Results

EuroTrak Poland 2016

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

1. Introduction

- EuroTrak Poland 2016 was designed and executed by Anovum (Zurich) on behalf of EHIMA.

- Sample sizes Poland 2016:
  - Representative sample (sample 1): n=15’344 people
  - Hearing impaired (sample 2): n=1’451 people
    - Hearing impaired non-owners: n=976 people with hearing loss (HL)
    - HA owners: n=475 people with hearing aid (HA)

- EuroTrak Poland 2016 is part of the EuroTrak studies:
2. Market overview

• Stated hearing loss prevalence
  - Total: 16 %, 18+: 18.3%
  - Binaural hearing loss: HA owners: 63%, HA non-owners: 60%.
  - Hearing Tests: 41% had a hearing test in the last 5 years, most tests done by ENT’s (69%)

• Hearing aid adoption rate (HA penetration)
  - Total: 17.8%
  - Total age group 18+: 17.8%
  - 33% of HA owners have binaural treatment.

• The route to the hearing aid
  - 71% of the hearing impaired discussed hearing loss with an ENT doctor or family doctor.
  - 36% got hearing aids recommended from the ENT or family doctor (drop out rate=50%).
  - 76% of the GP consultations referred to an ENT. 13% recommended no action.
  - 33% of ENT consultations referred to a audiologist, 52% 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.
  - Quality of sleep seems to improve if hearing impaired use hearing aids.
Summary

3. Analysis of hearing aid owners

- Hearing aid ownership and usage, accessories and Telecoil
  - 77% of all HA owners asked got some kind of 3rd party reimbursement.
  - 62% of the currently owned HAs were acquired in 2014 or later.
  - The average age of the currently owned HAs is 3.3 years.
  - The median age of hearing aids before replacement is 4 years.
  - On average, HAs are worn 6.3 hours a day.
  - 25% of today's hearing aid owners are aware of their hearing aid brand, 52% would preferably choose the same brand if they would plan to obtain new hearing aids.
  - Audio streamer or an additional microphone are the most often owned electronic accessory: 5% of hearing aid owners claim to have it – 31% claim to have heard of it but don't own it.
  - 21% of hearing aid owners know what Telecoil is but only 7% have used it – mainly at home. Most of those who use it are satisfied.

- Importance of listening situations and satisfaction with HAs
  - 76% of the hearing aid owners say their hearing aid works better than or as expected.
  - 80% of the HA owners are satisfied with their HAs.
  - The more hours worn per day, the higher the satisfaction.
  - Satisfaction with newer hearing aids is higher than with older hearing aids.
  - Talking at home (family members/phone/TV) are the most important listening situations.

- Positive impact of HAs
  - Significant positive impact of HAs on different aspects: Especially communication effectiveness, feelings about oneself and relationships at home improves with hearing aids.
  - 96% of hearing aid owners declare that their hearing aids improve their quality of life at least sometimes
Summary

4. Analysis of hearing impaired non-owners

• Reasons not to own/use HAs
  - While hearing impaired without hearing aids don’t know whether a third party would pay any part of hearing aids - 77% of the hearing aid owners received some kind of 3rd party reimbursement.
  - The main reasons for not using hearing aids are that people say “they hear well enough”, “hearing loss is not severe enough”, “Do not admit to have hearing loss in public” but also “I can’t afford”.
  - 4% who own HAs don’t use them at all; 16% use them less than one hour/day. Main reasons for this are: “They don’t restore hearing to normal” and “They do not work well in noisy situations”.

• Social rejection, buying intentions and triggers to buy
  - 82% of hearing aid owners think people don’t make fun of or reject them because of their hearing aids. It is more likely somebody makes fun or rejects a hearing impaired without hearing aid.
  - The most important influencing factors for getting hearing aids are worsening hearing loss and the ENT. Insurance coverage/price of hearing aids is very relevant for the non owners.
  - 9% of non-owners intend to get a hearing aid within the next year.
Results

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Detailed Results: Roadmap

1. **Introduction**
   - Organisation of EuroTrak 2016
   - 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 and dementia symptoms, sleep quality

3. **Analysis of hearing aid owners**
   - Hearing aid ownership, awareness of hearing loss before getting hearing aids, lifetime of hearing aids and usage
   - Awareness and usage of accessories and Telecoil
   - Satisfaction with hearing aids and drivers
   - Importance of listening situations
   - Positive impact of hearing aids, quality of life

4. **Analysis of hearing impaired non-owners**
   - Reasons for not having hearing aids and why some people can consider hearing aids as uncomfortable
   - Social rejection because of hearing loss compared to the acceptance of hearing aids
   - Buying intentions and most important triggers to buy

5. **Appendix**
   - Demographics: Hearing instrument adoption rates and populations
1. Introduction
Organisation of EuroTrak 2016

Organisation
- Principal of the project EuroTrak Poland is EHIMA.
- 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.
- The European Hearing Instrument Manufacturers Association [EHIMA] approved the questionnaire.

Use of the data
- EHIMA may use the anonymous data (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 EHIMA uses 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 – Poland/[year]/n=[relevant sample size]”

- Any member of EHIMA can ask Anovum to further analyse the raw data in specific ways at their own expense.

