STRATEGIES TO IMPROVE ACCESS OF HEARING HEALTH CARE AND ASSISTIVE TECHNOLOGIES

ROUND TABLE

- Moderator : Bernard FRAYSSE
  Panelists : Vincent COUSINS
  Seung-ha OH
  Giang DO HONG
  Roland LASZIG
  Saim LOKMAN
  Kaoru OGAWA

HO CHI MINH
November 24th-26th, 2019

GLOBAL BURDEN OF HEARING LOSS

- Hearing loss is one of the major problem in public health due to :

Prévalence

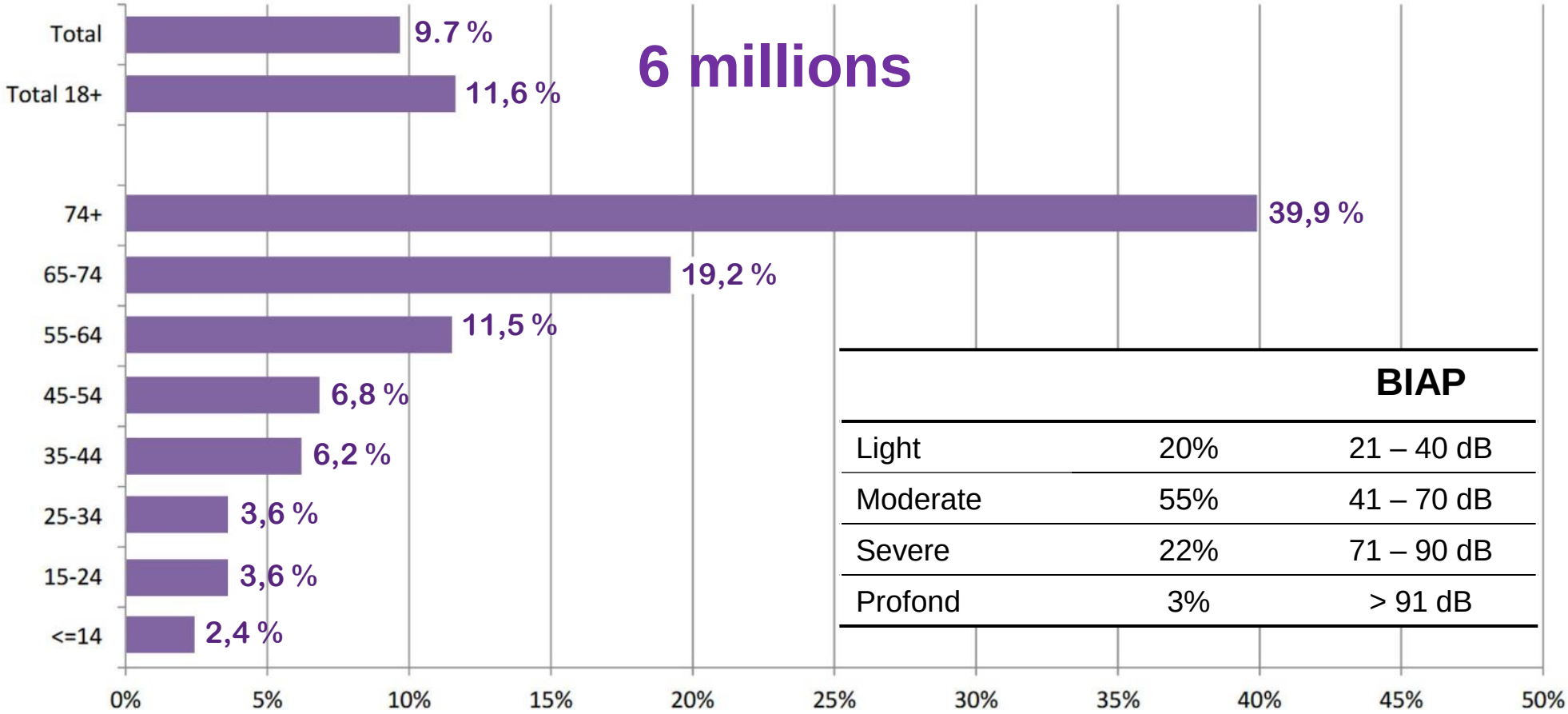
- The rankings of **Y.L.D.** due to hearing loss change from 11th in 2010 to 4th in 2015

