

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

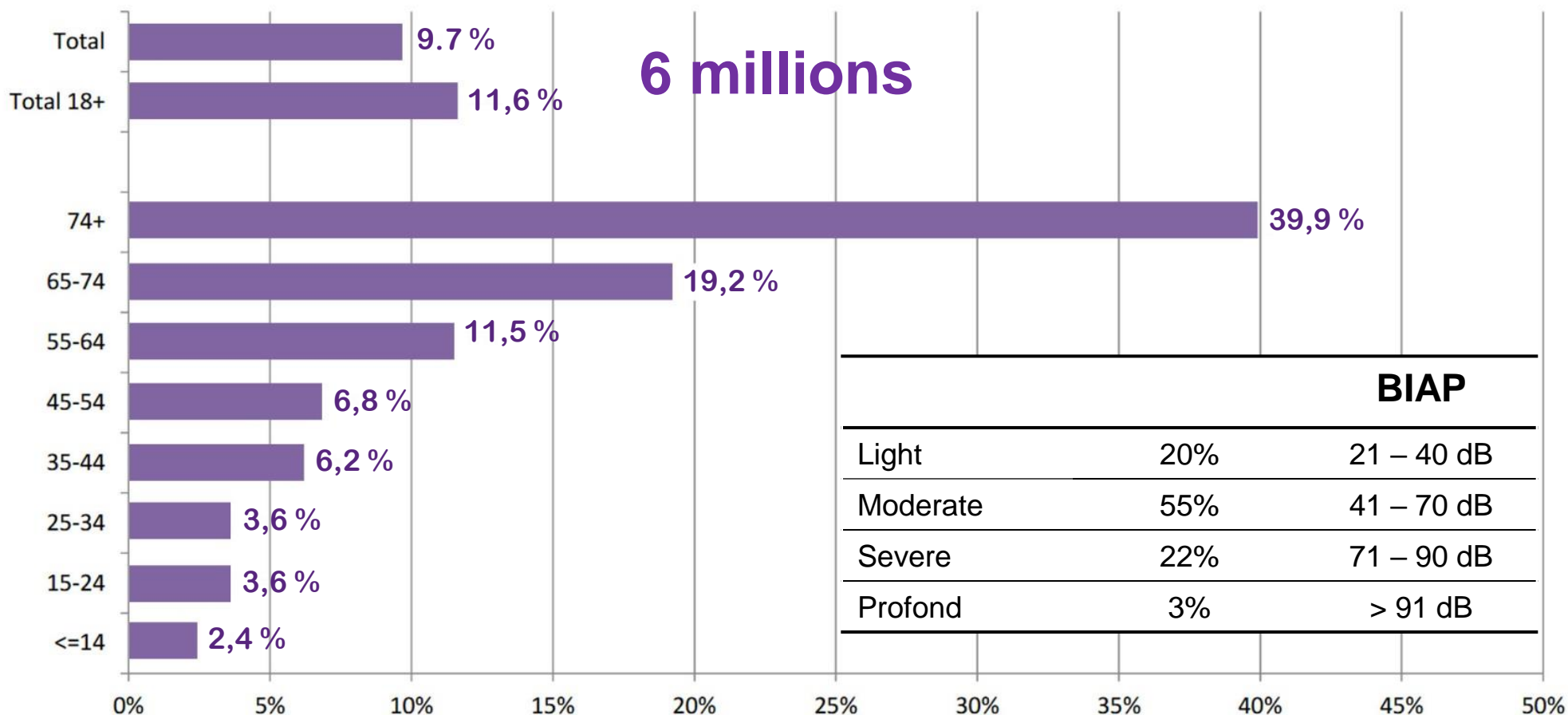
Consequences

- Neurocognitive function in adult and children

Cost




PREVALENCE EURO TRAK 2018

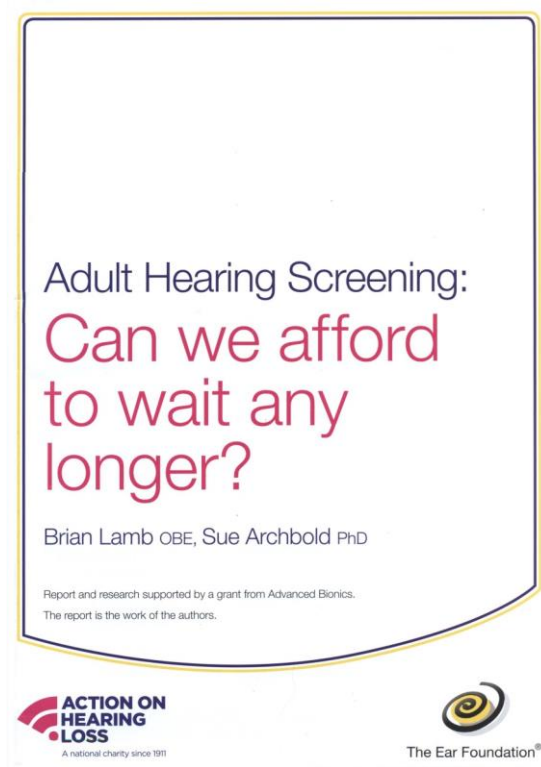


BIAP

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