- EHIMA companies can order a report with satisfaction scores for their brand. The other brands will be shown as benchmarks without denomination (brand A, brand B etc.). The report will show all satisfaction values. It is not allowed to communicate any information from these reports outside the EHIMA company.
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 panellist pools of more than 40’000 people
3. Screening questionnaire: Stated hearing loss and hearing aid usage + demographics
4. Result: Representative sample of n=15’344 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=475 hearing aid owners and n=976 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 Poland 2016

% hearing loss prevalence

- Total: 16.0%
- Total 18+: 18.3%
- 74+: 48.4%
- 65-74: 29.6%
- 55-64: 21.8%
- 45-54: 16.5%
- 35-44: 10.4%
- 25-34: 9.3%
- 15-24: 7.8%
- <=14: 4.7%

EuroTrak 2016
Base: 15'344

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Overview hearing loss prevalence and hearing aid adoption

Euro Trak 2016

- Hearing impaired (stated): 16.0%
- Adoption (% of population): 2.8%
- Adoption (% of stated impaired): 17.8%
Hearing aid adoption rate Poland 2016

17.8% of hearing impaired have hearing aid(s), 33% of them have binaural treatment

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Binaural Treatment</th>
<th>Monaural Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 18+</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>65+</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>45-64</td>
<td>9.8%</td>
<td>90.2%</td>
</tr>
<tr>
<td>&lt;=44</td>
<td>11.7%</td>
<td>88.3%</td>
</tr>
</tbody>
</table>
The more severe the hearing loss, the higher the adoption rate

Hearing loss 6-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).
Hearing loss

Hearing loss characteristics: Owners compared to non-owners

<table>
<thead>
<tr>
<th></th>
<th>HA-Non-owner n=976</th>
<th>HA Owner n= 475</th>
<th>Hearing Aid Adoption (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ears impaired</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unilateral loss</td>
<td>40%</td>
<td>37%</td>
<td>19%</td>
</tr>
<tr>
<td>Bilateral loss</td>
<td>60%</td>
<td>63%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Perceived loss</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>54%</td>
<td>9%</td>
<td>4%</td>
</tr>
<tr>
<td>Moderate</td>
<td>31%</td>
<td>36%</td>
<td>21%</td>
</tr>
<tr>
<td>Severe</td>
<td>11%</td>
<td>41%</td>
<td>45%*</td>
</tr>
<tr>
<td>Profound</td>
<td>4%</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>

n’s are unweighted whereas the shown results are weighted
* combined “severe” and “profound” because n is too small
Hearing tests and where hearing is tested
Hearing Tests: 41% had their hearing tested in the last 5 years – most tests are done by ENTs

Have you ever taken a hearing test?

- Yes, in the last 12 months: 11,515 (36%)
- Yes, in the last 1-5 years: 11,515 (15%)
- Yes, more than 5 years ago: 11,515 (23%)
- No, never: 11,515 (26%)

Where/how was your hearing tested?

- Ear doctor (ENT): 4,853 (69%)
- Family doctor: 4,853 (18%)
- Hearing Aid Dispenser/Audiologist: 4,853 (11%)
- Online test: 4,853 (1%)
- Test on a smartphone App: 4,853 (1%)
- Other: 4,853 (9%)
- Don't know: 4,853 (3%)

Base= 4'853
The route to the hearing aid: 
Sources of information and drop-out rates
Doctors and hearing aid dispensers are the most important source of information and therefore the major gatekeepers – followed by other people with hearing aids.

Where did you gather information about hearing aids?
Please check all that apply.
Of those who discussed the hearing loss with a doctor, 45% talked to an ENT 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 ENT specialist?

- 55% Your family doctor
- 45% Ear doctor (ENT specialist)
- 52% Hearing loss but no hearing aid (n=570)
- 48% Hearing aid (n=422)

Total n = 992
The route to the hearing aid

Base: n=1'451
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).

Base: n=1'451
The route to the hearing aid: GP/Family doctor

Have you discussed your hearing problem with your family doctor?

<table>
<thead>
<tr>
<th>% Discussed with GP</th>
<th>What did he/she recommend?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total hearing impaired</strong></td>
<td>HA owner (Base: 398)</td>
</tr>
<tr>
<td>Total hearing impaired</td>
<td>Referred to a hearing aid dispenser / audiologist</td>
</tr>
<tr>
<td>54%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Referred to an ear doctor (ENT)</td>
</tr>
<tr>
<td>89%</td>
<td>84%</td>
</tr>
<tr>
<td></td>
<td>Recommended to get a hearing aid</td>
</tr>
<tr>
<td></td>
<td>Recommended no further action</td>
</tr>
<tr>
<td></td>
<td>Impaired non-owner (Base: 394)</td>
</tr>
<tr>
<td>HA owner</td>
<td>Referred to a hearing aid dispenser / audiologist</td>
</tr>
<tr>
<td>89%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Referred to an ear doctor (ENT)</td>
</tr>
<tr>
<td>73%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>Recommended to get a hearing aid</td>
</tr>
<tr>
<td>19%</td>
<td>Recommended no further action</td>
</tr>
<tr>
<td>Hearing impaired non-owners</td>
<td>46%</td>
</tr>
</tbody>
</table>
The route to the hearing aid: ENT

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

% Discussed with ENT

<table>
<thead>
<tr>
<th>Total hearing impaired</th>
<th>64%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA owner</td>
<td>92%</td>
</tr>
<tr>
<td>Hearing impaired non-owners</td>
<td>58%</td>
</tr>
</tbody>
</table>

What did he/she recommend?

**HA owner (Base: 418)**
- Did prescribe a hearing aid: 56%
- Referred to a hearing aid dispenser / audiologist: 53%
- Recommended no further action: 4%

**Impaired non-owner (Base: 538)**
- Did prescribe a hearing aid: 8%
- Referred to a hearing aid dispenser / audiologist: 27%
- Recommended no further action: 67%
The route to the hearing aid: Audiologist

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

% Discussed with Audiologist

- Total hearing impaired: 28%
- HA owner: 75%
- Hearing impaired non-owners: 18%

What did he/she recommend?

- HA owner (Base: 328)
  - Recommended to get a hearing aid: 95%
  - Recommended not to get a hearing aid: 5%

- Impaired non-owner (Base: 156)
  - Recommended to get a hearing aid: 54%
  - Recommended not to get a hearing aid: 46%
Recommendations by profession: GPs usually refer to an ear doctor

- **GP (N=792)**
  - Referred to an ear doctor (ENT): 76%
  - Referred to a hearing aid dispenser / audiologist: 16%
  - Recommended to get a hearing aid: 13%
  - Recommended no further action: 14%

- **ENT (N=956)**
  - Referred to an ear doctor (ENT): 52%
  - Referred to a hearing aid dispenser / audiologist: 33%
  - Recommended to get a hearing aid: 20%
  - Recommended no further action: 27%

- **Audiologist (N=484)**
  - Referred to an ear doctor (ENT): 73%
  - Recommended no further action: 27%
Potential social cost-savings due to the use of hearing aids: Work competitiveness, depressive and dementia symptoms, sleep quality
Work competitiveness: 92% 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?