Consequences

- Neurocognitive function in adult and children

Cost

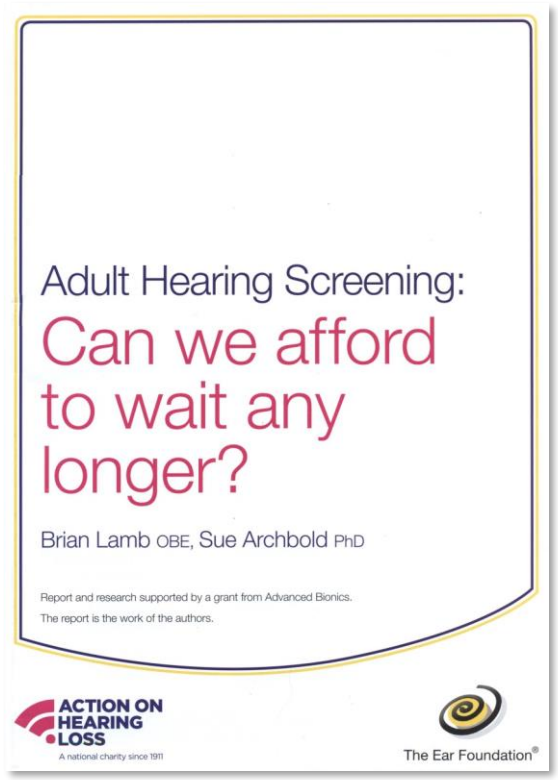
PREVALENCE EURO TRACK 2018



6 millions

		BIAP
Light	20%	21 – 40 dB
Moderate	55%	41 – 70 dB
Severe	22%	71 – 90 dB
Profond	3%	> 91 dB

What are the barriers for early identification in adult and how this barriers can be overcom ?



What evidence public health need to make decision ?

JRRD Volume 48, Number 3, 2011
Pages 235–244
Journal of Rehabilitation Research & Development

Department of Veterans Affairs

Long-term cost-effectiveness of screening strategies for hearing loss

Chuan-Fen Liu, PhD, MPH;[1–2*] Margaret P. Collins, PhD, CCC-A;[1] Pamela E. Souza, PhD, CCC-A;[3] Bevan Yueh, MD, MPH[1,4–5]

Table 3.
Effectiveness of hearing loss screening, unadjusted.

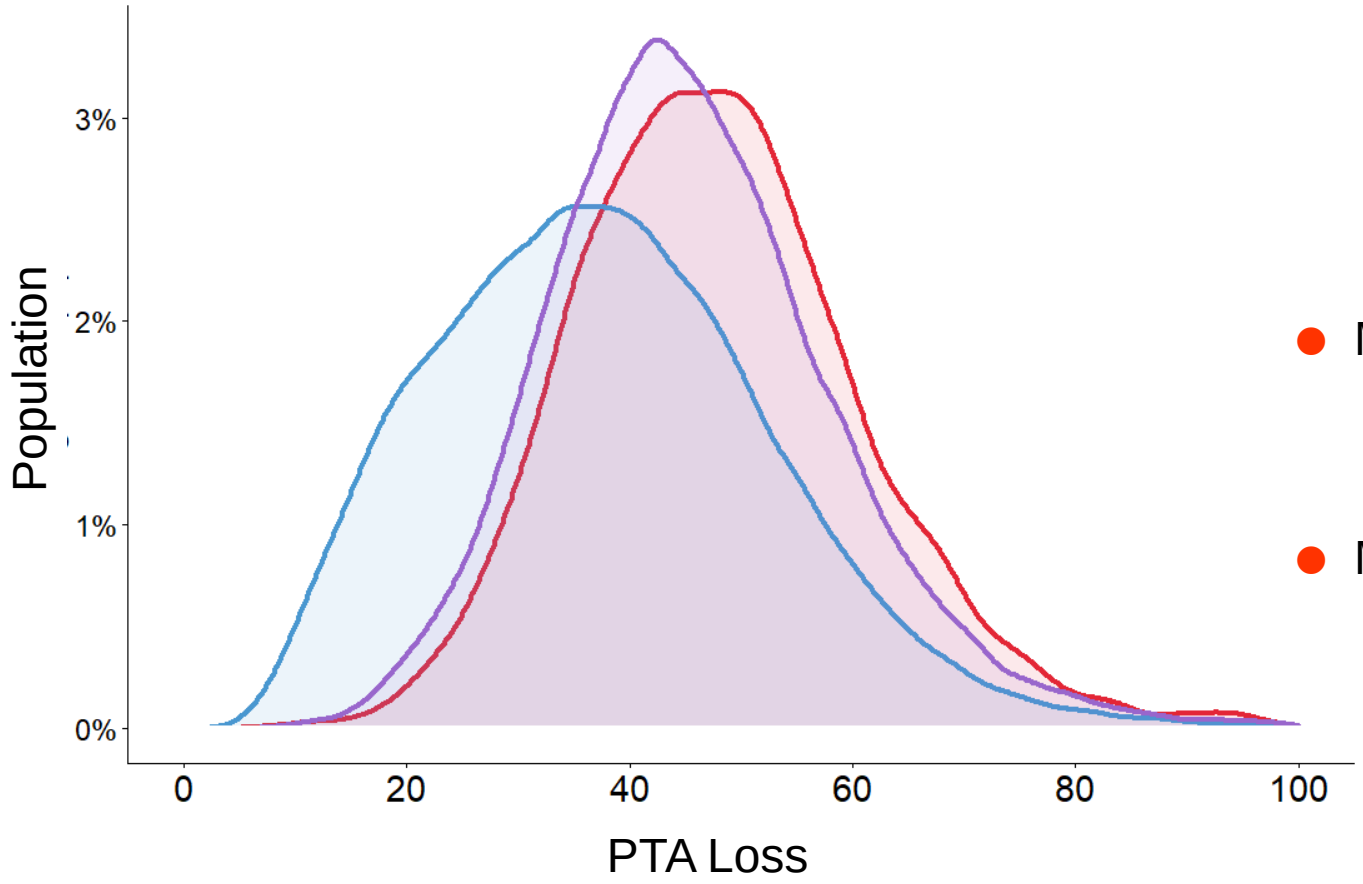
Effectiveness	Control ($n = 897$)	Otoscope ($n = 454$)	Questionnaire ($n = 449$)	Dual Screening ($n = 451$)	p-Value*
Screened Positive For Hearing Loss (%)	—	18.1	58.8	63.4	<0.001
Having an Audiology Visit (%)	11.4	14.5	23.2†	27.1†	<0.001
No. of Audiology Visits per Participant (mean ± SD)	0.21 ± 0.76	0.29 ± 0.88	0.32‡ ± 0.68	0.42† ± 0.86	<0.001
Using Hearing Aid 1 Year After Screening (%)	3.3	6.4‡	4.1	7.5†	0.003

