



#### Summary

## **EuroTrak FRANCE2012**

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





#### Summary 1. Introduction

EuroTrak France 2012 was designed and executed by Anovum (Zurich) on behalf of the European Hearing Instrument Manufacturers Association (EHIMA).

Sample sizes France 2012:

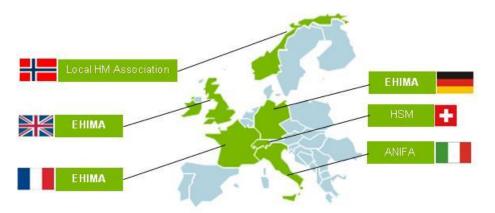
Representative sample (sample 1): n=15'430 people

Hearing impaired (sample 2): n=1'311 people

> Hearing impaired non-owners: n=809 people with hearing loss (**HL**)

> HA owners: n=502 people with hearing aid (**HA**)

EuroTrak France 2012 is part of the EuroTrak studies:











## Summary 2. Market overview

- Stated hearing loss prevalence
  - Total: 9.4% (18+: 11.5%).
  - Binaural hearing loss: HA owners: 76%, HA non-owners: 59%.
  - Tinnitus prevalence 26% (self stated, sometimes or permanently).
  - Hearing Tests: 29% had a hearing test in the last 5 years.
- Hearing aid adoption rate (HA penetration)
  - Total: 30.4% (2009: 29.8%).
  - Total age group 18+: 30.4 % (2009: 29.3%).
  - 74% of HA owners have binaural treatment. Trend rising (2009: 58%).
- The route to the hearing aid
  - 76% of the hearing impaired discussed hearing loss with an ENT doctor or family doctor.
  - 48% got hearing aids recommended from the ENT or family doctor (drop out rate = 37%).
  - 76% of the GP consultations referred to an ENT. 12% recommended no action.
  - 33% of ENT consultations referred to a hearing aid dispenser / audiologist, 37% recommended to get a hearing aid, 38% 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
  - People with hearing aids tend to have a higher personal income
  - Hearing aid owners have a much lower risk of being depressed and a lower risk of being forgetful compared to impaired non-owners







## Summary 3. Analysis of hearing aid owners

#### Hearing aid ownership and usage

- 77% received some kind of 3<sup>rd</sup> party reimbursement.
- 74% of the currently owned HAs were fitted in 2009 or later.
- The average age of the currently owned HAs is 2.5 years.
- The median age of hearing aids before replacement is 5 years.
- On average, HAs are worn 9.2 hours a day.
- 54% of hearing aid owners have never heard of wireless technology in connection with hearing aids. Only 13% of the older (65y+) rate wireless technology as very important but 27% of the younger (up to 44y).

#### Satisfaction with HAs

- 80% of the HA owners are satisfied with their HAs.
- The more hours worn per day, the higher the satisfaction.
- Satisfaction with HAs bought 2010 or after is higher than with HAs bought before.

#### Positive impact of HAs

 Significant positive impact of HAs on different aspects – especially communication, relationship at home and and social life.









## Summary 4. Analysis of hearing impaired non-owners

- Reasons not to own/use HAs
  - Information deficit non-owners: 38% don't know whether insurance would pay, 30% assume they don't pay.
  - The main reasons for not using hearing aids are that people say they cannot afford a hearing aid, the ENT's opinion and that they have more serious priorities.
  - 3% who own HAs don't use them at all; 7% use them less than one hour/day. Main reasons for this are: "Hear well enough in most situations", "They do not work well in noisy situations" and "Uncomfortable".
- Negative impact of hearing loss and buying intentions
  - Compared to impaired hearing aid non-owners with significant hearing loss (Top 50% hearing loss-group), hearing aid owners feel less exhausted in the evenings.
  - 7% of non-owners intend to get a hearing aid within the next year.
  - The most important influencing factors are worsening of hearing, ENT, significant others and audiologist (for owners). Costs are also important, but only for the non-owners.







#### Results

### **EuroTrak France 2012**

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







#### Detailed Results: Roadmap

#### 1. Introduction

- Objectives and organisation
- Field research specification

#### 2. Market overview

- Prevalence of hearing loss and hearing aid adoption rate
- Hearing tests and prevalence of tinnitus new in 2012
- The route to the hearing aid: Drop-out rates and reasons for drop-outs new in 2012
- Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive and dementia symptoms new in 2012

#### 3. Analysis of hearing aid owners

- Hearing aid ownership, lifetime new in 2012 and usage
- Awareness and importance of wireless technology new in 2012
- Satisfaction with hearing aids and drivers
- Positive impact of hearing aids

#### 4. Analysis of hearing impaired non-owners

- Reasons for not having a hearing aid
- Negative impact of hearing loss
- Buying intentions

#### 5. Appendix

Demographics: Hearing instrument adoption rates and populations









### 1. Introduction









## Objectives and organisation







#### Organisation of EuroTrak 2012

#### **Organisation**

- Principal of the project EuroTrak is the European Hearing Instrument Manufacturers Association [EHIMA]. Members of EHIMA are: GN Resound, Oticon, Phonak, Siemens, Starkey and Widex [EHIMA Companies].
- Anovum Zurich developed the concept of EuroTrak, designed the questionnaire and conducted the fieldwork in cooperation with a panel company. Furthermore Anovum analysed the data and prepared the presentation.
- EHIMA approved the questionnaire in cooperation with Sergei Kochkin, Ph.D., Executive Director, Better Hearing Institute.

#### Use of the data

- The principal as well as the EHIMA companies 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 or the EHIMA companies use 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 – EuroTrak – France/2012/n=[relevant sample size]"

 The principal and EHIMA companies can ask Anovum to further analyse the raw data in specific ways at their own expense.







## Field research specification









## 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 a panellist pool of more than 100'000 people
- 3. Screening questionnaire: Stated hearing loss and hearing aid usage + demographics
- 4. Result: Representative sample of n=15'430 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=502 hearing aid owners and n=809 hearing impaired non-owners