 EuroTrak 2018
 Base: 14'855

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



What evidence public health need to make decision ?

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, $p < 0.001$.

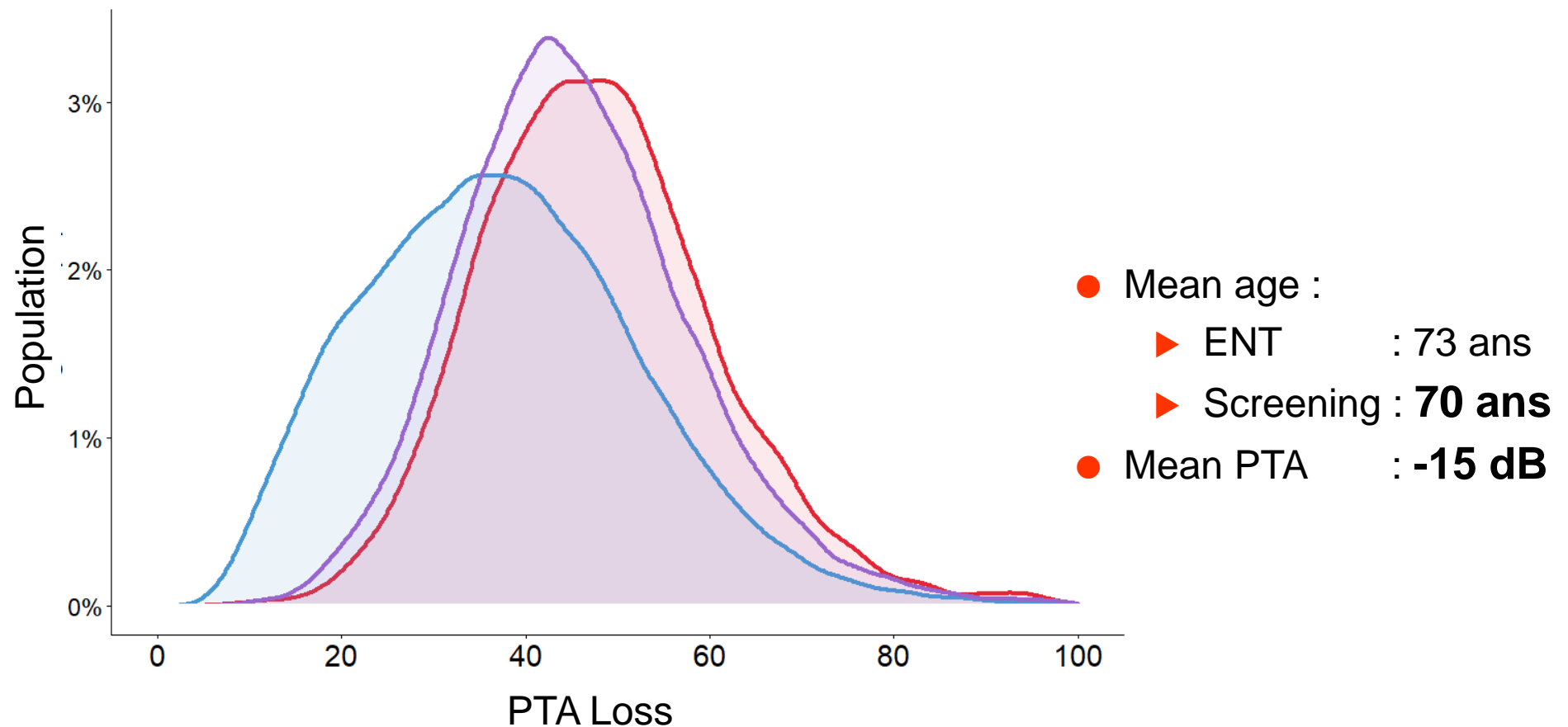
[‡]Significance level compared with control group, $p < 0.01$.