- 57% Of significant use
- 35% Of some use
- 8% Of no use

Base: N=234
**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.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Hearing Aid</th>
<th>Hearing Loss, No Hearing Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think that people with an untreated hearing loss tend to be less promoted in their job</td>
<td>Agree: 3% &amp; 5%</td>
<td>Agree: 22% &amp; 21%</td>
</tr>
<tr>
<td>I think that people with an untreated hearing loss tend not to get the job they deserve</td>
<td>Agree: 11% &amp; 10%</td>
<td>Agree: 21% &amp; 23%</td>
</tr>
<tr>
<td>I think that people with an untreated hearing loss tend to be under salaried</td>
<td>Agree: 41% &amp; 41%</td>
<td>Agree: 34% &amp; 34%</td>
</tr>
</tbody>
</table>

Base: Hearing loss, no hearing aid = 675/ hearing aid n = 387

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**General health problems:** Hearing aid owners have a slightly lower risk of becoming depressive and being forgetful 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

<table>
<thead>
<tr>
<th>Hearing aid</th>
<th>Top 50% hearing loss, no hearing aid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6%</strong></td>
<td><strong>8%</strong></td>
</tr>
<tr>
<td><strong>72%</strong></td>
<td><strong>73%</strong></td>
</tr>
<tr>
<td><strong>22%</strong></td>
<td><strong>19%</strong></td>
</tr>
</tbody>
</table>

### Dementia symptom:

**Getting more forgetful in the last year?**

<table>
<thead>
<tr>
<th>Hearing aid</th>
<th>Top 50% hearing loss, no hearing aid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3%</strong></td>
<td><strong>4%</strong></td>
</tr>
<tr>
<td><strong>60%</strong></td>
<td><strong>63%</strong></td>
</tr>
<tr>
<td><strong>37%</strong></td>
<td><strong>33%</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Disagree strongly</th>
<th>Rather disagree</th>
<th>Neutral</th>
<th>Rather agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hearing aid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the evenings I often feel physically exhausted</td>
<td>7%</td>
<td>11%</td>
<td>32%</td>
<td>38%</td>
<td>12%</td>
</tr>
<tr>
<td>Top 50% hearing loss, no hearing aid</td>
<td>4%</td>
<td>16%</td>
<td>15%</td>
<td>39%</td>
<td>27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Disagree strongly</th>
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<th>Neutral</th>
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</thead>
<tbody>
<tr>
<td><strong>Hearing aid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the evenings I often feel mentally exhausted</td>
<td>10%</td>
<td>14%</td>
<td>38%</td>
<td>30%</td>
<td>7%</td>
</tr>
<tr>
<td>Top 50% hearing loss, no hearing aid</td>
<td>8%</td>
<td>14%</td>
<td>27%</td>
<td>33%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Base: hearing aid n=243 / top 50% no hearing aid =130

*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:

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- 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?

- Top 50% hearing loss, no hearing aid (n=133): 46% Yes, 54% No
- Hearing aid (n=249): 45% Yes, 55% No
3. Analysis of hearing aid owners
Hearing aid ownership, awareness of hearing loss before getting hearing aids, lifetime of hearing aids and usage
Very low adoption rates within mild hearing loss

<table>
<thead>
<tr>
<th>Stated hearing loss</th>
<th>(% of impaired population*)</th>
<th>Adoption rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profound</td>
<td>(6%)</td>
<td>45%*</td>
</tr>
<tr>
<td>Severe</td>
<td>(16%)</td>
<td>21%</td>
</tr>
<tr>
<td>Moderate</td>
<td>(32%)</td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>(46%)</td>
<td>4%</td>
</tr>
</tbody>
</table>

Base: n=1'451

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

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62% of the currently owned HAs were acquired in 2014 or later

**Year of purchase**

- 2016: 7%
- 2015: 35%
- 2014: 62%
- 2013: 74%
- 2012: 82%
- 2011: 86%
- 2010: 93%
- 2009: 94%
- 2008: 96%
- 2007: 97%
- 2006: 98%
- 2005 or earlier: 100%

**Age of currently owned HAs (Mean):**
- 2012: 3.3 years

HA-owner, n=454
On average 3 years pass between becoming aware of the hearing loss and the purchase of hearing aids. Hearing aids are used for 4 years before they are being replaced.

**Current HAs = first HAs?**

- Yes: 67%
- No: 33%

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

- 1-3 years: 40%
- 4-6 years: 42%
- 7-10 years: 14%
- 11 years or longer: 3%

Base: n=122

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

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

- 1 year: 16%
- 2 years: 19%
- 3 years: 26%
- 4-6 years: 22%
- more than 6 years: 17%

Base: n=322
Monaural-binaural treatment by purchase date

<table>
<thead>
<tr>
<th>Year of purchase</th>
<th>% ownership of binaural hearing aids</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015/2016 (EuroTrak 2016 n=179)</td>
<td>37%</td>
</tr>
<tr>
<td>2013/2014 (EuroTrak 2016 n=158)</td>
<td>30%</td>
</tr>
<tr>
<td>2012 or earlier (EuroTrak 2016 n=117)</td>
<td>24%</td>
</tr>
</tbody>
</table>
77% received some kind of 3rd party reimbursement. Information deficit non-owners: only 36% know whether government/insurance would pay

**Owners:** Was any part or all of your hearing aid(s) paid for by a third party? (Insurance, Government, ...)

- Yes, completely: 12%
- Yes, partly: 65%
- No: 19%
- don't know: 5%

HA-owner, n=475

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

- Yes: 36%
- No: 56%
- don't know: 8%

HA-non-owners, n=976
On average, HAs are worn 6.3 hours a day

HA owner, n=475

HA worn:
Mean: 6.3 hours/day

In the drawer (0 hours): 4%

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25% of today’s hearing aid owners are aware of their hearing aid brand

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

- 25% Yes, I know it by heart
- 42% No, but I could find out
- 32% No, and can't find out

In case you plan to obtain new hearing aid(s), what brand would you choose?

