

# Prevalence and Impact of Hearing Loss in Aotearoa New Zealand

Mike Sharp, New Zealand Hearing Industry Association

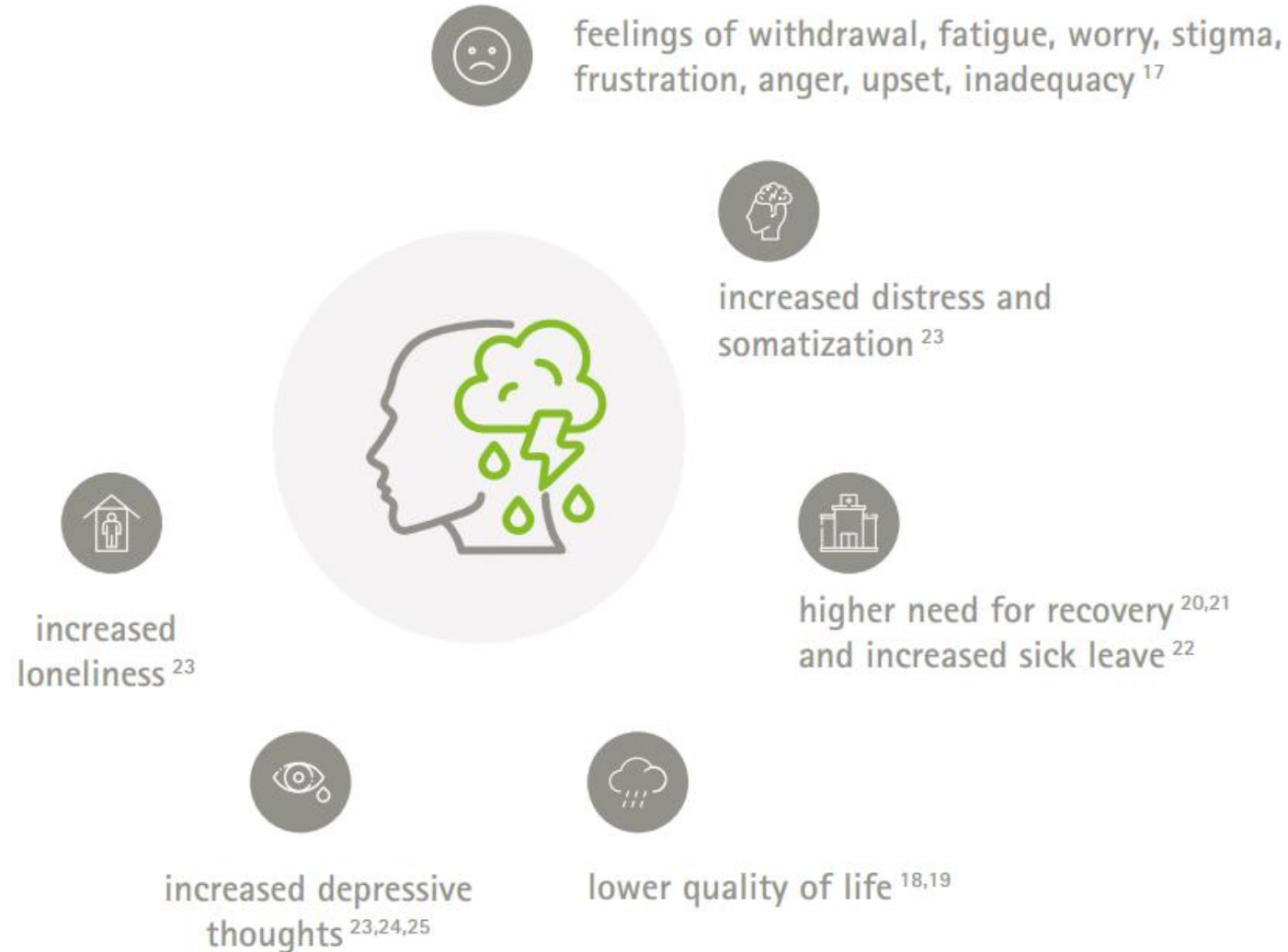
# Some background

- New Zealand Hearing Industry Association (NZHIA) represents manufacturers of hearing aids and hearing clinics in New Zealand
- NZHIA was formed to unify the hearing sector in New Zealand and to improve access and funding of hearing health services for New Zealanders
- NZHIA works closely with government, other professional bodies in the sector, and New Zealanders suffering from hearing loss
- About me
  - Audiologist with experience in both clinical practice and hearing aid manufacture
  - Managing Director of Sonova New Zealand (Wholesale)
  - Past member of Executive Council of New Zealand Audiological Society
  - Currently Chair of Hearing Instrument Manufacturers & Distributors Association