SD = standard deviation.

This study show that screening is inexpensive an effective

ENT SCREENING STRATEGIES

116.810 patients



ACCESS TO HEARING REHABILITATION

Human resources
(*ENT, Audiologist, Speech Therapist*)



Accessibility

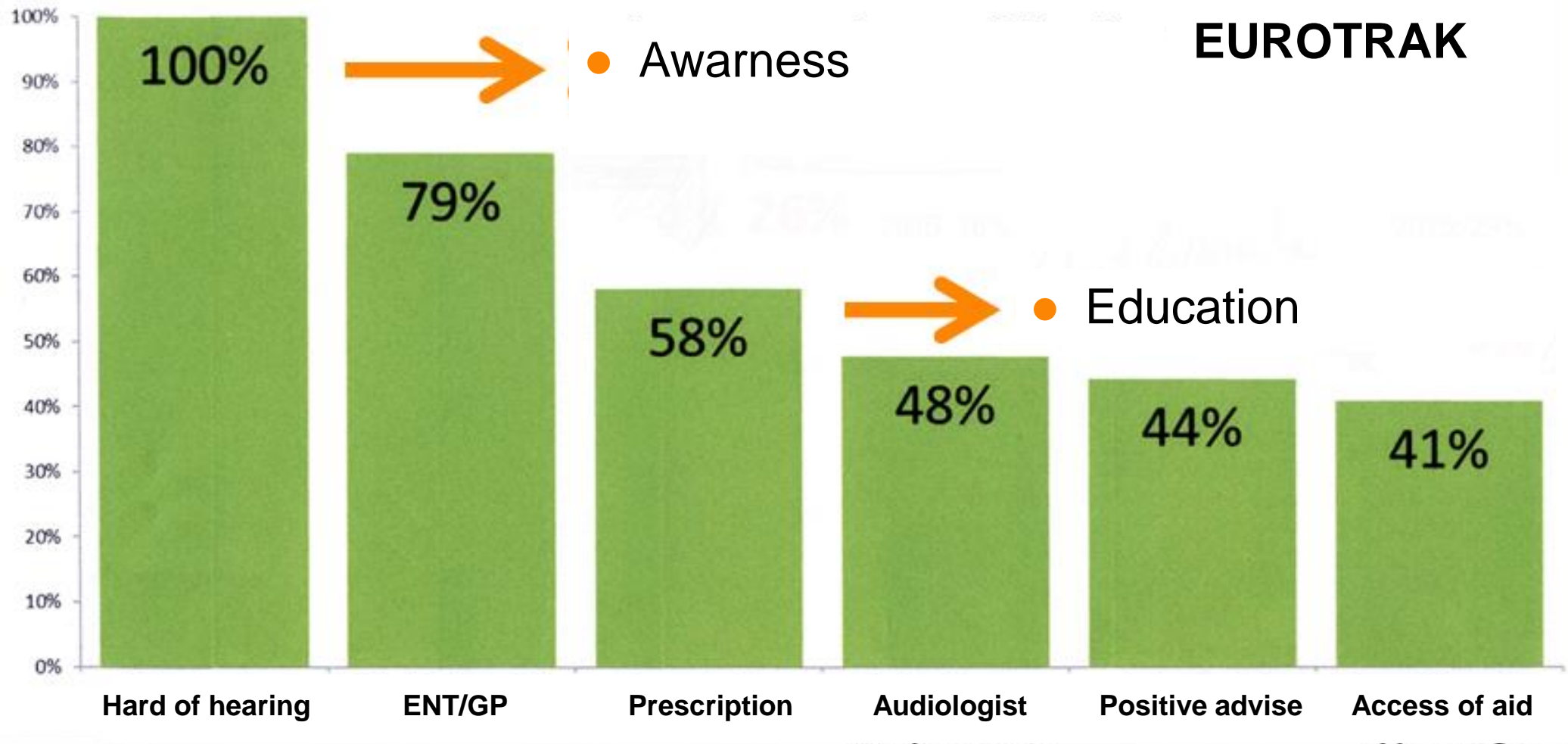
**Who decides access
and financing ?**



Cost/effectiveness

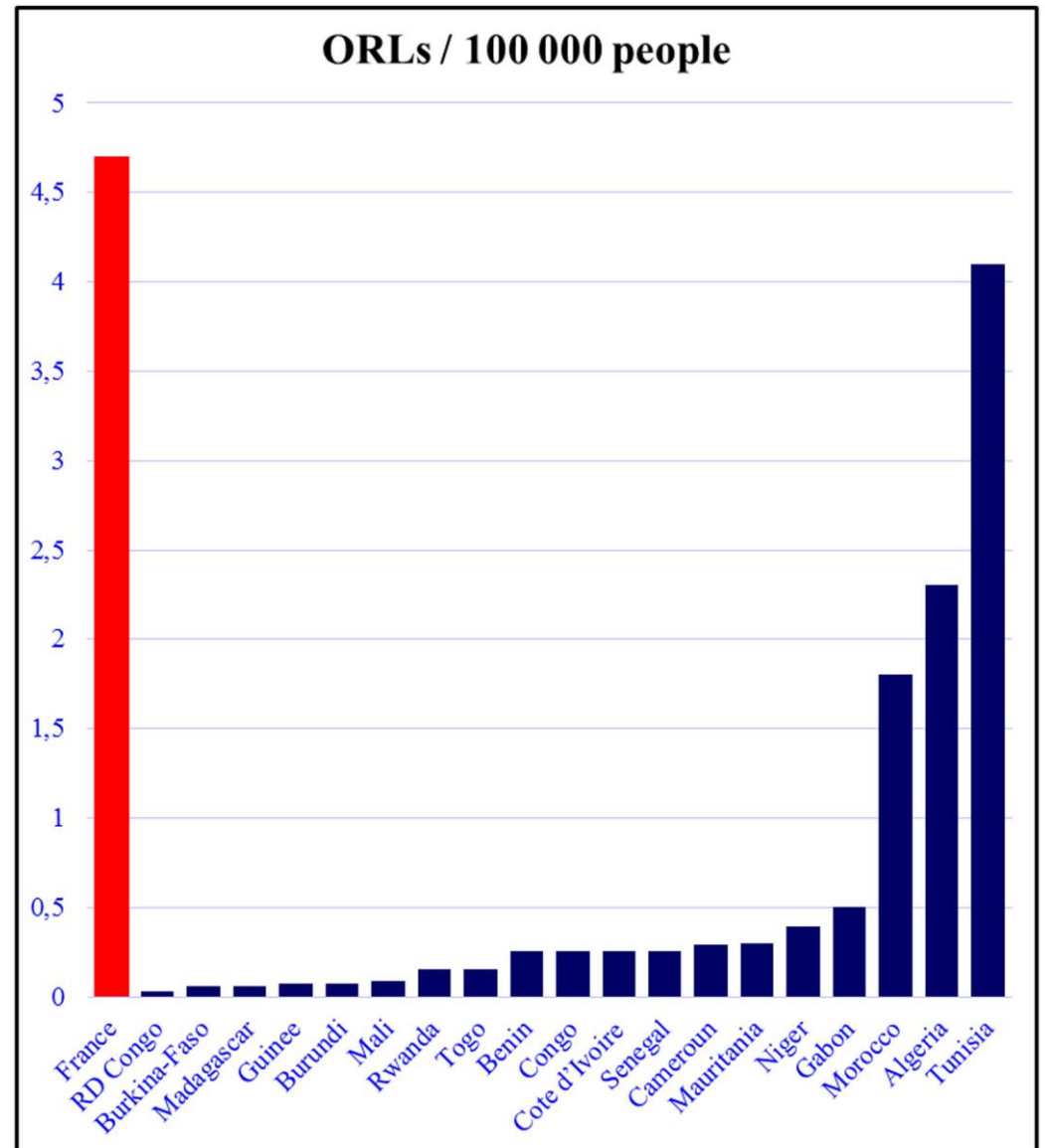
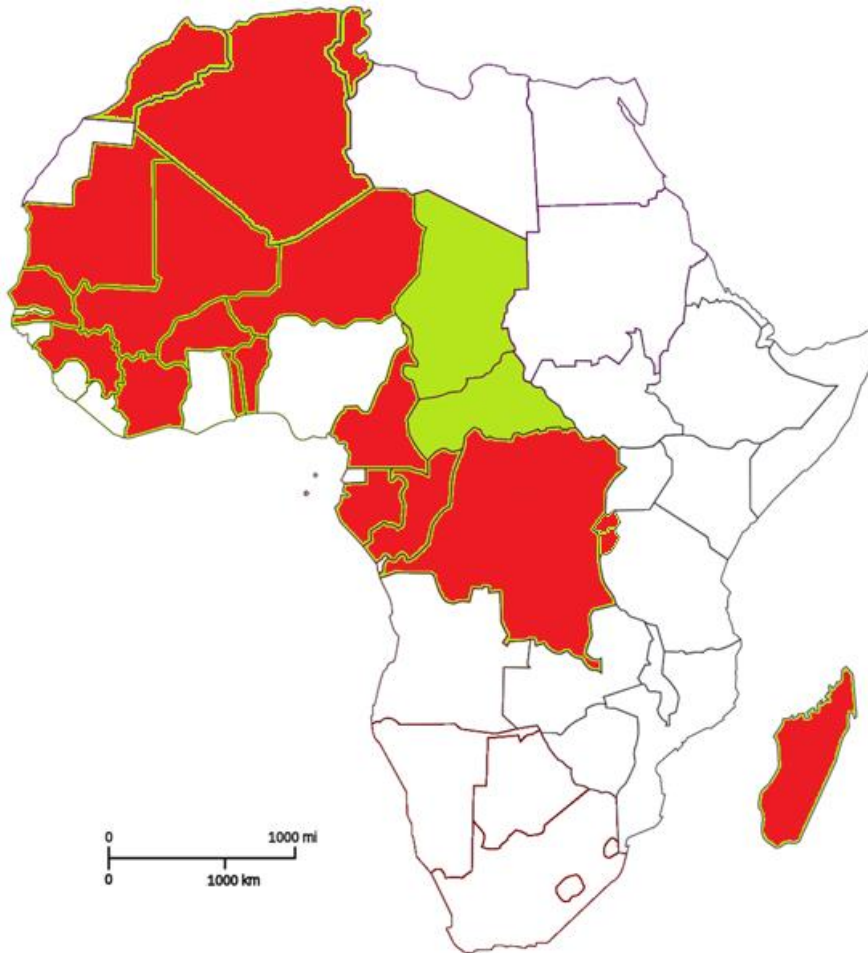
ACCESS TO HEARING REHABILITATION