- 52% Preferably from the same brand you currently own
- 37% Preferably from a different brand than you currently own
- 11% Indifferent, could be any brand

Base: N=475/305
80% 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?

- 57% never
- 23% once
- 13% 2-3 times
- 7% 4-5 times
- 0% more often

HA-owner, n=459
Awareness and usage of accessories and Telecoil
Ownership of accessories is generally very low

Which of the following accessories have you heard of and which ones do you own?

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Never heard of</th>
<th>Heard of this before but don't own one</th>
<th>I own one</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio streamer to connect my hearing aids to other devices like cell phones, mp3 players, tv sets, etc</td>
<td>64%</td>
<td>31%</td>
<td>5%</td>
</tr>
<tr>
<td>Additional microphone for conversations with one person, conversations in a group etc.</td>
<td>63%</td>
<td>31%</td>
<td>5%</td>
</tr>
<tr>
<td>Combined device - audio streamer and remote control in one device</td>
<td>64%</td>
<td>32%</td>
<td>4%</td>
</tr>
<tr>
<td>TV Box connected to the tv set to stream audio to your hearing aid</td>
<td>62%</td>
<td>35%</td>
<td>3%</td>
</tr>
<tr>
<td>Phone clip, plugged into the mobile phone to stream calls to the hearing aid</td>
<td>68%</td>
<td>29%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Base: N=475
21% of hearing aid owners know what Telecoil is but only 7% have used it – mainly at home. Most of those who use it are satisfied.

### Have you seen this logo before?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, and I know what it stands for</td>
<td>21%</td>
</tr>
<tr>
<td>Yes, but I don't know what it stands for</td>
<td>30%</td>
</tr>
<tr>
<td>No, have never seen this</td>
<td>49%</td>
</tr>
</tbody>
</table>

### On what type of venues have you used hearing aids in a hearing loop (Telecoil)?

<table>
<thead>
<tr>
<th>Venue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>34%</td>
</tr>
<tr>
<td>School, university</td>
<td>32%</td>
</tr>
<tr>
<td>Conference room</td>
<td>27%</td>
</tr>
<tr>
<td>Theater, auditorium</td>
<td>25%</td>
</tr>
<tr>
<td>Church</td>
<td>24%</td>
</tr>
<tr>
<td>Airport, train station</td>
<td>23%</td>
</tr>
<tr>
<td>Court room</td>
<td>10%</td>
</tr>
<tr>
<td>Drive thru, ticket window, bank counter</td>
<td>9%</td>
</tr>
</tbody>
</table>

### Are your hearing aids equipped with Telecoil?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, and I have already used Telecoil</td>
<td>7%</td>
</tr>
<tr>
<td>Yes, but have never used it</td>
<td>14%</td>
</tr>
<tr>
<td>No</td>
<td>30%</td>
</tr>
<tr>
<td>I don't know</td>
<td>49%</td>
</tr>
</tbody>
</table>

### How satisfied are you with the use of Telecoil overall?

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>very dissatisfied</td>
<td>1%</td>
</tr>
<tr>
<td>dissatisfied</td>
<td>1%</td>
</tr>
<tr>
<td>somewhat dissatisfied</td>
<td>24%</td>
</tr>
<tr>
<td>neutral</td>
<td>18%</td>
</tr>
<tr>
<td>somewhat satisfied</td>
<td>41%</td>
</tr>
<tr>
<td>satisfied</td>
<td>5%</td>
</tr>
</tbody>
</table>

HA-owner, n=475

HA-owner, who have used Telecoil, n=48
Satisfaction with hearing aids and drivers
76% of the 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?

- 54% hearing aids work as I expected
- 24% hearing aids work better than I expected
- 22% hearing aids work worse than I expected

Base: N=475
Overall satisfaction with HA: Highest satisfaction for the following groups: ITCs, purchased 2014 or after, worn more than 8 hrs/day

<table>
<thead>
<tr>
<th></th>
<th>Total HA-user</th>
<th>BTE</th>
<th>ITE</th>
<th>ITC</th>
<th>2014 or after</th>
<th>2013 or earlier</th>
<th>HA worn up to 4 hrs/day</th>
<th>HA worn 4-8 hrs/day</th>
<th>HA worn more than 8 hrs/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>very dissatisfied</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>dissatisfied</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>somewhat dissatisfied</td>
<td>6</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>9</td>
<td>10</td>
<td>17</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>neutral</td>
<td>24</td>
<td>26</td>
<td>27</td>
<td>61</td>
<td>28</td>
<td>22</td>
<td>19</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td>somewhat satisfied</td>
<td>47</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>45</td>
<td>47</td>
<td>33</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>satisfied</td>
<td>9</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>13</td>
<td>6</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>very satisfied</td>
<td>80%</td>
<td>80%</td>
<td>75%</td>
<td>86%</td>
<td>82%</td>
<td>77%</td>
<td>56%</td>
<td>87%</td>
<td>91%</td>
</tr>
</tbody>
</table>

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Overall Satisfaction with HA: Country comparison

<table>
<thead>
<tr>
<th>Country</th>
<th>Overall satisfaction 2012</th>
<th>France</th>
<th>Switzerland</th>
<th>UK</th>
<th>Denmark</th>
<th>Norway</th>
<th>Italy</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>-</td>
<td>80%</td>
<td>84%</td>
<td>72%</td>
<td>70%</td>
<td>72%</td>
<td>70%</td>
<td>36%</td>
</tr>
<tr>
<td>France</td>
<td>80%</td>
<td>84%</td>
<td>81%</td>
<td>70%</td>
<td>71%</td>
<td>-</td>
<td>79%</td>
<td>39%</td>
</tr>
<tr>
<td>Switzerland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Satisfaction with current hearing aids

