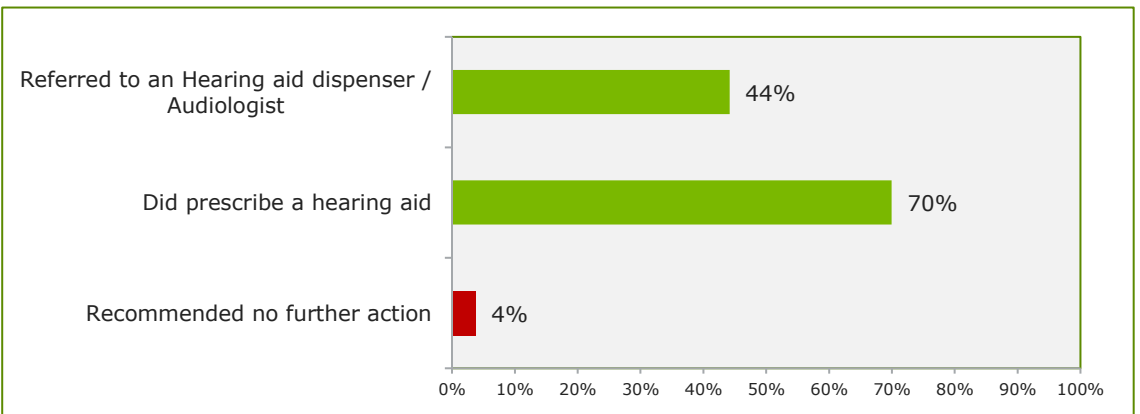
Have you ever discussed your hearing problem with an Ear, Nose and Throat specialist (ENT)?

% Discussed with ENT

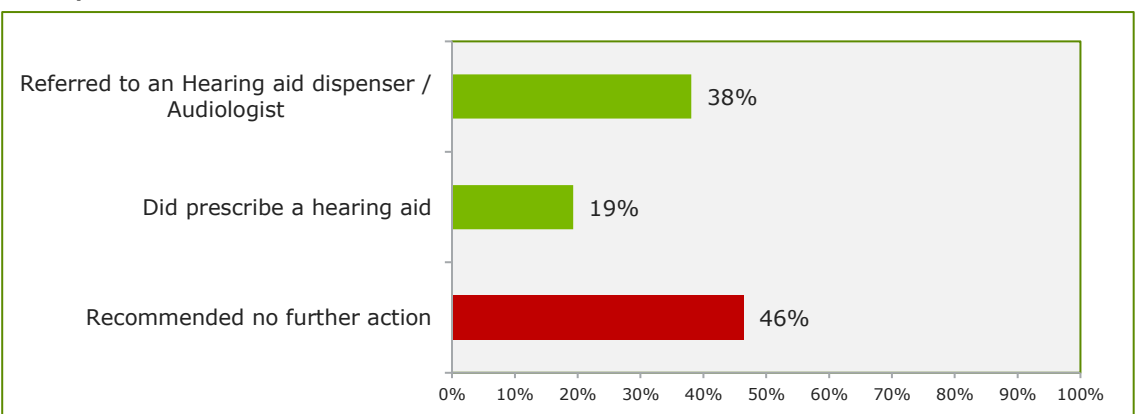


What did he/she recommend ?

HA Owner (n=296)

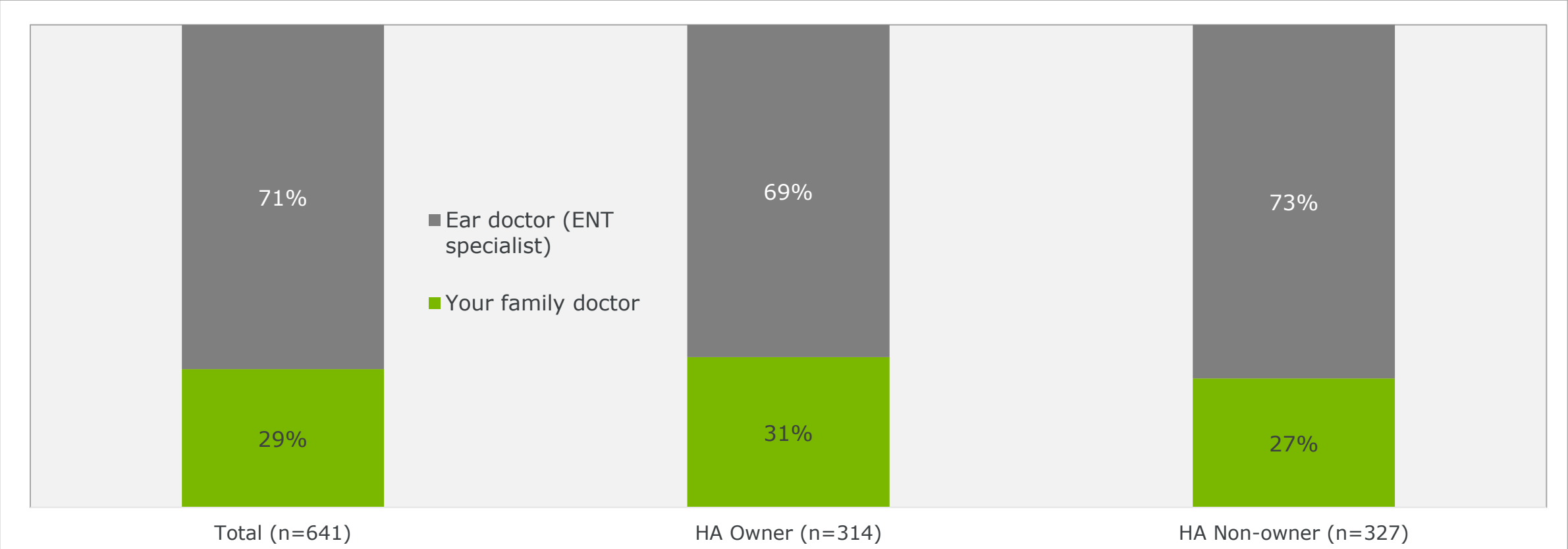


Impaired HA Non-owner (n=306)



# Among those who discussed their hearing loss with a doctor, 71% consulted an ENT first, while 29% spoke to a GP or family doctor first

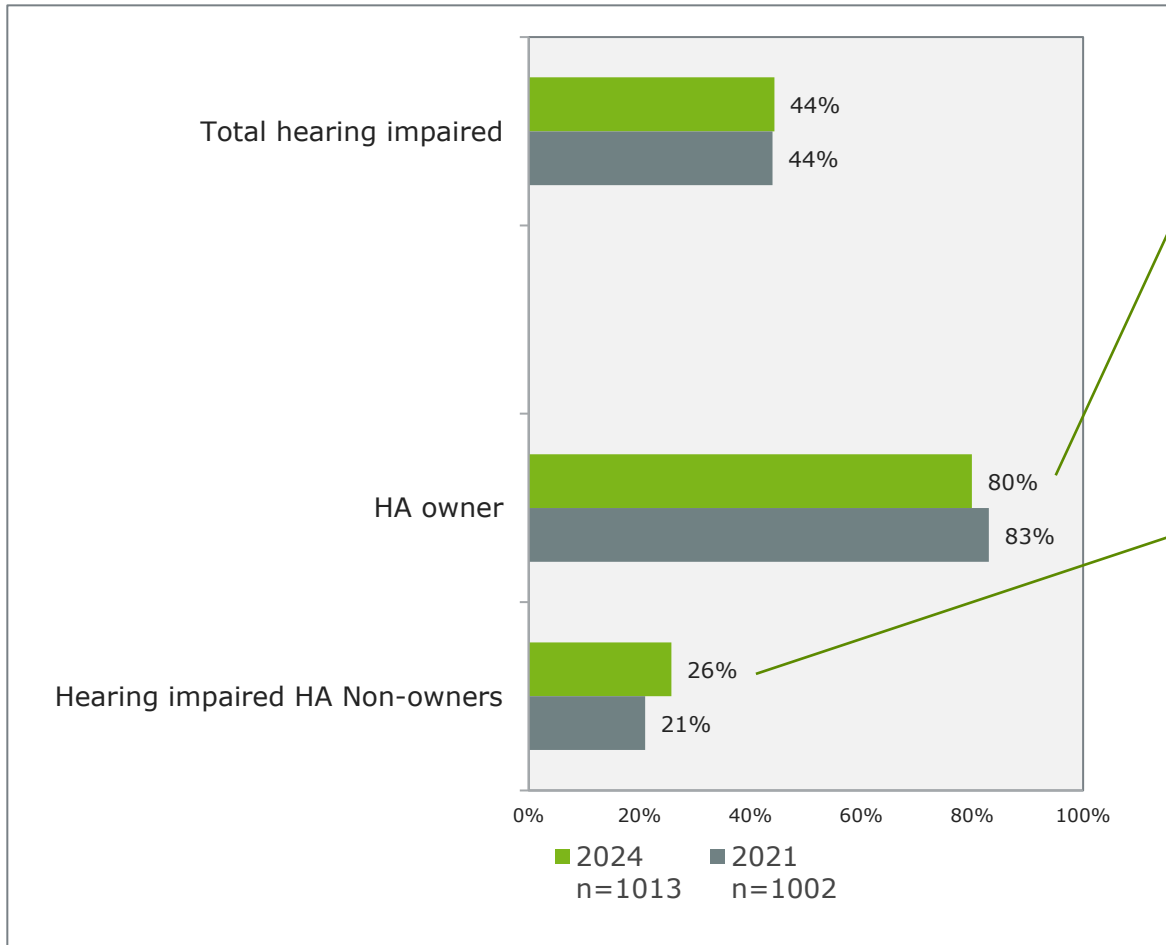
Those who discussed hearing loss with family doctor and/or ENT:  
Who was the doctor you discussed your hearing loss with for the **first time** – your family doctor or the Ear, Nose and Throat specialist (ENT)?



# The route to the hearing aid: Audiologist

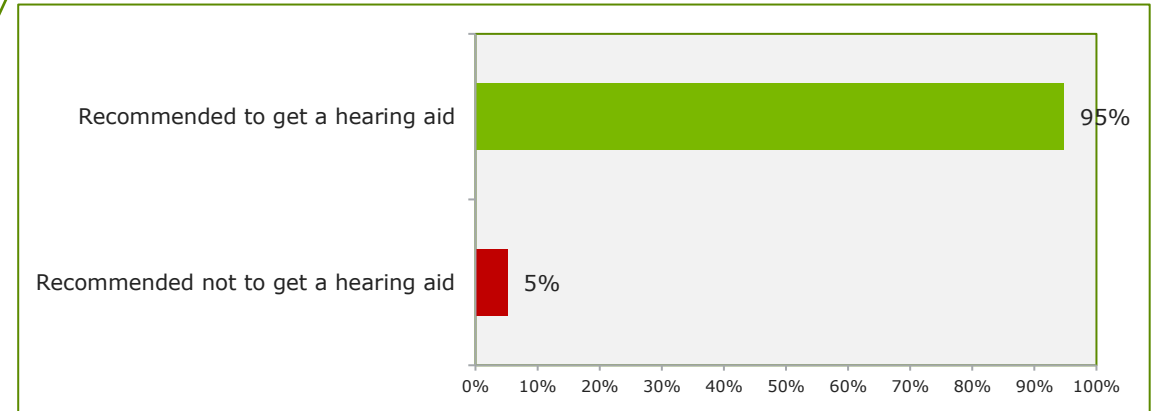
Have you ever discussed your hearing problem with a HA dispenser / Audiologist?

% Discussed with HA dispenser/ Audiologist

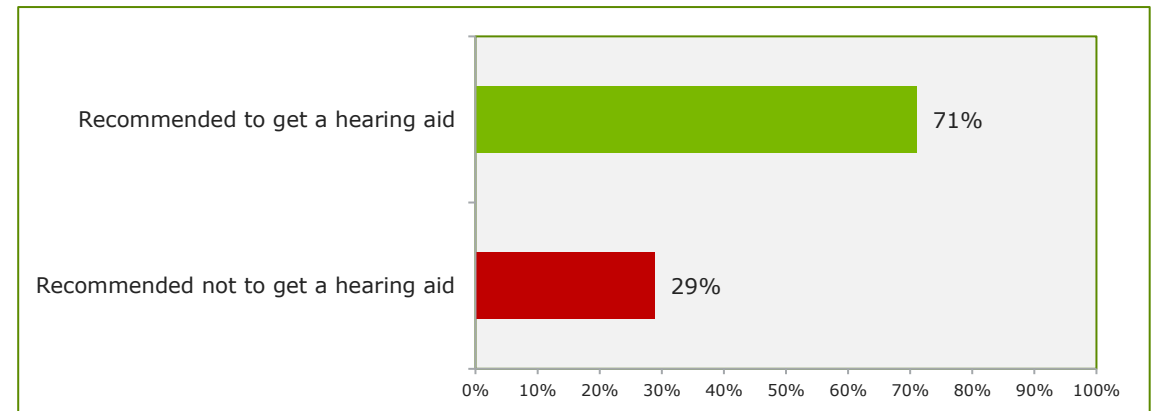


What did he/she recommend ?

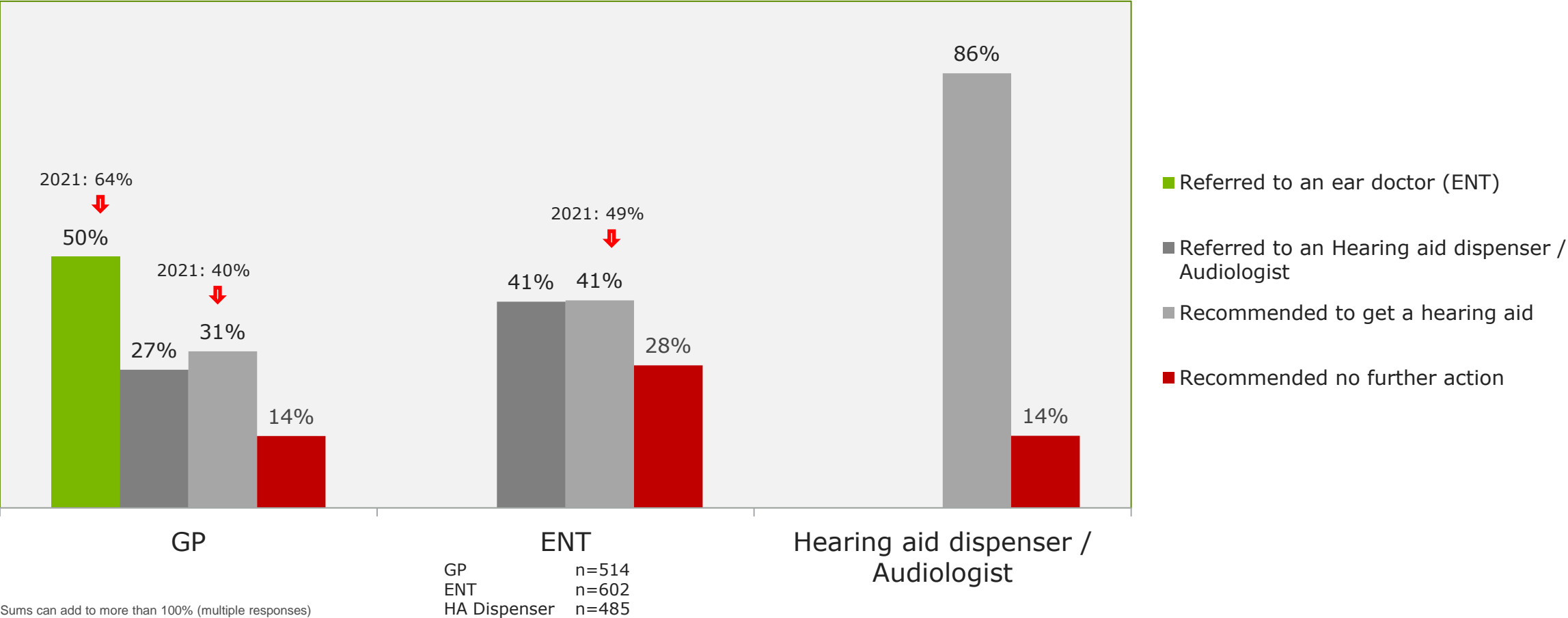
HA Owner (n=313)



Impaired HA Non-owner (n=145)



# Recommendations by profession

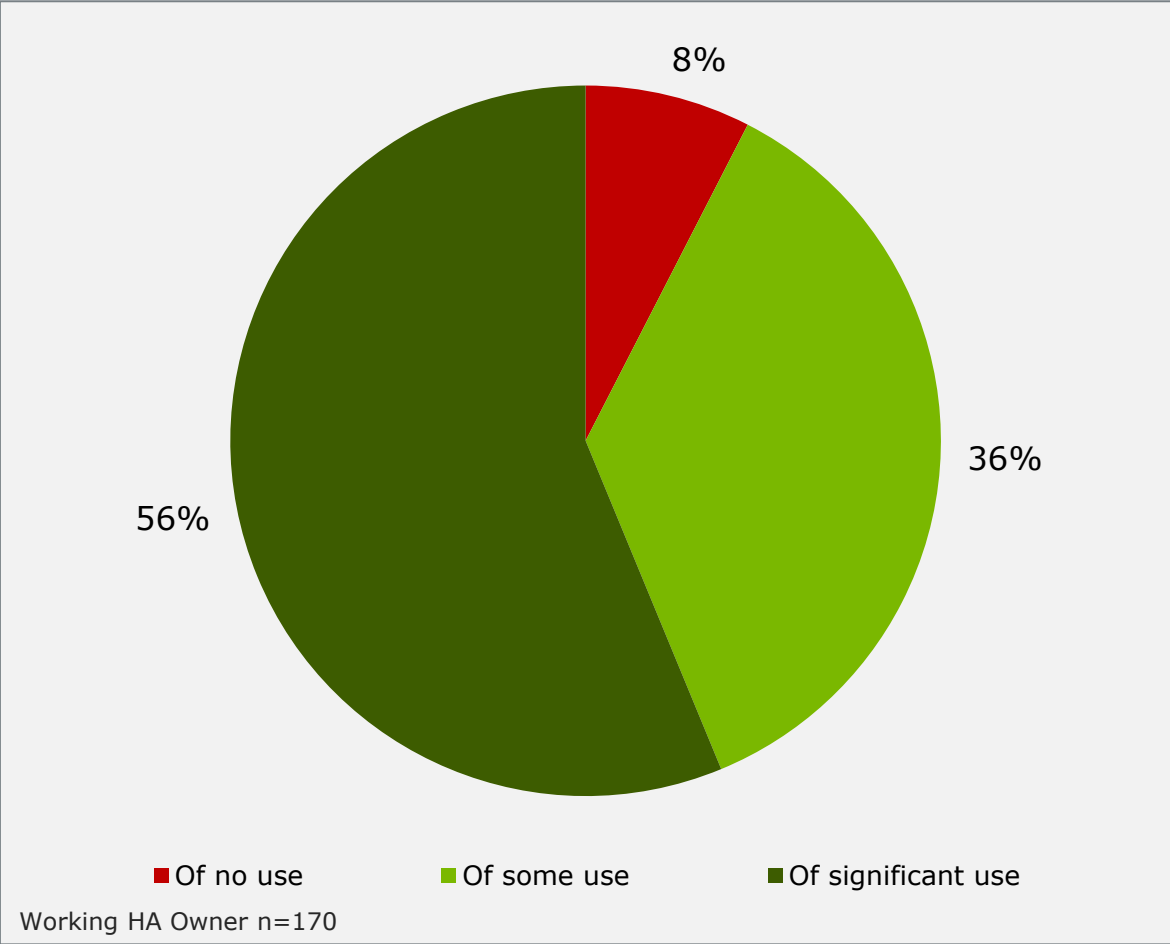


Potential social cost-savings due to the use of hearing aids:

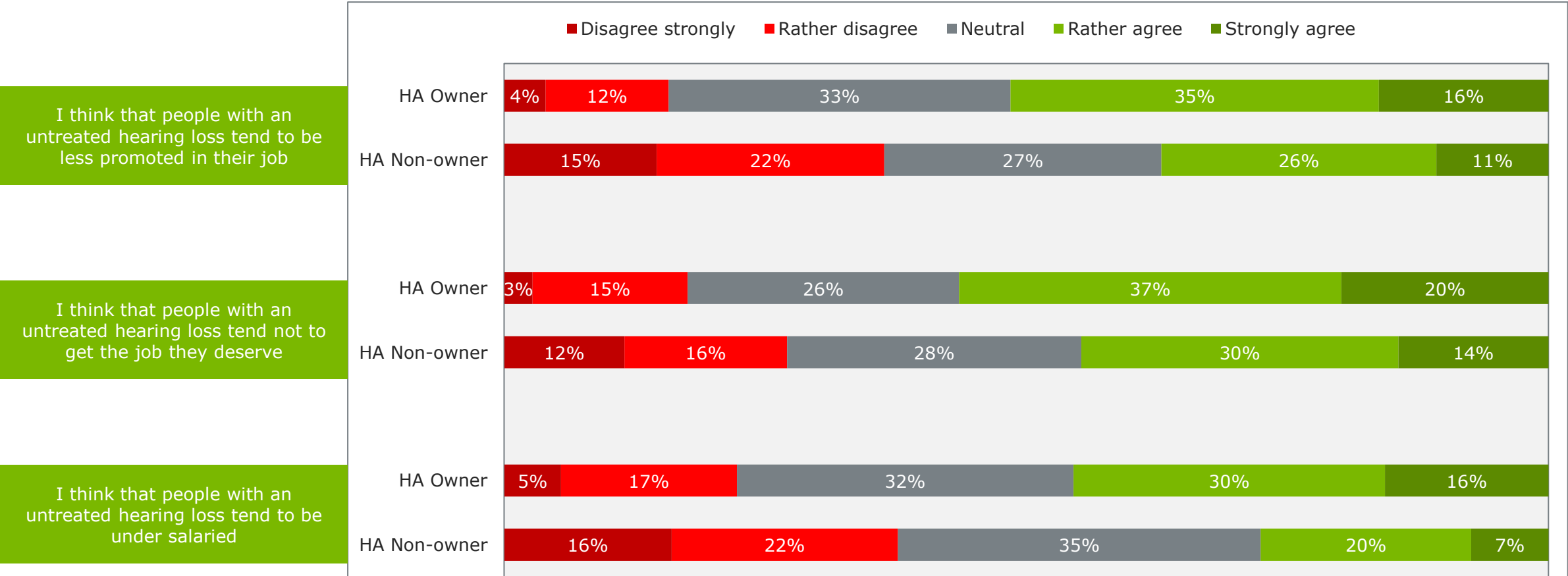
Work competitiveness, depressive symptoms, sleep quality, co-morbidities

# Work competitiveness: 92% of the working hearing aid owners state that their hearing aid(s) are useful on their job

How useful are your hearing aids on your job?



