

# INFRASTRUCTURE OF HEARING HEALTHCARE IN KENYA

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CGHH Conference, OXFORD  
25<sup>TH</sup> JULY 2014

# Introduction

- WH.O estimates that 360 million persons worldwide live with disabling hearing loss.
- 2/3 of the burden of hearing impairment is in developing countries
- Kenya Population estimated at 40 million
- Prevalence of hearing loss- 4.5%



# Healthcare system in Kenya

The health sector comprises of:

- ❑ Public sector (Ministry of Health, Parastatals)- 51%
- ❑ Private sector (private for profit, NGOs, FBOs)- 49%
  
- Health care is provided through 4,700 health facilities countrywide
- Service delivery in Public Sector is structured:  
Tertiary, Secondary and Primary levels



# Public Sector: Hearing Healthcare service delivery

Level of Health care Service	Cadre of Health Care worker
TERTIARY National Referral Hospital	ENT Specialists Audiologists Audiology Officers/Technicians Speech and Language Pathologists ENT Clinical Officers
SECONDARY Provincial and District Hospitals	ENT Specialists Audiology Officers/Technicians ENT Clinical Officers
PRIMARY Health Centres & Dispensaries	Primary Ear and Hearing Care workers ( Not available)

# Private Sector

PRIVATE SECTOR	ORGANISATIONS/INSTITUTIONS
NON GOVERNMENTAL ORGANISATIONS	OPERATION EARDROP, IMPACT AFRICA, LIONS HOSPITAL, CBM, SHF, HTW
PRIVATE FOR PROFIT ORGANISATIONS/INSTITUTIONS	AGA KHAN HOSPITAL, GIANTS HEARING CENTRE, GETRUDES CHILDRENS' HOSPITAL
FAITH BASED ORGANISATIONS	KIJABE HOSPITAL, MATHARI MISSION HOSPITAL