## 2. Market overview











## Prevalence of hearing loss and adoption rate

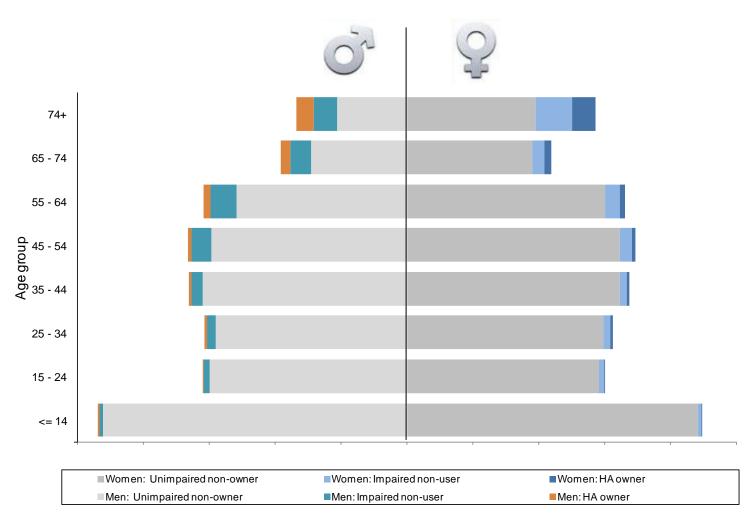








## Hearing loss and hearing instrument ownership by gender/age



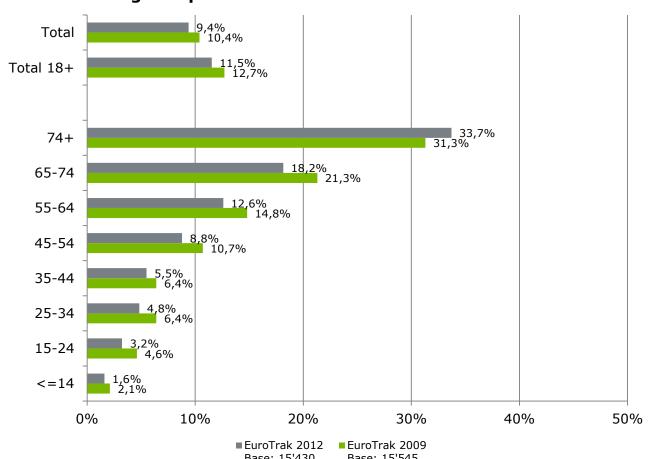






#### Hearing loss prevalence France 2012

#### % hearing loss prevalence



Base: 15'430 Base: 15'545

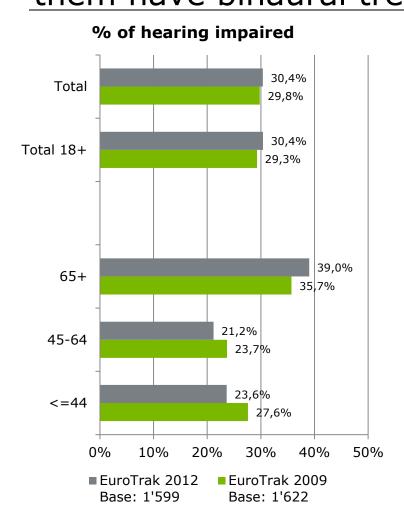


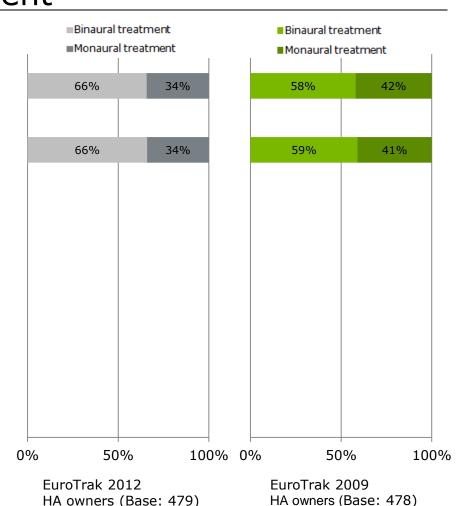






# Hearing aid adoption rate France 2012 30% of hearing impaired have hearing aid(s), 66% of them have binaural treatment



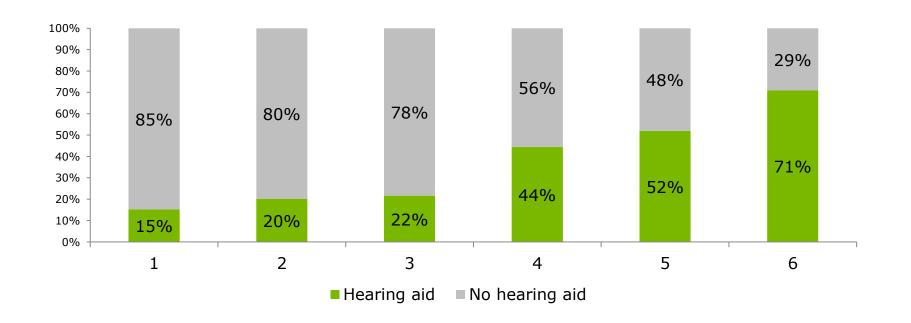








## The more severe the hearing loss, the higher the adoption rate



Hearing loss 6-groups\*

HA-non-owner, n=809 HA-owner, n=502

\* 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).





## Hearing loss

#### Hearing loss characteristics: Owners compared to non-owners

	HA-Non-owner 2012: n= 809 (2009: n= 803)	HA Owner 2012: n= 502 (2009: n= 501)	Hearing Aid Adoption (%)
Ears impaired (stated)			
Unilateral loss	41% (39%)	24% (29%)	25% <i>(25%)</i>
Bilateral loss	59% (61%)	76% <i>(71%)</i>	42% (33%)
Perceived loss			
Mild	29% (26%)	5% (6%)	9% (9%)
Moderate	54% <i>(50%)</i>	47% <i>(46%)</i>	31% (28%)
Severe	13% (19%)	39% (36%)	59% <i>(47%)</i> *
Profound	4% (5%)	9% (12%)	

n's are unweighted whereas the shown results are weighted

<sup>\*</sup> combined "severe" and "profound" because n is too small

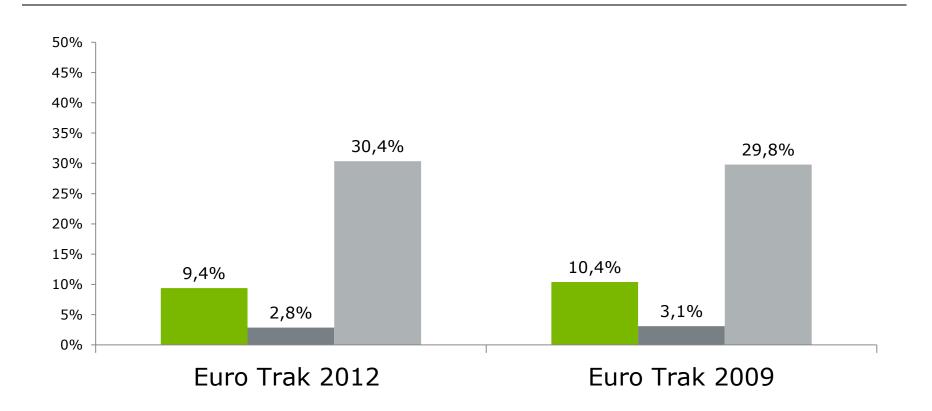








## Overview hearing loss prevalence and hearing aid adoption



■ Hearing impaired (stated) ■ Adoption (% of population) ■ Adoption (% of stated impaired)











### Hearing tests and prevalence of tinnitus

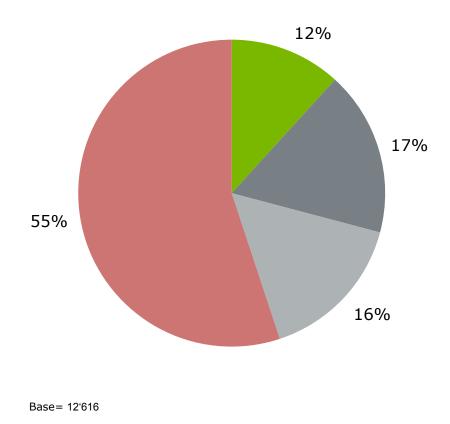


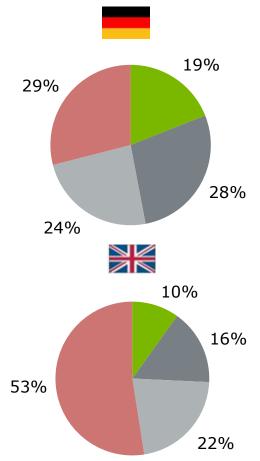




### 55% of the population state their hearing has never been tested

- Yes, in the last 12 months Yes, in the last 1-5 years
- Yes, more than 5 years ago No, never