# Work competitiveness: People with hearing aids recognize that hearing aids increase the chance of hearing impaired getting promoted, getting the right job and to get a higher salary



HA Owner n=355 / HA Non-owner n=555

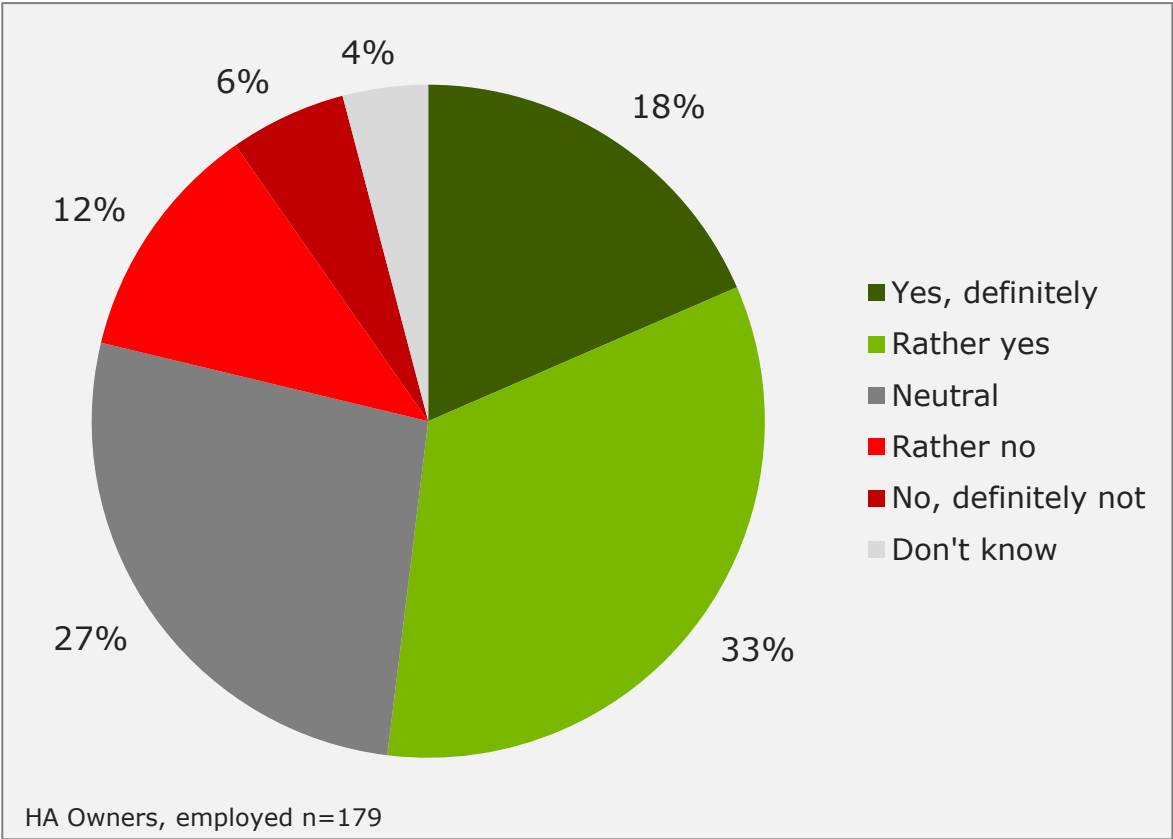




# 51% of employed individuals using hearing aids believe the devices enable them to work longer

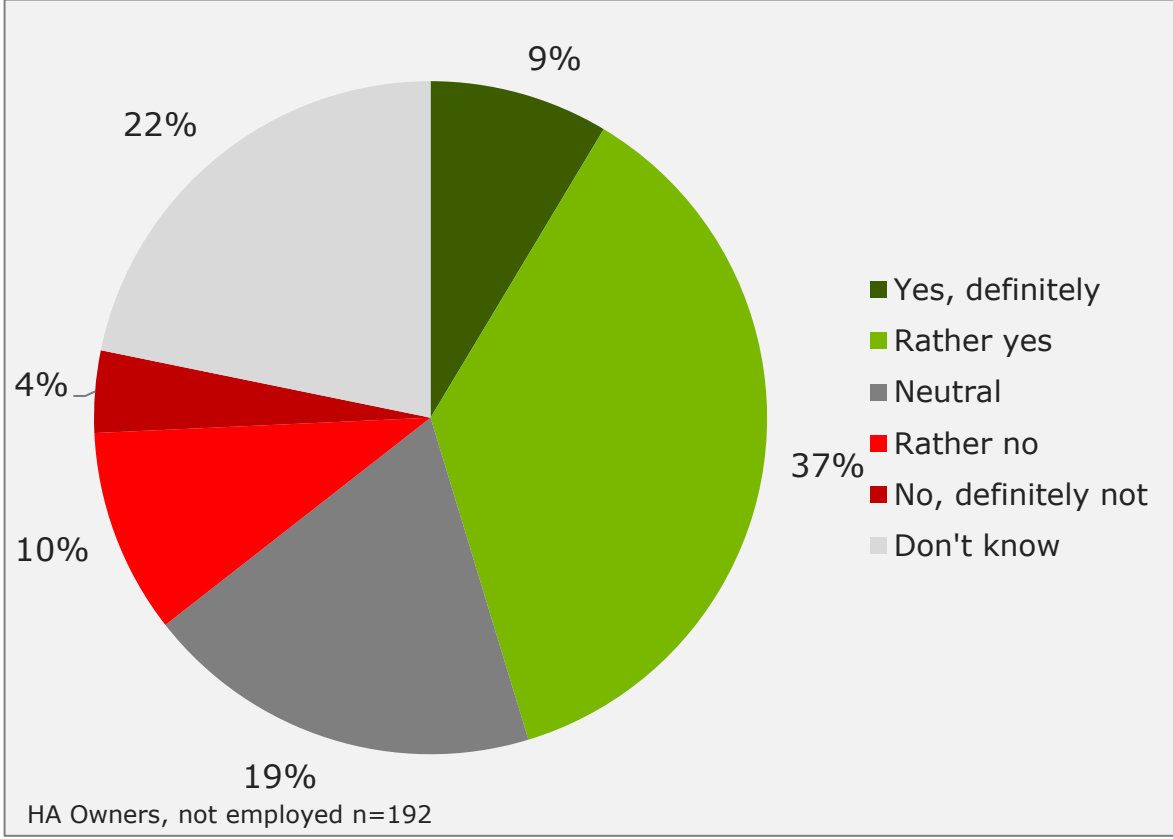
## HA Owners, employed:

Do you believe that due to your hearing aid provision you can be employed longer than without hearing aid(s)?



## HA Owners, NOT employed :

Do you believe that due to your hearing aid provision you could have been employed longer than without hearing aid(s)?

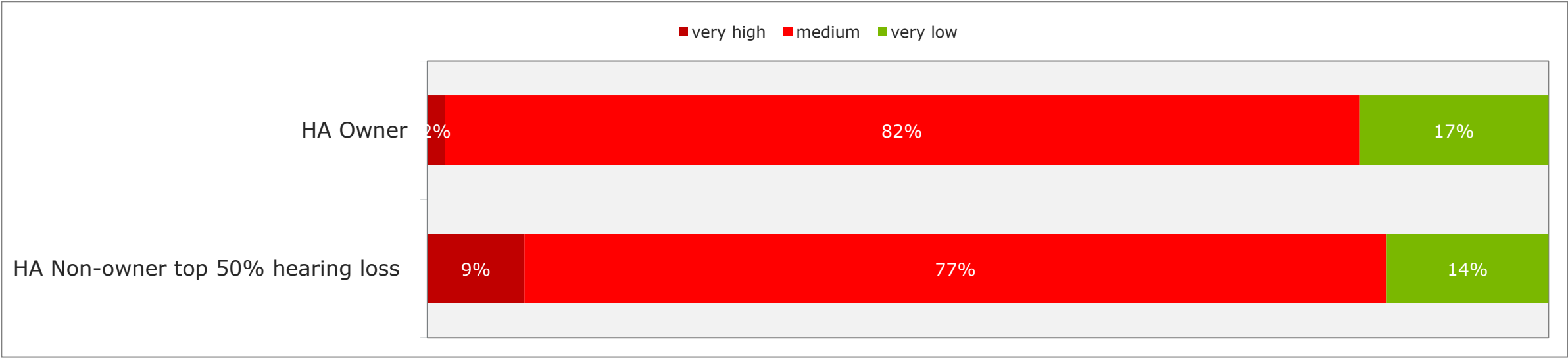


General health problems: Hearing aid owners tend to have a lower risk of being depressed (PHQ-2 Screening) compared to impaired non-owners with comparable hearing loss (Top50% hearing loss group\*)

Depression symptoms:  
PHQ-2 Screening:  
In the last 2 weeks:

- Little interest or pleasure
- Feeling down, depressed, hopeless

Probability of major depressive disorder



HA owner n=204 / HA Non-owner top 50% hearing loss n=97

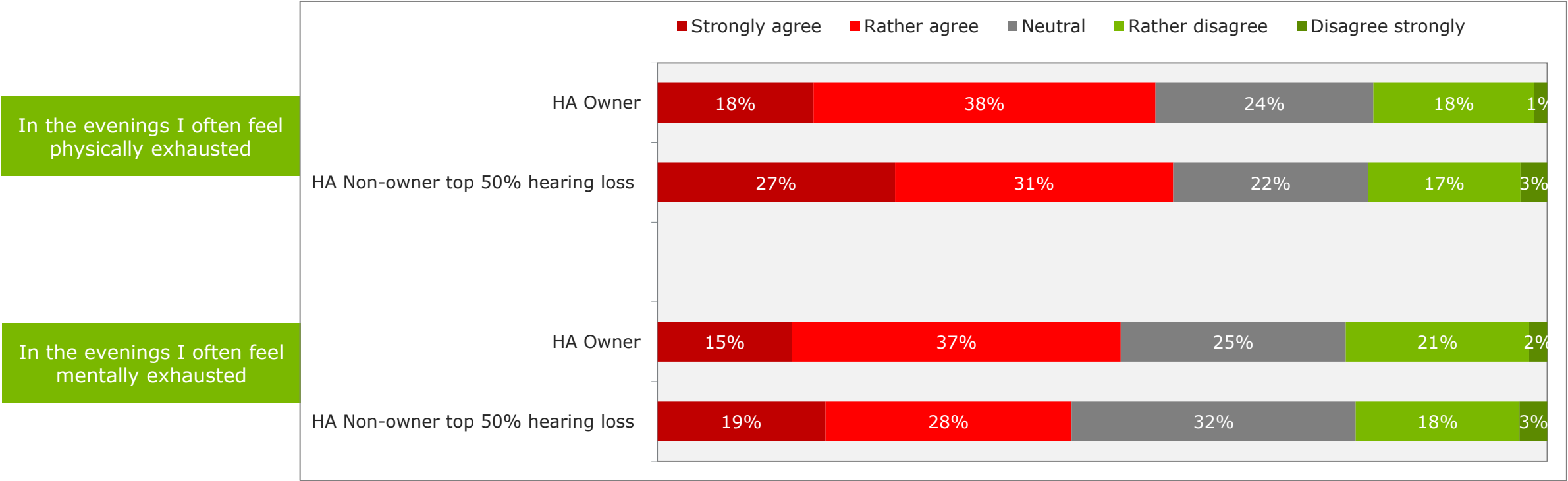
\*Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:

- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC – like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

→ People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).



General health problems: Compared to individuals with significant hearing loss who do not use hearing aids (Top 50% hearing loss group\*), hearing aid users are less likely to feel severely physically exhausted in the evenings.



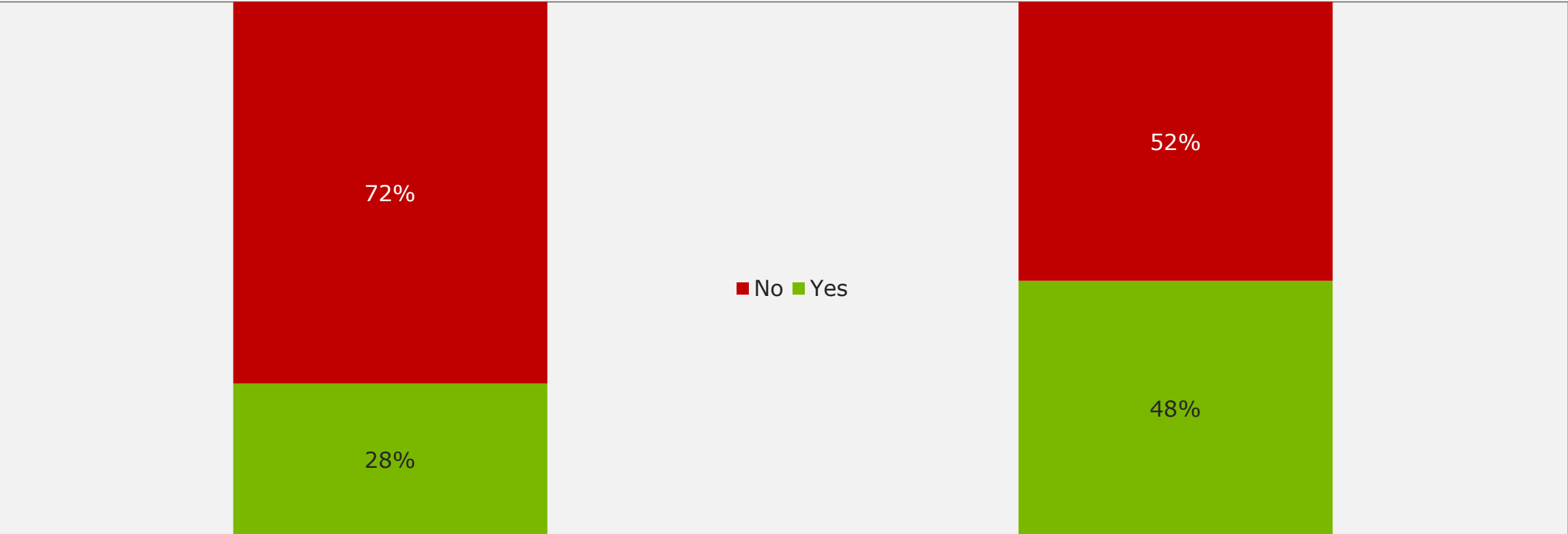
HA Owner n=203 / HA Non-owner top 50% hearing loss n=97

\*Construction of 6-groups: A factor analysis was performed to identify one factor "degree of hearing loss". The following questions were included in the factor:

- Number of ears impaired (one or two)
  - Stated hearing loss (Mild to Profound)
  - Scores on 6 APHAB-EC – like questions (Scaled 1-5)
  - When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise
- People were segmented into 6 groups of same size (16.67% of all hearing impaired in the sample).

# General health problems: Quality of sleep seems to improve if hearing impaired use hearing aids

Are you generally satisfied with the quality of your sleep?



HA Non-owner, top 50% hearing loss

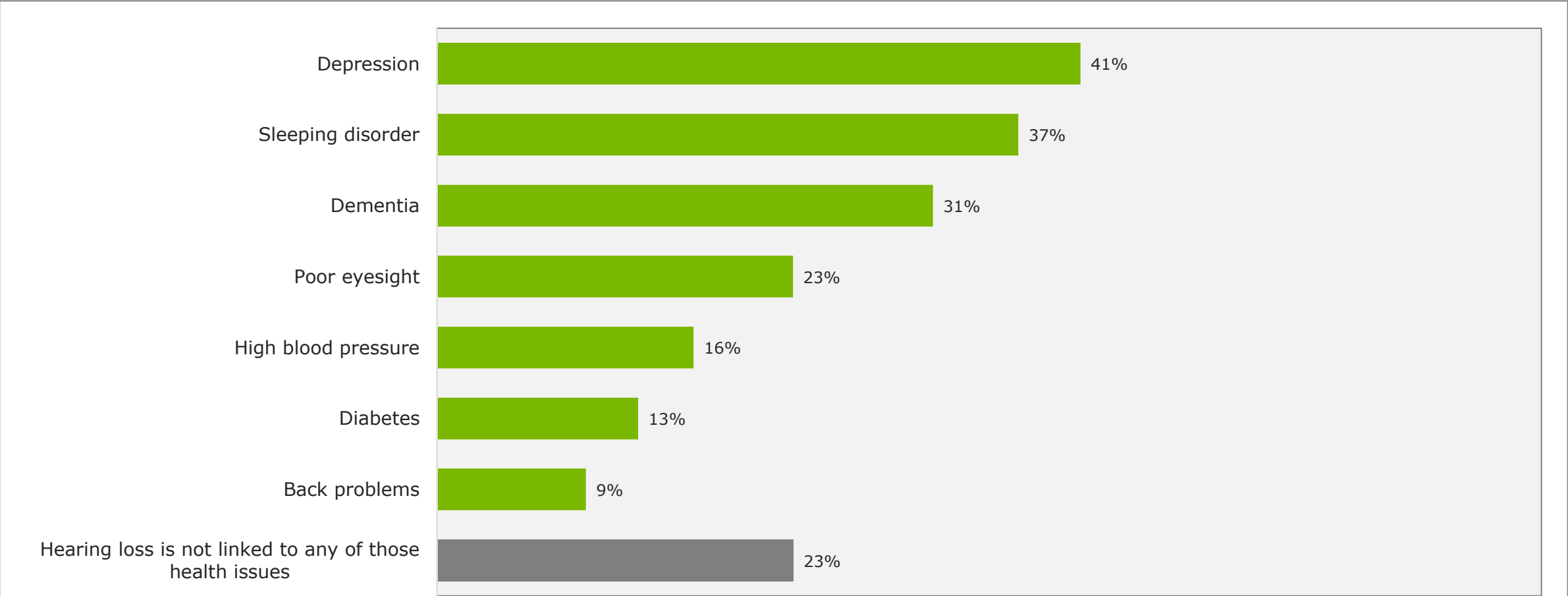
HA Owner

HA Non-owner top 50% hearing loss n=97 / HA Owner n=204



# 41% of all hearing-impaired think that hearing loss could be linked to depression

Please tick all of the health issues below which you think could be linked to one’s hearing loss.