# Tertiary level Health Institutions



**Kenyatta National Hospital  
Nairobi**

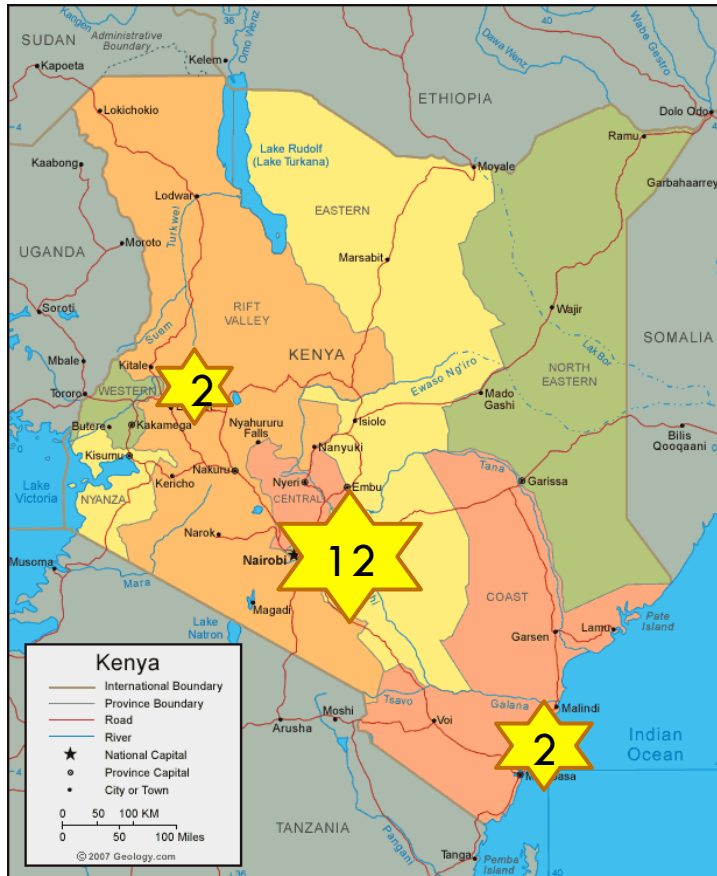


**Moi Teaching and Referral Hospital  
Eldoret**



# Audiology & Speech and Language Pathology Services in Kenya

## Speech and Language Pathologists



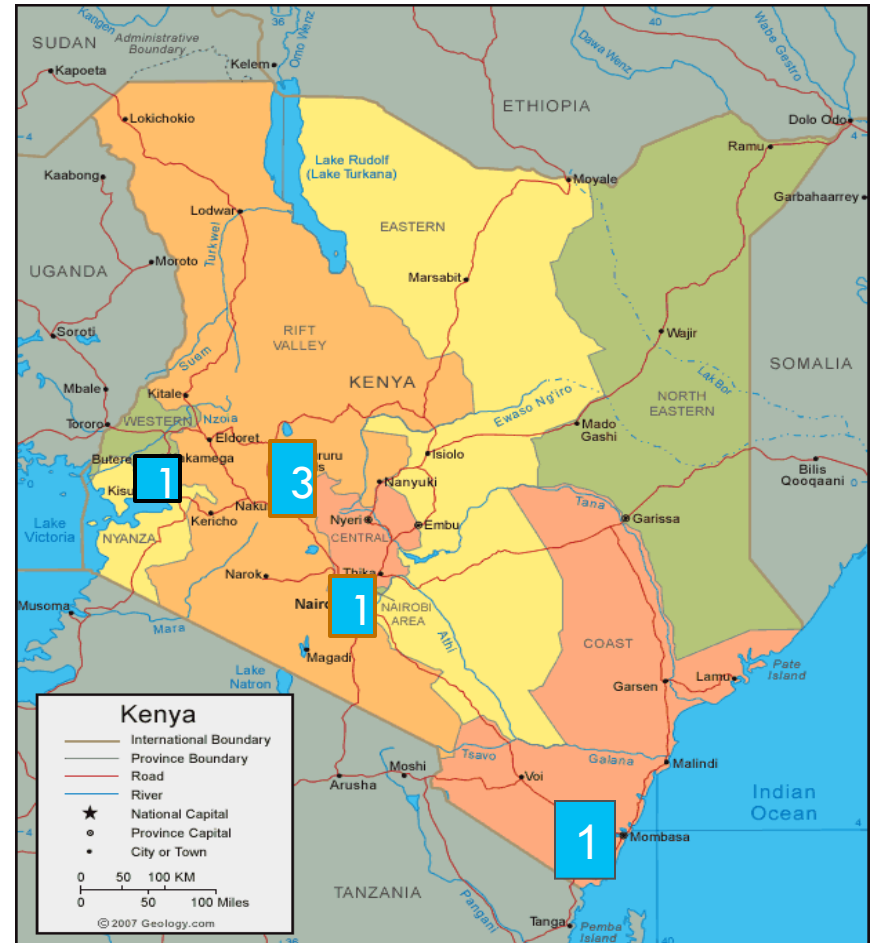
## Audiologists/Audiology Officers



# Audiology Services in Kenya

Special Education Teachers-  
Educational and assessment and  
Resource centres

CLINICAL OFFICERS ( 6 )