# Audiology in New Zealand

- New Zealanders hearing needs met by audiologists
  - Master of Audiology qualification or higher
  - Staffing shortages in many regions
- Needs of hearing impaired New Zealanders met by a combination of private and public audiological services
- Audiologists perform combination of diagnostic and rehabilitation services to all ages

# Hearing loss is associated with reduced psychosocial health



# Hearing loss is more prevalent with....

cardiovascular disease /  
cardiovascular risk factors <sup>11,12,14,15</sup>



chronic  
kidney disease <sup>16</sup>



diabetes <sup>10,11,12,13</sup>



cancer <sup>11,12</sup>



arthritis <sup>11,12,13</sup>



# Hearing loss is also associated with....

reduced postural control<sup>5</sup> and  
higher risk of falls<sup>6</sup>



accelerated cognitive  
decline<sup>2,3,4</sup>

tinnitus<sup>1</sup>



increased use of  
health care services<sup>7,8</sup>

higher incidence  
of injuries<sup>7</sup>



higher health  
care costs<sup>9</sup>

# Hearing loss & dementia

Lancet Commission on Dementia Prevention, Intervention & Care 2017

- 9 modifiable risk factors identified
- Recognition of hearing loss as a risk factor for dementia relatively new
- At 9% modifiable risk factor, the risk of hearing loss in mid & late life for dementia is *higher than any other individual risk factor*
- Also pertinent for many people given the high prevalence in these populations
- Recognises the mechanism of the association between hearing loss & dementia are not yet clear
- Neither is it established that whether correction (e.g. hearing aids) can prevent or delay onset of dementia
- Recommend, amongst other things, maintaining social engagement & management of hearing loss

# 1. NewZealandTrak 2018



# NewZealandTrak 2018

Establishing the prevalence & impact of hearing loss in NZ

- Until NewZealandTrak 2018 (NZTrak2018) no comprehensive research into the prevalence and impact to hearing loss in New Zealand
  - NZTrak2018 data provides an insight into the scale of hearing loss and social and economic impacts it is having for hundreds of thousands of New Zealanders
- NZTrak 2018 was designed & executed by Anovum (Zurich) on behalf on the NZHIA, with support of European Hearing Instrument Manufacturers Association
- Data collection
  - 16,080 screening interviews: self-reported prevalence & hearing aid ownership
  - 1,316 target population (hearing-impaired) interviews: hearing satisfaction & reasons for non-ownership
  - Both steps balanced to represent overall population