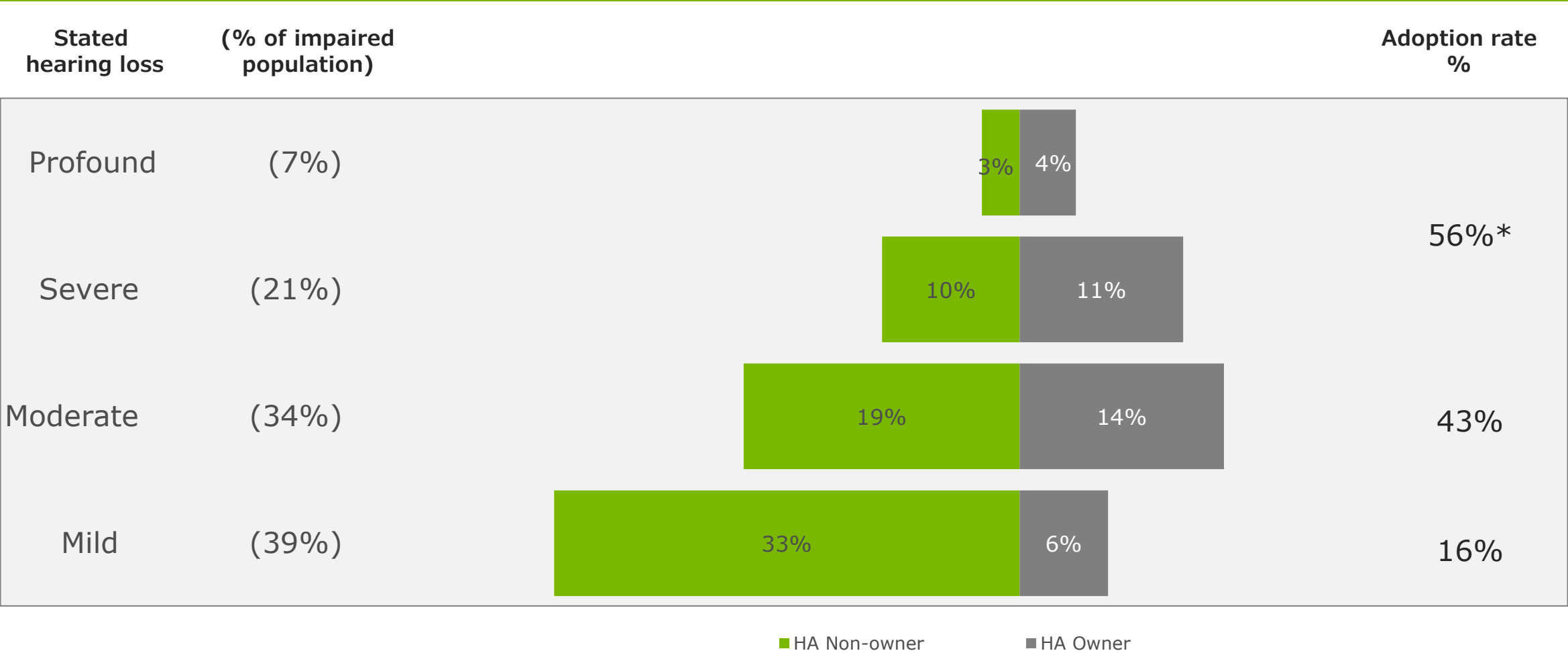


Hearing impaired, n=1'013

### 3. Analysis of hearing aid owners

Hearing aid ownership, awareness of hearing loss before getting hearing aids, lifetime of hearing aids and usage

# Low adoption rates within mild hearing loss



n=1'013

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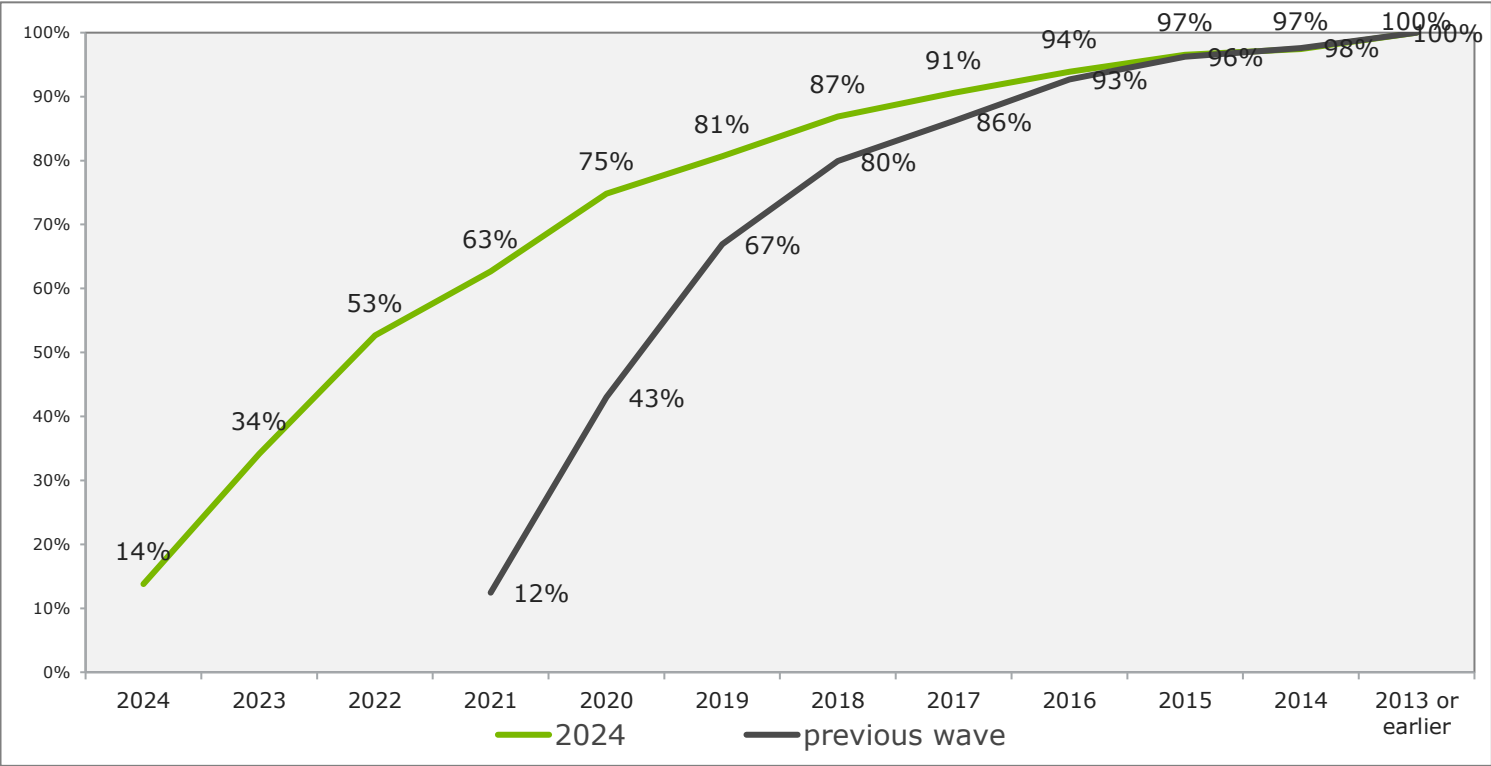
Sums can differ from 100% due to rounding  
\* combined "severe" and "profound" because n is too small





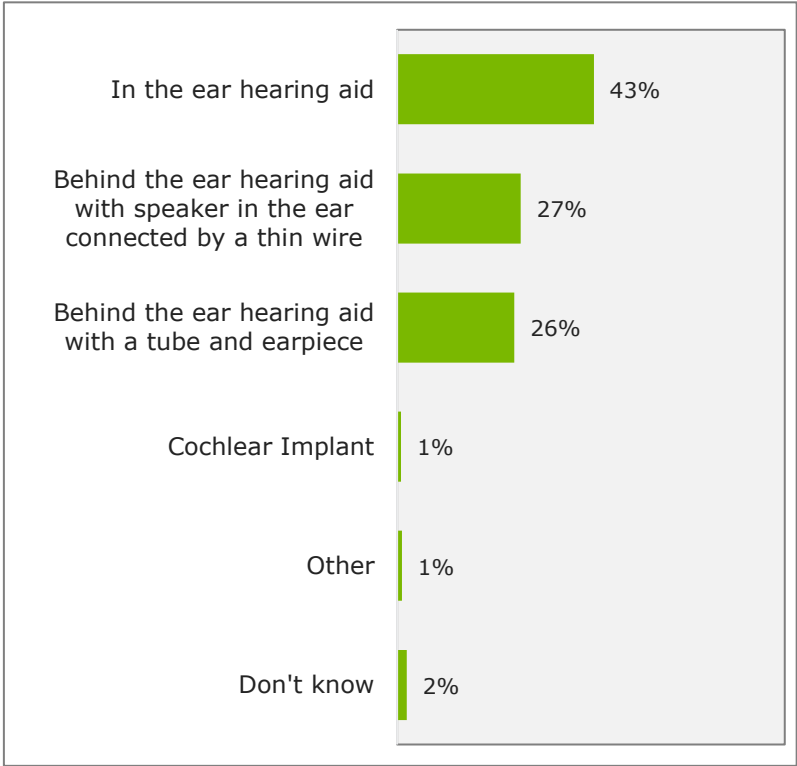
**53% of the currently owned hearing aids (HAs) were acquired in 2022 or later. In-the-ear (ITE) hearing aids are the most frequently purchased type**

Year of purchase



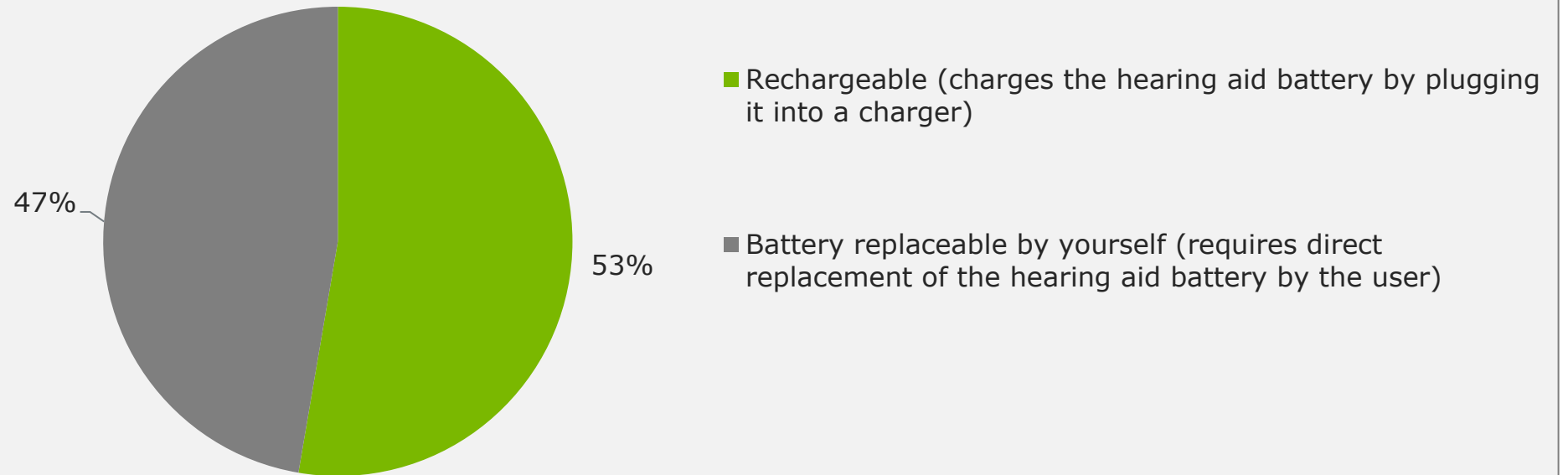
**Age of currently owned HAs (Mean):**  
**2024: 3.5 years**  
**2021: 3.0 years**

Type of HA



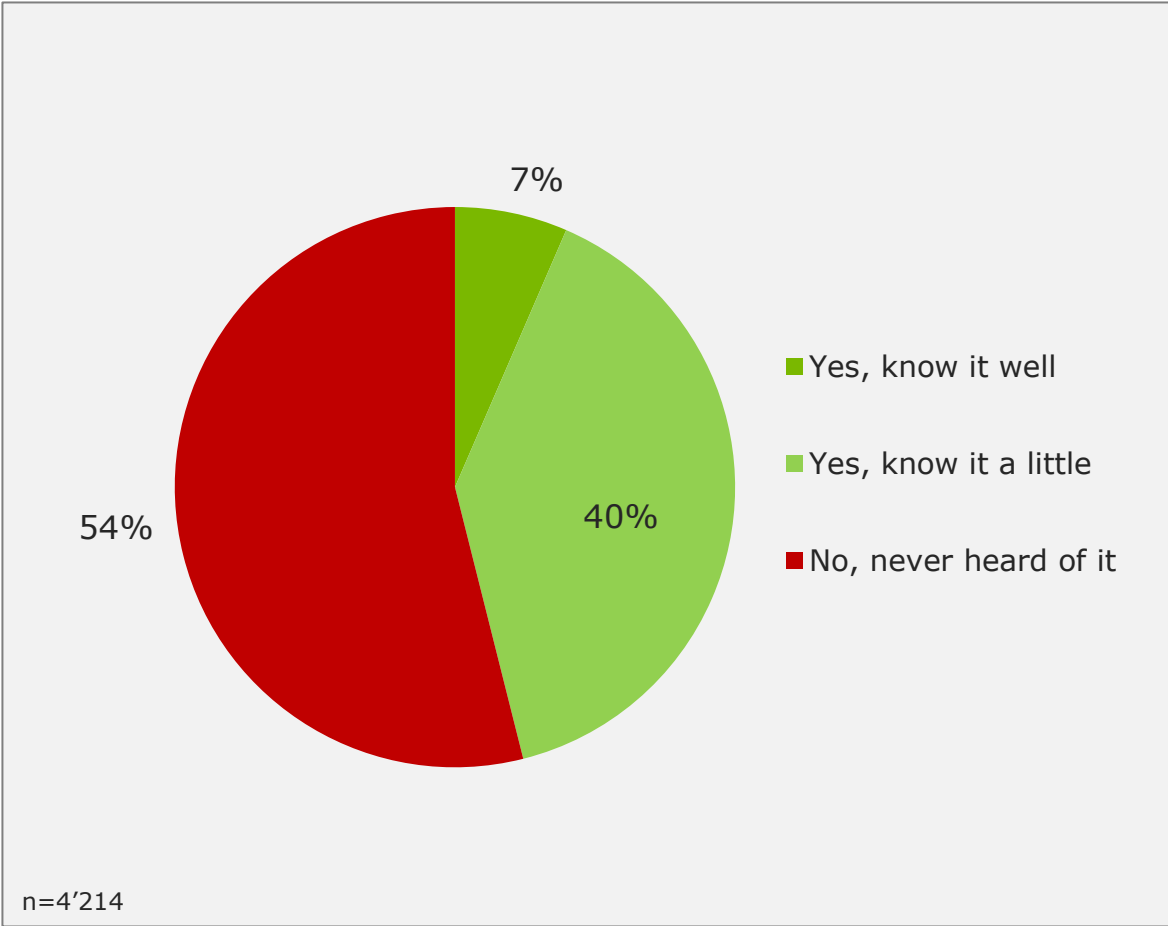
# About half have rechargeable hearing aids

The hearing aid you are currently using is...

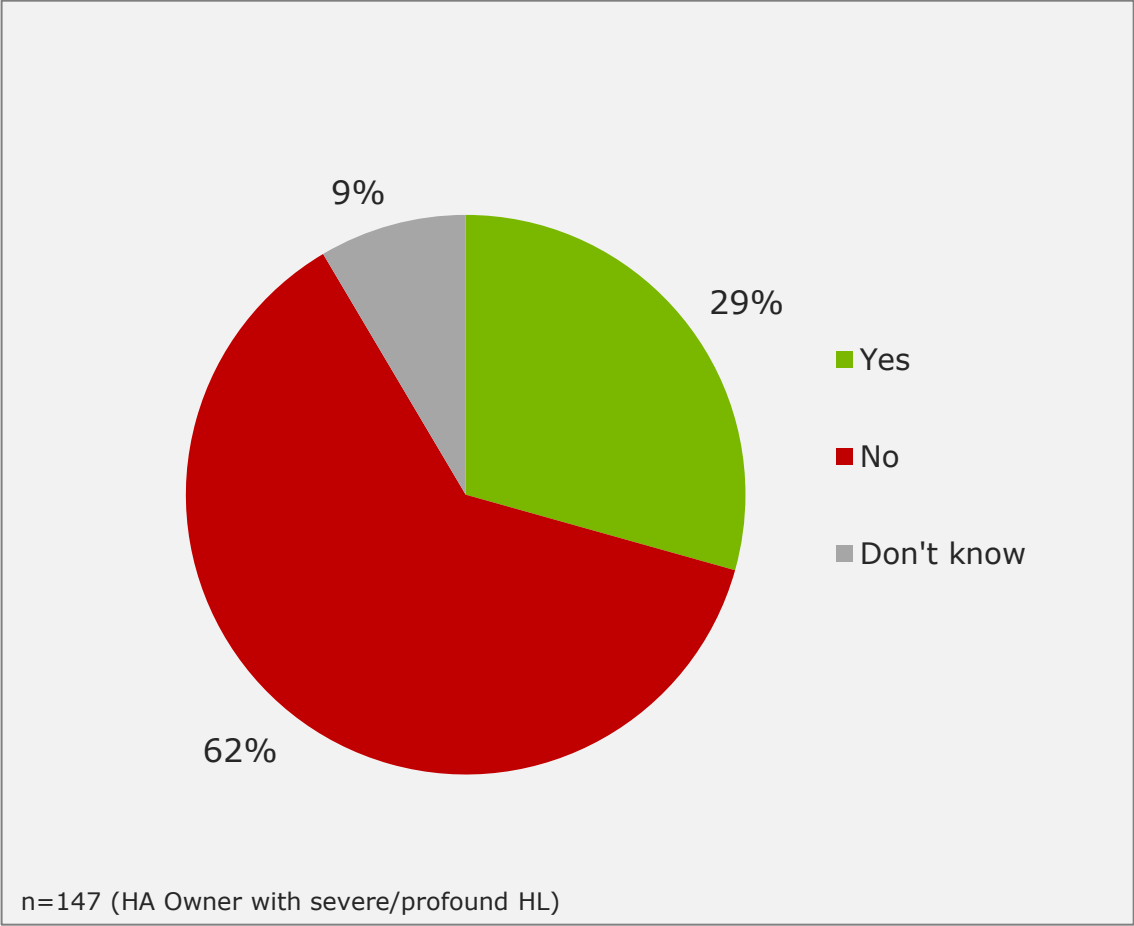


**54% of the population in KOR have never heard of Cochlear Implants.**  
**29% of the HA owners with severe/profound HL have been informed about CIs by a medical professional**

Do you know what a cochlear implant (CI) is?

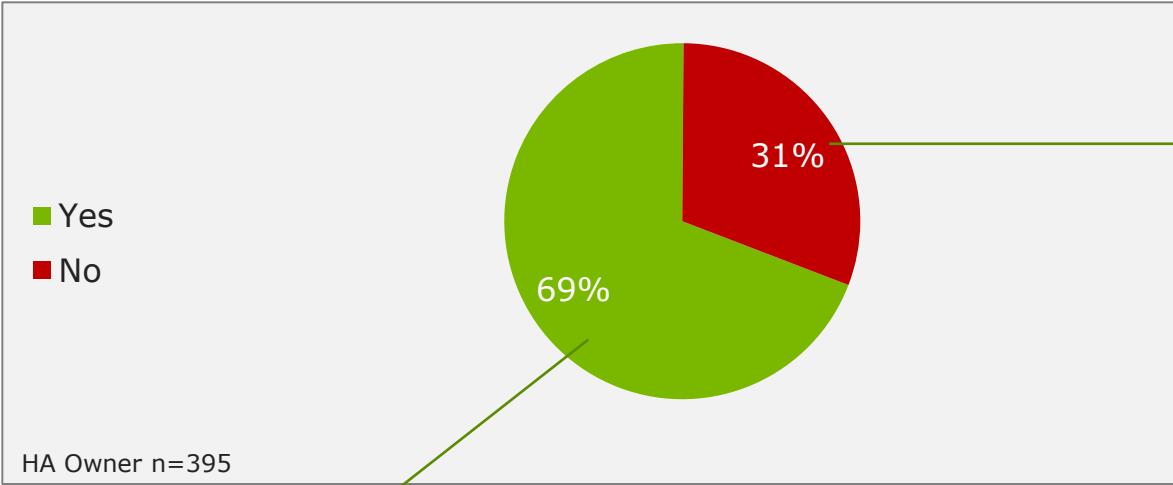


Have you been informed about cochlear implants by a medical professional?



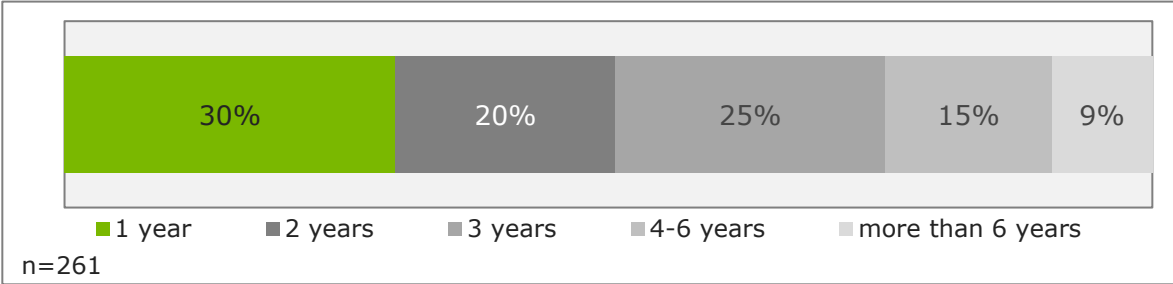
Hearing aids are used for five years before they are replaced.  
Mostly more than three years pass between becoming aware of the hearing loss and purchasing hearing aids

Current HAs = first HAs?

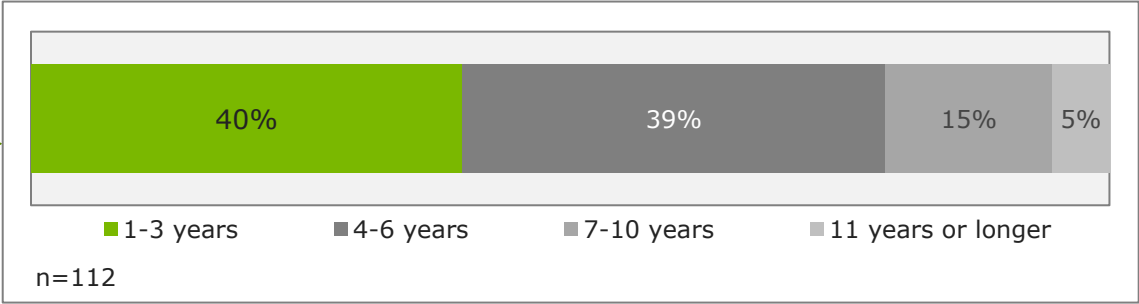


HA Owner (1<sup>st</sup> HA):

Thinking back before you acquired your first hearing aid: How many years have passed since you became aware of your hearing loss until you acquired a hearing aid?



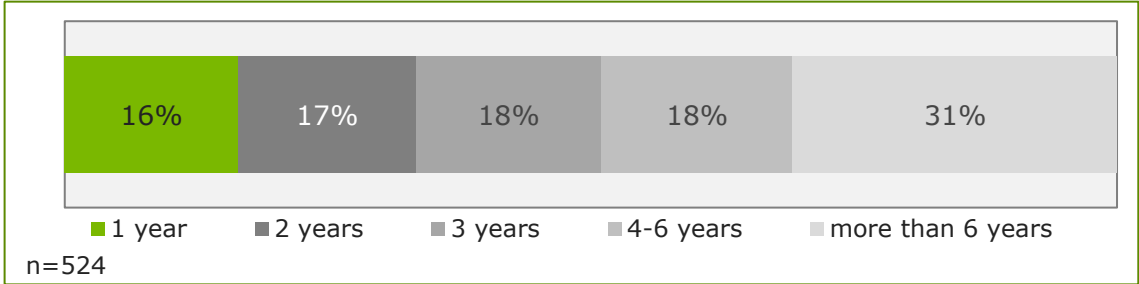
How many years did you own your previous HAs?