*Based on analysis of variance test of equality across four group
†Significance level compared with control group, $p < 0.001$.
‡Significance level compared with control group, $p < 0.01$.
SD = standard deviation.

This study show that screening is inexpensive an effective

ENT SCREENING STRATEGIES

116.810 patients



- Mean age :
  - ENT : 73 ans
  - Screening : **70 ans**
- Mean PTA : **-15 dB**

amplifon

ACCESS TO HEARING REHABILITATION

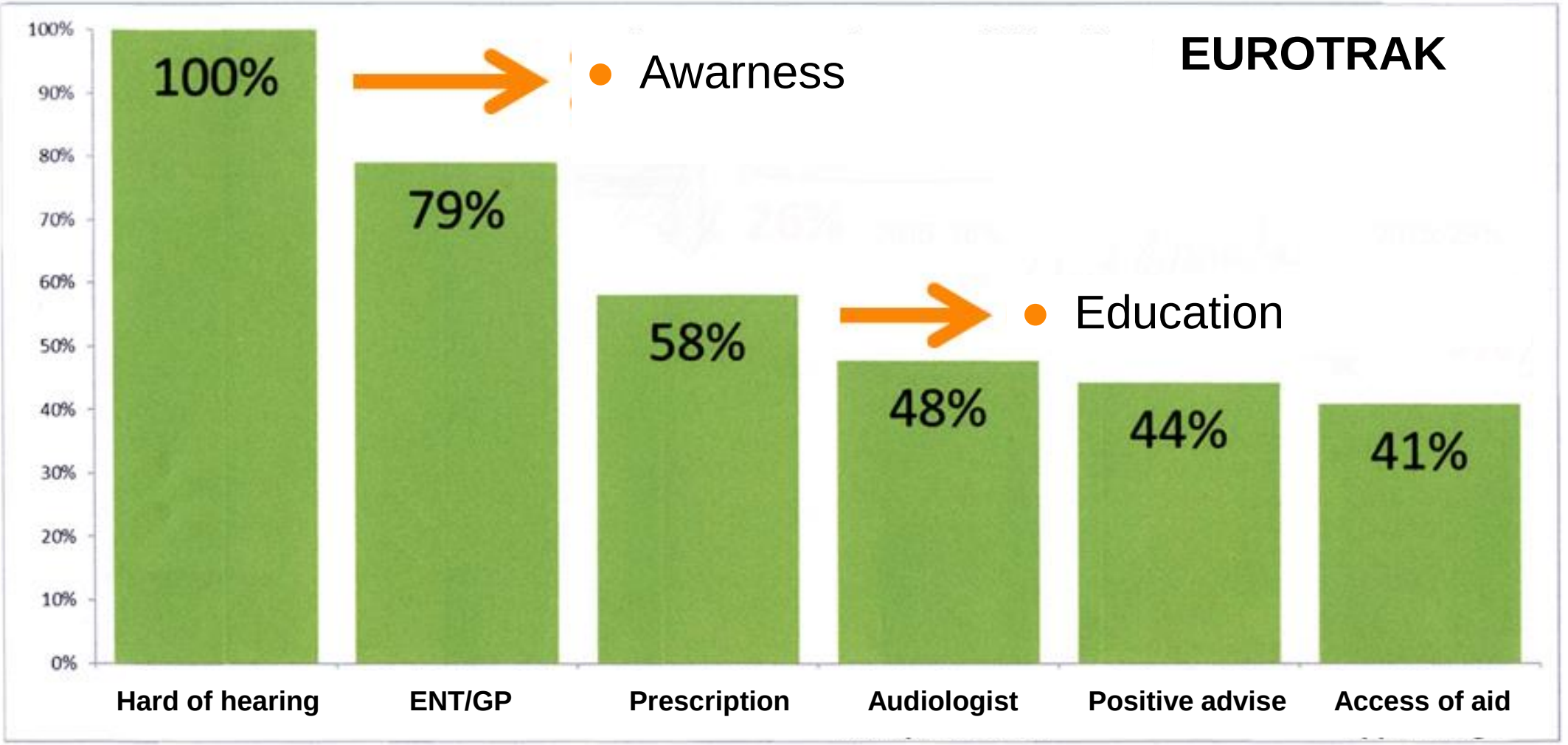
Human ressources
(ENT, Audiologist, Speech Therapist)