EUROTRAK



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



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



BMJ 2018;361:k2219. doi: 10.1136/bmj.k2219. Published 02 June 2018. Page 1 of 5

PRACTICE

GUIDELINES

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

Saoussen Flouh senior research fellow¹, Katherine Harrop-Griffiths retired consultant in audiology², Martin Harner health economics lead³, Kevin J Munro professor of audiology⁴, Ted Lewerton retired general practitioner, clinical advisor for NICE⁵, on behalf of the Guideline Committee

National Guideline Centre, Royal College of Physicians, London W1A 0AE, UK; ¹Health National Trusts Research and Evidence, UCLA WGL Foundation Trust, London WC2E 9EQ, Neuroscience Centre for Audiology and Deafness, School of Health Sciences, University of Manchester, Manchester M13 9PL, UK; ²Stree Aston, Decree

What you need to know

- In people with hearing loss, untreated hearing loss with moderate to severe hearing loss is associated with an increased risk of falls, depression, social isolation, and cognitive decline.
- Early identification and assessment of hearing loss is important to ensure appropriate management and to prevent progression to severe hearing loss.
- People with hearing loss should be offered a hearing aid if they have moderate to severe hearing loss.
- People with hearing loss should be offered a hearing aid if they have moderate to severe hearing loss.
- People with hearing loss should be offered a hearing aid if they have moderate to severe hearing loss.

What you need to know

Hearing loss can be managed successfully—Early and effective intervention can reduce the impact of hearing loss on the individual and on his or her family.

The guideline covers adults (20 years—100 years) with hearing loss, including those with mixed hearing loss, who are not deaf, and those with first time hearing loss. It includes adults who presented with hearing loss before the age of 18.

This article summarises the most recent recommendations from the National Institute for Health and Care Excellence (NICE) on the assessment and management of hearing loss in adults. It focuses on those areas of most relevance to primary and community care.

Recommendations

NICE recommendations are based on systematic reviews of best available evidence and explicit consideration of cost effectiveness. When minimal evidence is available, recommendations are based on the Guideline Committee's experience and opinion of what constitutes good practice. Evidence levels for the recommendations are given in table 1, as separate brackets.

How might a clinician in primary or community care manage a person presenting with hearing difficulties?

For adults who present for the first time with hearing difficulties, or in whom you suspect hearing difficulties:

- Exclude acquired noise and other reversible causes of noise-induced noise.
- Refer to audiology services for an assessment and

Correspondence to: S Flouh, saoussen.flouh@nhs.uk

For personal use only: first name only.