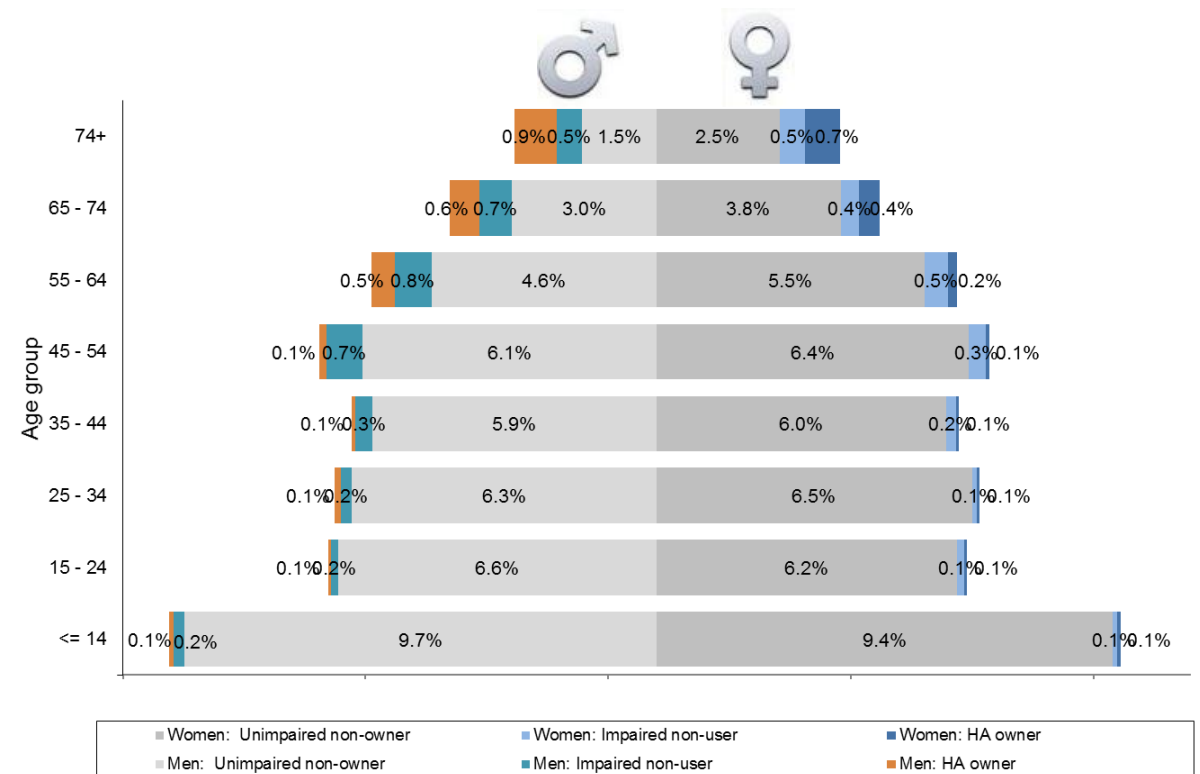
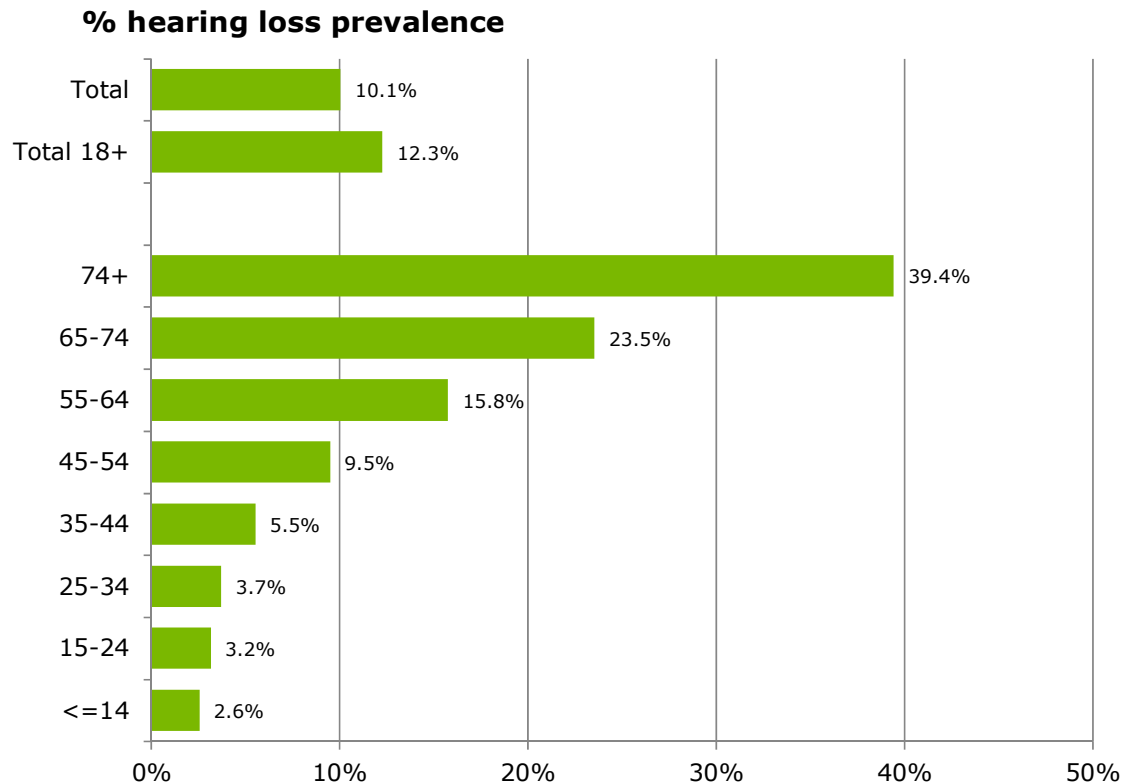
[www.nzhia.org.nz/wp-content/uploads/2017/03/NewZealandTrak\\_2018\\_Final-Report-public-copy.pdf](http://www.nzhia.org.nz/wp-content/uploads/2017/03/NewZealandTrak_2018_Final-Report-public-copy.pdf)