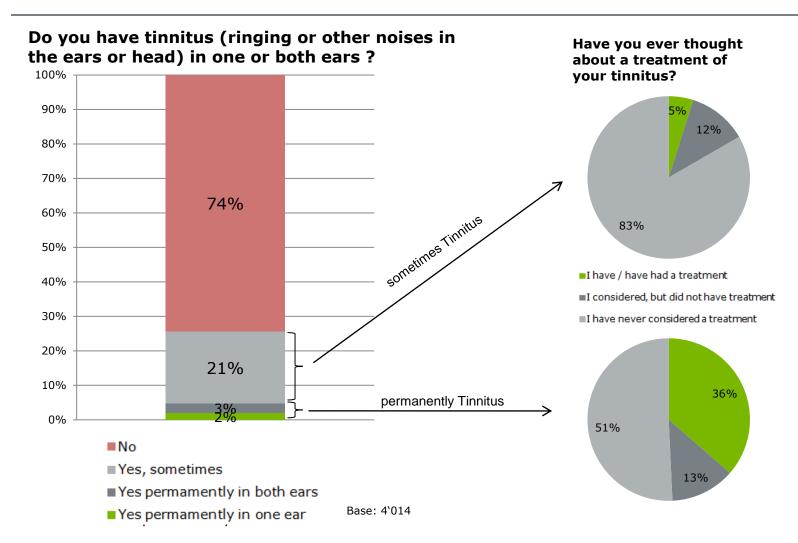




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#### Prevalence of tinnitus











## The route to the hearing aid: Drop-out rates and reasons for drop-outs

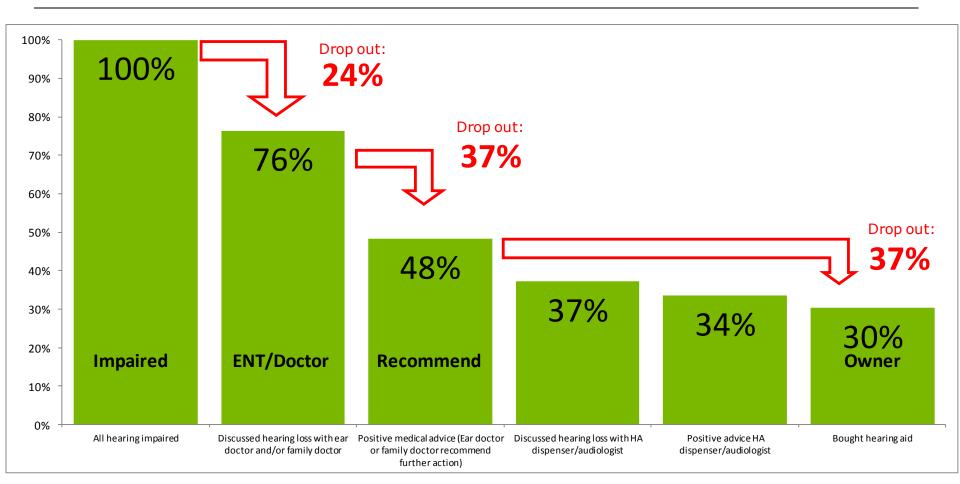








#### The route to the hearing aid: Overview



Base: n=1'311

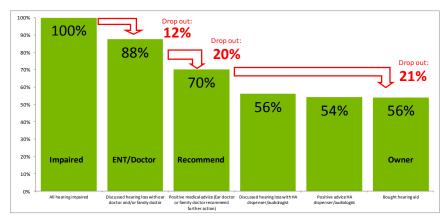


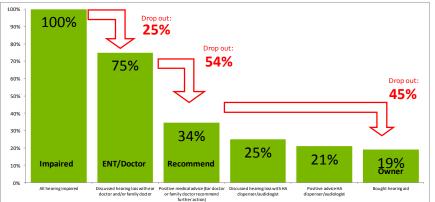


## Much higher drop-out-rates for the lower hearing loss segments

Top 50% hearing loss\*

Low 50% hearing loss\*





Base: n=1'311



<sup>\*</sup> 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)

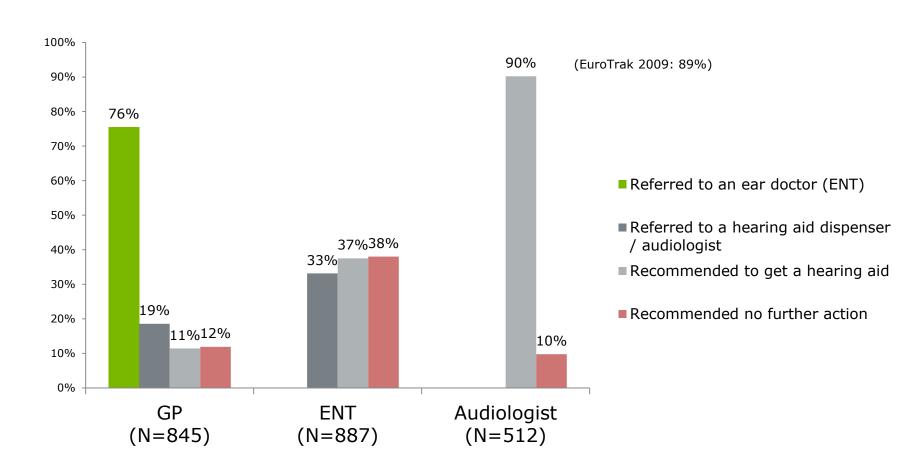
Scores on 6 APHAB-EC - like questions (Scaled 1-5)

When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

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



#### Recommendations by profession



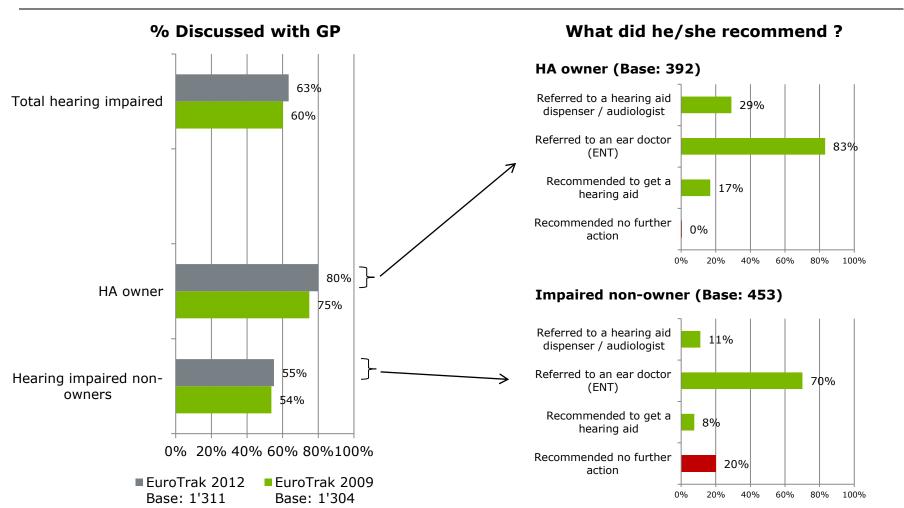






## The route to the hearing aid: GP/Family doctor

Have you discussed your hearing problem with your family doctor?



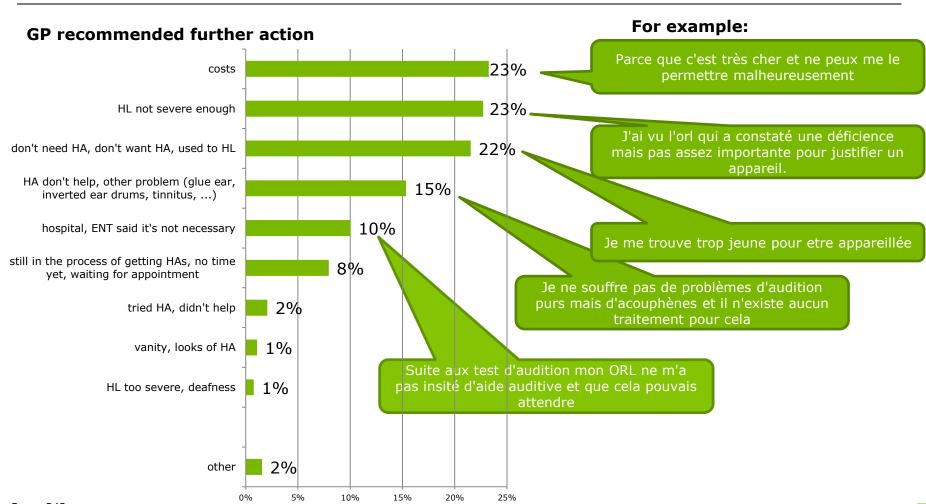






## Non-owners: Reasons for not owning a HA

If GP recommended further action (open ended question)



Base: 342



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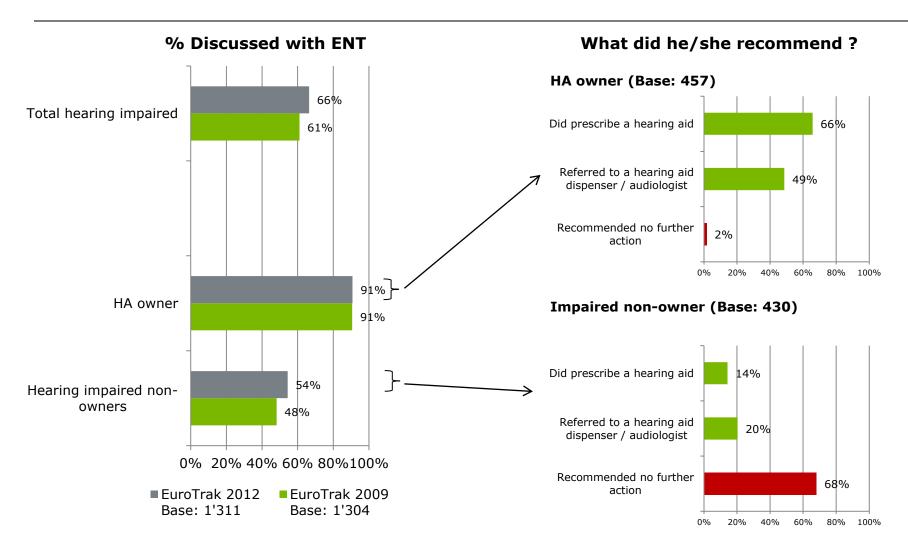






### The route to the hearing aid: ENT

Have you discussed your hearing problem with an ear doctor (ENT)?