19 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 2 du titre II de la liste des produits et prestations prévus à l'article L. 165-1 du code de la sécurité sociale

NON SOLICITATION

La ministre des solidarités et de la santé et le ministre de l'action et des comptes publics, Vu le code de la sécurité sociale, notamment ses articles L. 133-1, L. 162-9, L. 165-1 à L. 165-9, L. 871-1 et R. 165-1 à R. 165-28 ; Vu le code de la santé publique, notamment ses articles L. 4361-1 à L. 4361-11 ; Vu l'avis de la Commission nationale d'évaluation des dispositifs médicaux et des technologies de santé (CENEDITS) du 9 octobre 2018 ; Vu l'avis de projet de modification des modalités de prise en charge des dispositifs médicaux et prestations associées pour la prise en charge des aides auditives visés au chapitre 2 du titre II de la liste des produits et prestations prévus à l'article L. 165-1 du code de la sécurité sociale publié au *Journal Officiel* du 21 juin 2018 (NOR : S16A156277) ; Vu le projet de loi de financement de la sécurité sociale pour 2019, notamment son article 33.

Arrêtent :

Art. 1^{er} – Au titre II de la liste des produits et prestations prévus à l'article L. 165-1 du code de la sécurité sociale, le remplacement du chapitre 2 relatif aux aides auditives est ainsi, à l'exception des sections 5, 6, 7 et 8, qui deviennent les nouvelles sections 5, 6, 7 et 8 :

CHAPITRE 3

AIDES AUDITIVES

1. – SPÉCIFICATIONS TECHNIQUES DES AIDES AUDITIVES

Aide auditive (ou audiprothèse) est un dispositif médical à usage individuel destiné à compenser électroacoustiquement, au moyen d'une amplification appropriée, les pertes d'audition des malentendants ou les troubles de la compréhension. Le dispositif est de petite dimension et alimenté de façon autonome au moyen de batteries (pile ou accumulateur). Il est en outre conforme à la norme NF EN 60118.

1.1. Type d'aides auditives

Les aides auditives sont de l'un des types suivants :

- sonnet à oreille (microphone et écouteur situés à l'arrière du pavillon) ;
- sonnet à écouteur déporté (écouteur intra-auriculaire et microphone à l'arrière du pavillon) ;
- intra-auriculaire (microphone et écouteur dans la conque ou le conduit auditif).

1.2. Classification des aides auditives

Les aides auditives sont classées en deux groupes (classe I et classe II) selon leurs caractéristiques techniques. La classification dépend de la présence et du nombre d'opérations, selon les listes définies au paragraphe 1.4 :

- classe I : une aide auditive de classe I doit comporter au moins trois opérations de la liste A ;
- classe II : une aide auditive de classe II doit comporter au moins six opérations de la liste A, et au moins une opération de la liste B (Pour les aides auditives à destination exclusivement de 9 canaux comme spécifié ci-dessous, l'option B requiert en outre la présence de la référence de bruit implémenté. Spécialement pour les aides auditives de type intra-auriculaire semi-professionnel (ou CKE) et pour les aides auditives de type intra-auriculaire invisibles dans le canal (ou BCI), le nombre minimal d'opérations de la liste A requies pour être prises en charge au titre de la classe II est abaissé à 3 et le nombre de l'aide auditive comporte au moins 9 opérations de la liste B, ou 4 opérations de la liste A et au minimum 1 l'aide auditive comporte au moins 2 opérations de la liste B.)

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, BS²; Hye Yoon Seol, AuD²; 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

Hearing loss in adults: assessment and management

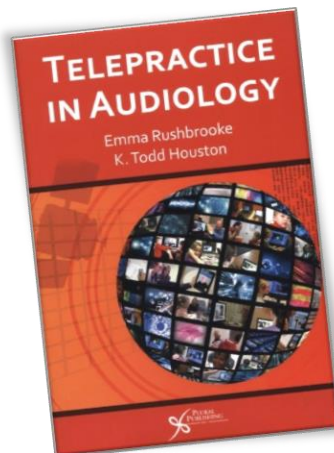
NICE guideline

Published: 21 June 2018

[nice.org.uk/guidance/ng98](https://www.nice.org.uk/guidance/ng98)



- 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 »