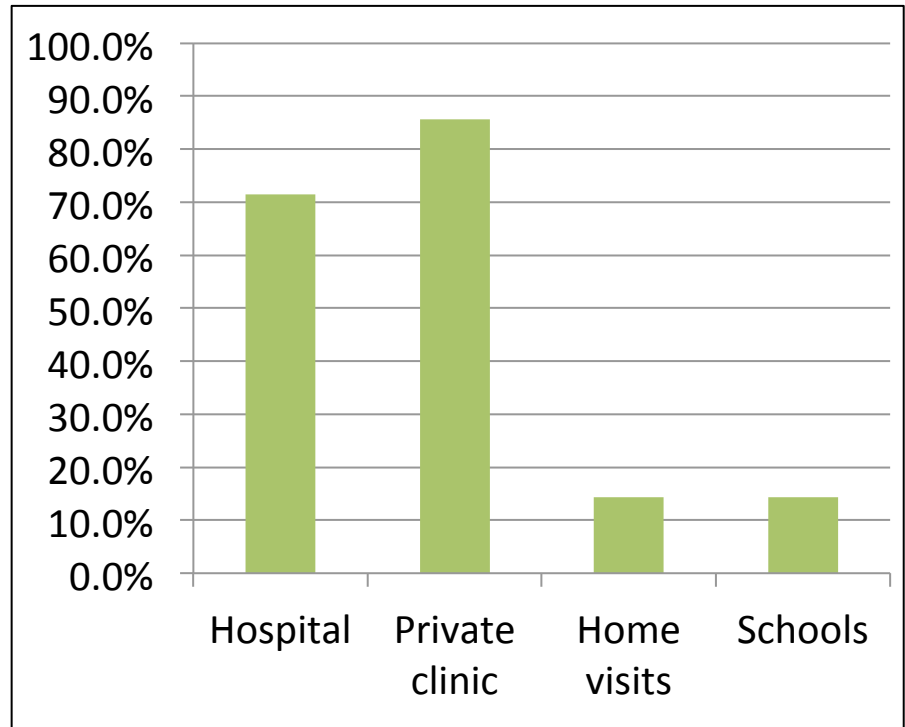


# Professionals in Hearing healthcare

Clinician	No	Distribution	population	Clinician/Pop ratio
ENT Surgeons	80	90%-Urban 10%-Rural	40 M	1:500,000
Clinical officers	200	50%-Rural 50%-Urban	40 M	1:200,000
Audiologists	7	100% urban	40 M	1:5,700,000
Audiology officers/ Technicians	12	100%-Urban	40M	1: 3,300,000
Speech & language Therapist	16	100% Urban	40M	1: 2,500,000

# Practice setting-Audiologists

	Hospital	Private clinic	Home visits	School
A-1	X	X	-	-
A-2	X	X	-	X
A-3	X	X	X	-
A-4	X	X	-	-
A-5	X	-	-	-
A-6	-	X	-	-
A-7	-	X	-	-
Total	5	6	1	1

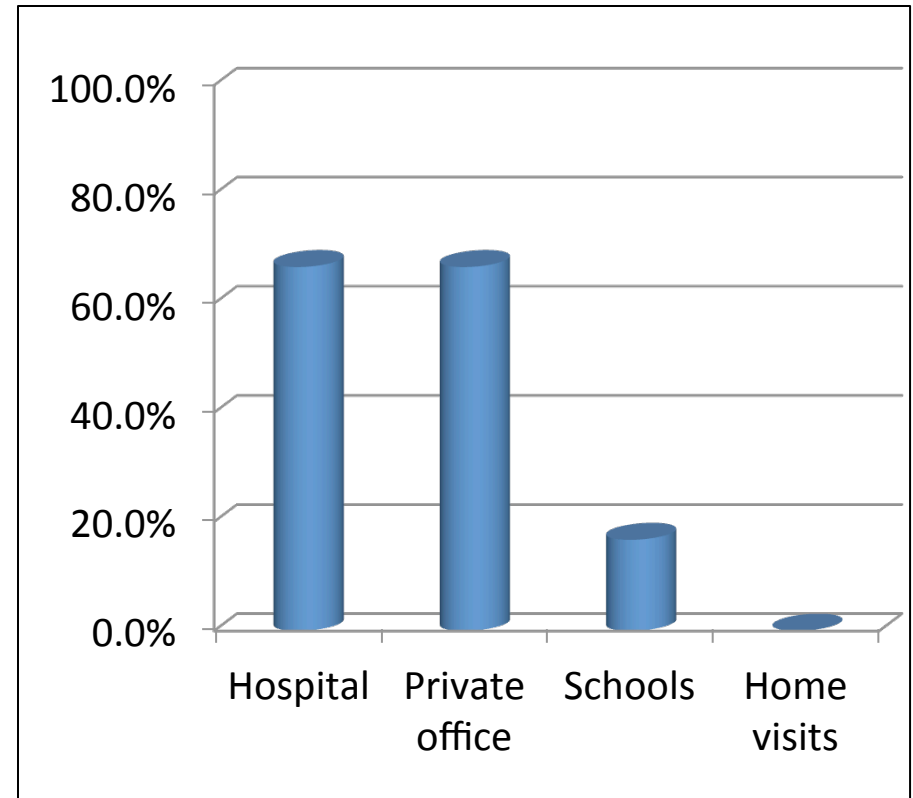


## 7 Audiologists

Only 1 Audiologist working in the Public sector. The Majority are in the private sector. About 60% of the Audiologists work in 2 practice settings.