Accessibility

Who decides access and financing ?

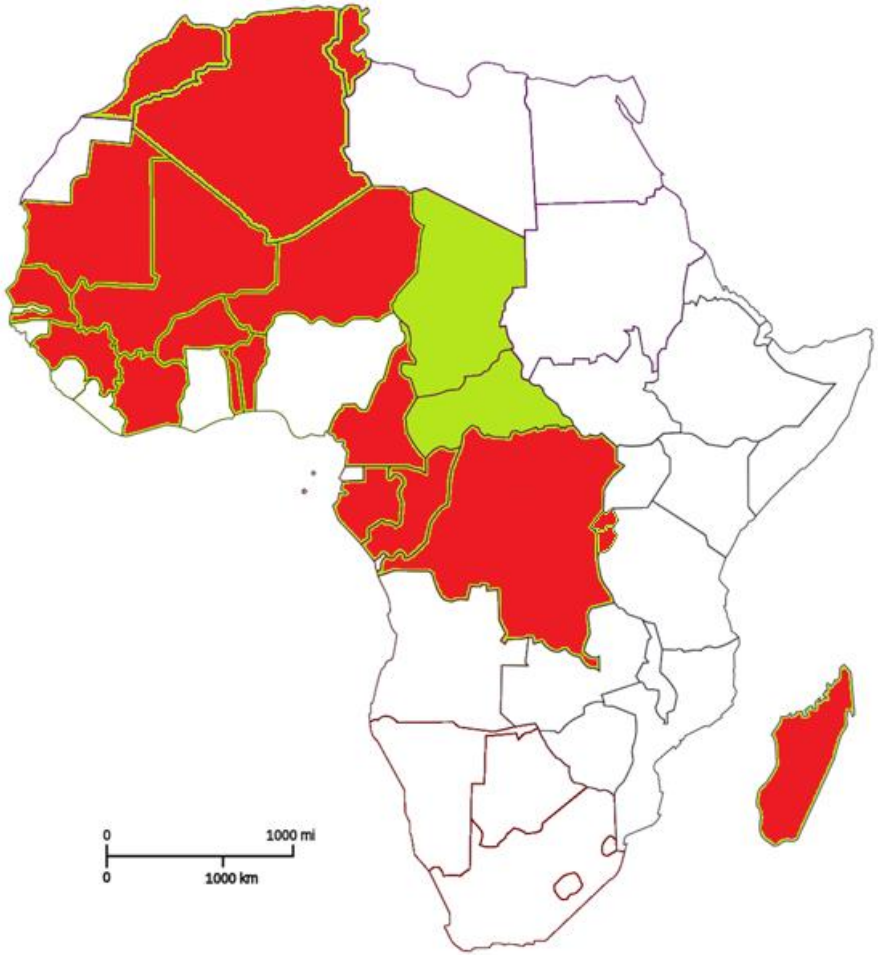
Cost/effectiveness

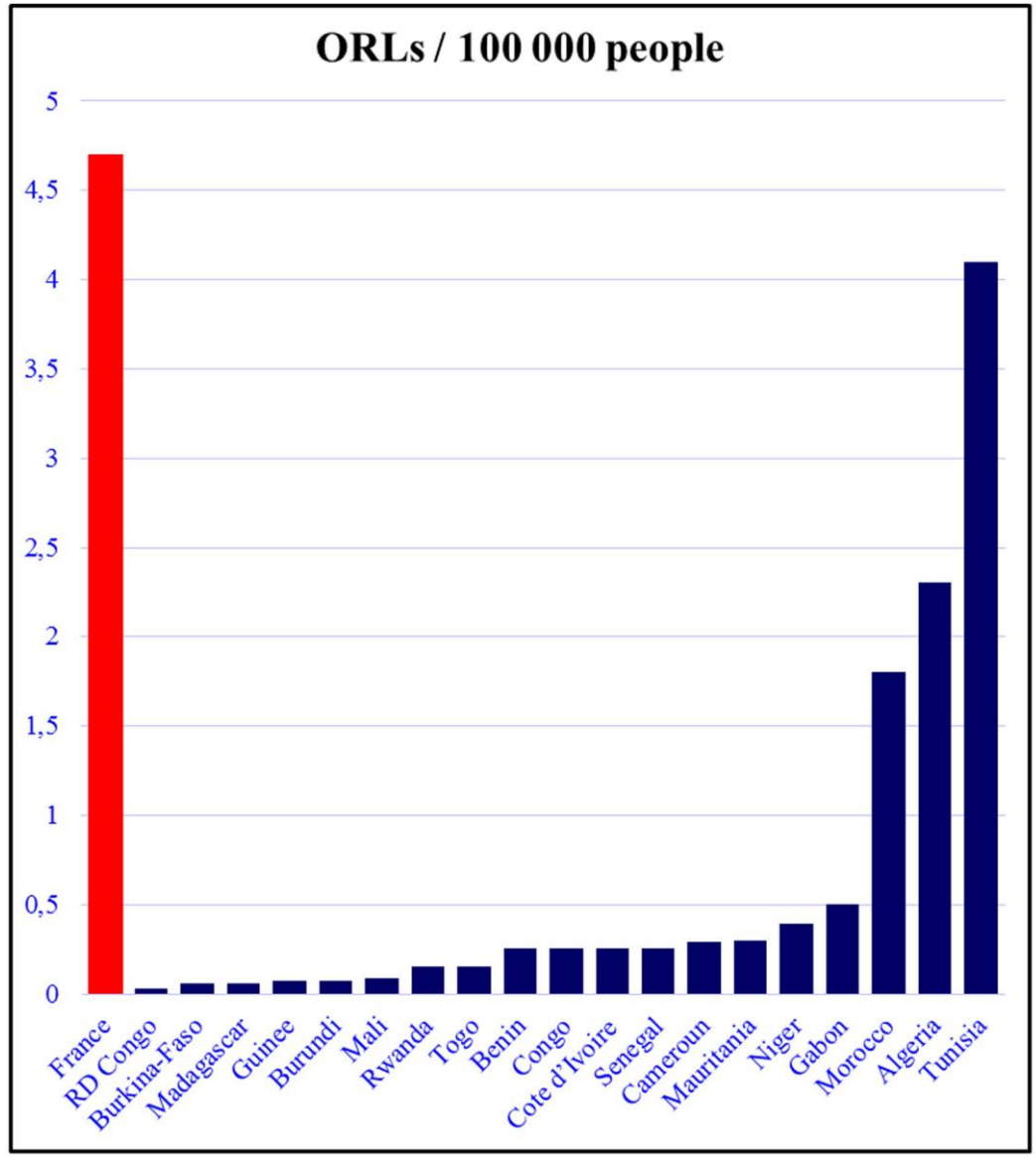
ACCESS TO HEARING REHABILITATION



HUMAN RESSOURCES

- Francophone countries





	Population (m)	ORL	ORL / 100 000	French equivalent (4.7)
RD Congo	86.7	24	0.03	4075
Burkina-Faso	20.4	13	0.06	959
Madagascar	25	15	0.06	1175
Guinee	13.4	10	0.07	630
Burundi	11.6	8	0.07	568
Mali	19.7	19	0.09	555
Togo	8.2	12	0.15	259
Rwanda	12.6	19	0.15	587
Benin	11.8	30	0.25	555
Congo	5.5	14	0.25	259
Cote d'Ivoire	25.5	64	0.25	1199
Senegal	16.7	42	0.25	785
Cameroun	25.3	73	0.29	1189
Mauritania	4.7	14	0.3	221
Niger	23.2	9	0.39	1090
Gabon	2.1	11	0.5	99
Morocco	36.5	650	1.8	1716
Algeria	42.7	1000	2.3	2007
Tunisia	11.7	480	4.1	550
France	**66**	**3076**	**4.7**	

Need to train
13.715 ENT

GLOBAL HEALTH ACTION, 2017
VOL. 10, 1289736
https://doi.org/10.1080/16549716.2017.1289736

Taylor & Francis
Taylor & Francis Group

ORIGINAL ARTICLE

OPEN ACCESS Check for updates

Survey of ENT services in sub-Saharan Africa: little progress between 2009 and 2015

Wakisa Mulwafu[a,b], Robbert Ensink [c], Hannah Kuper[d] and Johannes Fagan[e]

Numbers of countries with nil/poor/good/excellent services in state hospitals.

	Availability in state service			
	Nil	Poor	Good	Excellent
Audiology and otologic surgery				
Audiology	0	15	5	1
Auditory brainstem reflexes (ABR)	9	12	1	0
Hearing screening: newborn	18	3	1	0
Hearing aids	5	14	3	0
Tympanoplasty	2	13	5	2
Mastoidectomy for cholesteatoma	0	14	5	3
Mastoidectomy for mastoiditis	1	13	5	0
Cochlear implants	18	4	0	0

- How 

can improve this mission in education taking in account the diversity of practice around the world ?

HOW DO THEY TAKE DECISION ?