Dispenser
- Quality of dispensers counseling
- Professionalism of dispenser
- Quality of service during hearing aid fitting period
- Quality of service after purchase

Sound quality
- Clearness of tone and sound
- Natural sounding
- Richness or fidelity of sound
- Comfort with loud sounds

Product features
- Ease of changing battery
- Overall fit/ Comfort
- Reliability
- Value (performance versus money spent)
- Visibility to others
- Battery life
- Managing whistling/feedback/buzzing

%disatisfied = % very dissatisfied + % dissatisfied + % somewhat dissatisfied
%satisfied = % somewhat satisfied + % satisfied + % very satisfied

HA-owner, n=475
### Satisfaction with current hearing aids

#### Listening situation

<table>
<thead>
<tr>
<th>Situation</th>
<th>% dissatisfied</th>
<th>% satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation with one Person</td>
<td>7%</td>
<td>82%</td>
</tr>
<tr>
<td>At home with family members</td>
<td>12%</td>
<td>80%</td>
</tr>
<tr>
<td>Conversation in small groups</td>
<td>9%</td>
<td>79%</td>
</tr>
<tr>
<td>Watching TV</td>
<td>11%</td>
<td>79%</td>
</tr>
<tr>
<td>When talking to children</td>
<td>8%</td>
<td>78%</td>
</tr>
<tr>
<td>In a store, when shopping</td>
<td>10%</td>
<td>77%</td>
</tr>
<tr>
<td>Outdoors</td>
<td>11%</td>
<td>76%</td>
</tr>
<tr>
<td>Conversation in large groups</td>
<td>11%</td>
<td>76%</td>
</tr>
<tr>
<td>Leisure activities</td>
<td>7%</td>
<td>75%</td>
</tr>
<tr>
<td>When riding in a car</td>
<td>12%</td>
<td>74%</td>
</tr>
<tr>
<td>On the telephone</td>
<td>12%</td>
<td>74%</td>
</tr>
<tr>
<td>Listening to Music</td>
<td>11%</td>
<td>73%</td>
</tr>
<tr>
<td>In a larger lecture hall (e.g., theater, concert hall,...)</td>
<td>15%</td>
<td>70%</td>
</tr>
<tr>
<td>At a movie theater</td>
<td>14%</td>
<td>67%</td>
</tr>
<tr>
<td>In the workplace</td>
<td>11%</td>
<td>65%</td>
</tr>
<tr>
<td>In school or a classroom (as an observer or student)</td>
<td>14%</td>
<td>64%</td>
</tr>
<tr>
<td>Use in noisy situations</td>
<td>20%</td>
<td>62%</td>
</tr>
</tbody>
</table>

%dissatisfied\(= \% \text{very dissatisfied} + \% \text{dissatisfied} + \% \text{somewhat dissatisfied}\)
%satisfied\(= \% \text{somewhat satisfied} + \% \text{satisfied} + \% \text{very satisfied}\)

HA-owner, n=475
Factors influencing satisfaction with current HA: Sound quality/signal processing is most important for overall satisfaction with HA

**Dispenser**
- Quality of service after purchase
- Quality of dispensers counseling
- Quality of service during hearing aid fitting period
- Professionalism of dispenser

**Sound quality/signal process.**
- Clearness of tone and sound
- Natural sounding
- Richness or fidelity of sound
- Comfort with loud sounds

**Product features**
- Reliability
- Value (performance versus money spent)
- Managing whistling/feedback/buzzing
- Ease of changing battery
- Battery life
- Overall fit/ Comfort
- Visibility to others

*The Influence has been calculated with a correlation: 0 means no relation between a criterion and overall satisfaction; 1 means a maximal relationship. Read: clearness of tone and sound is the most important criterion for satisfaction.*
Frequency of important listening situations

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

- At home with family members: 59%
- When talking on a phone: 56%
- When watching TV with others: 45%
- In the workplace: 34%
- In conversations with 1 person: 31%
- In noisy situations: 30%
- In conversations with large groups: 29%
- In a larger lecture hall (e.g., theater, concert hall, place of worship, etc.): 26%
- In a store, when shopping: 25%
- In conversations with small groups: 21%
- Outdoors: 17%
- When riding in a car: 17%
- When talking to children: 16%
- When listening to music: 10%
- In school or a classroom (as an observer or student): 8%
- During leisure activities (e.g., exercising, taking a walk, etc.): 7%
- At a movie theater: 5%

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Positive impact of hearing aids, quality of life
Significant positive impact of HAs on different aspects: Especially communication effectiveness, feelings about oneself and relationships at home improves with hearing aids.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Worse</th>
<th>The Same</th>
<th>Better</th>
<th>A lot Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall ability to communicate</td>
<td>1%</td>
<td>16%</td>
<td>57%</td>
<td>25%</td>
</tr>
<tr>
<td>Feelings about yourself</td>
<td>3%</td>
<td>21%</td>
<td>51%</td>
<td>25%</td>
</tr>
<tr>
<td>Relationships at home</td>
<td>3%</td>
<td>26%</td>
<td>48%</td>
<td>23%</td>
</tr>
<tr>
<td>Ability to participate in group</td>
<td>2%</td>
<td>27%</td>
<td>55%</td>
<td>16%</td>
</tr>
<tr>
<td>Sense of safety</td>
<td>3%</td>
<td>25%</td>
<td>49%</td>
<td>21%</td>
</tr>
<tr>
<td>Confidence in yourself</td>
<td>3%</td>
<td>27%</td>
<td>47%</td>
<td>22%</td>
</tr>
<tr>
<td>Mental/emotional health</td>
<td>4%</td>
<td>27%</td>
<td>52%</td>
<td>16%</td>
</tr>
<tr>
<td>Sense of independence</td>
<td>4%</td>
<td>28%</td>
<td>47%</td>
<td>20%</td>
</tr>
<tr>
<td>Social life</td>
<td>3%</td>
<td>32%</td>
<td>45%</td>
<td>19%</td>
</tr>
<tr>
<td>Relationships at work</td>
<td>1%</td>
<td>39%</td>
<td>40%</td>
<td>17%</td>
</tr>
<tr>
<td>Mental ability</td>
<td>3%</td>
<td>42%</td>
<td>41%</td>
<td>15%</td>
</tr>
<tr>
<td>Physical health</td>
<td>4%</td>
<td>50%</td>
<td>32%</td>
<td>14%</td>
</tr>
</tbody>
</table>