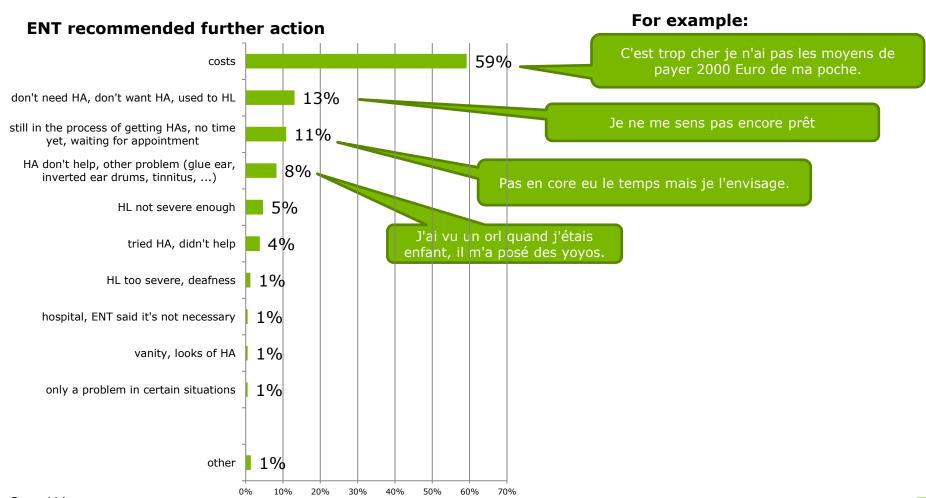






## Non-owners: Reasons for not owning a HA

If ENT recommended further action (open ended question)



Base: 114



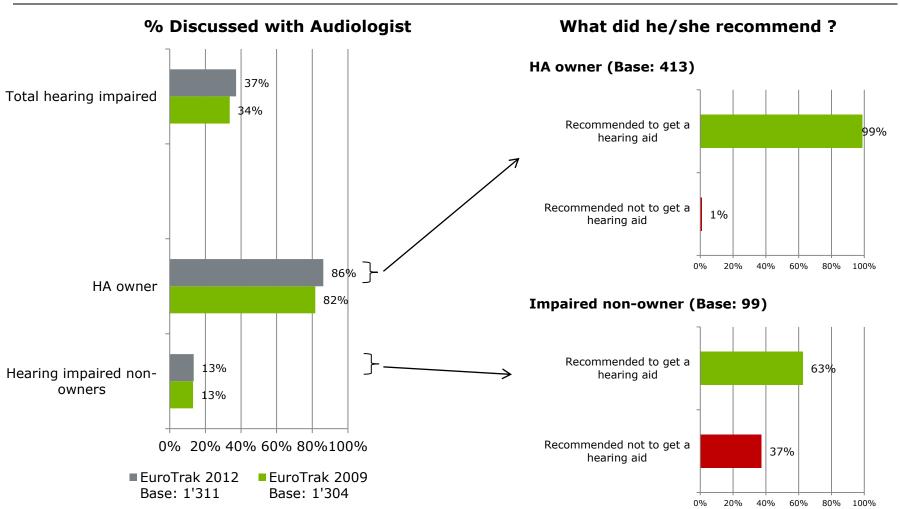




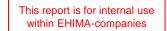


## The route to the hearing aid: Audiologist

Have you discussed your hearing problem with a Hearing Aid Dispenser/Audiologist?



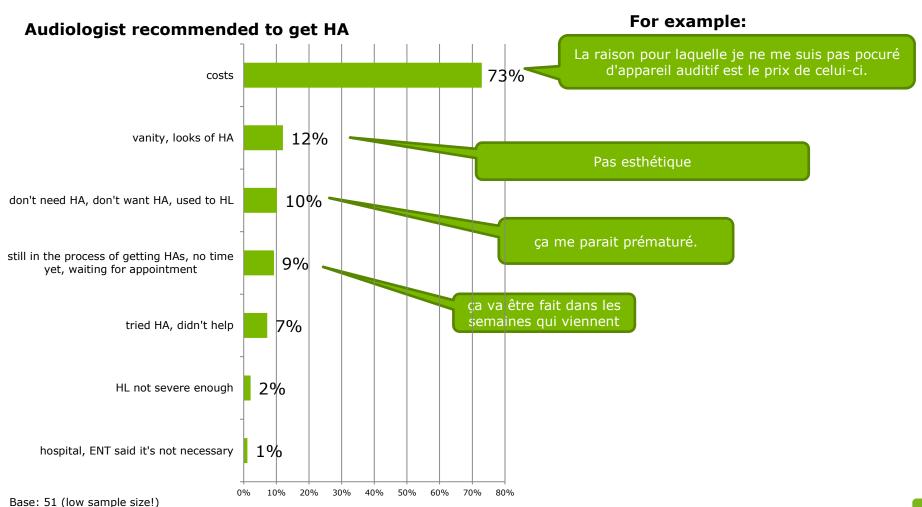






## Non-owners: Reasons for not owning a HA

If Audiologist recommended to get HA (open ended question)



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Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive and dementia symptoms



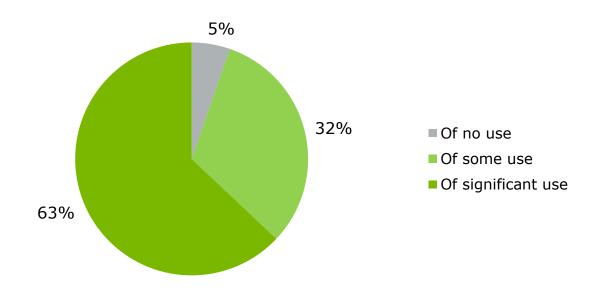






Work competitiveness: 95% of the working hearing aid owners state their hearing aid(s) are useful on their job.

How useful are your hearing aids on your job?



Base: N=204





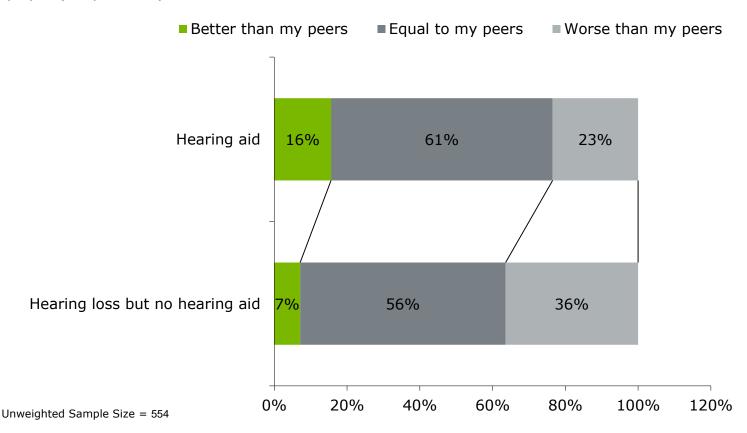


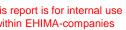


# **Work competitiveness:** 36% of impaired people without hearing aid tend to think they receive a worse compensation for their jobs than their peers (23% of hearing aid owners)

Compared to your peers of equal age, education and skill how would you rate the compensation that you receive for the job you perform?

Base: Employed (full/part time)







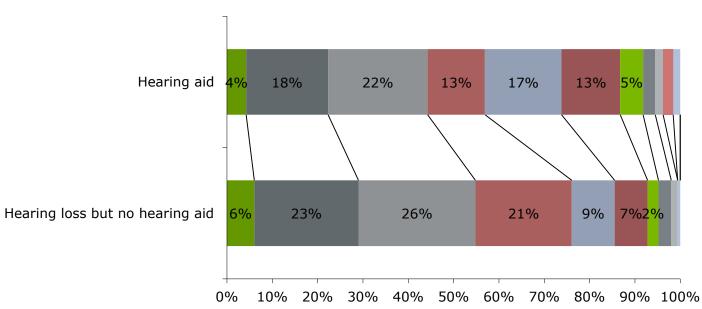


#### Work competitiveness: People with hearing aid(s) tend to have a higher personal income compared to impaired non-owners

#### Personal income

Base: Employed (full/part time)

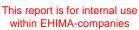




Unweighted Sample Size = 617



Base: Employed (full/part time)





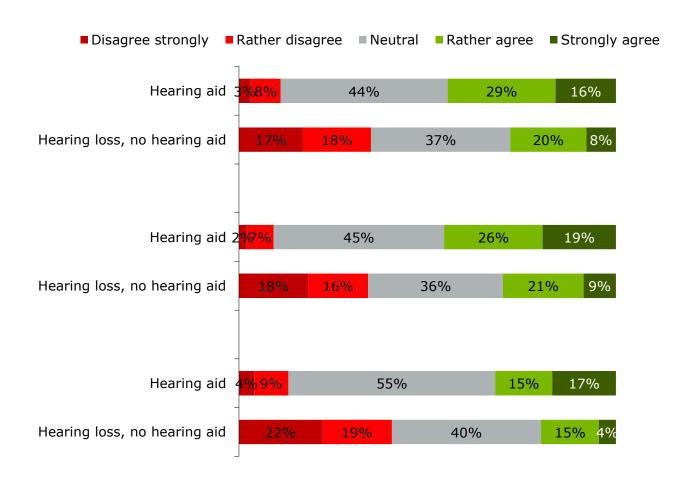


**Work competitiveness:** People with hearing aids recognize that hearing aids increase the chance of hearing impaired to get promoted, to get the right job and to get more salary