# Practice setting- Audiology officers/Technicians

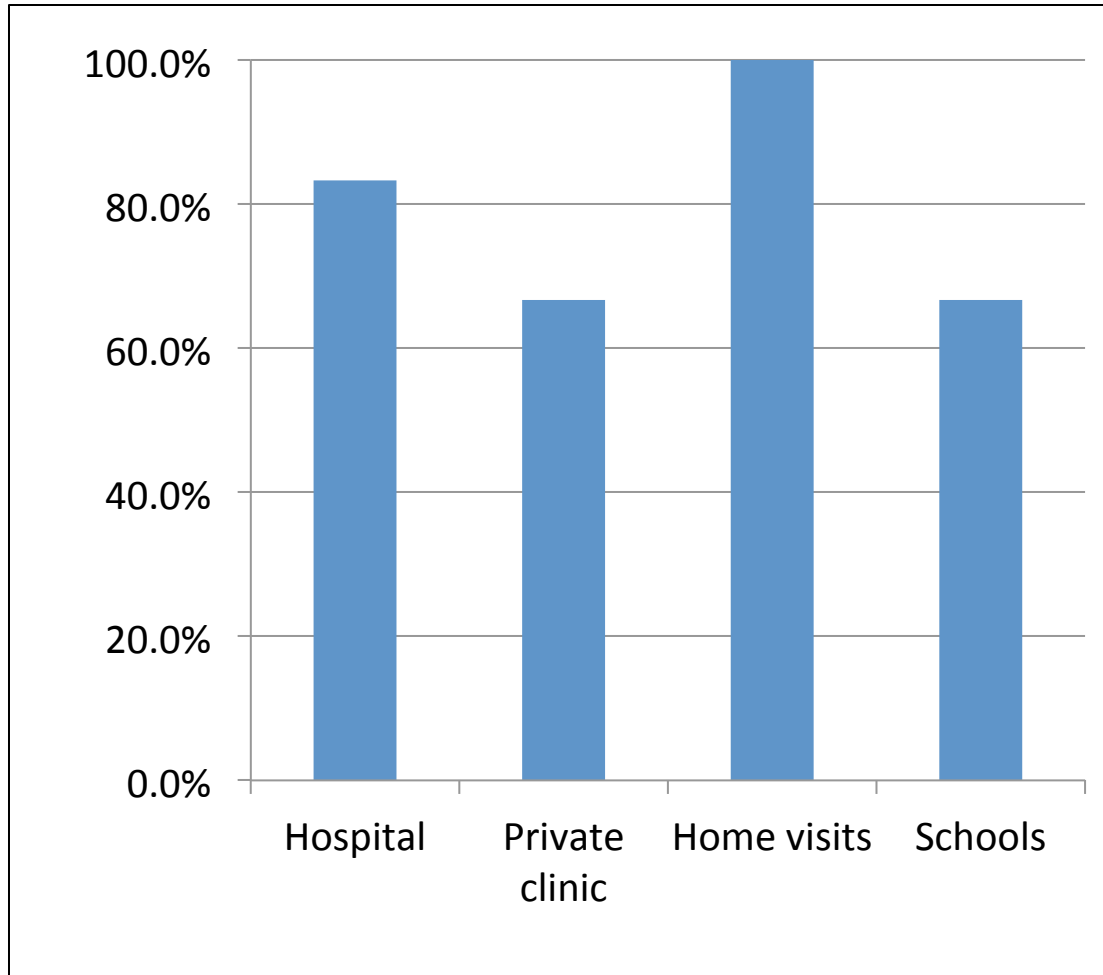
Hospital	Private Clinic	Home Visits	School
X	--	-	-
X	-	-	X
X	-	-	-
X	X	--	-
X	X	-	X
X	X	-	--
X	-	-	-
	X	-	--
-	X	-	-
-	X	--	--
-	X	-	-
-	X	--	-
7	8		2



12 Audiology Officers/Technicians

50% of Audiology Officers in the public sector ( hospital). 50% in private sector Private clinic or Hospital).