THE HearingReview

LEGISLATION

President Trump Signs OTC Hearing Aid Legislation into Law

Published on August 19, 2017

On Friday, President Donald Trump signed into law the Food and Drug Administration Reauthorization Act of 2017, legislation that includes the *Over the Counter Hearing Aid Act* designed to provide greater public accessibility and affordability with over-the-counter (OTC) hearing aids.

The *OTC Hearing Aid Act* is designed to enable adults with perceived mild-to-moderate hearing loss to access OTC hearing aids without being seen by a hearing care professional. The new law, which was introduced in March by Senators Elizabeth Warren (D-Mass) and Chuck Grassley (R-Iowa), was passed by the US House on July 12 and the US Senate on August 3. It also comes on the heels of the elimination of the "physician waiver" system which had required consumers first to seek a physician for a medical evaluation or sign a waiver prior to obtaining a hearing aid.

The new legislation will require the FDA to create and regulate a category of OTC hearing aids to ensure they meet the same high standards for safety, consumer labeling, and manufacturing protection that all other medical devices must meet. It mandates the FDA to establish an OTC hearing aid category for adults with "perceived" mild-to-moderate hearing loss within 3

thebmj

PRACTICE

GUIDELINES

Hearing loss in adults, assessment and management: summary of NICE guidance

Saoussen Fouh *senior research fellow*[1], Katherine Harrop-Griffiths *retired consultant in audiovestibular medicine (paediatric)*[2], Martin Harker *health economics lead*[1], Kevin J Munro *professor of audiology*[3], Ted Leverton *retired general practitioner, clinical advisor for NCGP*[1], on behalf of the Guideline Committee

16 novembre 2018 JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE Texte 7 sur 95

Décrets, arrêtés, circulaires

TEXTES GÉNÉRAUX

MINISTÈRE DES SOLIDARITÉS ET DE LA SANTÉ

Arrêté du 14 novembre 2018 portant modification des modalités de prise en charge des aides auditives et prestations associées au chapitre 3 du titre II de la liste des produits et prestations prévue à l'article L. 165-1 du code de la sécurité sociale

NOR : *SSAS1830986A*

OTC DELIVERY

	Bean T-Coil	CS-50+	Tweak Focus	Soundhawk	Songbird
					
Price	$349/each; $599/pair	$349	$224.99	$349.99	$395/each; $745/pair

- To develop a new generation of self fit hearing aid between around $400

Original Investigation

JAMA Otolaryngology–Head & Neck Surgery

JAMA Otolaryngol Head Neck Surg. 2019 Jun 1;145(6):516-522

Clinical Performance Evaluation of a Personal Sound Amplification Product vs a Basic Hearing Aid and a Premium Hearing Aid

Young Sang Cho, MD[1,2]; Su Yeon Park, BS[2]; Hye Yoon Seol, AuD[2]; et al

American Journal of Audiology • Vol. 26 • 53–79 • March 2017 • Copyright © 2017 The Authors

AJA

Research Article

The Effects of Service-Delivery Model and Purchase Price on Hearing-Aid Outcomes in Older Adults: A Randomized Double-Blind Placebo-Controlled Clinical Trial

Larry E. Humes,[a] Sara E. Rogers,[a] Tera M. Quigley,[a] Anna K. Main,[a] Dana L. Kinney,[a] and Christine Herring[a]

NICE National Institute for Health and Care Excellence

Hearing loss in adults: assessment and management

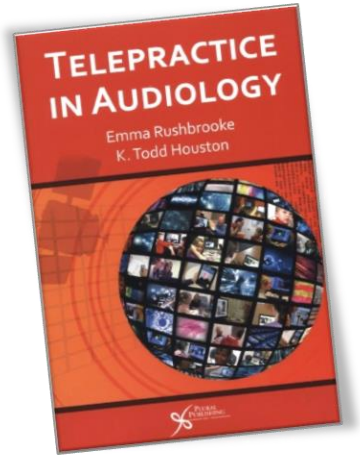
NICE guideline

Published: 21 June 2018

nice.org.uk/guidance/ng98

NICE guideline

- Supporting GP engagement in primary care to manage hearing loss in adults
- Pathway redesign in audiology services using telepractice



- *Hearing screening*
- *Teleotoscopy*
- *Hearing aid fittings*
- *Remote cochlear implant*
- *Rehabilitation and remediation*

100% SANTÉ

« Cette réforme, c'est la possibilité pour tous nos concitoyens, et notamment les personnes âgées, d'accéder à une audioprothèse sans reste à charge »