I think that people with an untreated hearing loss tend not to get the job they deserve

I think that people with an untreated hearing loss tend to be under salaried



Base: Hearing loss, no hearing aid =614/ hearing aid n=409

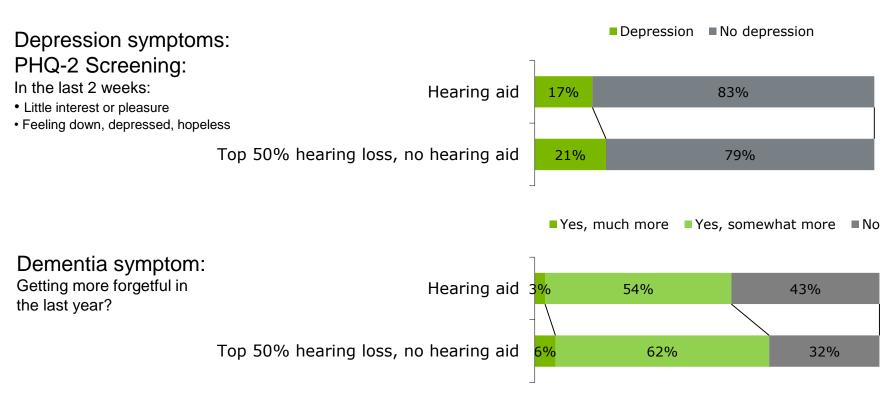
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**Health problems**: Hearing aid owners have a slightly lower risk of being depressed (PHQ-2 Screening) and a slightly lower risk of being forgetful compared to impaired non-owners with comparable hearing loss (Top50% hearing loss-group\*)



Base: hearing aid n=357 / no hearing aid =167

\*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).







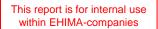
## 3. Analysis of hearing aid owners



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## Hearing aid ownership and usage

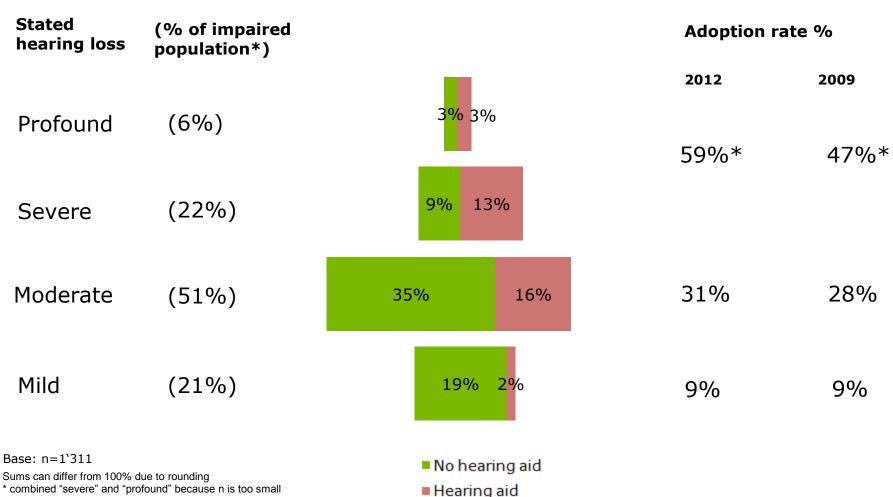








## Low adoption rates within mild and moderate hearing loss



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Page 42

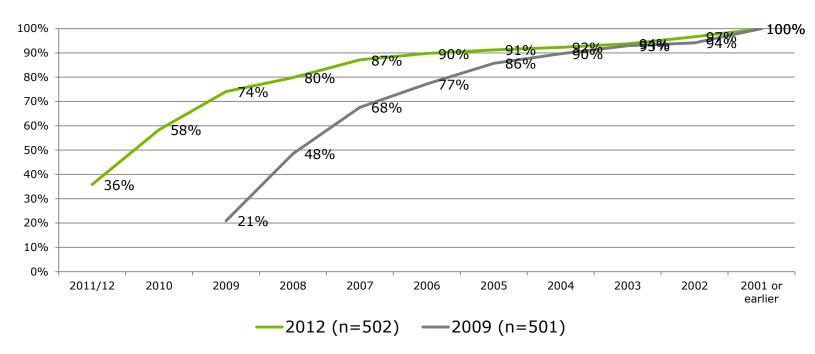






#### 74% of the currently owned HAs were fitted in 2009 or later

#### Year of purchase



Age of currently owned HAs (Mean):

2012: 2.5 years 2009: 2.9 years



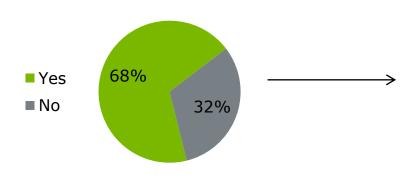






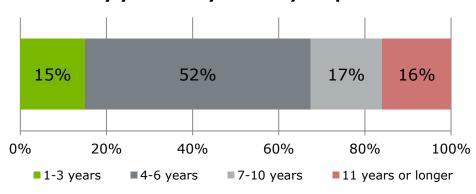
### 68% are first time HA users – non first time users kept their HAs for 5 years on average

#### **Current HAs = first HAs?**



Base: n=500

#### How many years did you own your previous HAs?



Base: n=145

Age of HA before it has been replaced: **2012: 5 years (median)** 

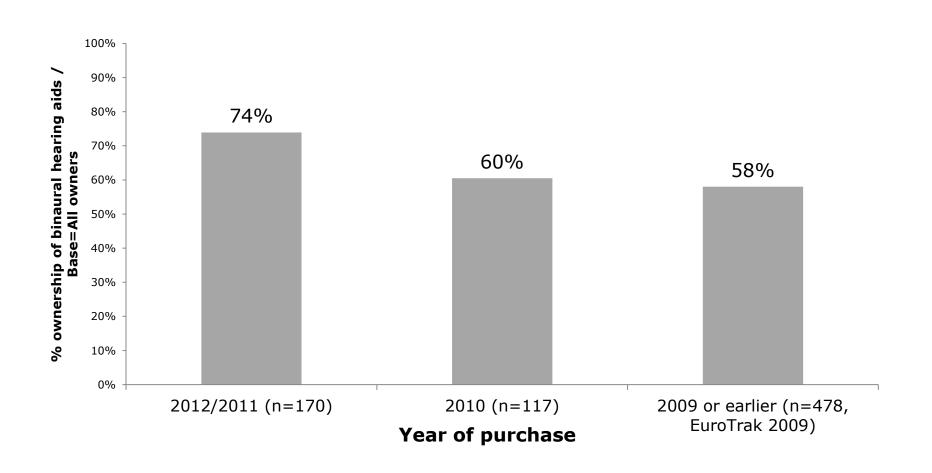








## Monaural-binaural treatment by purchase date

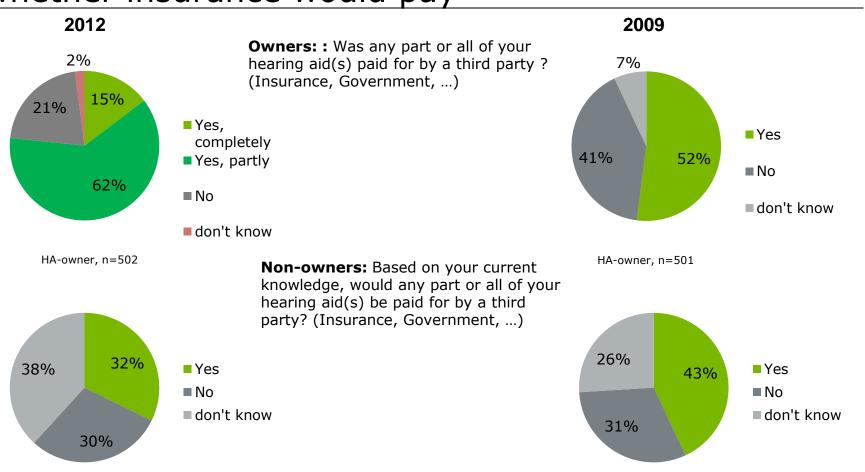








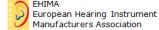
# 77% received some kind of 3<sup>rd</sup> party reimbursement Information deficit non-owners: only 32% know whether insurance would pay