HA-owner, n=475
Impact of HAs is perceived more positive by patients with a Top 50% hearing loss in most aspects

% of HA owners feeling better/a lot better

- Low 50% hearing loss (n=92)
- Top 50% hearing loss (n=345)
Even for other people in the household/relatives, the situation improves when the person with hearing loss starts wearing hearing aids.

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

- **Communication with Person**
  - a lot worse: 4%
  - worse: 13%
  - the same: 24%
  - better: 31%
  - a lot better: 28%

- **Personal relationship with Person**
  - a lot worse: 5%
  - worse: 8%
  - the same: 48%
  - better: 22%
  - a lot better: 17%

- **Quarrels/disputes with Person**
  - a lot worse: 4%
  - worse: 11%
  - the same: 52%
  - better: 19%
  - a lot better: 14%

- **Social activities together with Person**
  - a lot worse: 5%
  - worse: 8%
  - the same: 50%
  - better: 24%
  - a lot better: 14%
96% 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?

- Regularly: 36%
- Occasionally: 12%
- Rarely: 4%
- Never: 48%

Base: N=475

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4. Analysis of hearing impaired non-owners
Reasons for not having hearing aids and why some people can consider hearing aids as uncomfortable
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

<table>
<thead>
<tr>
<th></th>
<th>% HA Owner (n=475)</th>
<th>%HA-Non-owner Low 50% HL (n=482)</th>
<th>%HA-Non-owner Top 50% HL (n=270)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ears impaired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unilateral loss</td>
<td>37%</td>
<td>46%</td>
<td>30%</td>
</tr>
<tr>
<td>Bilateral loss</td>
<td>63%</td>
<td>54%</td>
<td>70%</td>
</tr>
<tr>
<td>Perceived loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>9%</td>
<td>70%</td>
<td>21%</td>
</tr>
<tr>
<td>Moderate</td>
<td>36%</td>
<td>25%</td>
<td>44%</td>
</tr>
<tr>
<td>Severe</td>
<td>41%</td>
<td>4%</td>
<td>25%</td>
</tr>
<tr>
<td>Profound</td>
<td>14%</td>
<td>0%</td>
<td>10%</td>
</tr>
</tbody>
</table>

More similar hearing loss structure
Top 10 reasons for not having a hearing aid (I/II)

- Hear well enough in most situations
- Hearing loss not severe enough
- Do not admit I have a hearing loss in public
- Cannot afford a hearing aid
- Have more serious priorities
- Uncomfortable
- Have tinnitus (ringing in ears)
- They do not restore your hearing to normal
- Would be embarrassed to wear a hearing aid
- They do not work well in noisy situations

Base: non owners Top 50% HL: n=270

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Less important reasons for not having a hearing aid (II/II)

- Have hearing loss in only one ear: 23% Reason, 17% Somewhat a reason, 60% Not a reason
- Bad design: 23% Reason, 15% Somewhat a reason, 62% Not a reason
- Have hearing loss only with low frequency sounds: 17% Reason, 19% Somewhat a reason, 64% Not a reason
- Have hearing loss only with high pitch sounds: 16% Reason, 18% Somewhat a reason, 66% Not a reason
- Ear doctors opinion (ENT): 20% Reason, 13% Somewhat a reason, 67% Not a reason
- Have Sensory-neural hearing loss (nerve deafness): 12% Reason, 19% Somewhat a reason, 69% Not a reason
- I have vision or dexterity problems: 16% Reason, 14% Somewhat a reason, 69% Not a reason
- Family doctors opinion (GP): 17% Reason, 13% Somewhat a reason, 70% Not a reason
- Another hearing aid owners opinion: 12% Reason, 17% Somewhat a reason, 71% Not a reason
- Have not had hearing tested yet: 19% Reason, 9% Somewhat a reason, 71% Not a reason
- Have tried hearing aid and they do not work: 11% Reason, 16% Somewhat a reason, 74% Not a reason
- Do not know where to get hearing aids: 13% Reason, 9% Somewhat a reason, 77% Not a reason
- Hearing problem requires surgery: 15% Reason, 7% Somewhat a reason, 78% Not a reason
- Social / Family opinion such as child, spouse, friend: 10% Reason, 11% Somewhat a reason, 79% Not a reason
- Do not trust Hearing Aid Dispenser/Audiologist: 12% Reason, 8% Somewhat a reason, 80% Not a reason
- Hearing Aid Dispenser/Audiologists opinion: 9% Reason, 10% Somewhat a reason, 81% Not a reason
- Had surgery - hearing aids wont help: 11% Reason, 6% Somewhat a reason, 82% Not a reason

Base: non owners Top 50% HL: n=270
Top 10 reasons for HA owners NOT using them

1. They do not restore your hearing to normal: 74% Reason, 20% Somewhat a reason, 5% Not a reason
2. They do not work well in noisy situations: 35% Reason, 46% Somewhat a reason, 19% Not a reason
3. Have tinnitus (ringing in ears): 62% Reason, 13% Somewhat a reason, 25% Not a reason
4. Uncomfortable: 50% Reason, 18% Somewhat a reason, 32% Not a reason
5. Have tried hearing aid and they do not work: 58% Reason, 8% Somewhat a reason, 35% Not a reason
6. Hear well enough in most situations: 38% Reason, 25% Somewhat a reason, 37% Not a reason
7. Hearing loss not severe enough: 43% Reason, 15% Somewhat a reason, 42% Not a reason
8. Have Sensory-neural hearing loss (nerve deafness): 51% Reason, 7% Somewhat a reason, 43% Not a reason
9. Have more serious priorities: 34% Reason, 15% Somewhat a reason, 51% Not a reason
10. Would be embarrassed to wear a hearing aid: 30% Reason, 16% Somewhat a reason, 54% Not a reason

Owners who don't use, n=23
Meaning of «uncomfortable» (open question)

You mentioned "uncomfortable" as a reason why you don't use your hearing aid(s). Please describe in detail why you consider your hearing aids uncomfortable.