Age of HA before it has been replaced:  
2024: 5 years (median)  
2021: 5 years (median)

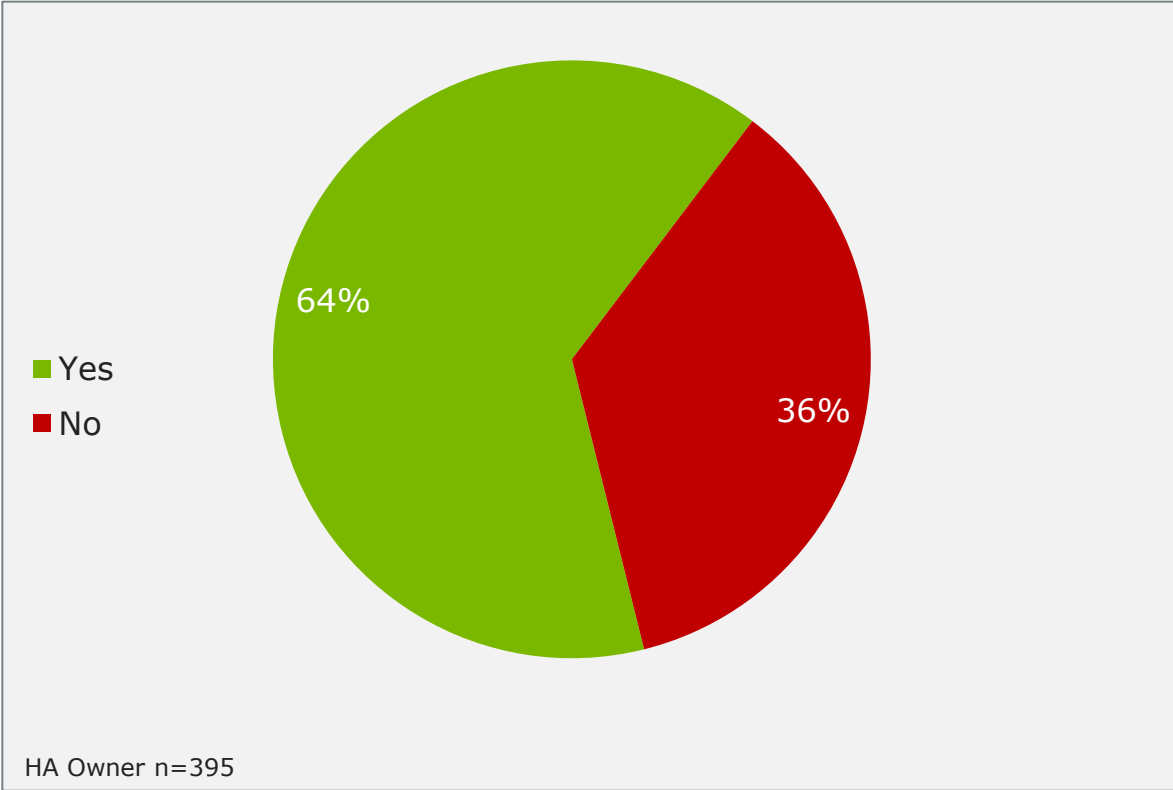
HA Non-owner:

How many years had passed since you became aware of your hearing loss?

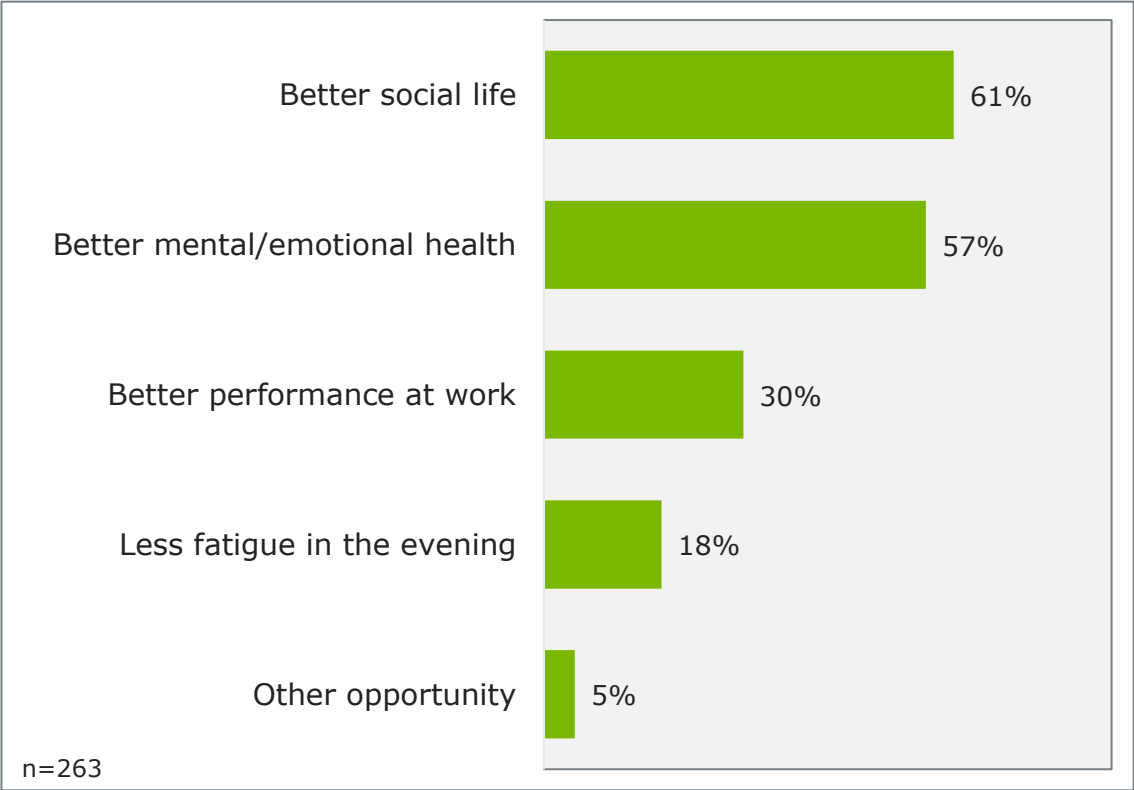


# 64% of all HA owners think they should have gotten their HAs sooner! The main reason is missing out on social life and mental/emotional health

Thinking back before you obtained your first hearing aid(s):  
do you think, you should have gotten them sooner?



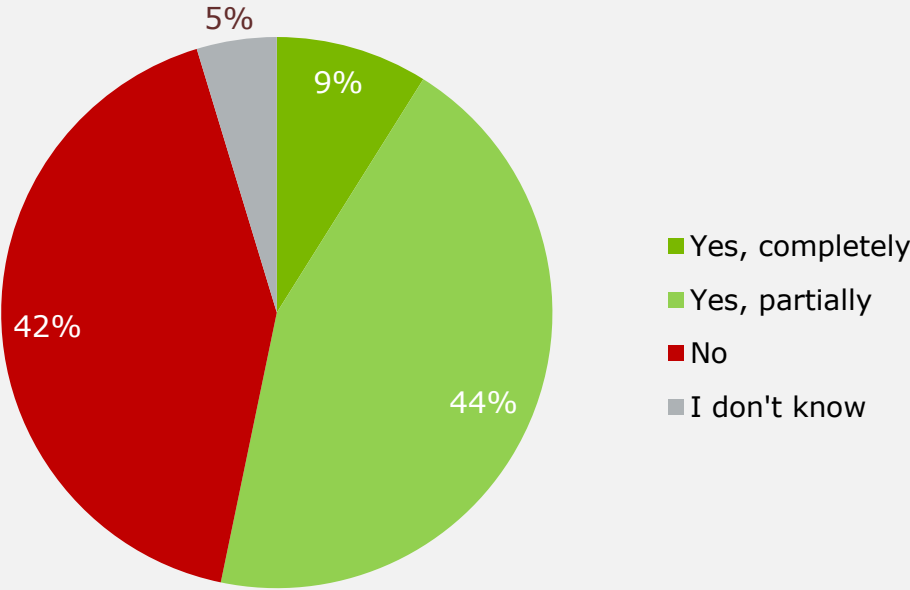
*IF YES:*  
What are the reasons why you think you should have gotten your hearing aid(s) sooner? What are the opportunities you think you have missed because of this? Please tick all that apply.



53% claimed some 3rd party reimbursement.  
Only 19% of the hearing impaired without hearing aids think that a third party would pay for any part of hearing aids – most don't know

**HA Owner:**

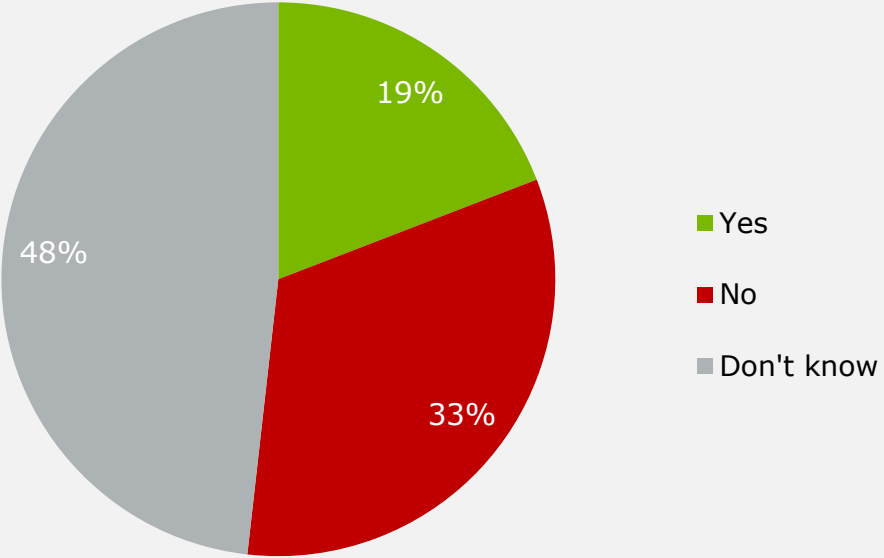
Has your hearing aid been fully or partially paid for by a third party organization (Insurance, Government...)?



HA Owner n=395

**HA Non-owner:**

Based on your current knowledge, would any part or all of your hearing aid(s) be paid for by a third party (Insurance, Government...)?



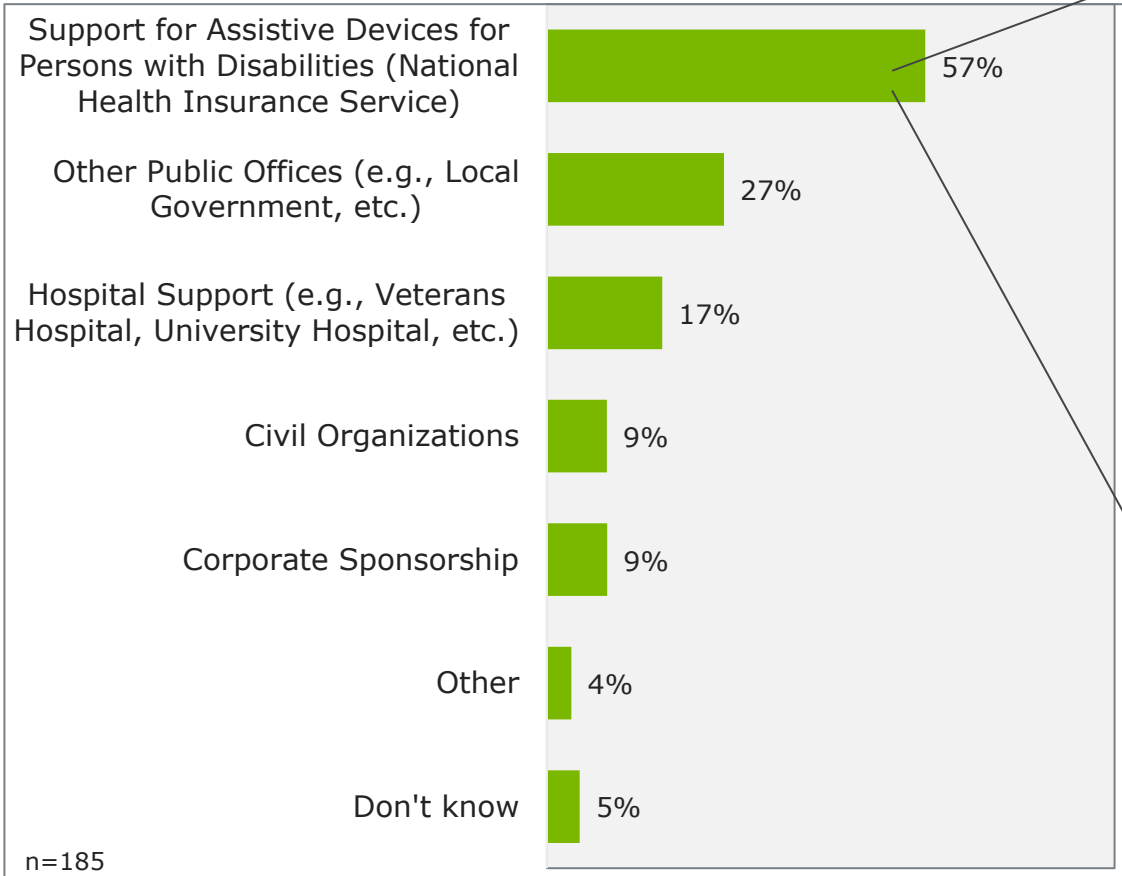
HA Non-owner n=618



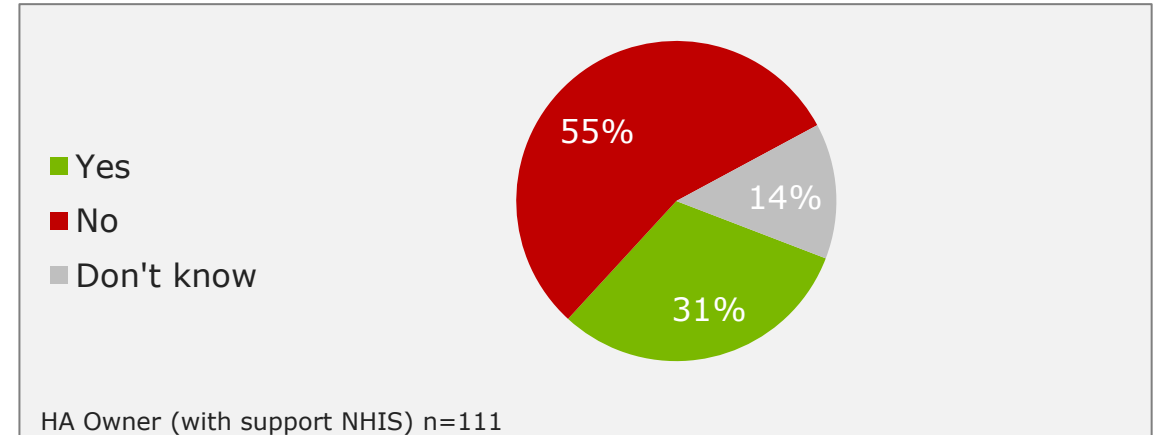
# Details third party payment

## IF 3<sup>rd</sup> party payment: YES

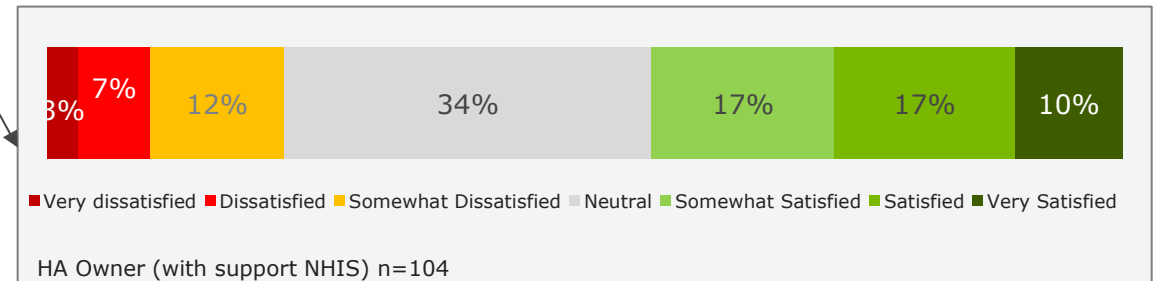
If you received hearing aids through a third-party purchasing route, where is the source of the support?



Have you ever claimed follow-up fitting management costs?

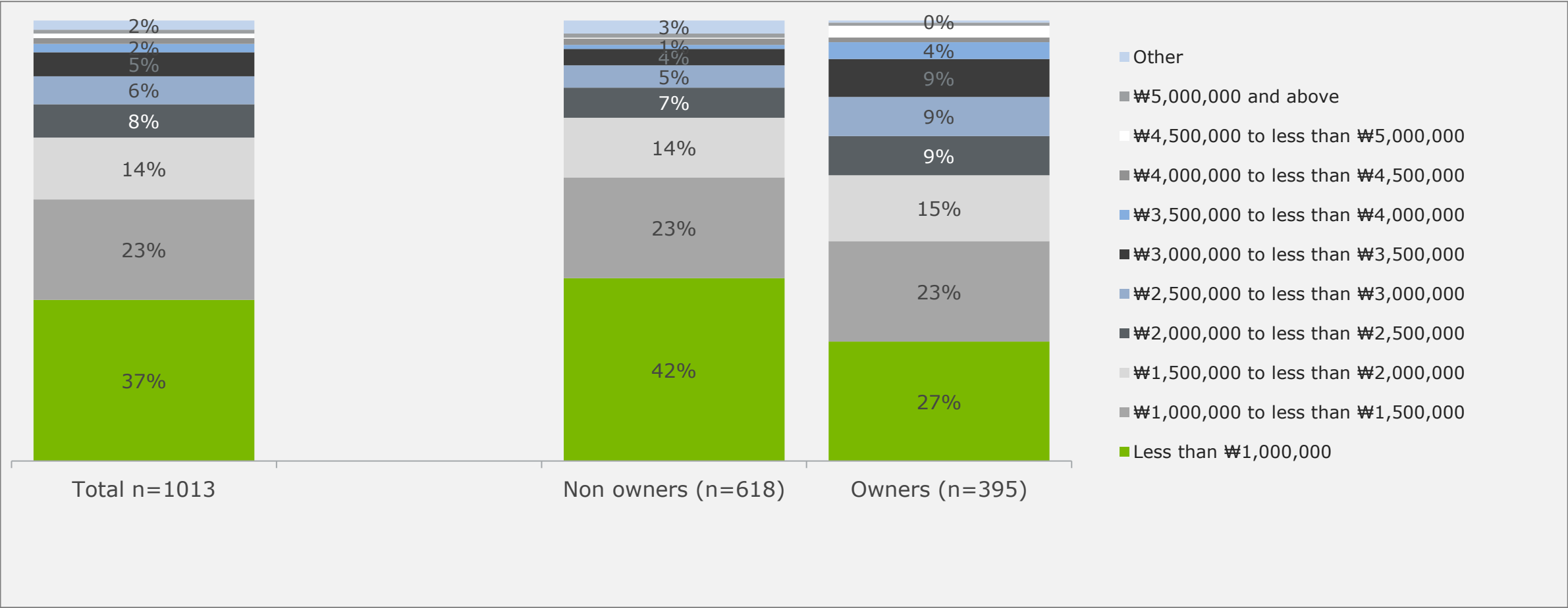


How satisfied are you with the product/service/follow-up fitting management costs?



# Estimated price for hearing aids

What do you consider to be the appropriate price for hearing aids?