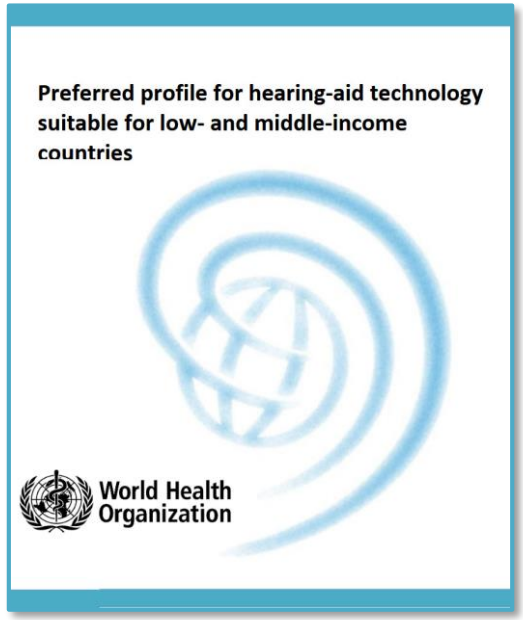
Ms. Agnes Buzin, *French Minister of Health*

- ***Catégorie 1 :***
  - *Amplification > 30dB*
  - *Directivity microphone*
  - *Antilarsen*
  - *12 Channels*
  - *2 programs*
  - *Datalogging*

PREFERRED PROFILE FOR HEARING AID REDUCING TREATMENT COST

- This recommandation has been given for hearing loss in the range 31 to 80 dBHL in better ear *(frequencies 500Hz to 4 KHz)*

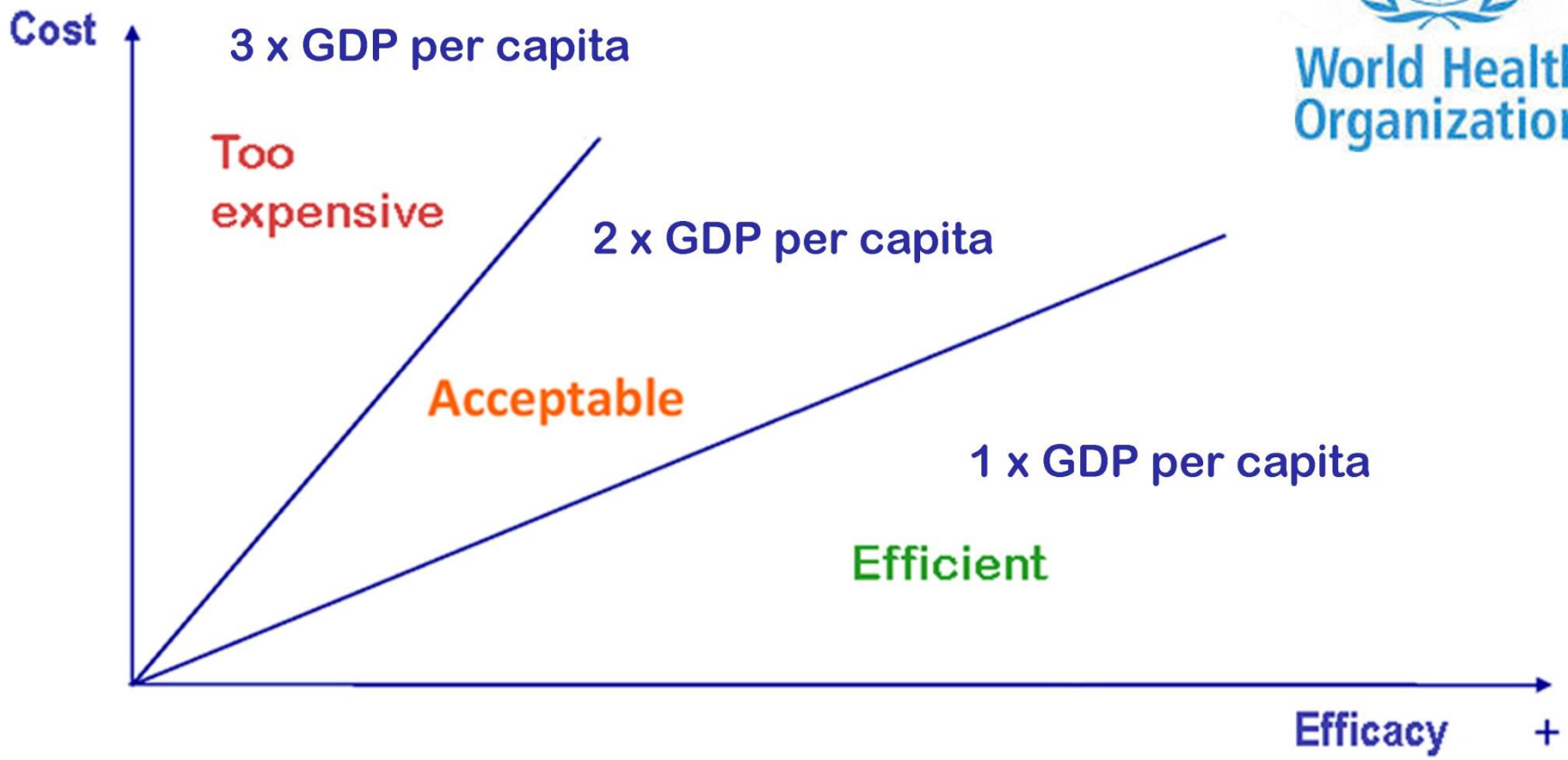
  - Digital technology
  - Behind the ear
  - Gain 42/70dB
  - Frequency response 200 to 4000Hz
  - Self fitted
  - Long battery life