- foreign object in the ear, it pinches, it hurts, too big, visible: 57%
- fall out, afraid of losing it: 12%
- uncomfortable in general: 12%
- others say it is uncomfortable: 9%
- not suited for certain activities (sports, swimming...): 5%
- uncomfortable with glasses: 4%
- taking it on and off, adjusting: 3%
- uncomfortable noises, feedback, etc.: 3%
- it is itching: 2%
- cerumen, dirt, infection: 2%
- keeping it dry: 2%
- changing batteries: 1%
- maintenance, cleaning: 1%
- other: 5%

Base: n=324
Social rejection because of hearing loss compared to the acceptance of hearing aids
82% of hearing aid owners think people rarely or never make fun of or reject them because of their hearing aids. It is more likely somebody makes fun or rejects a hearing impaired without hearing aid.

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

- Never: 13%
- Rarely: 20%
- Occasionally: 5%
- Regularly: 62%

**Hearing impaired non-owners:**
How often do you feel you are made fun of or rejected because your hearing loss?

- Never: 38%
- Rarely: 40%
- Occasionally: 1%
- Regularly: 21%

Base: N=475
Base: Top 50% hearing loss, no hearing aid N=270
Buying intentions and most important triggers to buy
9% of non-owners intend to get a hearing aid within the next year. Re-buying intention is higher than first-buying intention.
The most important influencing factors are worsening hearing loss, ENT and significant others (+price, insurance coverage for the non owners)

**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?

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

<table>
<thead>
<tr>
<th>Factor</th>
<th>Non-Owner (n=976)</th>
<th>Owner (n=475)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing loss got worse</td>
<td></td>
<td>69%</td>
</tr>
<tr>
<td>ENT/ Ear Doctor</td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Price of hearing aid</td>
<td></td>
<td>42%</td>
</tr>
<tr>
<td>Free due to coverage by Insurance / Received hearing aid...</td>
<td>10%</td>
<td>38%</td>
</tr>
<tr>
<td>Spouse</td>
<td></td>
<td>27%</td>
</tr>
<tr>
<td>GP /Family doctor</td>
<td></td>
<td>30%</td>
</tr>
<tr>
<td>Another hearing aid owner (word of mouth)</td>
<td></td>
<td>22%</td>
</tr>
<tr>
<td>Safety concerns</td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td>Audiologist clinic / hospital</td>
<td></td>
<td>19%</td>
</tr>
<tr>
<td>Child</td>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>Financial Situation improved</td>
<td></td>
<td>26%</td>
</tr>
<tr>
<td>Relative, friend</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Hearing aid dispenser / Audiologist</td>
<td></td>
<td>14%</td>
</tr>
<tr>
<td>Direct mail piece</td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td>Hearing loss article or literature</td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>TV advertisement</td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>Internet: Websites of hearing aids manufacturers</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Co-worker or boss</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td>Information/advice about hearing loss from consumer...</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>Internet: Other websites, google...</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Internet: Websites of hearing aid clinics</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Newspaper advertisement</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>Radio advertisement</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Celebrity or public Personality</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Telemarketing phone call</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Magazine advertisement</td>
<td></td>
<td>2%</td>
</tr>
</tbody>
</table>

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The most important trigger to buy a hearing aid when the hearing loss gets worse is ENT

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

- Hearing loss got worse: 30%
- ENT/ Ear Doctor: 19%
- Hearing aid dispenser / Audiologist: 8%
- Child: 7%
- Spouse: 7%
- Audiologist clinic / hospital: 6%
- GP /Family doctor: 4%
- Price of hearing aid: 4%
- Another hearing aid owner (word of mouth): 3%
- TV advertisement: 2%
- Free due to coverage by Insurance /...: 2%
- Direct mail piece: 2%
- Friend / relative: 1%
- Safety concerns: 1%
- Information/advice about hearing loss...: 1%
- Financial Situation improved: 1%

Hearing aid owner (n=475)
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Mobil +41 (0)78 717 88 01
Email stefan.ruf@anovum.com
www.anovum.com

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Telefon +41 (0)44 576 76 78
Mobil +41 (0)76 318 57 51
E-Mail christian.egger@anovum.com
www.anovum.com

EHIMA
Soeren Hougaard
EHIMA secretary general
Phone: (+45) 4045 7135
Email: sh@ehima.com
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 +/−3.1 around 15% - which means between 11.9% and 18.1% (Conservative assumption: 95% confidence level)

<table>
<thead>
<tr>
<th>Sample size</th>
<th>Random sample error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Real value is within interval:</td>
</tr>
<tr>
<td></td>
<td>Level of proportion: 50%/50%</td>
</tr>
<tr>
<td>50</td>
<td>+/− 13.9</td>
</tr>
<tr>
<td>100</td>
<td>+/− 9.8</td>
</tr>
<tr>
<td>250</td>
<td>+/− 6.2</td>
</tr>
<tr>
<td>500</td>
<td>+/− 4.4</td>
</tr>
<tr>
<td>1000</td>
<td>+/− 3.1</td>
</tr>
<tr>
<td>5’000</td>
<td>+/− 1.4</td>
</tr>
<tr>
<td>10’000</td>
<td>+/− 1.0</td>
</tr>
</tbody>
</table>
# Demographics (1) Hearing instrument adoption rates and populations