HA-non-owners, n=809 HA-non-owners, n=803









#### On average, HAs are worn 9.2 hours a day

#### How many hours a day are HA worn? (cum. %)



**HA worn:** 

2012: Mean: 9.2 hours/day 2009: Mean: 8.3 hours/day

HA-owner: 2012: n=502 2009: n=501



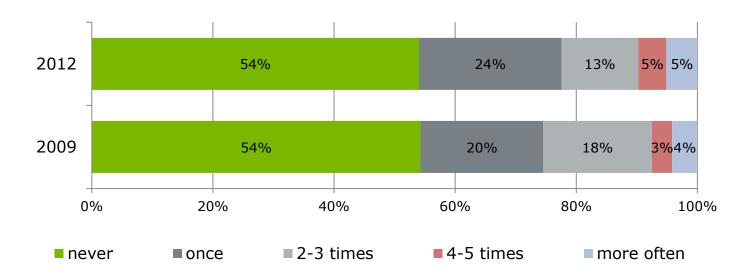






### 78% of the currently owned HAs either had no repair need or only once

#### How often has your current hearing aid required a repair because it was not working properly?



HA-owner: 2012: n=502 2009: n=501









## Awareness and importance of wireless technology



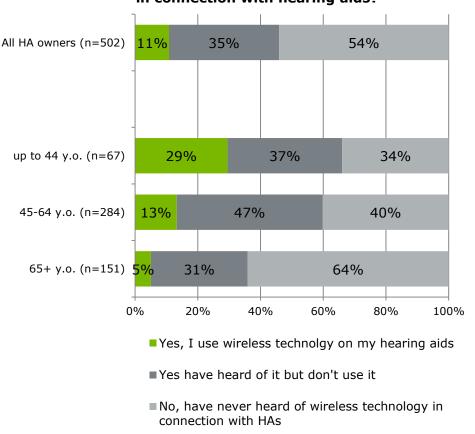




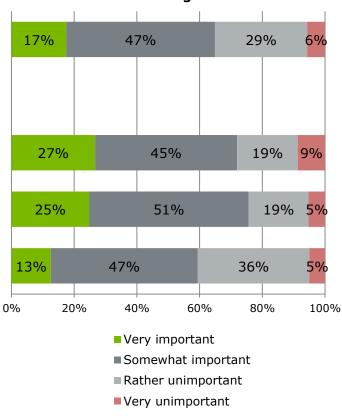
### Younger HA owners use wireless technology with their HAs more often and it's more important to them

#### **Wireless Technology**





#### Importance of wireless technology in connection with hearing aids?













### Satisfaction with HA and drivers

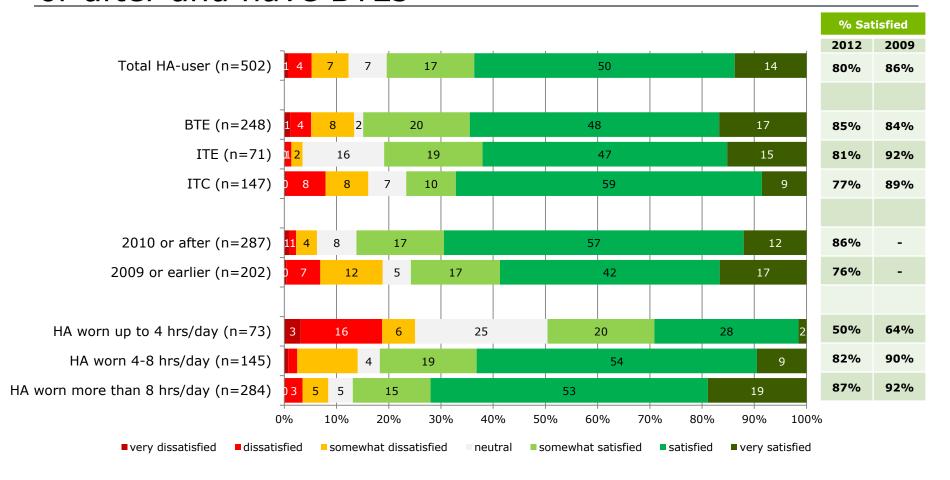








# Overall satisfaction with HA is highest among users who wear them more than 8 hrs/day, bought them in 2010 or after and have BTEs







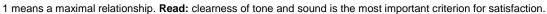


# Factors influencing satisfaction with current HA: Sound quality/signal processing is most important for overall satisfaction with HA

		Influence on overall satis-faction with HA*	Comparison 7 = became more important  with 2009
	Quality of service during hearing aid fitting period	0.68	$\rightarrow$
<b>D</b> iamanan	Quality of dispenser's counselling	0.68	$\rightarrow$
Dispenser	Quality of service after purchase	0.67	$\rightarrow$
	Professionalism of dispenser	0.64	<b>→</b>
	Conversation with one person	0.74	$\rightarrow$
	Conversation in small groups	0.69	$\rightarrow$
	Leisure activities	0.68	$\rightarrow$
Listening	Conversation in large groups	0.66	$\rightarrow$
situation	Listening to Music	0.65	
Situation	Watching TV	0.63	$\rightarrow$
	Use in noisy situations	0.63	$\rightarrow$
	Understanding a lecture in a large public place	0.59	
	On the telephone	0.59	7
Sound quality	Clearness of tone and sound	0.79	→
	Natural sounding	0.78	$\rightarrow$
signal process.	Richness or fidelity of sound	0.76	$\rightarrow$
	Comfort with loud sounds	0.73	<b>→</b>
	Reliability	0.76	<b>→</b>
	Overall fit/ Comfort	0.73	$\rightarrow$
Product	Managing whistling/feedback/buzzing	0.62	$\rightarrow$
features	Visibility to others	0.59	$\rightarrow$
	Value (performance versus money spent)	0.54	$\rightarrow$
	Ease of changing battery	0.52	$\rightarrow$
	Battery life	0.48	<b>→</b>
	*The Influence has been calculated with a correlation	· O means no relation between a cri	itarion and overall eatisfaction :

\*The Influence has been calculated with a correlation: 0 means no relation between a criterion and overall satisfaction;



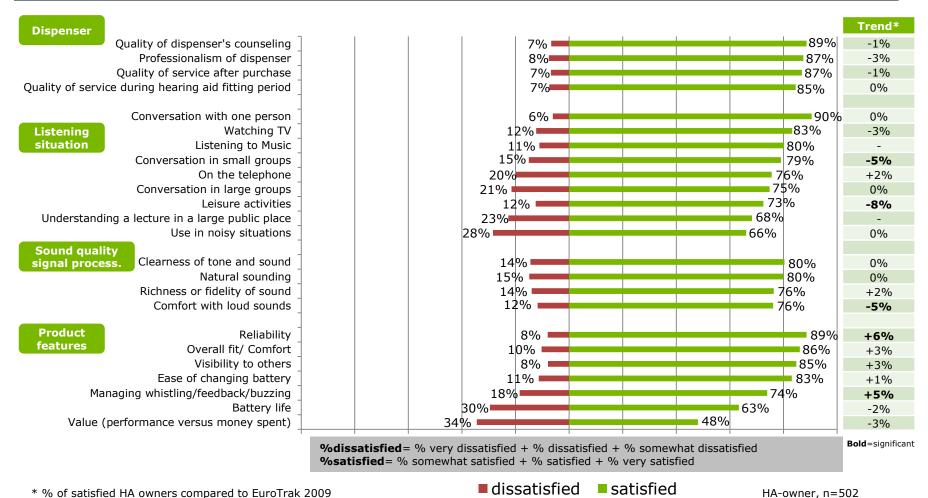








#### Satisfaction with current HA



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## Positive impact of HAs

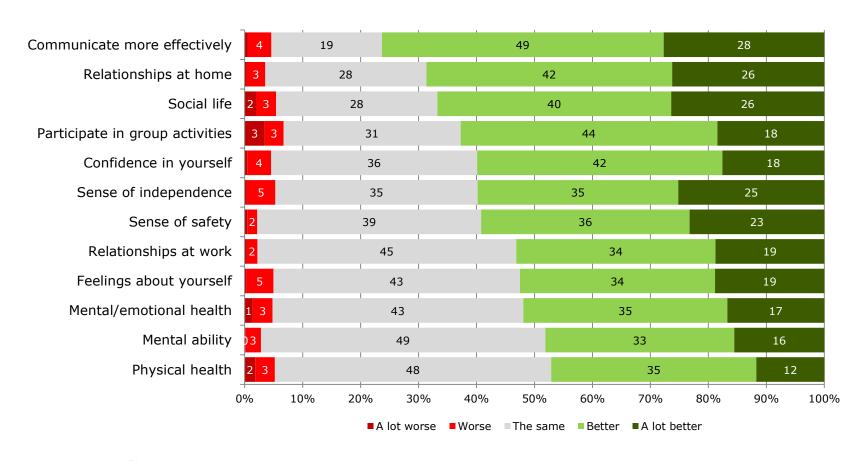








# Significant positive impact of HAs on different aspects – especially communication effectiveness, relationship at home and social life have improved