Access and affordability of cochlear implant

COST UTILITY (DALY/QALY vs GDP)

World Health Organization

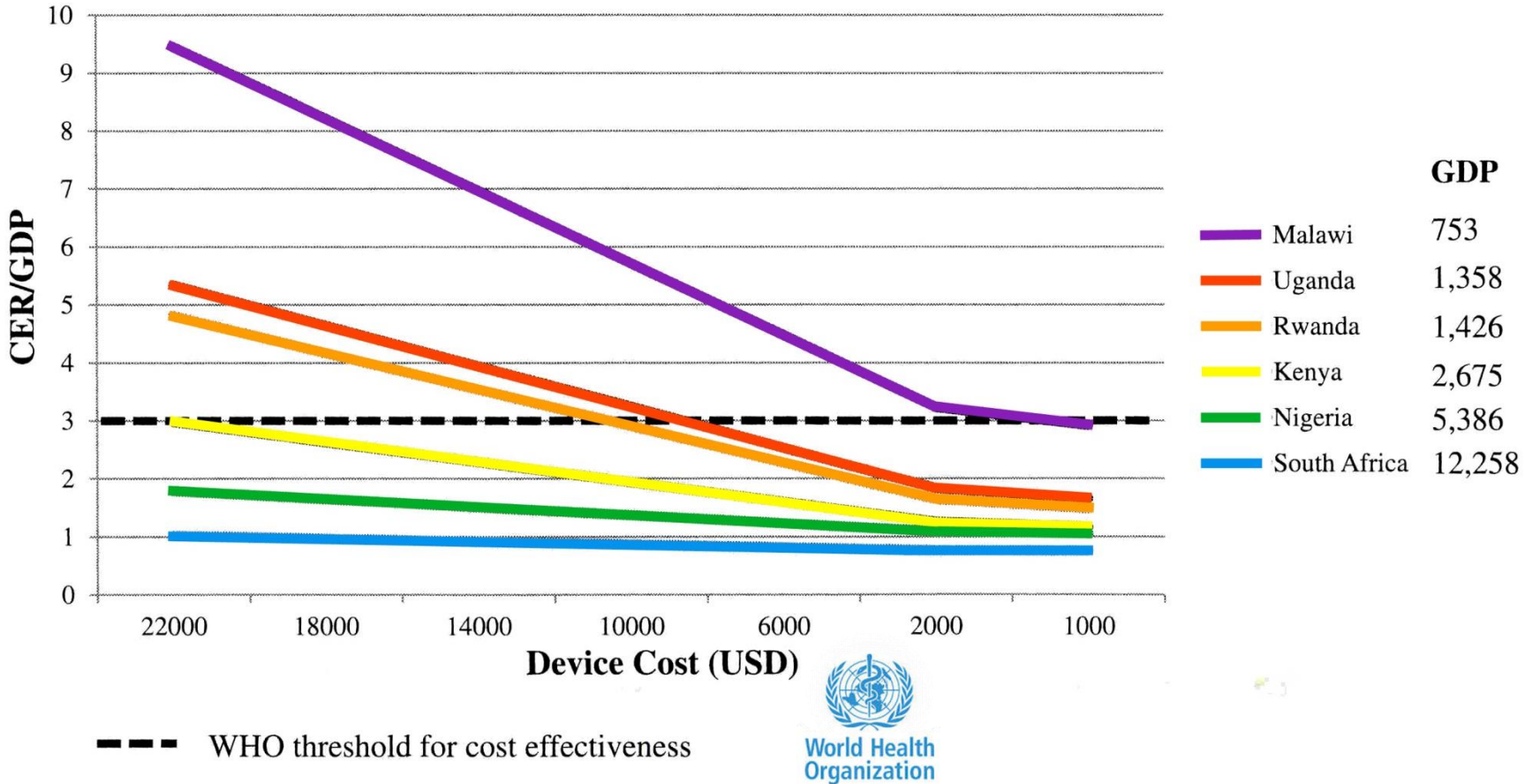


DALY : Disability Adjusted Life Years
QALY : Quality Adjusted Life Years
GDP : Gross Domestic Product

Otology & Neurotology
36:1357–1365 © 2015, Otology & Neurotology, Inc.

GDP Matters: Cost Effectiveness of Cochlear Implantation and Deaf Education in Sub-Saharan Africa

*†Susan D. Emmett, ‡Debara L. Tucci, §Magteld Smith, ||Isaac M. Macharia, ||Serah N. Ndegwa, ¶Doreen Nakku, **Mukara B. Kaitesi, ††Titus S. Ibekwe, ‡‡Wakisa Mulwafu, †Wenfeng Gong, *Howard W. Francis, and §§James E. Saunders



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Thank you for your attention