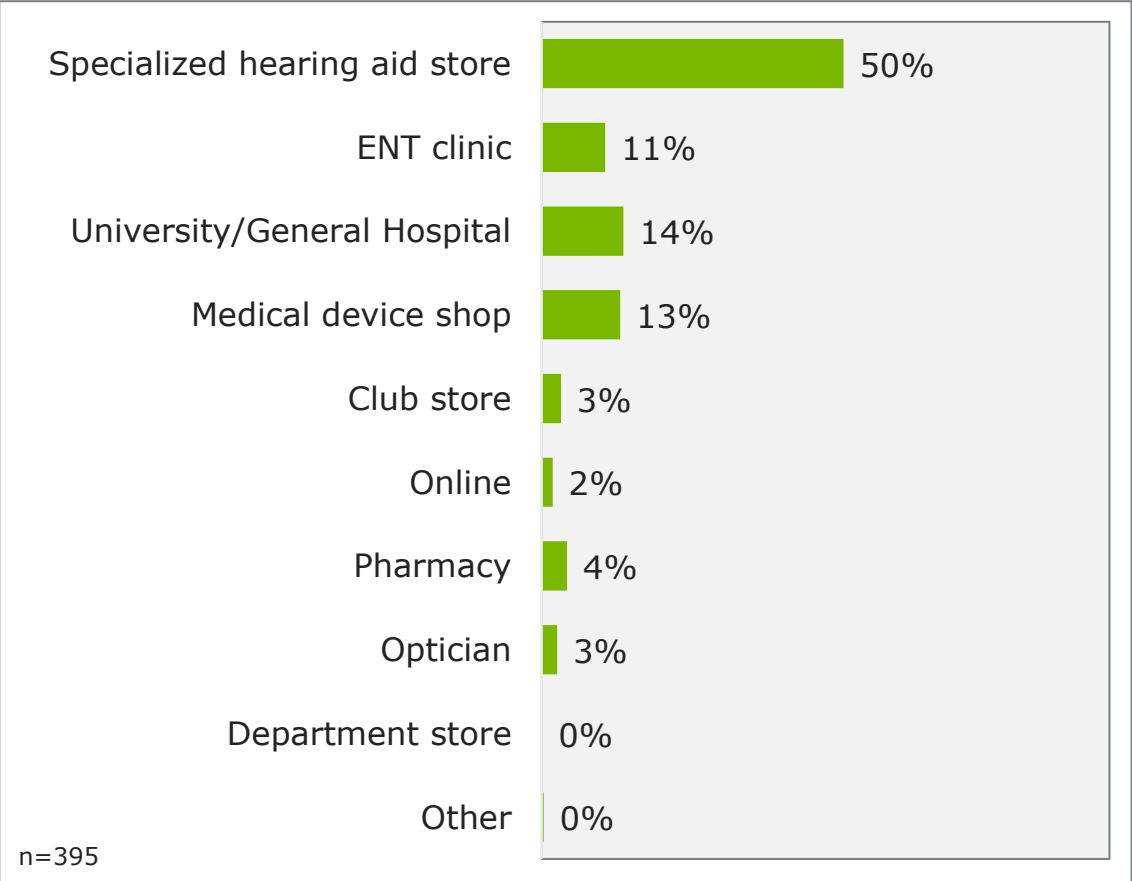




# A specialized hearing aid store is the preferred place for obtaining hearing aids (both for owners and non-owners)

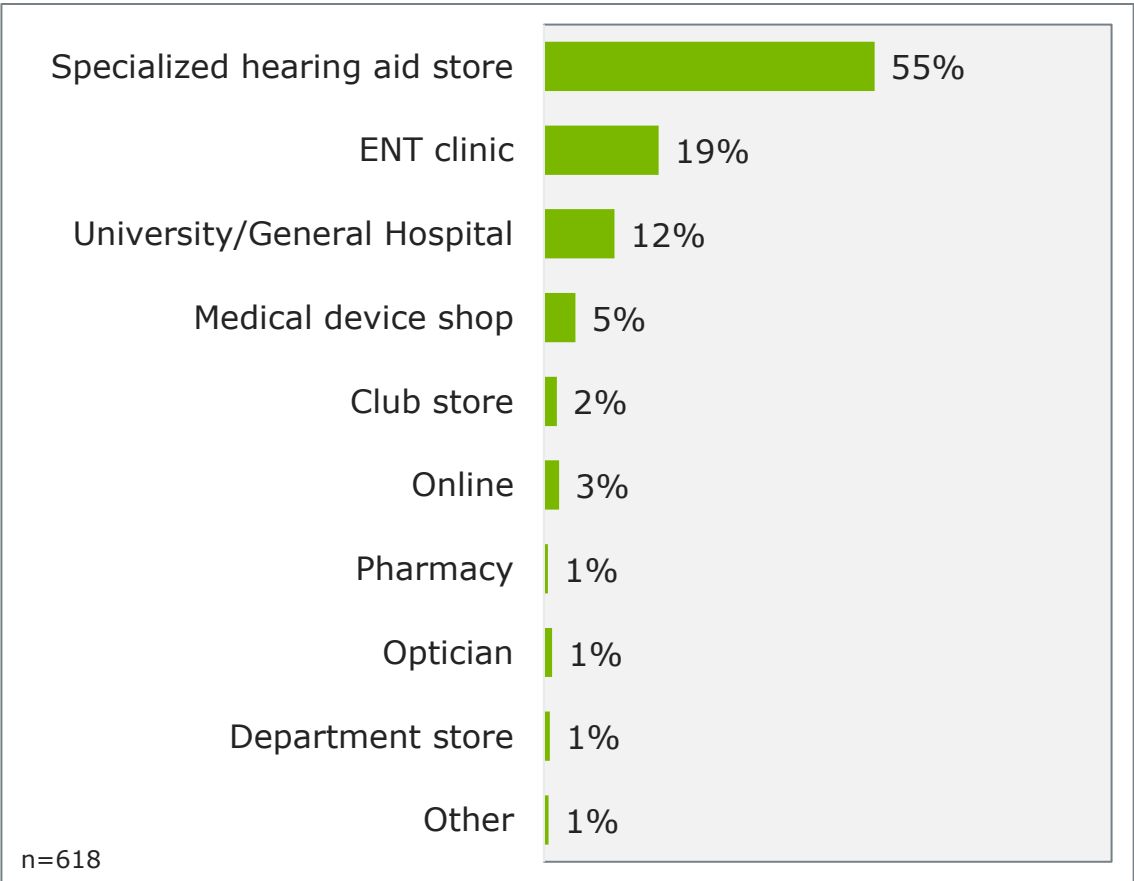
## HA Owner:

Where was your most current hearing aid obtained?



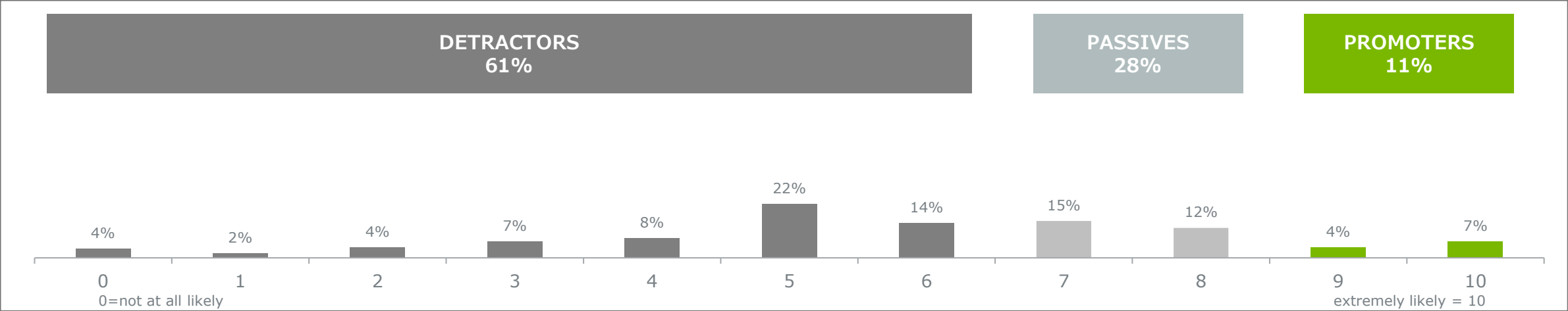
## HA Non-owner:

If you were to get hearing aids, where would you go?



# Recommendation intention of the place where the hearing aid(s) have been obtained: NPS score of -50

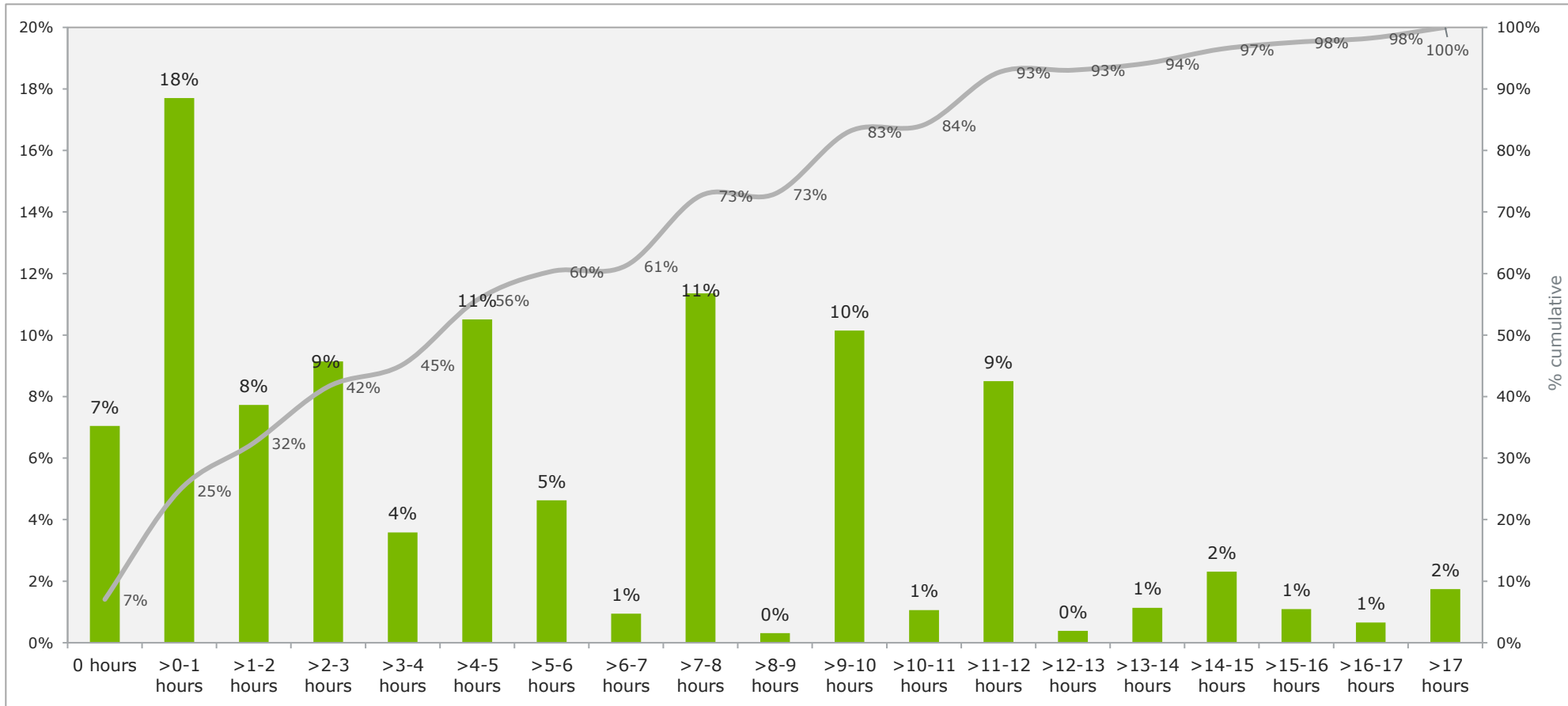
Considering your complete experience, how likely would you be to recommend the place where you obtained your hearing aids to a friend or colleague?



**NPS = PROMOTERS – DETRACTORS = -50 (2021: -33)** (exact figure rounded)

# On average, HAs are worn 5.9 hours a day

How many hours a day are HA worn?



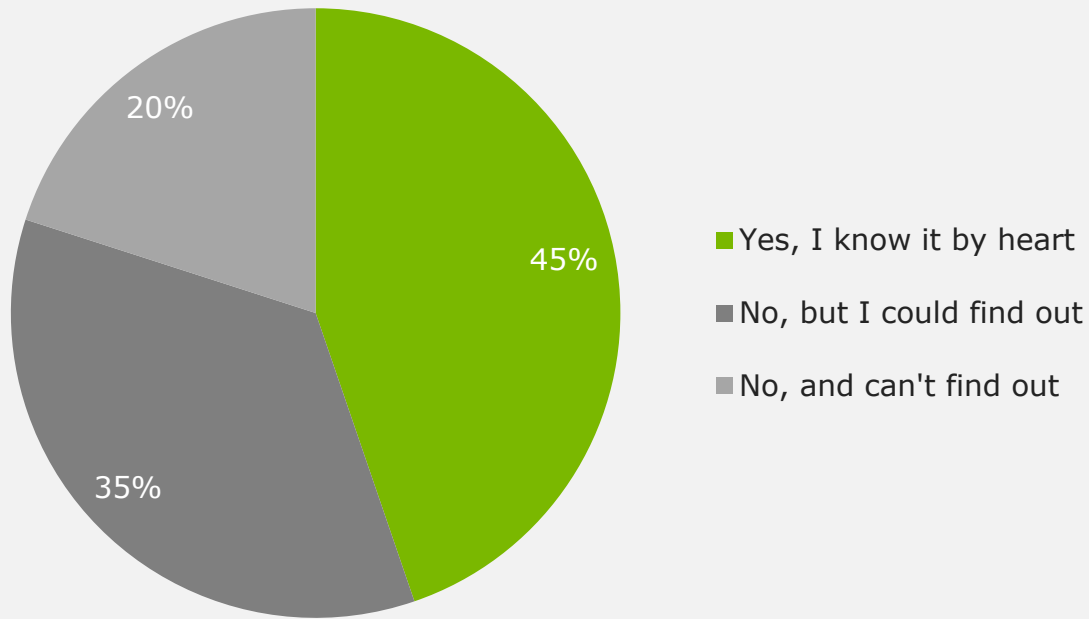
**HA worn:**  
2024 Mean: 5.9 hours/day  
2021 Mean: 5.7 hours/day

**In the drawer (0 hours):**  
2024: 7%  
2021: 5%

HA Owner n=395

# 45% of today's hearing aid owners are aware of their hearing aid brand

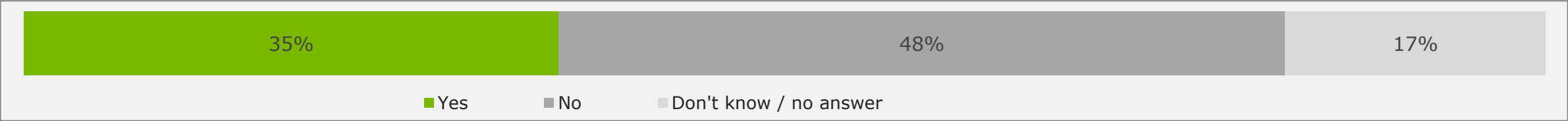
Are you aware of the brand of your hearing aid(s)?



HA Owner n=395

# 33% of the HA owners use a hearing aid app, and 47% are satisfied with it

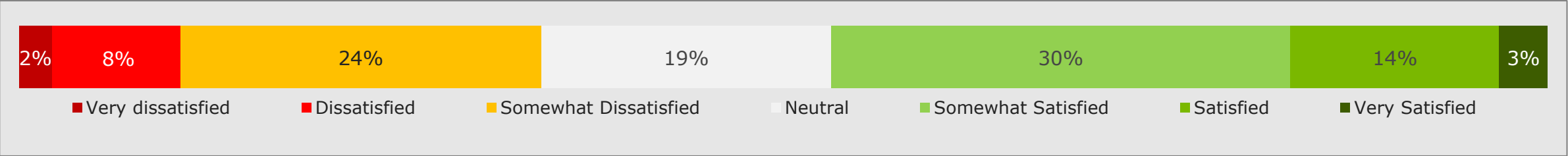
Have you been informed by your hearing care professional about hearing aid apps?  
(HA Owner n=395)



Do you personally use apps for your hearing aids?  
(HA Owner n=395)

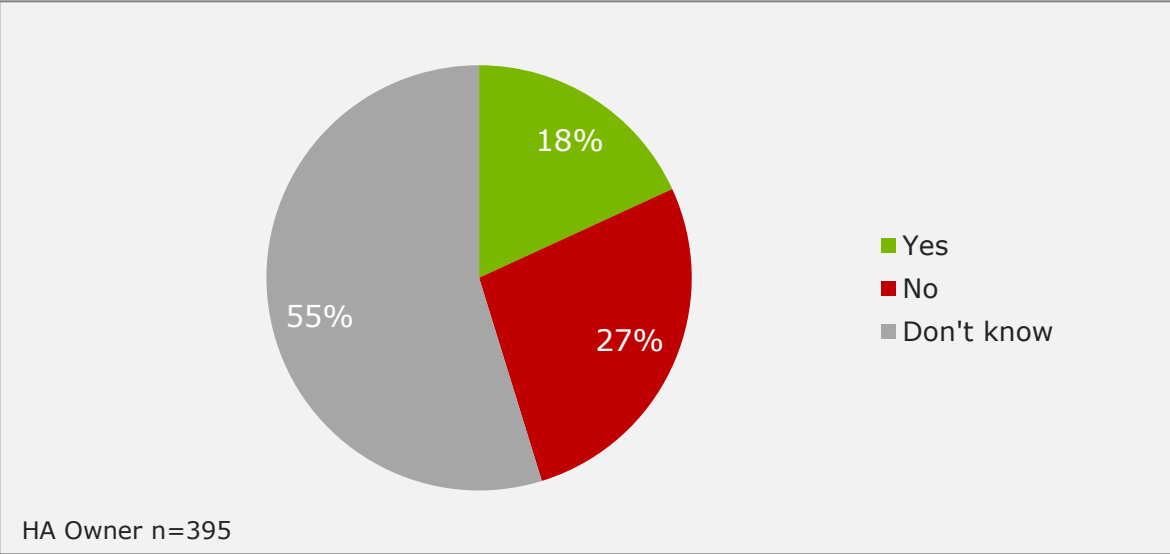


IF APPS USED (n=137):  
Overall, how satisfied with the performance of your apps?

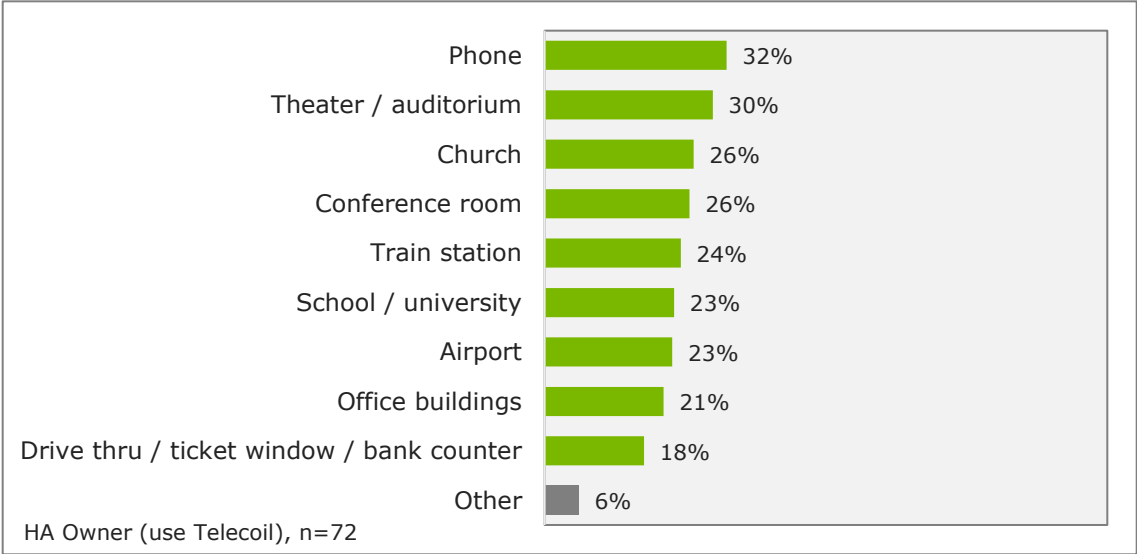


# 18% of the HAs are (to the knowledge of the owners) equipped with Telecoil — the main usage of telecoil is in the phone

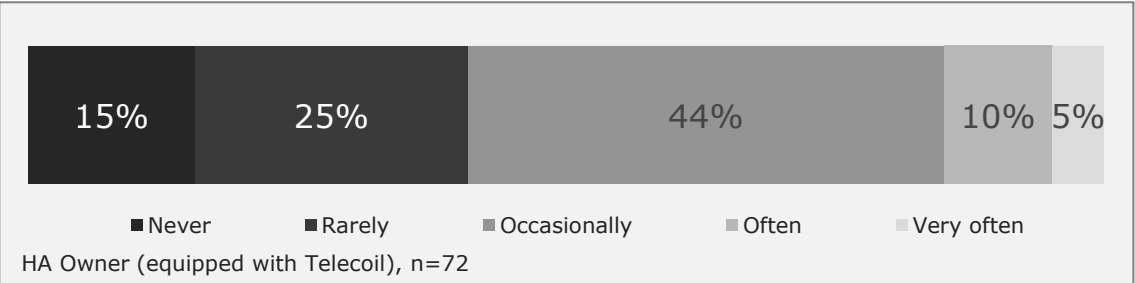
Are your hearing aids equipped with Telecoil?



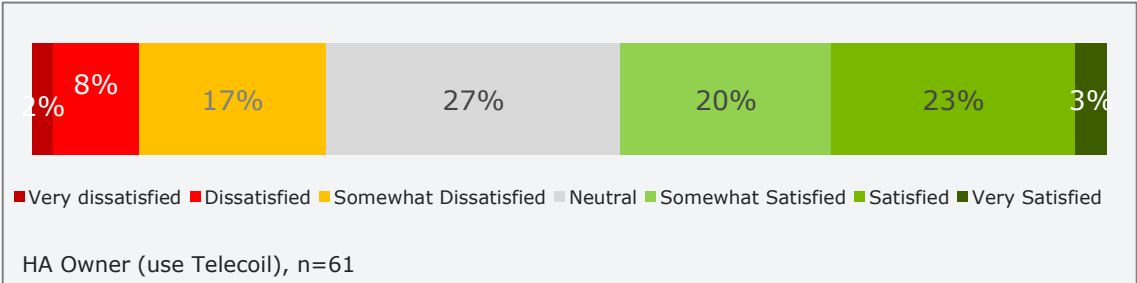
Where do you use your telecoil to improve your hearing?



How often do you use the telecoil to improve your hearing?