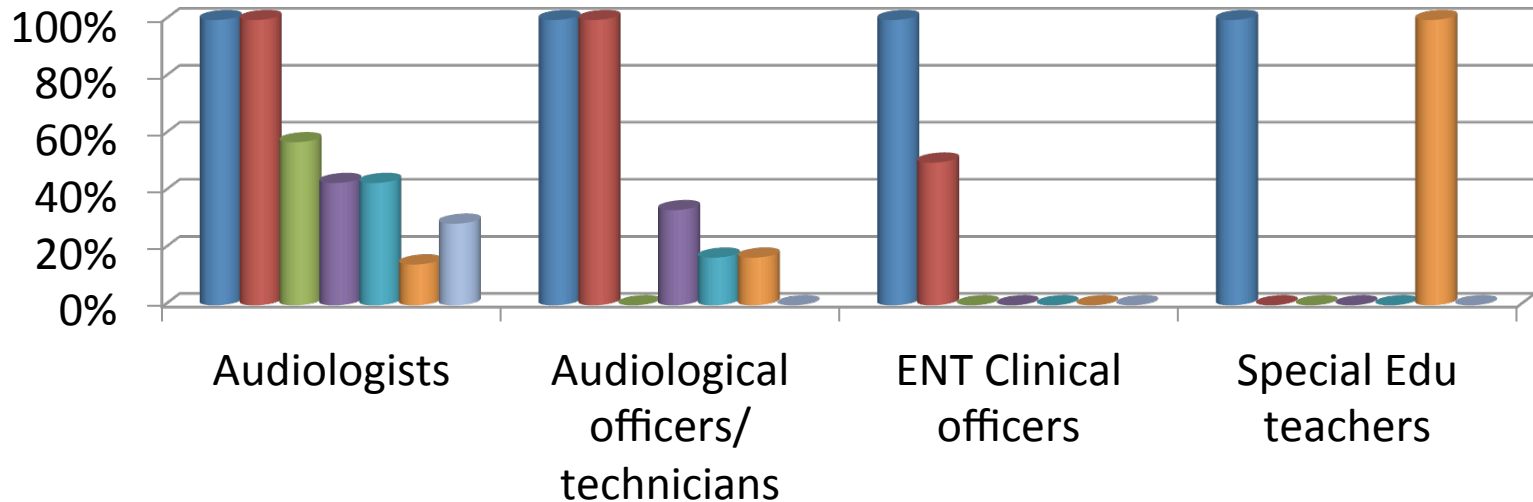
# Practice setting-SLTS



□ 16 SLTs

□ None in Public sector

# AUDIOLOGICAL EQUIPMENT



■ Audiometers

■ Tympanometry

■ OAEs

■ ABR

■ Hearing Aid analyser

■ Earmould lab

■ VRA

# How are children with severe to profound HL managed

1. Hearing Aids fitting
2. Sign Language taught in schools for the deaf
3. Cochlear implantation followed by mainstreaming.