# 2. Hearing loss prevalence

## The use of hearing aids

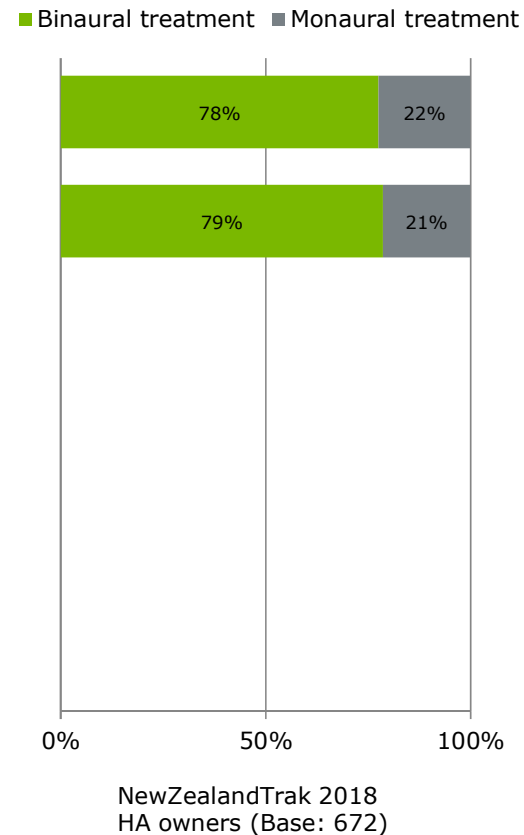
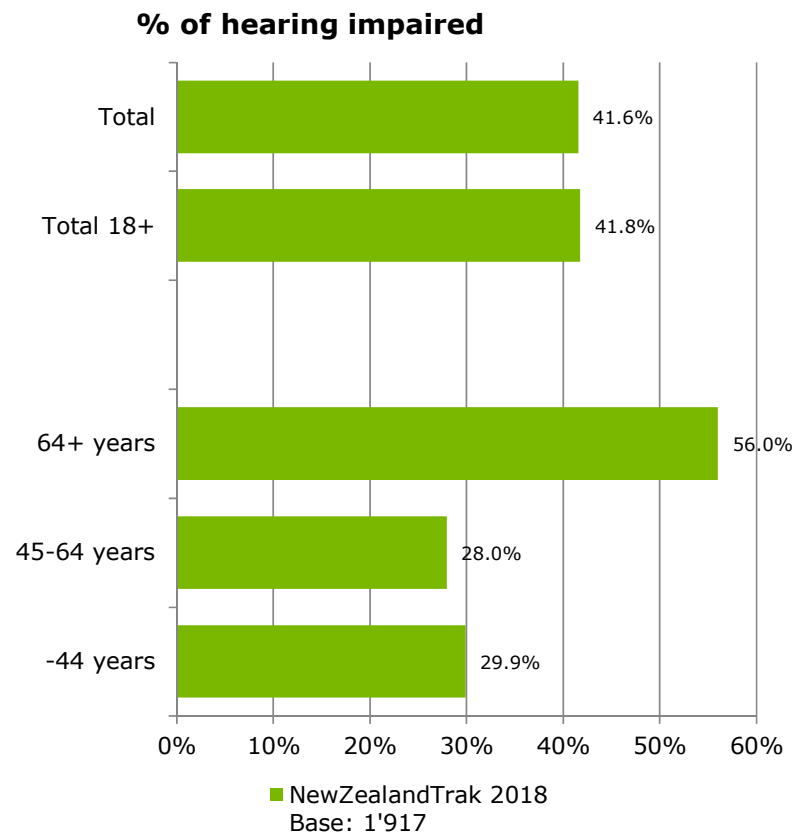
# Hearing loss prevalence