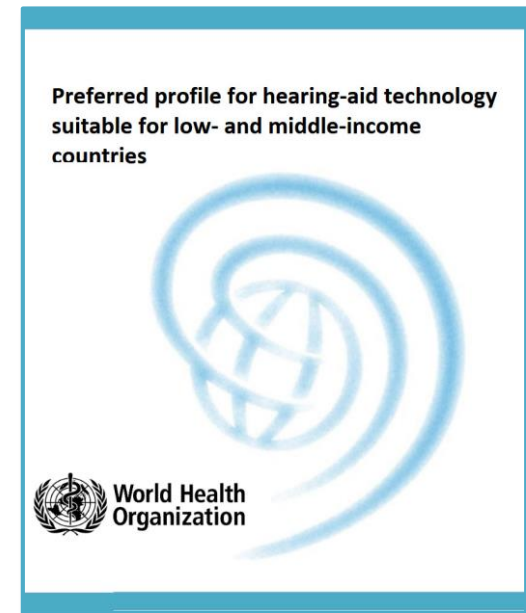
Ms. Agnes Buzin, *French Minister of Health*

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

PREFERRED PROFILE FOR HEARING AID REDUCING TREATMENT COST



- This recommendation 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



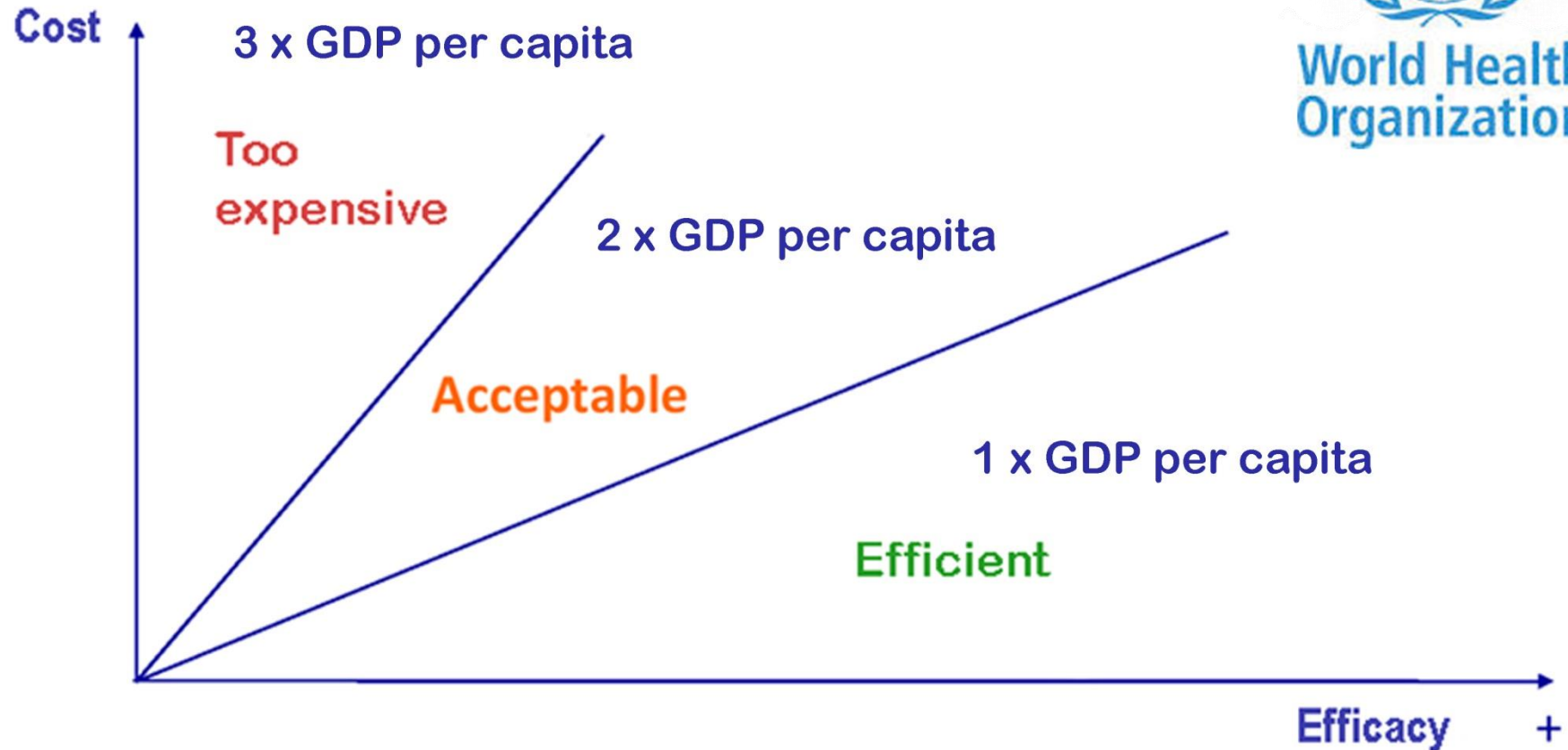
Access and affordability of cochlear implant