# Training

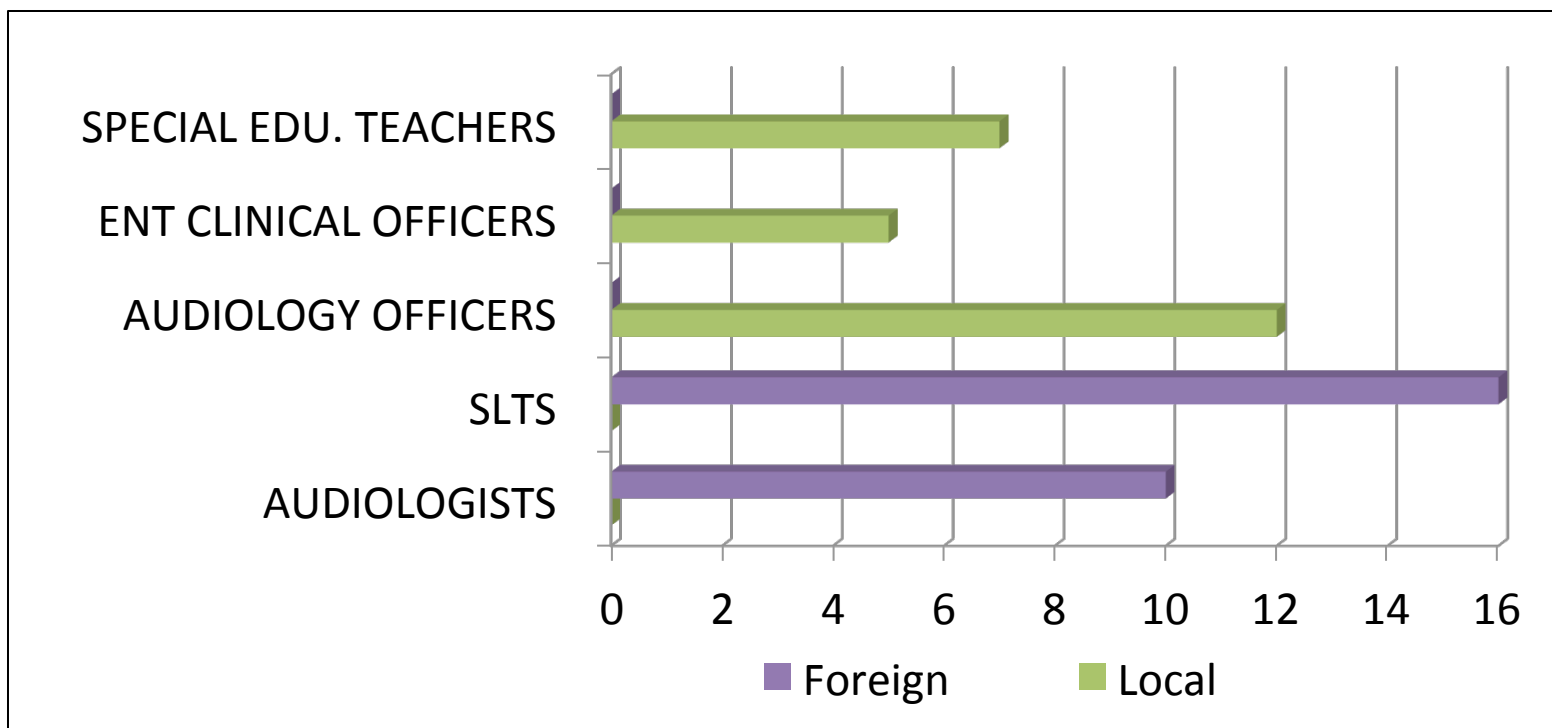
## AUDIOLOGY TRAINING



## UNIVERSITY OF NAIROBI

- Dip programme in Clinical Audiology and PH otology.
- Programme support through collaborations with Sound Seekers, AudMed, UCL
- Current- developed the curriculum for a BSc Programme in Audiology Speech and Language Pathology.
- 2 other Universities MSc In SLP
- Currently no existing programme for SLP

# Training




- ❑ Audiologists and SLTs have all trained abroad.
- ❑ Audiology Officers and technicians, Special Education teachers, ENT Clinical Officers all trained locally.



# Needs/Challenges related to provision of Speech and hearing services

1. Inadequate no. of Audiologists and Speech and language therapists.
2. Training at all levels of Hearing Healthcare service.  
Need for an in-country degree training programme for SLTs and Audiologists. Need to continue training Audiology officers/technicians. Need to training PEHC workers.
3. Need for development of a National Programme for Ear and Hearing Care for Kenya
4. Inaccessibility to Audiology and SLT services.  
Services are mainly centered in the capital city and mainly provided through private institutions.

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5. Need for a Government scheme of service for the Audiology and Speech and Language professionals
  6. Minimal funding for:
    - ❑ Training of Audiology and speech and language professionals
    - ❑ Equipping of institutions with audiological equipment, hearing aids and physical infrastructure.
  7. Affordability and sustainability of hearing health services. Need for public/private partnerships.

# Pilot Newborn Hearing Screening Program: Nairobi

- One year pilot/demonstration program
- Goal: screen all children born in Kenyatta Hospital in 2015
- Screening equipment provided through Natus (partnership with James Lemons MD, Indiana University)
- Funding provides support to develop infrastructure for the program, including personnel, educational materials, follow up (immunization clinics), amplification
- We will use the information from this pilot project for future newborn hearing screening implementation
- Hope in future to develop similar program in Eldoret
- Sustainability will require other funding sources – government, hospital, private

# Acknowledgments

- Debara Tucci MD, Professor ORL & H/N surgery  
Duke University, USA
- All the following professionals who filled out the questionnaires: Audiologists, Audiological officers and technicians, Speech and Language therapists, special education teachers.

# Thank You