1 in 10 New Zealanders experience some form of hearing loss



# Use of hearing aids

42% of hearing impaired use hearing aids



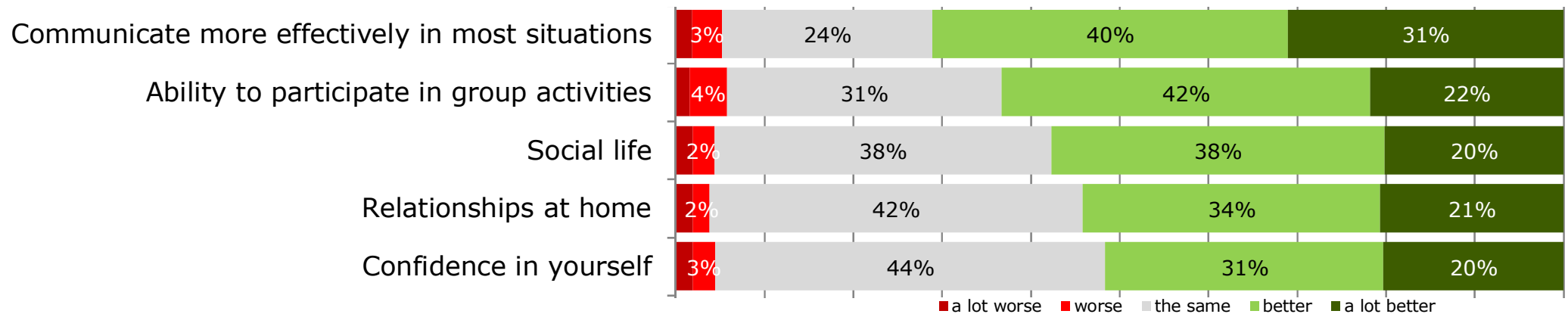
- On average hearing aids worn 8.5 hrs/day
- Average wait of 3-4 years before commit to hearing aids
- 83% say hearing aids work better than or as expected
- 64% think they should have got hearing aids earlier
- 85% say hearing aids are useful in their job
- High overall satisfaction for professionalism of audiologist & services provided