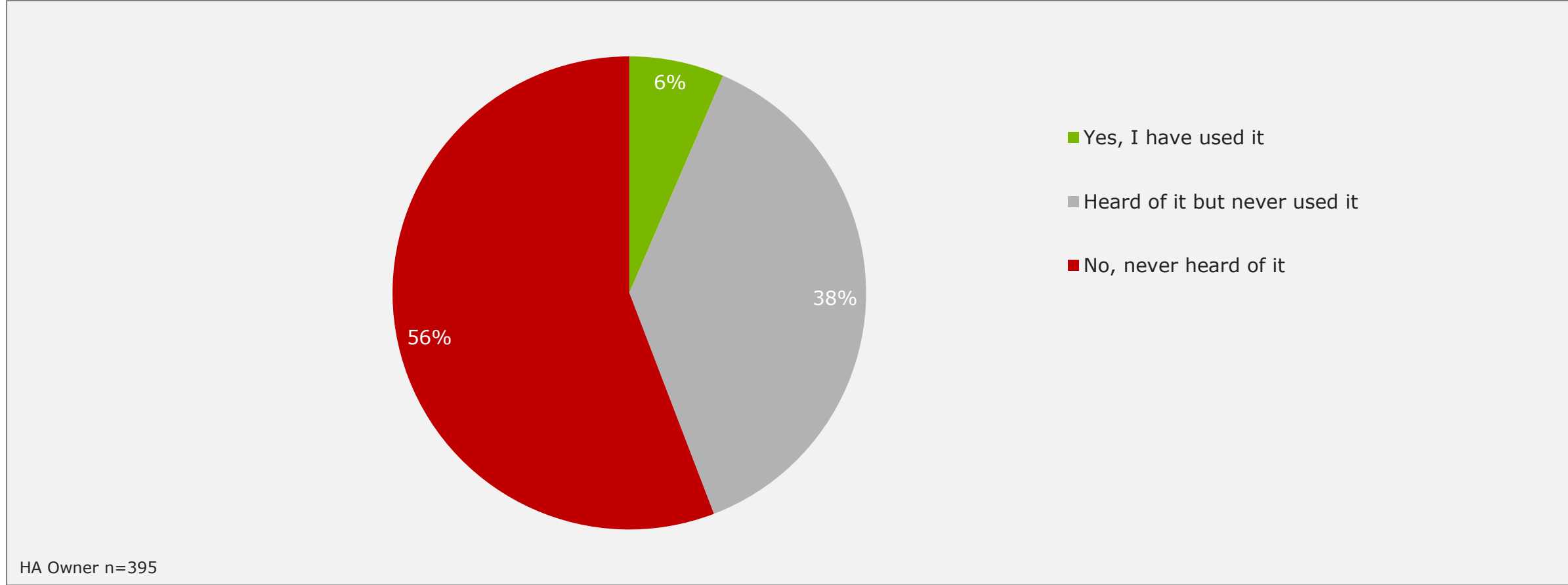


How satisfied are you with the telecoil option?



# 6% of the HA owners have already used remote fitting, 38% have at least heard of it, and 56% have never heard of it

Have you ever heard of Remote fitting for your hearing aids?  
 (Remote fitting: enables your hearing care professional to fit and fine-tune hearing aids from a distance (in real-time via video chat via an app), so that you don't need to leave your house to get your hearing aids adjusted)

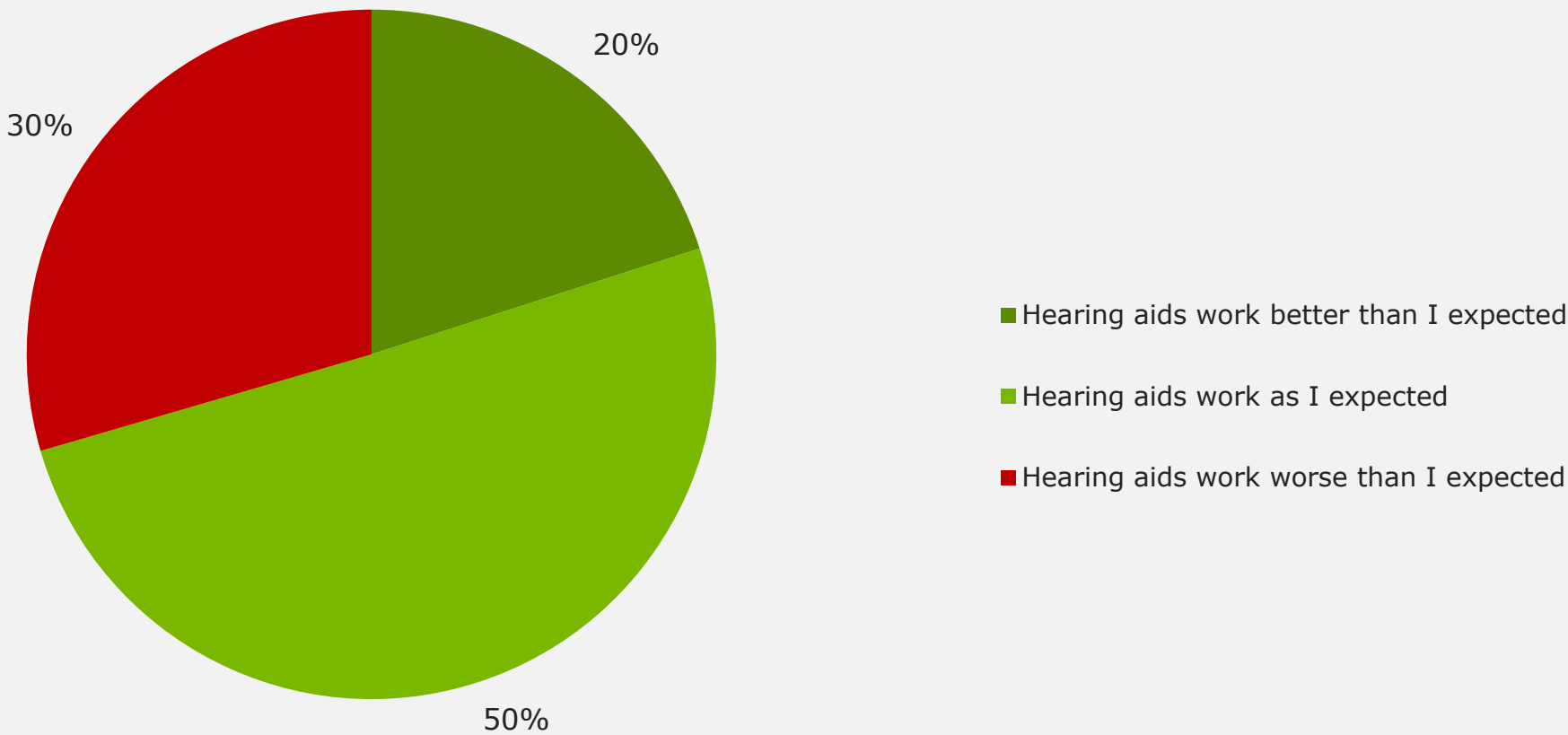


# Satisfaction with hearing aids and drivers



# 70% of hearing aid owners say their hearing aid works better than or as expected

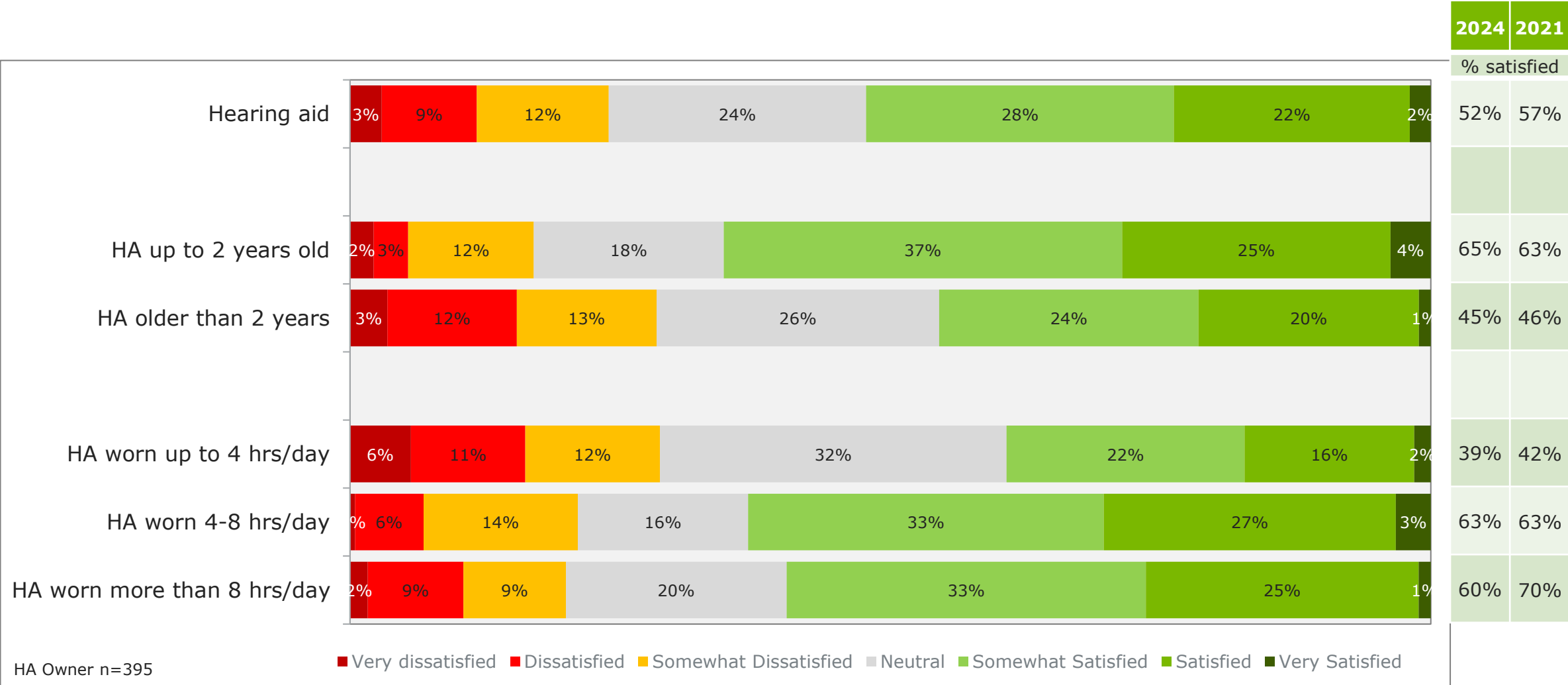
How have the expectations you had towards hearing aids before trying them on for the first time been met?



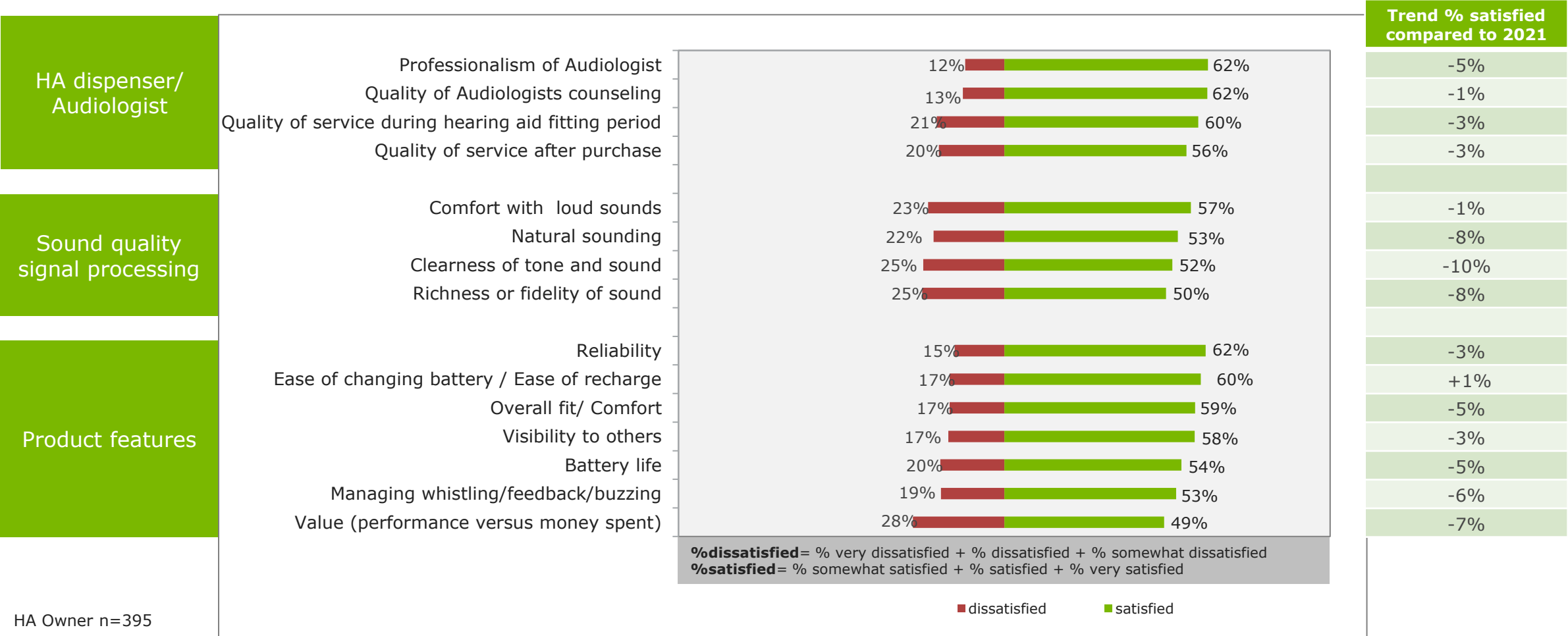
HA Owner n=395



# Overall satisfaction with HA: 52% of hearing aid owners are satisfied with their hearing aid(s)



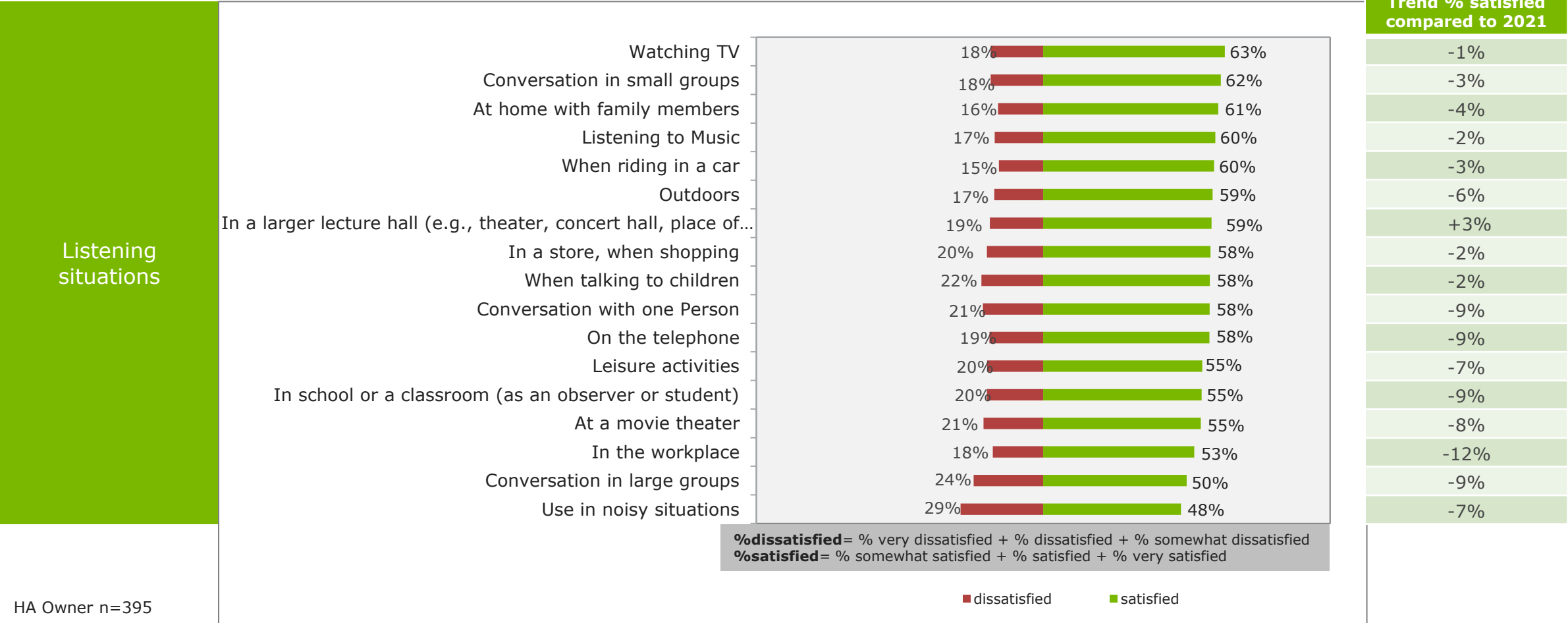
# Satisfaction with current hearing aids



HA Owner n=395



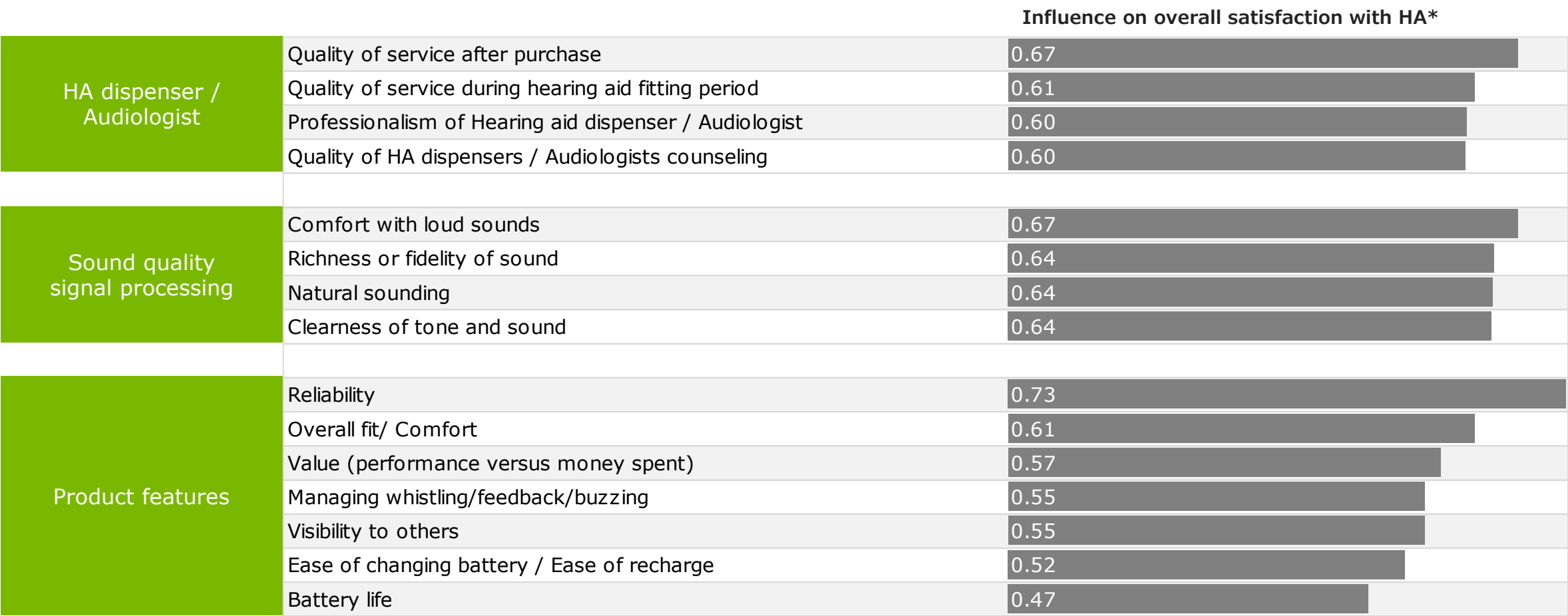
# Satisfaction with current hearing aids



HA Owner n=395



# Factors influencing satisfaction with current hearing aids the most are: Reliability and Quality of service after purchase

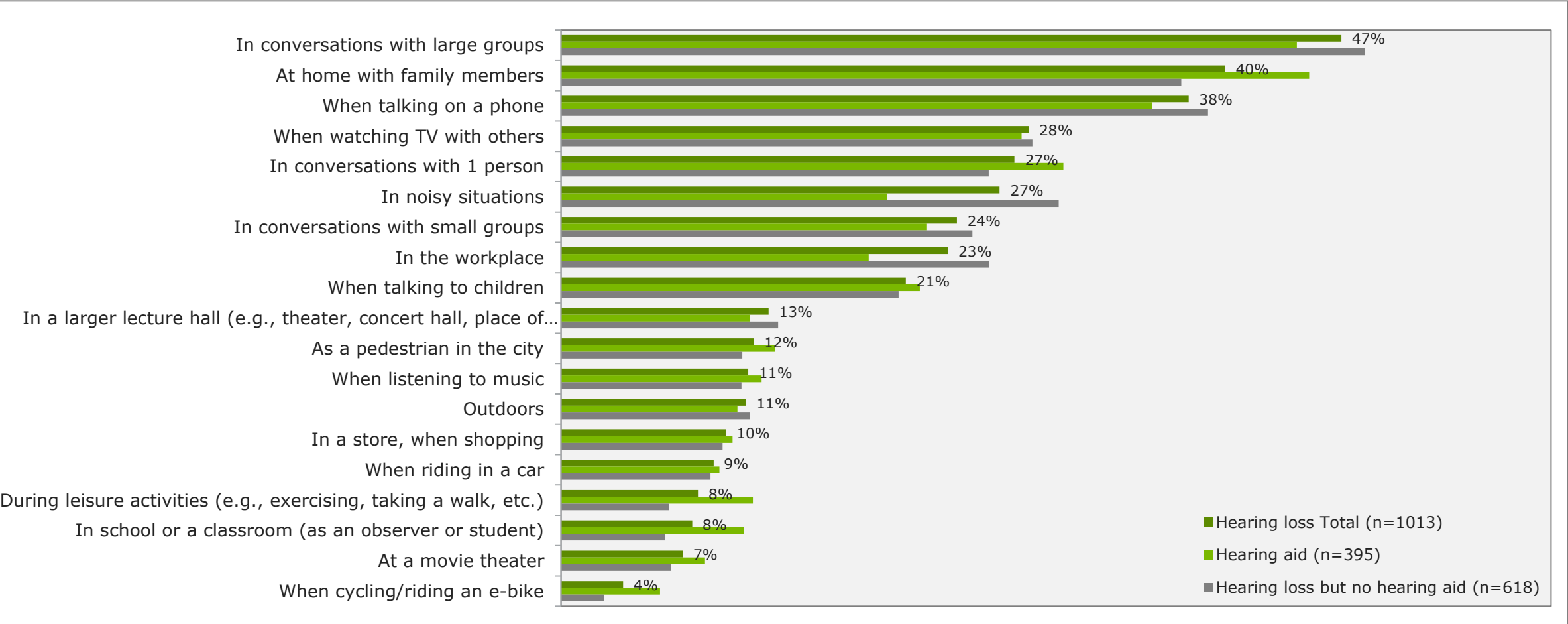


HA Owner n=395

\*The Influence has been calculated with a correlation: 0 means no relation between a criterion and overall satisfaction, 1 means a maximal relationship.