Profiles: Categories add to 100%*

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Hearing difficulty</th>
<th>Hearing aid adoption rate % (Base=hearing impaired)</th>
<th>No hearing loss</th>
<th>Hearing loss but no hearing aid</th>
<th>Hearing aid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7'429</td>
<td>17.9%</td>
<td>16.3%</td>
<td>47%</td>
<td>55%</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>7'915</td>
<td>14.1%</td>
<td>19.5%</td>
<td>53%</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Age recoded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 14</td>
<td>2'258</td>
<td>4.7%</td>
<td>17.4%</td>
<td>17%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>15 - 24</td>
<td>1'704</td>
<td>7.8%</td>
<td>13.3%</td>
<td>12%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>25 - 34</td>
<td>2'390</td>
<td>9.3%</td>
<td>9.6%</td>
<td>17%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>35 - 44</td>
<td>2'396</td>
<td>10.4%</td>
<td>10.3%</td>
<td>17%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>45 - 54</td>
<td>1'888</td>
<td>16.5%</td>
<td>7.7%</td>
<td>12%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>55 - 64</td>
<td>2'213</td>
<td>21.8%</td>
<td>11.2%</td>
<td>13%</td>
<td>21%</td>
<td>12%</td>
</tr>
<tr>
<td>65 - 74</td>
<td>1'393</td>
<td>29.6%</td>
<td>19.8%</td>
<td>8%</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>75+</td>
<td>1'101</td>
<td>48.4%</td>
<td>36.2%</td>
<td>4%</td>
<td>17%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Type of household</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>single household</td>
<td>1'162</td>
<td>27.3%</td>
<td>25.6%</td>
<td>7%</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>Couple, no kids</td>
<td>3'479</td>
<td>21.9%</td>
<td>20.5%</td>
<td>21%</td>
<td>30%</td>
<td>36%</td>
</tr>
<tr>
<td>Couple with kid(s)</td>
<td>8'219</td>
<td>11.3%</td>
<td>12.5%</td>
<td>57%</td>
<td>40%</td>
<td>27%</td>
</tr>
<tr>
<td>Single mom/dad with kid(s)</td>
<td>851</td>
<td>13.8%</td>
<td>23.8%</td>
<td>6%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Retirement home, hospital etc.</td>
<td>25</td>
<td>54.4%</td>
<td>27.1%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>1'608</td>
<td>19.3%</td>
<td>16.4%</td>
<td>10%</td>
<td>13%</td>
<td>12%</td>
</tr>
</tbody>
</table>

* Small sample sizes in some categories
# Demographics (2) Hearing instrument adoption rates and populations

Profiles: Categories add to 100%*

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
<th>Hearing difficulty</th>
<th>Hearing aid adoption rate % (Base=hearing impaired)</th>
<th>No hearing loss</th>
<th>Hearing loss but no hearing aid</th>
<th>Hearing aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>The head of the household (alone or together with someone)</td>
<td>7'360</td>
<td>20.4%</td>
<td>17.3%</td>
<td>46%</td>
<td>62%</td>
<td>60%</td>
</tr>
<tr>
<td>The spouse of the head of the household</td>
<td>2'461</td>
<td>17.5%</td>
<td>18.3%</td>
<td>16%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Daughter/son of head of household</td>
<td>4'513</td>
<td>6.1%</td>
<td>14.6%</td>
<td>33%</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Other Person</td>
<td>895</td>
<td>23.6%</td>
<td>24.5%</td>
<td>5%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time employed</td>
<td>6'604</td>
<td>13.1%</td>
<td>8.6%</td>
<td>54%</td>
<td>41%</td>
<td>18%</td>
</tr>
<tr>
<td>Part time employed</td>
<td>674</td>
<td>15.4%</td>
<td>14.4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Unemployed / not working</td>
<td>908</td>
<td>12.7%</td>
<td>11.0%</td>
<td>7%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Retired under a disability pension scheme (fully or partly)</td>
<td>547</td>
<td>25.7%</td>
<td>26.8%</td>
<td>4%</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Early retired under an early retirement benefit scheme</td>
<td>247</td>
<td>21.0%</td>
<td>13.1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Retired (at the official retirement age)</td>
<td>2'760</td>
<td>35.7%</td>
<td>26.7%</td>
<td>17%</td>
<td>38%</td>
<td>64%</td>
</tr>
<tr>
<td>Student / pupil / in training</td>
<td>1'251</td>
<td>6.3%</td>
<td>6.3%</td>
<td>11%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niepełne podstawowe</td>
<td>61</td>
<td>51.9%</td>
<td>37.1%</td>
<td>0%</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Podstawowe</td>
<td>616</td>
<td>35.5%</td>
<td>29.2%</td>
<td>4%</td>
<td>8%</td>
<td>15%</td>
</tr>
<tr>
<td>Gimnazjalne</td>
<td>394</td>
<td>11.0%</td>
<td>29.2%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Zasadnicze zawodowe</td>
<td>1'729</td>
<td>25.3%</td>
<td>19.7%</td>
<td>12%</td>
<td>18%</td>
<td>21%</td>
</tr>
<tr>
<td>Średnie Ogólnokształcące</td>
<td>1'754</td>
<td>14.2%</td>
<td>15.2%</td>
<td>14%</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Średnie zawodowe</td>
<td>2'422</td>
<td>20.3%</td>
<td>17.4%</td>
<td>18%</td>
<td>21%</td>
<td>21%</td>
</tr>
<tr>
<td>Policealne</td>
<td>862</td>
<td>16.3%</td>
<td>16.3%</td>
<td>7%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Wyższe</td>
<td>5'155</td>
<td>14.1%</td>
<td>13.0%</td>
<td>42%</td>
<td>33%</td>
<td>23%</td>
</tr>
</tbody>
</table>

* Small sample sizes in some categories