# 3. Impacts of hearing loss

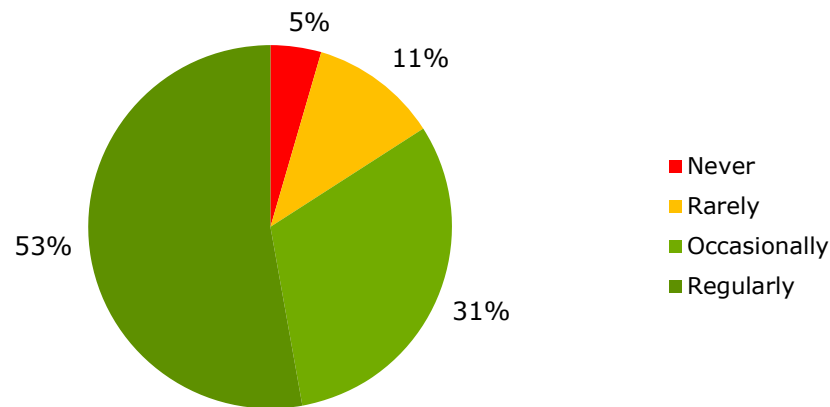
## Benefits of hearing aids

# Quality of Life Impact: Changes noticed with hearing aid use

## Rating of changes experienced as a result of hearing aid use



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

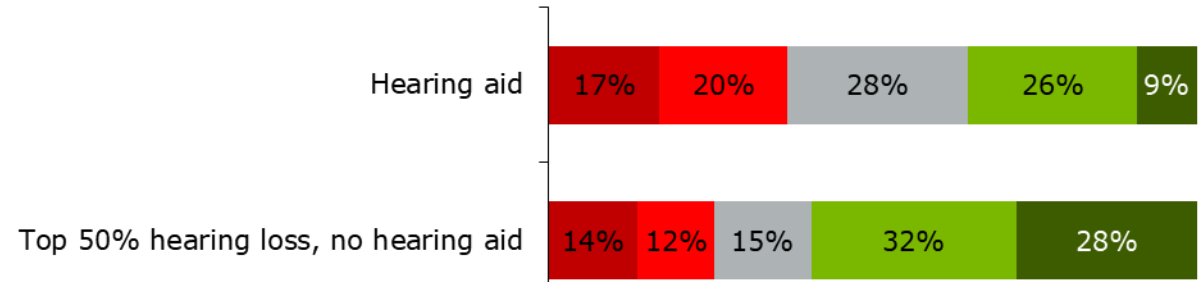


# Quality of Life impact: Exhaustion

## Physical & mental exhaustion

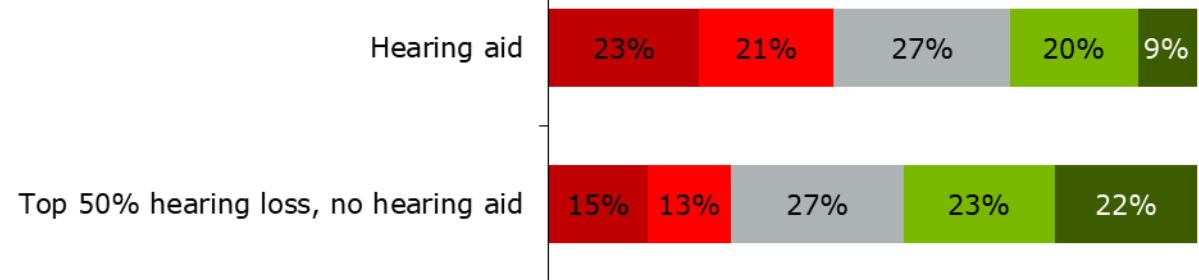
■ Disagree strongly ■ Rather disagree ■ Neutral ■ Rather agree ■ Strongly agree

In the evenings I often feel physically exhausted



**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

In the evenings I often feel mentally exhausted



Base: hearing aid n=412 / top 50% HL, no hearing aid =99

\*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:

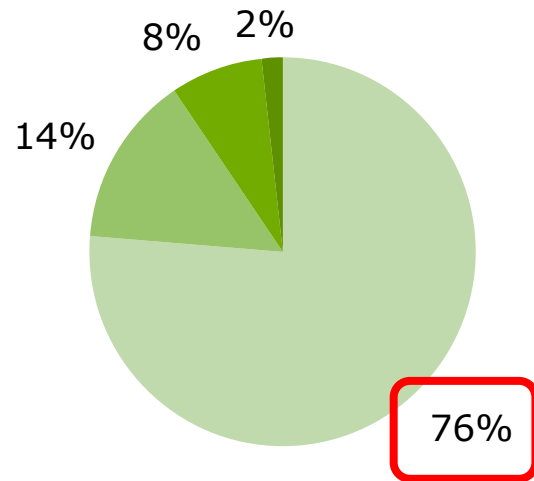
- Number of ears impaired (one or two)
- Stated hearing loss (Mild to Profound)
- Scores on 6 APHAB-EC – like questions (Scaled 1-5)
- When NOT using a hearing aid, how difficult is it for you to follow conversations in the presence of noise

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

# Quality of Life impact: Rejection, being made fun of

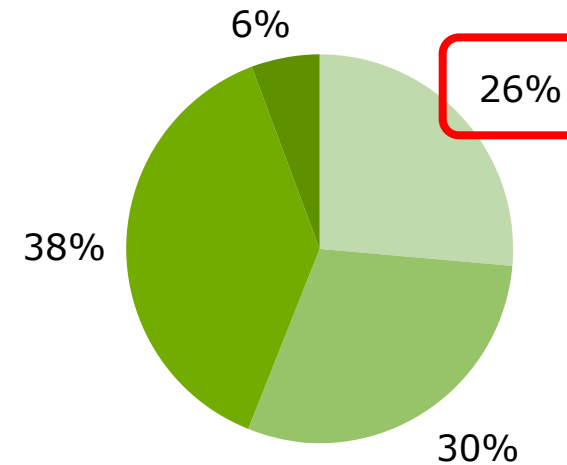
How often do you feel you are made fun of or rejected because you are wearing a hearing aid or have a hearing loss?

### Hearing aid owners



Base: N=639

### Hearing impaired non-owners



Base: Top 50% hearing loss, no hearing aid N=171

- Never
- Rarely
- Occasionally
- Regularly



# Quality of Life impact: Depression

Depression symptoms:

PHQ-2 Screening:

In the last 2 weeks:

Little interest or pleasure

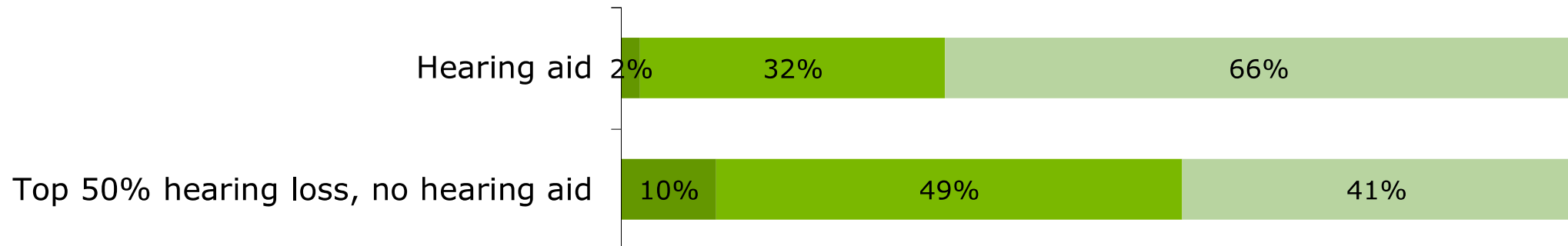
Feeling down, depressed, hopeless

Probability of major depressive disorder

■ very high

■ medium

■ very low



Base: hearing aid n=417 / top 50% HL, no hearing aid n=100

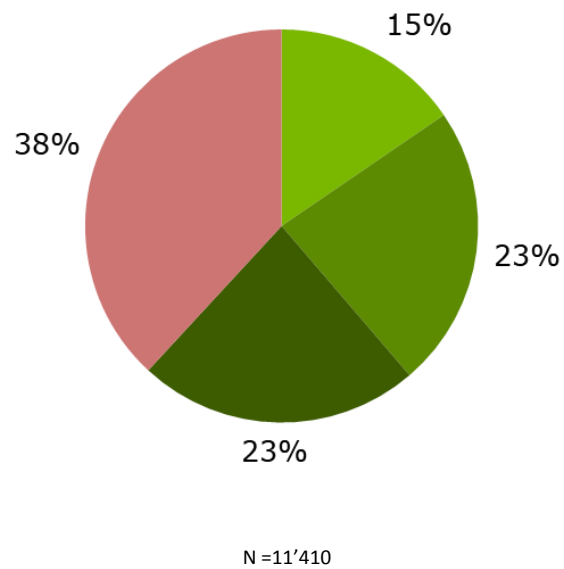
# 4. Access to services

# It starts with a hearing test

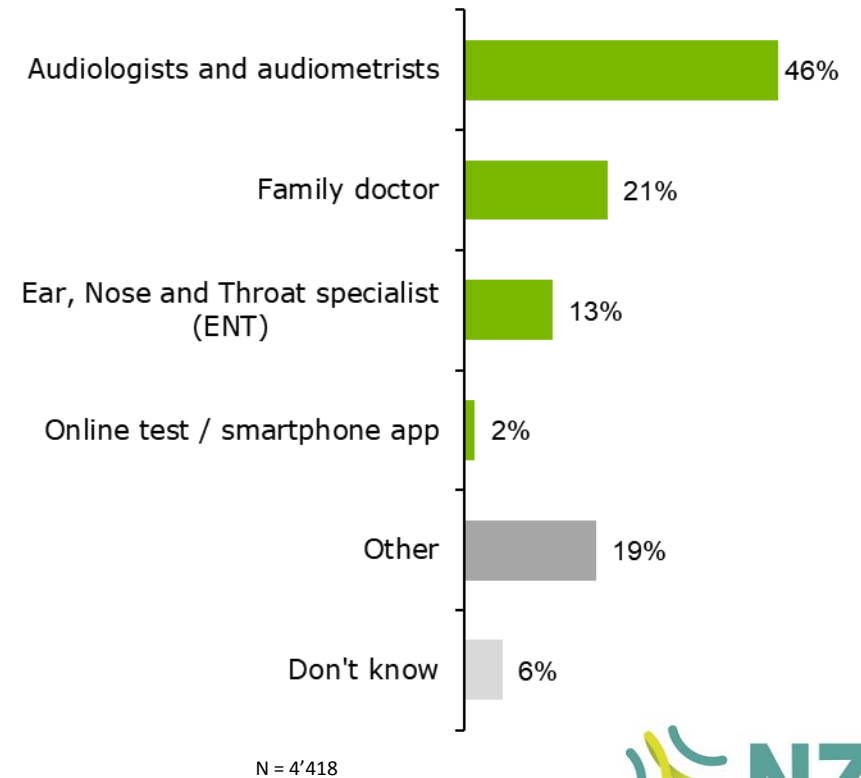
38% have had a hearing test in last 5 years

Have you ever taken a hearing test?