COST UTILITY (DALY/QALY vs GDP)



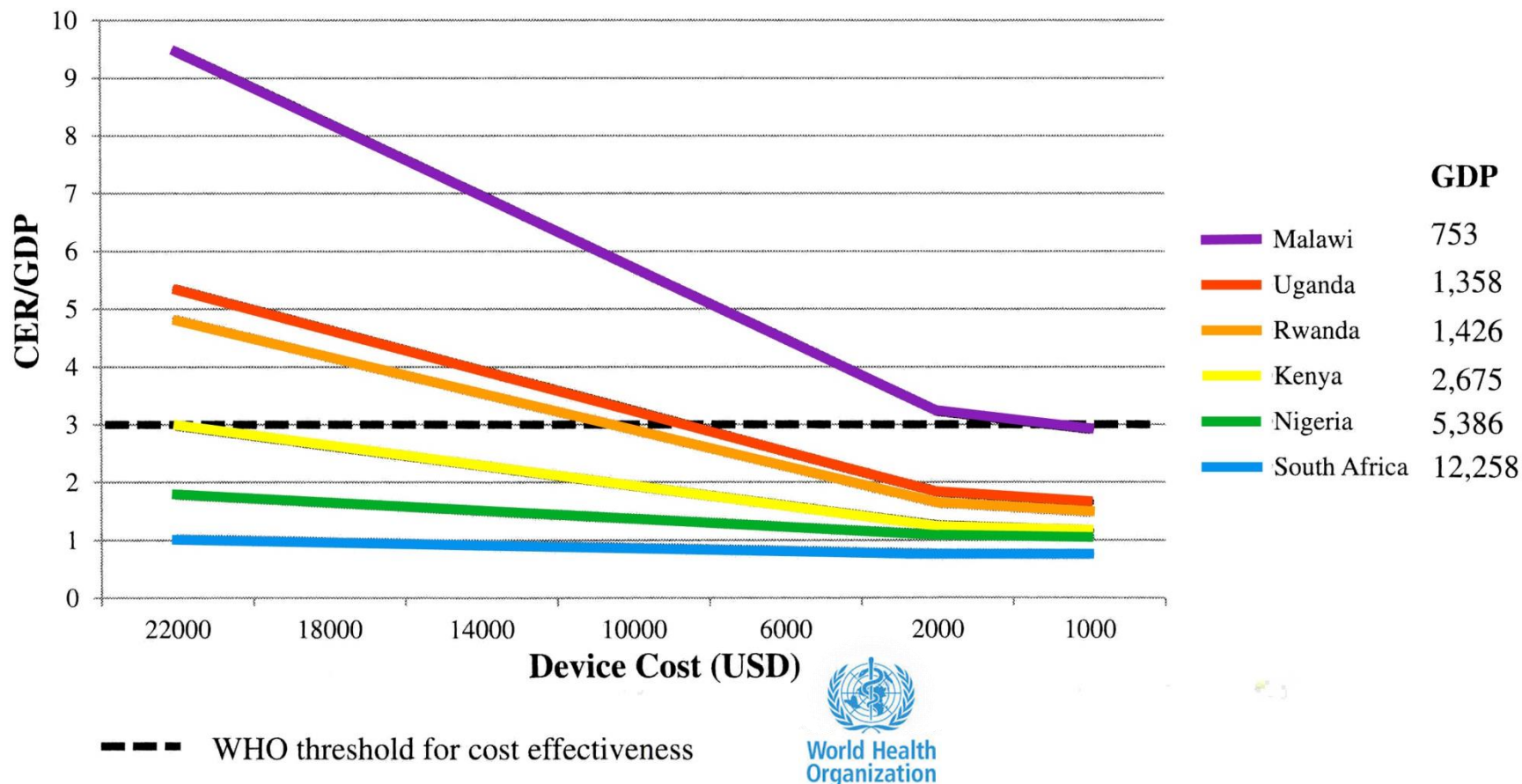
World Health Organization



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

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





SFORL
SOCIÉTÉ FRANÇAISE
D'ORL ET DE CHIRURGIE
DE LA FACE ET DU COU

Thank you for your attention