HA-owner, n=502





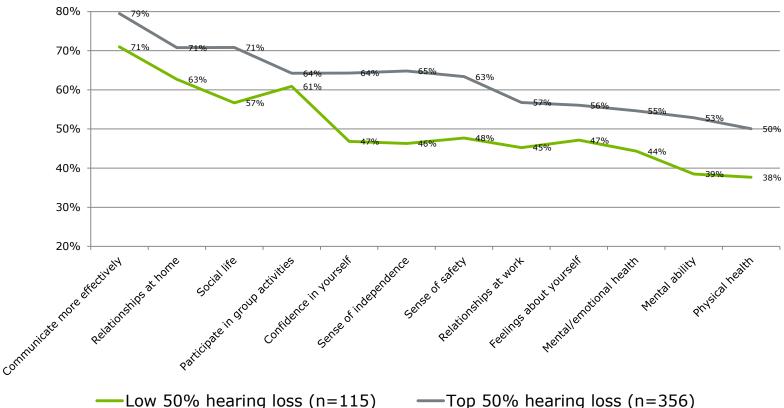






### Impact of HAs is perceived more positive by patients with a Top 50% hearing loss in all aspects

#### % of HA owners feeling better/a lot better



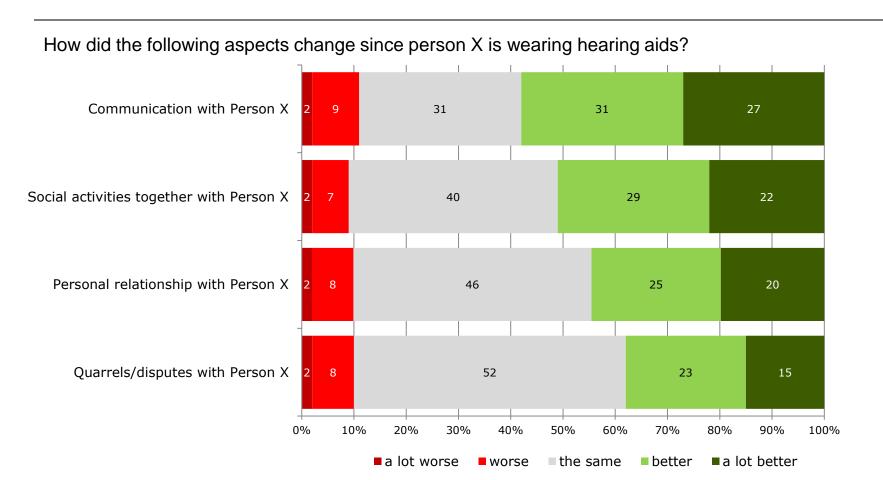








## For the significant others, the situation has improved, since person in household/parent is wearing hearing aids



Someone in HH / parent have HA, n=579









# 4. Analysis of hearing impaired non-owners









## Reasons for not having a hearing aid









## To analyse reasons of non-adoption we look at the Top 50% HL group, as the structure of hearing loss is more similar to that of HA owners

Hearing loss characteristics: Owners compared to non-owners

	% HA Owner (n=502)		er	%HA-Non- owner Low 50% HL	%HA-Non- owner Top 50% HL		
Ears impaired							
Unilateral loss	24%			47%	30%		
Bilateral loss	76%			53%	70%		
				More similar			
Perceived loss			<b>—</b>	hearing loss- structure	<b>—</b>		
Mild		5%		38%		3%	
Moderate		47%		58%		53%	
Severe		39%		3%		36%	
Profound		9%		1%		8%	

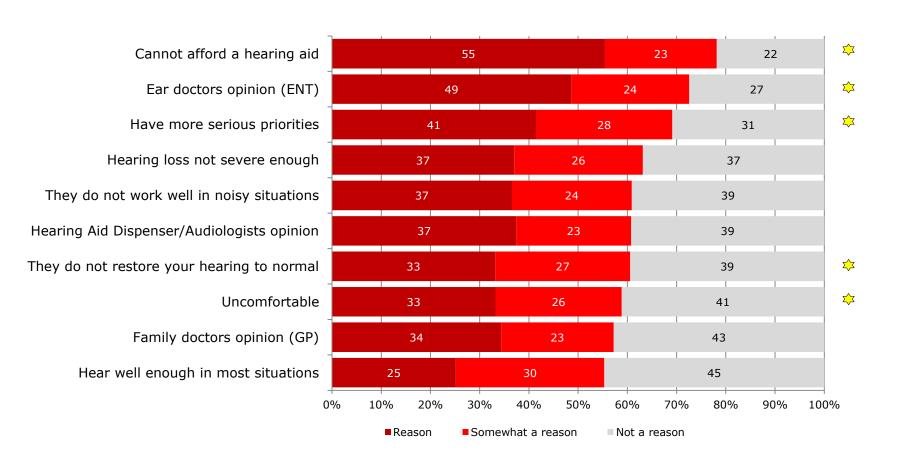








#### **Top 10** reasons for not having a hearing aid (I/II)



=Top 5 reasons EuroTrak 2009

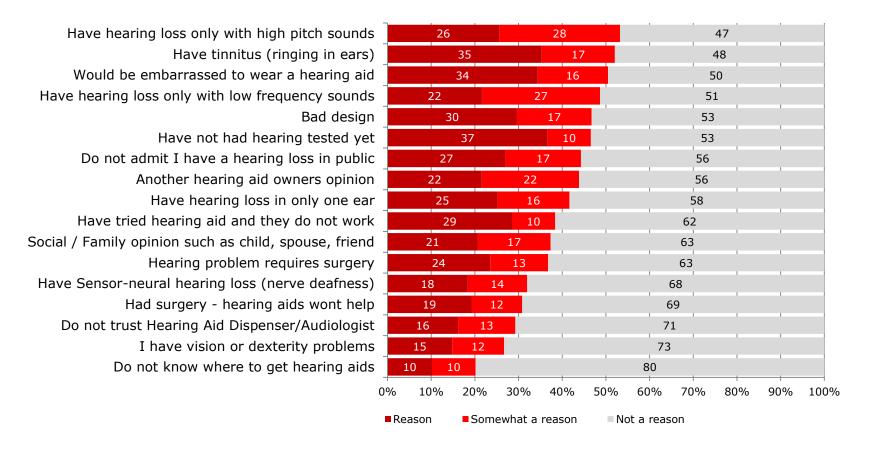
Base: non owners Top 50% HL: n=249







## Less important reasons for not having a hearing aid



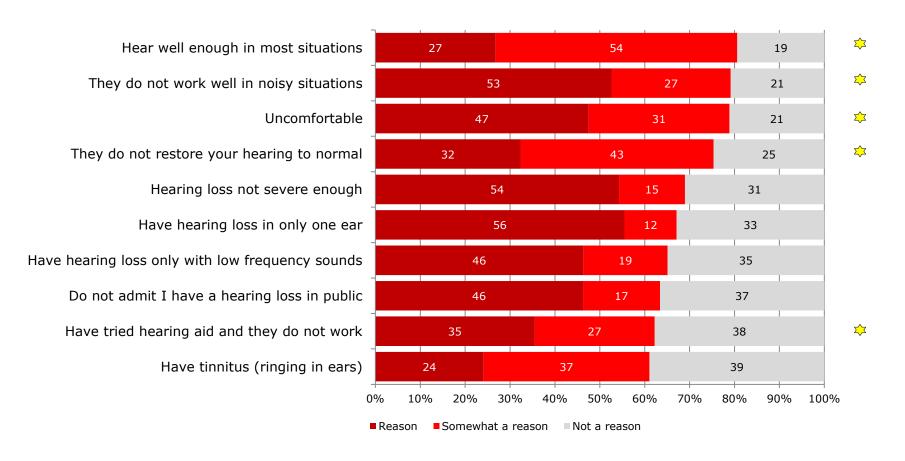
Base: non owners Top 50% HL: n=249







#### Top 10 reasons for HA owners NOT using them



=Top 5 reasons EuroTrak 2009

Owners who don't use, n=21





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## Negative impact of hearing loss