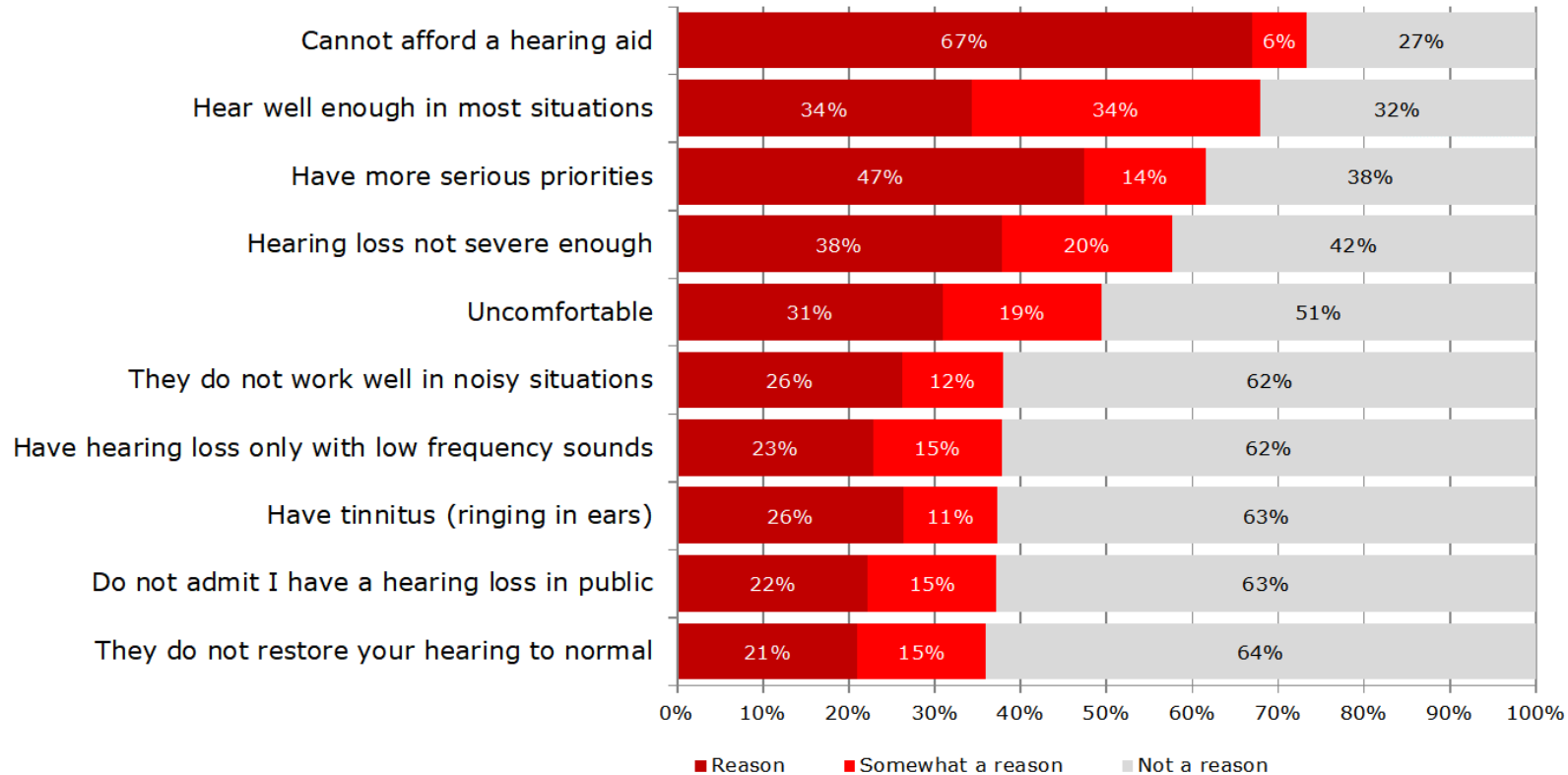
■ Yes, in the last 12 months ■ Yes, in the last 1-5 years  
■ Yes, more than 5 years ago ■ No, never



Where/how was your hearing tested?



# What are the barriers to access?



# What can you do to help?

Don't forget about hearing!

- Incorporate discussions about hearing in annual check ups (especially 50+)
- If evidence of hearing difficulties, 1<sup>st</sup> step is to get the hearing tested
- Always refer to your local audiologist if evidence of asymmetry, balance, fluctuations in hearing
- Consider investing in a hearing screening solution
  - Traditional testing equipment
  - Quality smartphone based solutions becoming available, for example:
    - Hearxgroup.com - smartphone based, automated testing options, data in the cloud, calibrated transducers
    - Kuduwave – PC based, automated testing options, data in the cloud, calibrated transducers
- NZHIA in discussions with RNZCGP about how increasing access and awareness of screening could work

Thank you!

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