# The most important listening situations are conversations in large groups, interactions at home with family members, and phone conversations

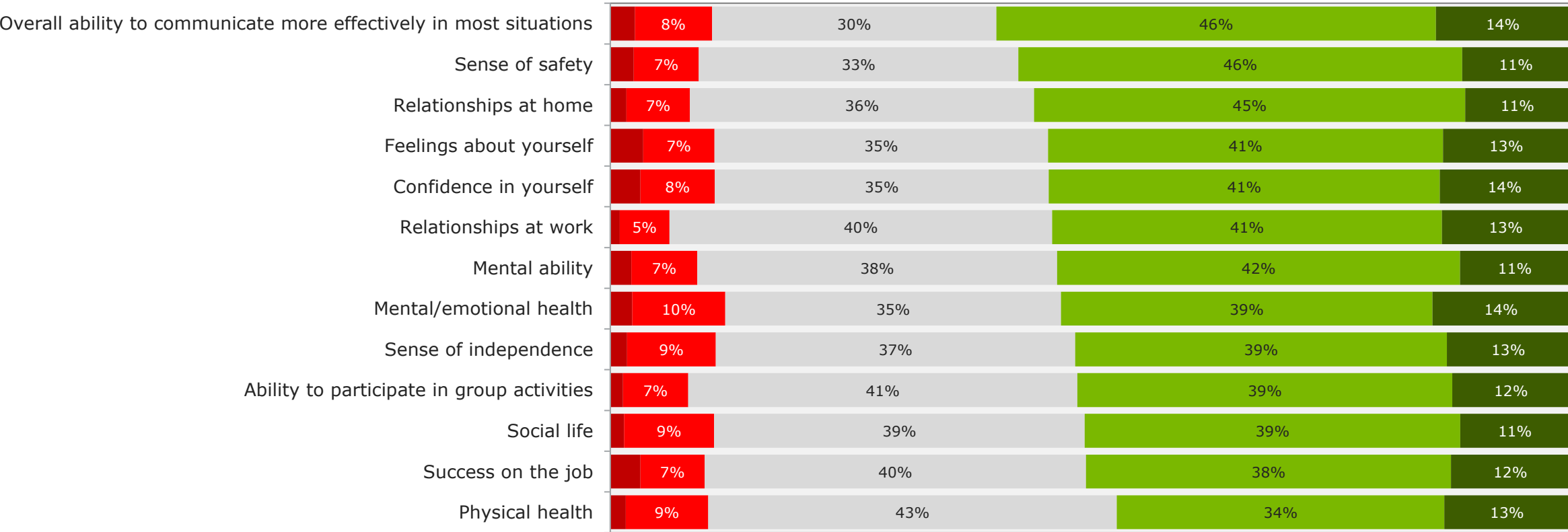
In which of these situations is it most important for you to hear well? (choose up to 5)



# Positive impact of hearing aids, quality of life

# Hearing aids positively impact overall communication effectiveness, a sense of safety, and many other aspects of life

Since you started using your hearing aid(s), please rate the changes you have experienced in each of the following areas, that you believe are due to your hearing aid(s).



HA Owner n=395

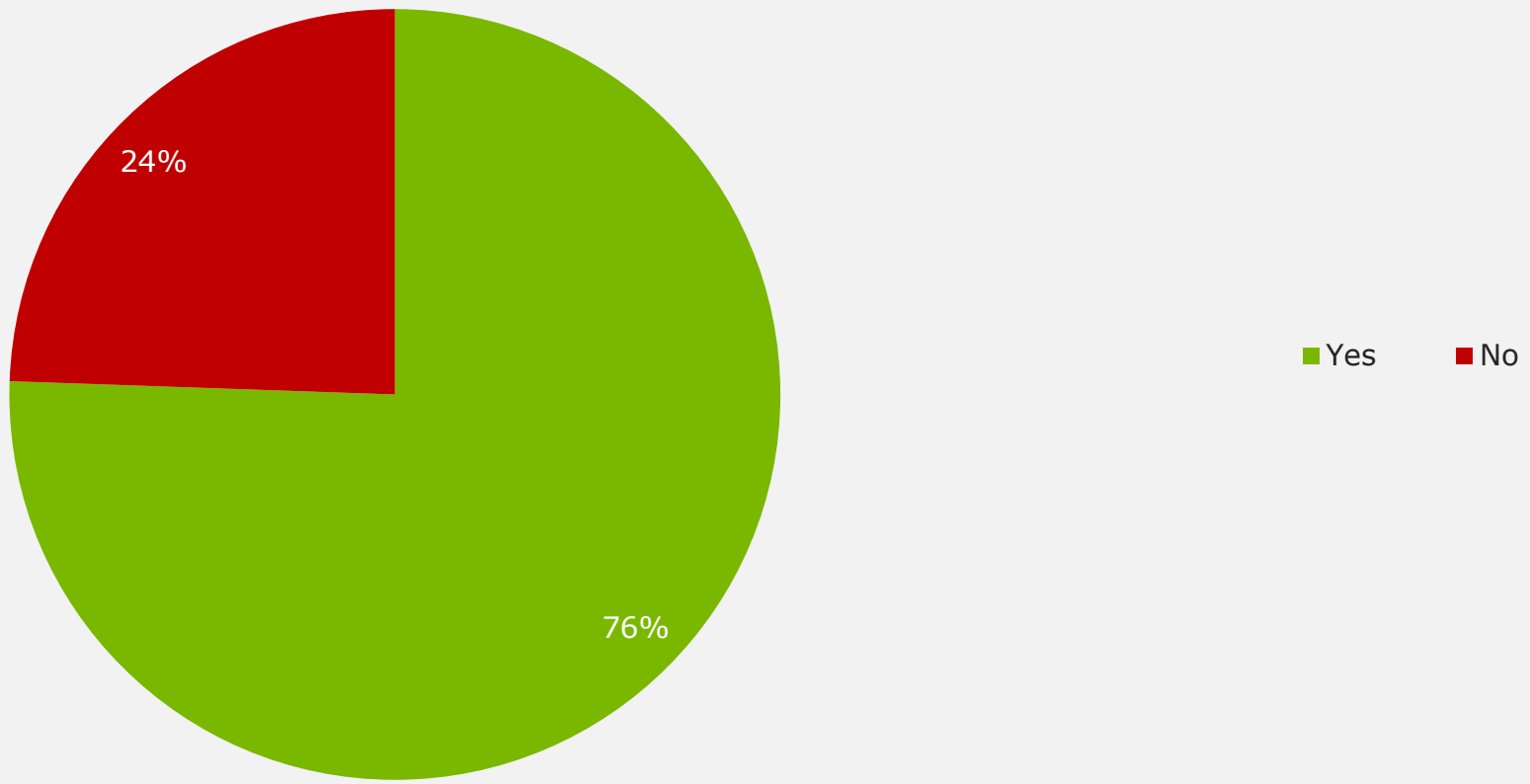
■ a lot worse ■ worse ■ the same ■ better ■ a lot better





# 76% of hearing aid owners feel more confident moving in a city since wearing hearing aids

Since wearing a hearing aid, do you feel more confident moving in a city, e.g. because you hear traffic signals/vehicles approaching?

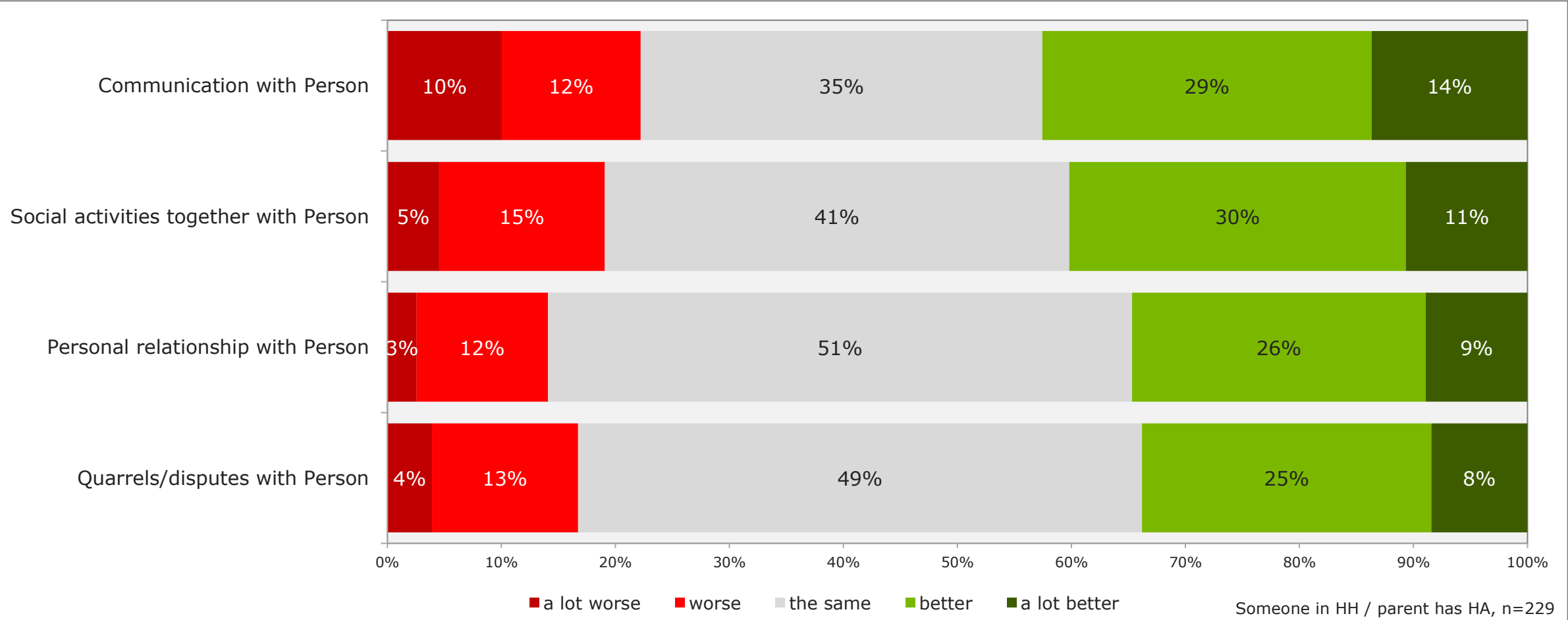


HA Owner n=395



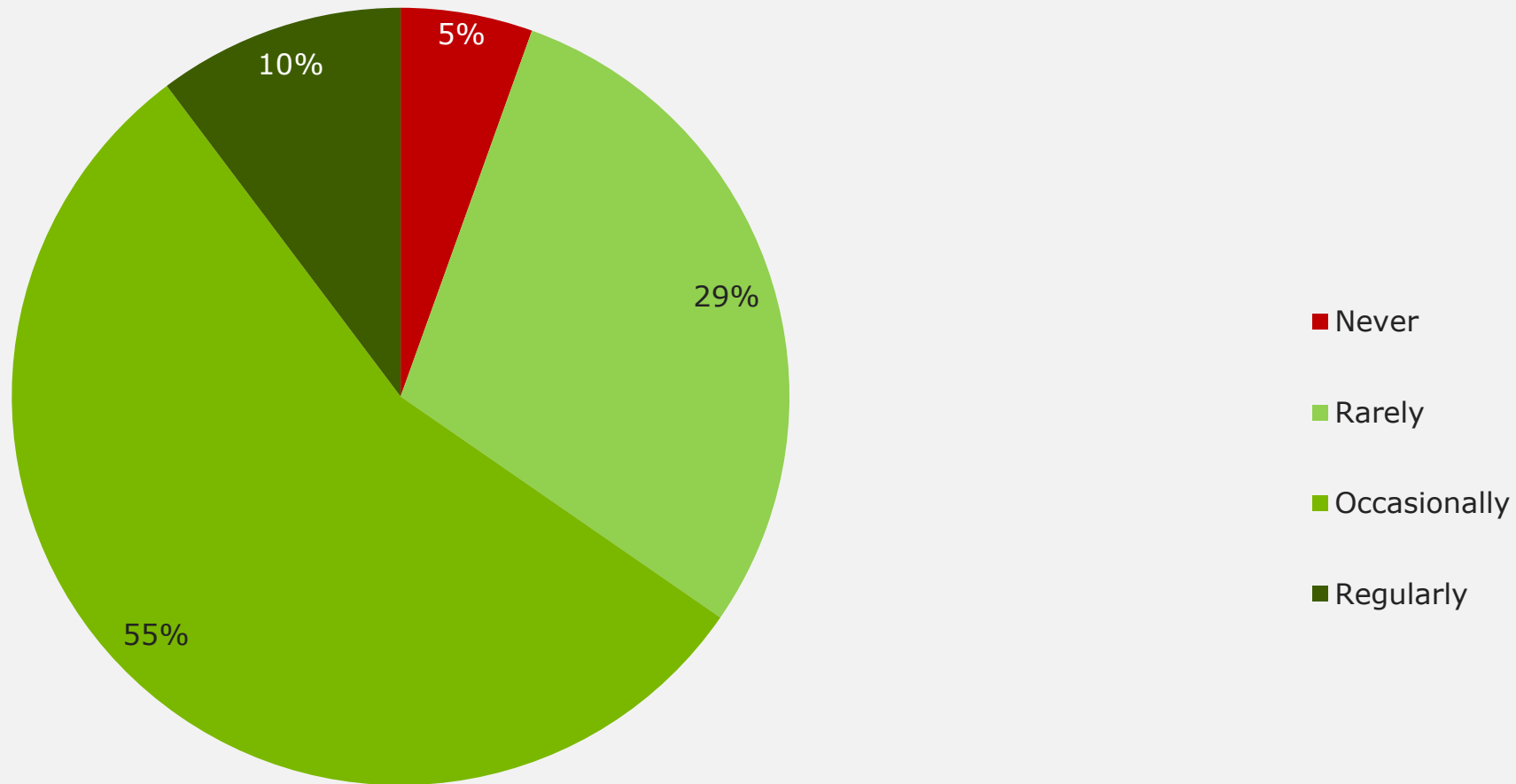
# When someone with hearing loss wears hearing aids, it also improves the situation for others in the household

How did the following aspects change since person X is wearing hearing aids?



# 95% of hearing aid owners declare that their hearing aids improve their quality of life at least sometimes

How often do your hearing aids improve your quality of life?



HA Owner n=395

## 4. Analysis of hearing impaired non-owners

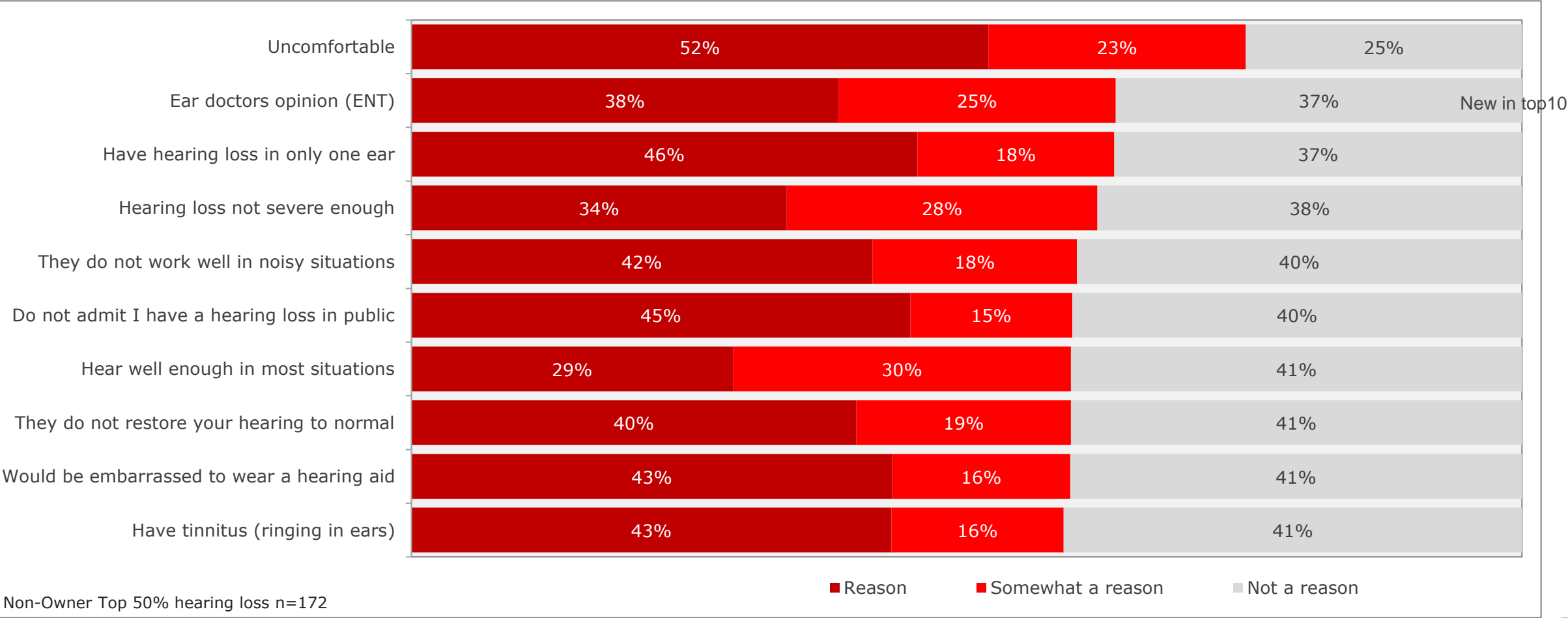
To analyze reasons for non-adoption, we will examine the Top 50% HL group, as their hearing loss structure is more similar to that of HA owners

Hearing loss characteristics: Owners compared to Non-owners

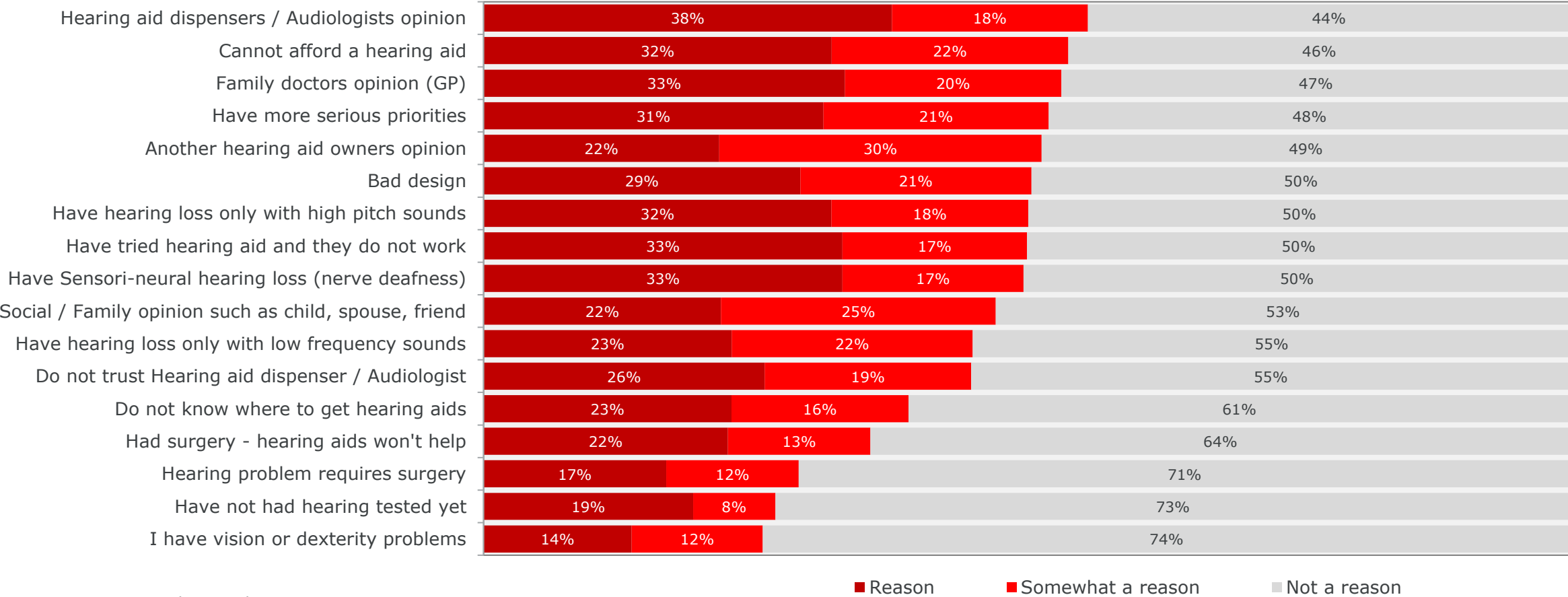
	HA Owner n=395	HA Non-owner low 50% HL n=279	HA Non-owner Top 50% HL n=172
<b>Ears impaired</b> (stated)			
Unilateral loss	33%	66%	46%
Bilateral loss	67%	34%	54%
<b>Perceived loss</b>		More similar hearing loss-structure	
Mild	17%	64%	21%
Moderate	40%	25%	41%
Severe	32%	8%	30%
Profound	11%	3%	8%