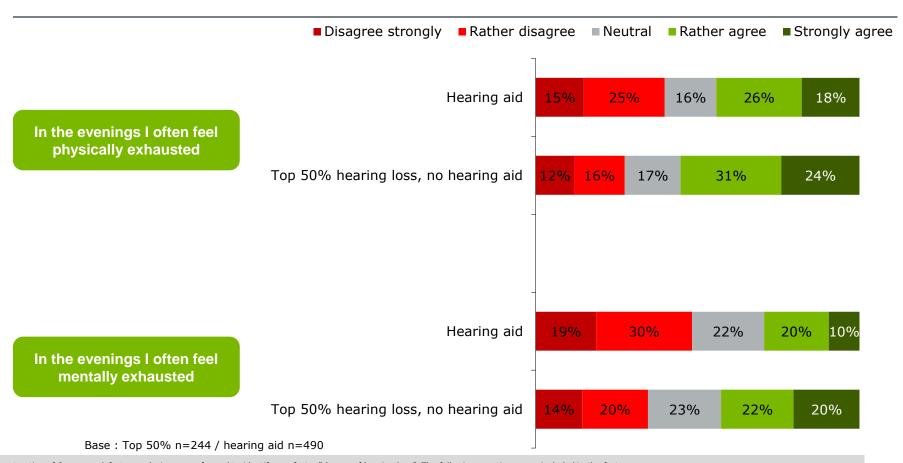








#### Compared to impaired hearing aid non-owners with significant hearing loss (Top 50% hearing loss\*), hearing aid owners feel less exhausted in the evenings



\*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).







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## Buying intentions



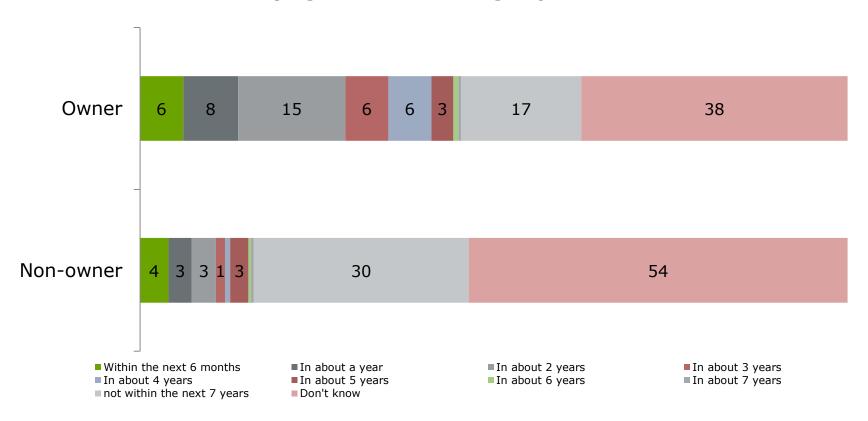






### 7% of non-owners intend to get a hearing aid within the next year. Re-buying intention is higher than first-buying intention

#### Buying intention hearing impaired in %



HA-non-owner, n=809 HA-owner, n=502





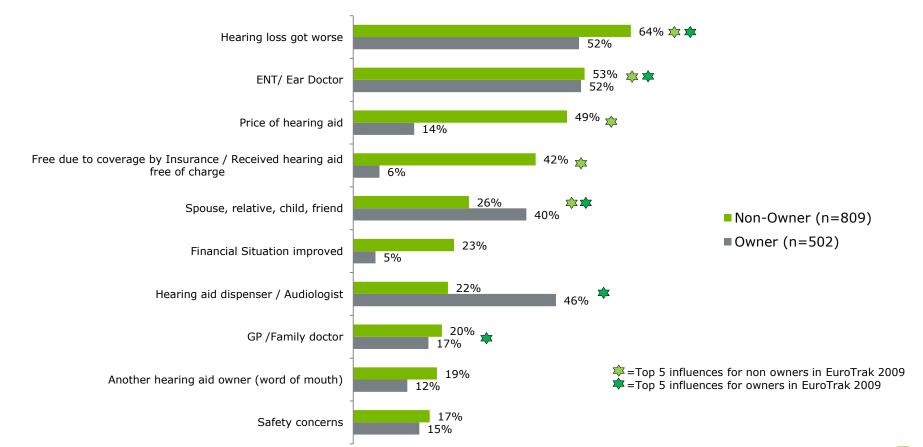




The most important influencing factors are worsening of hearing, ENT, significant others and audiologist (for owners). Costs are also important, but only for the non-owners.

**Owner:** Thinking back to when you obtained your first hearing aid(s), what influenced you to obtain /purchase the hearing aid(s)?

**Non-owner:** Think about the option to obtain / purchase a hearing aid. What do you think would influence you to obtain / purchase a hearing aid?







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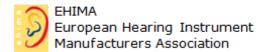
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### **APPENDIX**





## Demographics (1): Hearing instrument adoption rates and populations

	Profiles: Categories add to 100%*					
	Count	Hearing difficulty	Hearing aid adoption rate % (Base=hearing impaired)	No hearing loss	Hearing loss but	Hearing aid
Gender						
Male	7476	10.9%	28.2%	47.9%	54.9%	49.6%
Female	7954	8.9%	32.8%	52.1%	45.1%	50.4%
Age recoded						
1 - 14	2831	1.9%	28.2%	19.9%	3.2%	2.9%
15 - 24	1887	3.4%	20.7%	13.1%	4.8%	2.9%
25 - 34	1909	5.3%	24.0%	13.0%	6.9%	5.0%
35 - 44	2064	6.0%	23.1%	14.0%	8.7%	5.9%
45 - 54	2094	8.9%	18.3%	13.7%	14.9%	7.7%
55 - 64	1973	12.8%	23.3%	12.3%	18.9%	13.2%
65 - 74	1269	18.9%	34.4%	7.4%	15.0%	18.0%
74+	1403	35.5%	41.3%	6.7%	27.6%	44.4%
Type of household						
single household	1479	16.2%	32.8%	8.9%	15.3%	17.0%
Couple, no kids	4337	14.5%	32.4%	26.7%	40.7%	44.8%
Couple with kid(s)	7756	5.6%	24.6%	52.5%	30.6%	22.9%
Single mom/dad with kid(s)	850	6.2%	26.5%	5.7%	3.4%	2.8%
Retirement home, hospital etc.	131	48.3%	32.4%	0.5%	3.9%	4.3%
Other	878	12.0%	37.0%	5.6%	6.1%	8.2%



Page 72





## Demographics (2) Hearing instrument adoption rates and populations

Profiles: Categories add to 100%*							
	Count	Hearing difficulty	Hearing aid adoption rate % (Base=hearing impaired)	No hearing loss	Hearing loss but no hearing aid	Hearing aid	
Status							
The head of the household (alone or together with someone)	6646	14.8%	29.9%	41.2%	67.8%	66.7%	
The spouse of the head of the household	3923	9.0%	31.9%	25.8%	24.1%	26.0%	
Daughter/son of head of household	4419	2.3%	29.2%	31.2%	6.6%	6.2%	
Other Person	258	7.5%	24.5%	1.7%	1.5%	1.1%	
Employment							
Full time employed	5631	7.6%	20.9%	47.3%	33.1%	19.9%	
Part time employed	885	6.5%	13.9%	7.5%	4.8%	1.8%	
Unemployed / not working	1237	8.0%	23.0%	10.3%	7.5%	5.1%	
Retired under a disability pension scheme (fully or partly)	221	25.3%	36.6%	1.5%	3.4%	4.5%	
Early retired under an early retirement benefit scheme	287	18.5%	27.4%	2.1%	3.8%	3.3%	
Retired (at the official retirement age)	3106	23.9%	38.4%	21.7%	45.0%	64.0%	
Student / pupil / in training	1070	2.7%	20.2%	9.4%	2.3%	1.4%	
Education							
Brevet	1558	16.9%	32.5%	11.9%	17.3%	19.0%	
CAP-BEP	2942	14.7%	32.0%	22.9%	29.1%	31.3%	
Baccalauréats	2483	8.6%	26.4%	20.7%	15.2%	12.4%	
BTS - DUT	1589	7.2%	24.1%	13.4%	8.3%	6.0%	
License (BAC+3)	1292	8.5%	26.4%	10.7%	8.2%	6.7%	
Master 1 et 2 - Diplôme d'Ingénieur	1256	8.6%	32.3%	10.4%	7.1%	7.8%	
Doctorat	237	12.2%	35.1%	1.9%	1.8%	2.2%	
Autre	1082	18.0%	32.8%	8.1%	13.0%	14.5%	