# Reasons for not having hearing aids

# Top 10 reasons for not having a hearing aid



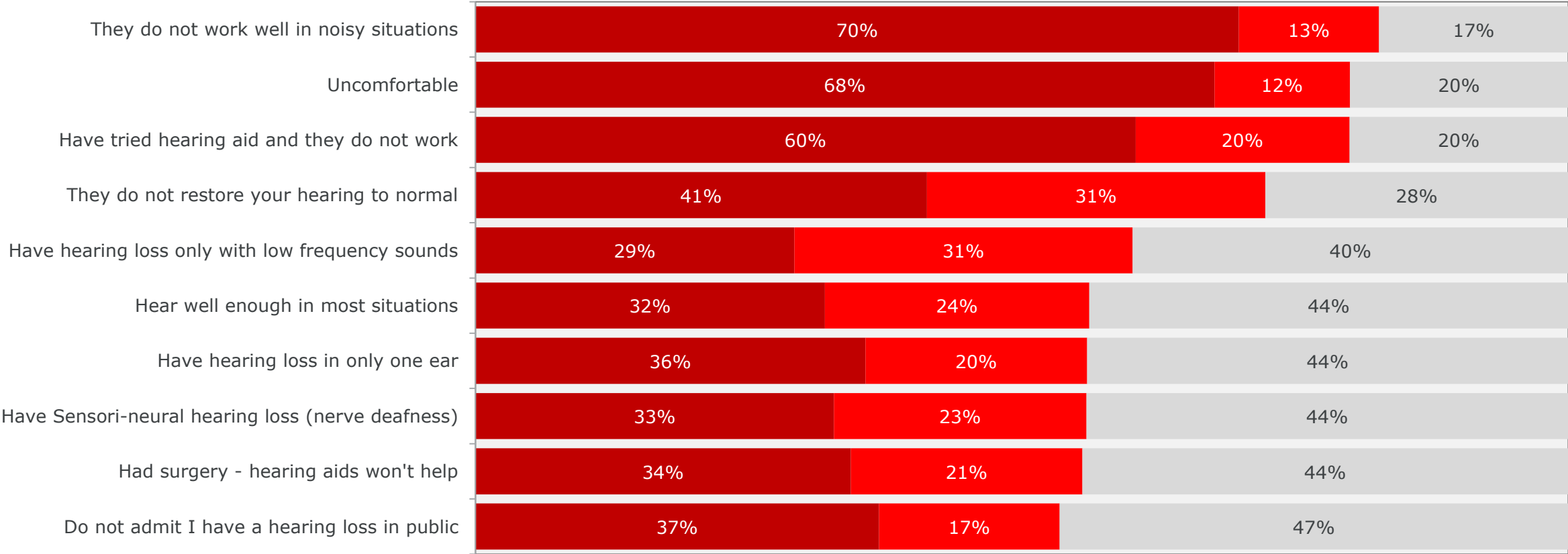
# Less important reasons for not having a hearing aid



Non-Owner Top 50% hearing loss n=172



# Top 10 reasons for HA owners NOT using them



HA Owners who don't use, n=27 (low sample!)

Reason      Somewhat a reason      Not a reason

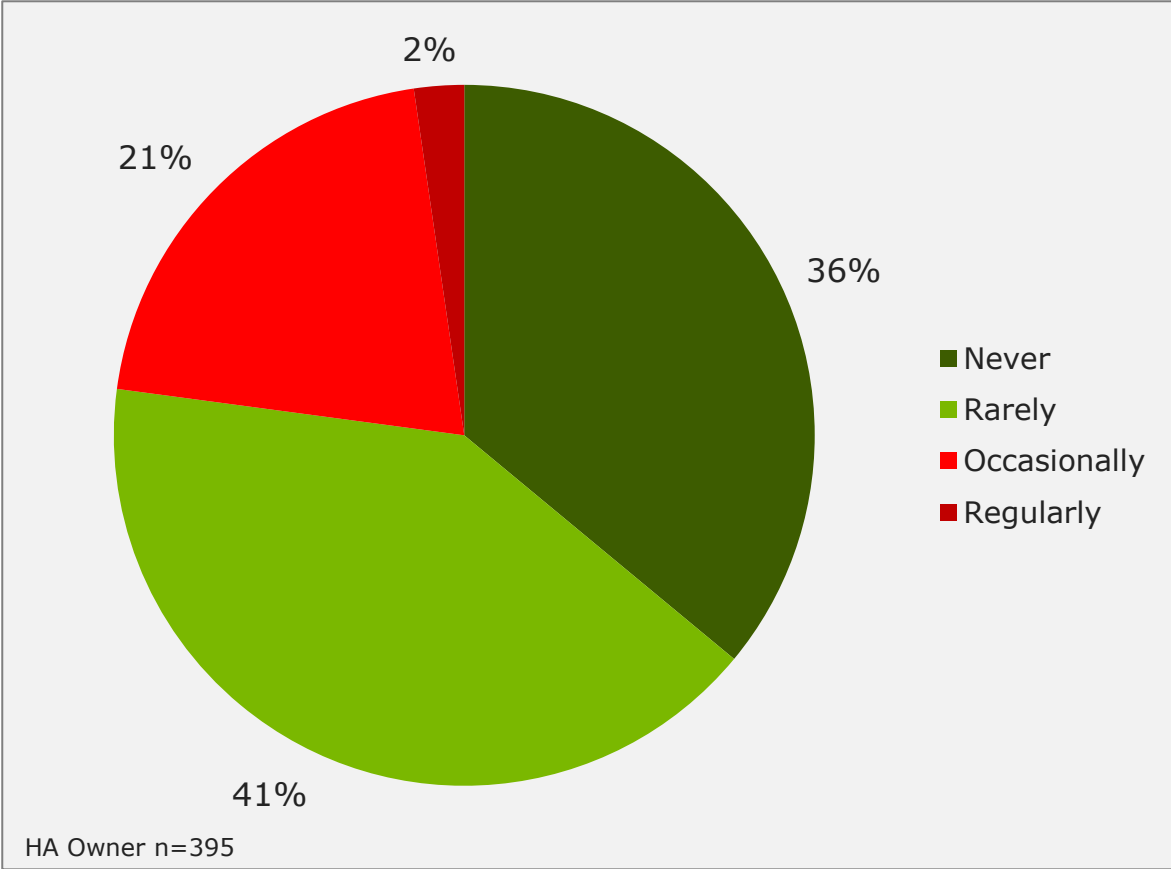


Social rejection because of hearing loss compared to the acceptance of hearing aids

36% of hearing aid owners feel that people never make fun of or reject them because of their hearing aids. It is more likely that somebody makes fun of or rejects a hearing impaired without a hearing aid

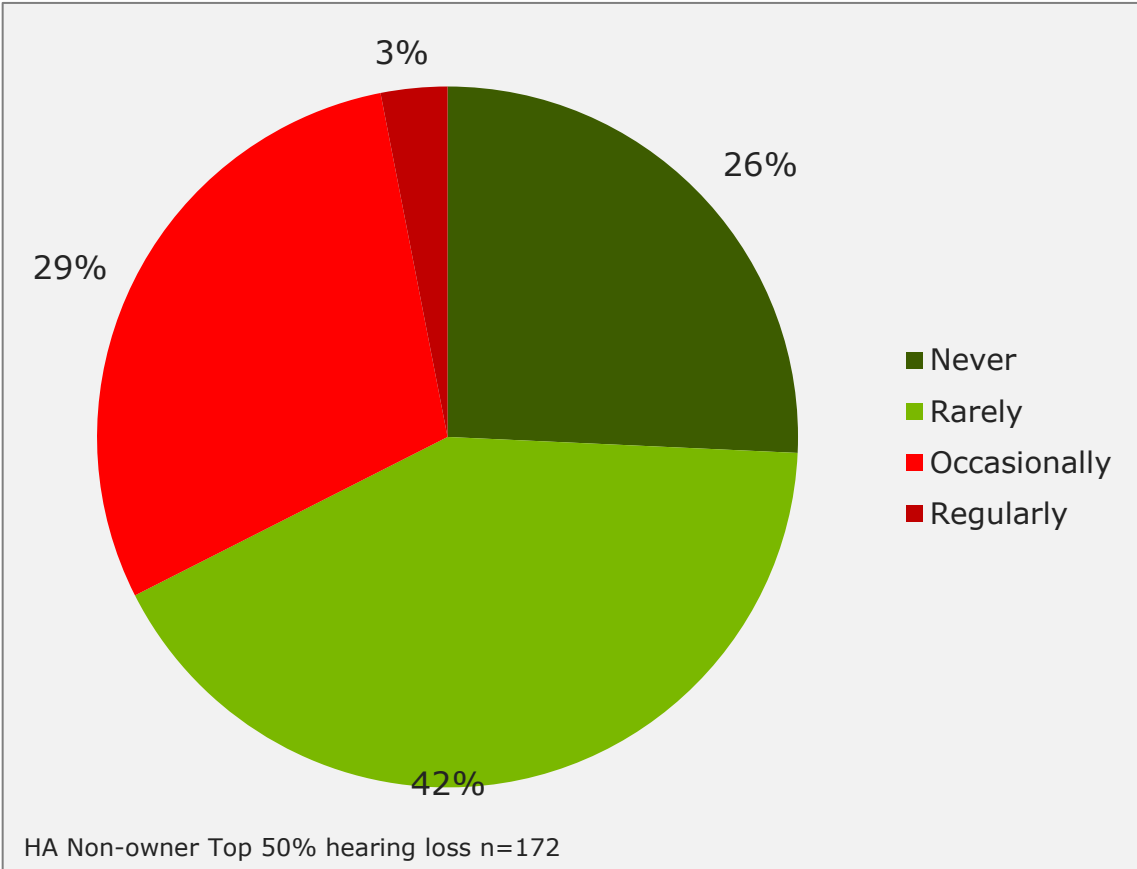
**HA Owner:**

How often do you feel you are made fun of or rejected because you are wearing a hearing aid?



**HA Non-owner:**

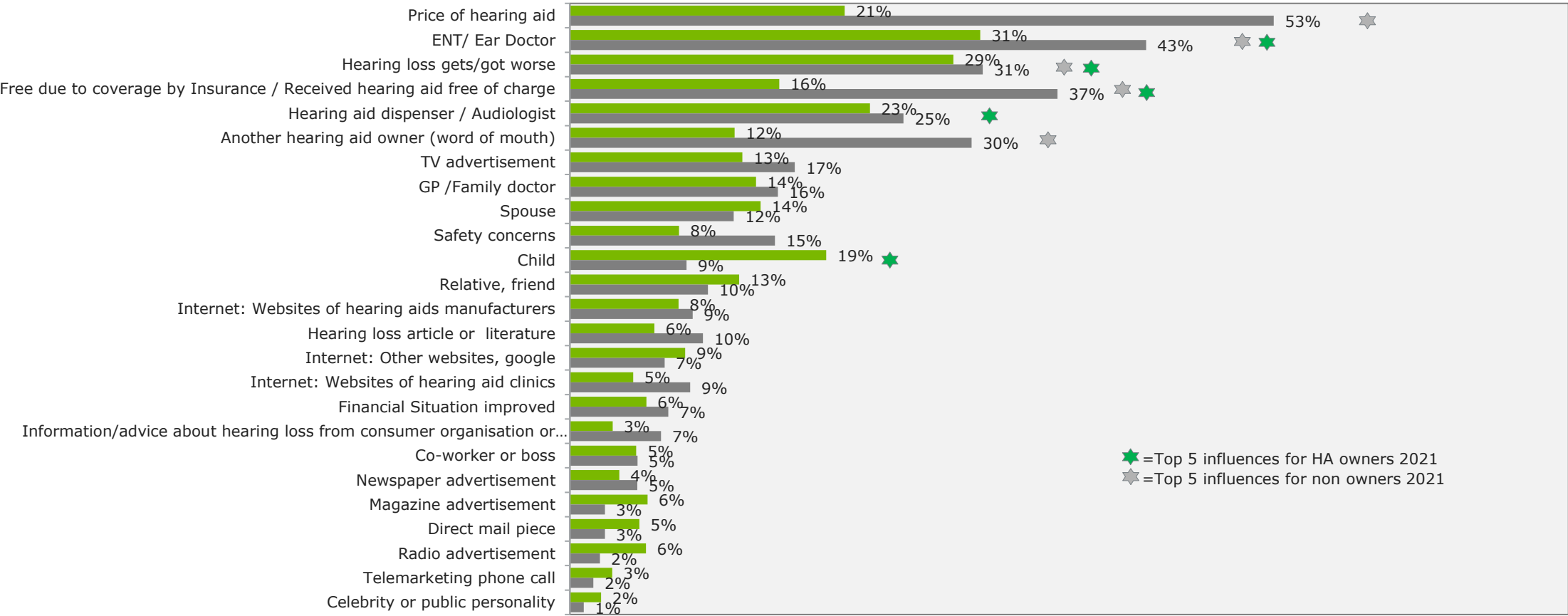
How often do you feel you are made fun of or rejected because of your hearing loss?



# Most important triggers to buy

# Key factors for hearing aid ownership were ENT advice, worsening hearing loss, and audiologists, while non-owners found financial considerations and word-of-mouth relatively more important for potential purchases

**HA Owner:** Thinking back to when you obtained your first hearing aid(s), what influenced you to obtain /purchase the hearing aid(s)?  
**HA Non-owner:** What do you think would influence you to obtain / purchase a hearing aid ?

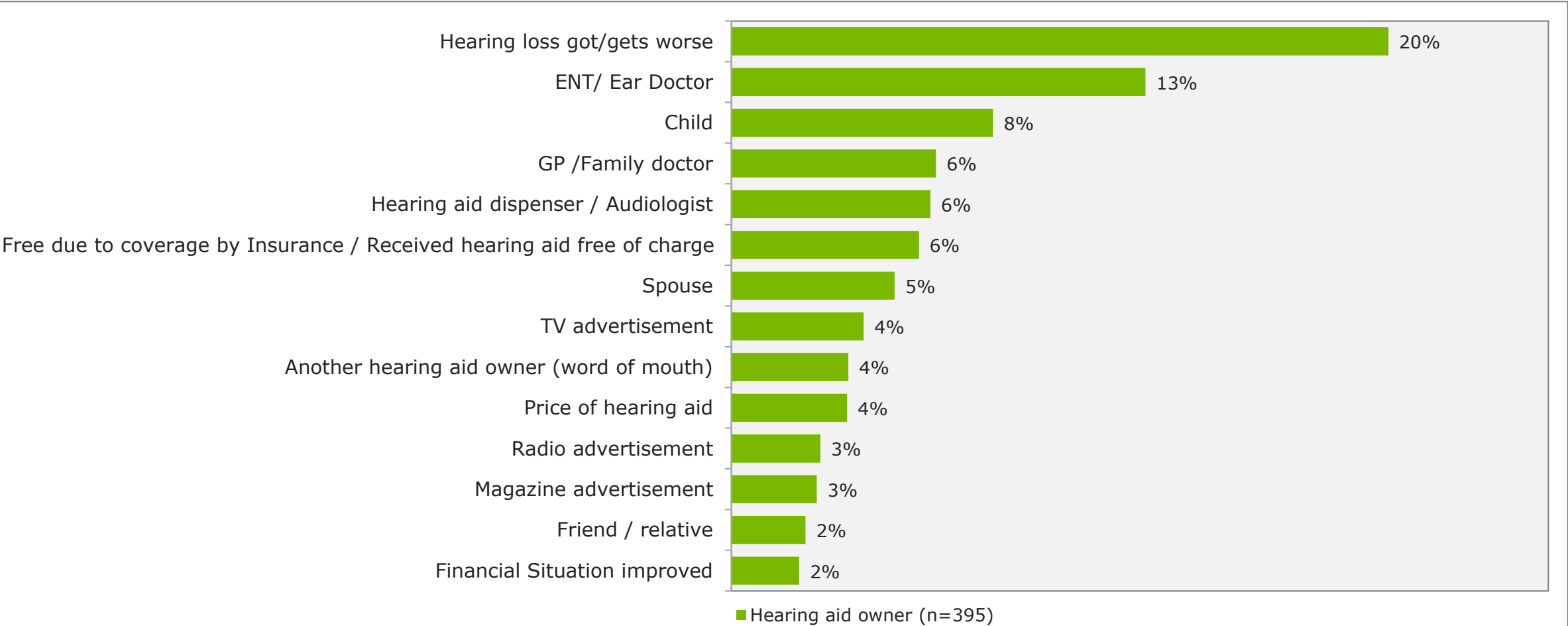


■ Hearing aid Owner (n=395)    ■ Hearing aid Non-Owner (n=618)

★ =Top 5 influences for HA owners 2021  
★ =Top 5 influences for non owners 2021

# The most crucial trigger to buy a hearing aid is worsening hearing loss, followed by the ENT

What made you finally decide to get your actual hearing aid(s)?



# Provided by:



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# APPENDIX



# Demographics (1)

## Hearing instrument adoption rates and populations

		Count	Hearing difficulty	Hearing aid adoption rate % (Base=Hearing impaired)	No hearing loss	Hearing loss but no hearing aids (HA Non-owner)	Hearing aids (HA Owner)
Gender							
	Male	7'731	5.4%	36.9%	50.1%	49.1%	54.8%
	Female	7'685	5.2%	31.7%	49.9%	50.9%	45.2%
Age							
	1 - 14	1'746	2.4%	70.2%	11.7%	2.3%	10.5%
	15 - 24	1'487	1.7%	50.3%	10.0%	2.3%	4.4%
	25 - 34	2'124	2.8%	53.5%	14.1%	5.2%	11.4%
	35 - 44	2'231	3.7%	35.0%	14.7%	10.0%	10.3%
	45 - 54	2'414	4.6%	21.3%	15.8%	16.3%	8.4%
	55 - 64	2'436	4.4%	17.6%	15.9%	16.5%	6.7%
	65 - 74	1'749	7.7%	26.9%	11.1%	18.2%	12.8%
	74+	1'230	20.9%	38.8%	6.7%	29.2%	35.4%
Type of household							
	single household	1'487	10.3%	44.2%	9.1%	15.9%	24.1%
	Couple, no kids	1'728	7.1%	43.1%	11.0%	12.9%	18.8%
	Couple with kid(s)	10'081	4.2%	29.6%	66.2%	55.3%	44.4%
	Single mom/dad with kid(s)	762	4.8%	22.0%	5.0%	5.3%	2.9%
	Retirement home, hospital etc.	144	18.1%	33.7%	0.8%	3.2%	3.1%
	Other	1'214	4.8%	32.7%	7.9%	7.3%	6.8%

# Demographics (2)

## Hearing instrument adoption rates and populations

	Count	Hearing difficulty	Hearing aid adoption rate % (Base=Hearing impaired)	No hearing loss	Hearing loss but no hearing aids (HA Non-owner)	Hearing aids (HA Owner)
<b>Status</b>						
The head of the household (alone or together with someone)	6'040	8.1%	33.2%	38.0%	60.5%	57.4%
The spouse of the head of the household	3'839	5.3%	33.0%	24.9%	25.1%	23.7%
Daughter/son of head of household	4'625	1.4%	41.2%	31.2%	7.3%	9.7%
Other person	912	7.0%	40.4%	5.8%	7.1%	9.2%
<b>Employment</b>						
Full time employed	6'306	3.8%	23.2%	47.5%	35.2%	22.3%
Part time employed	1'237	5.2%	30.0%	9.2%	8.5%	7.7%
Unemployed / not working	2'864	8.2%	32.8%	20.6%	29.9%	30.5%
Retired under a disability pension scheme (fully or partly)	148	13.1%	48.6%	1.0%	1.9%	3.7%
Early retired under an early retirement benefit scheme	176	10.0%	45.6%	1.2%	1.8%	3.2%
Retired (at the official retirement age)	1'425	13.0%	39.5%	9.7%	21.3%	29.1%
Student / pupil / in training	1'385	1.1%	56.8%	10.7%	1.3%	3.5%
<b>Education</b>						
Primary school	606	16.7%	37.6%	4.0%	12.0%	15.1%
Middle school	743	13.1%	30.4%	5.1%	12.9%	11.8%
High school	3'335	6.0%	36.3%	24.6%	24.1%	28.8%
Community College	1'665	4.9%	31.6%	12.4%	10.5%	10.1%
Four-year University	6'903	4.1%	28.4%	51.9%	38.2%	31.6%
Other	288	6.4%	34.5%	2.1%	2.3%	2.5%

# Sample size and random sample error: Rules of thumb

READ: At a sample size of n=500 and a value of 15% we would expect the real value in an interval  $\pm 3.1$  around 15% - which means between 11.9% and 18.1% (Conservative assumption: 95% confidence level)

Sample size	Random sample error	
	Real value is within interval:	
	Level of proportion: 50%/50%	Level of proportion: 15%/85%
50	$\pm 13.9$	$\pm 9.9$
100	$\pm 9.8$	$\pm 7.0$
250	$\pm 6.2$	$\pm 4.4$
500	$\pm 4.4$	<b><math>\pm 3.1</math></b>
1'000	$\pm 3.1$	$\pm 2.2$
5'000	$\pm 1.4$	$\pm 1.0$
10'000	$\pm 1.0$	$\pm 0.7$