

Supporting children with hearing loss in Zambia

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Introduction

There are currently 466 million people in the world with disabling hearing loss, 34 million of these are children (WHO, 2018). Early onset childhood hearing loss can have long-term consequences affecting language and communication and psychosocial skills as well as educational attainment and employability (Tucci et al 2010).

Zambia is a landlocked country in southern Africa with a population of around 17 million people. Common causes of hearing loss in this population include impacted wax, chronic suppurative otitis media, ototoxic medication, conditions at the time of birth, genetic factors and noise exposure. Many of these causes are preventable. The World Health Organisation estimates around 4-6% of Zambians have disabling hearing loss (disabling hearing loss defined as >40dB in the better ear for adults and >30dB in the better ear for children). To meet this huge need, there are very few specialised health professionals in the country (see table 2).

For the last seven years Sound Seekers have been working the Zambian Ministry of Health to develop audiology services in the capital city of Lusaka and Ndola in the Copperbelt region.

Specialised health profession	Number of staff employed	
	Public health sector	Private sector
Consultant ENT surgeon	2	1
General Medical Officer (ENT)	5	0
Registered ENT nurse	0	2
Audiologist	1 (Sound Seekers volunteer)	1
Hearing instrument specialist (audio technician)	3	4
Speech and language therapist	0	4
Speech and language therapy assistant	1	0

Table 1: Audiology, ENT and speech therapy human resources in Zambia. 2 additional public sector audio technicians are due to finish training in December 2018 and 2 more will start training in 2019.

Timeline of Sound Seeker's work in Zambia

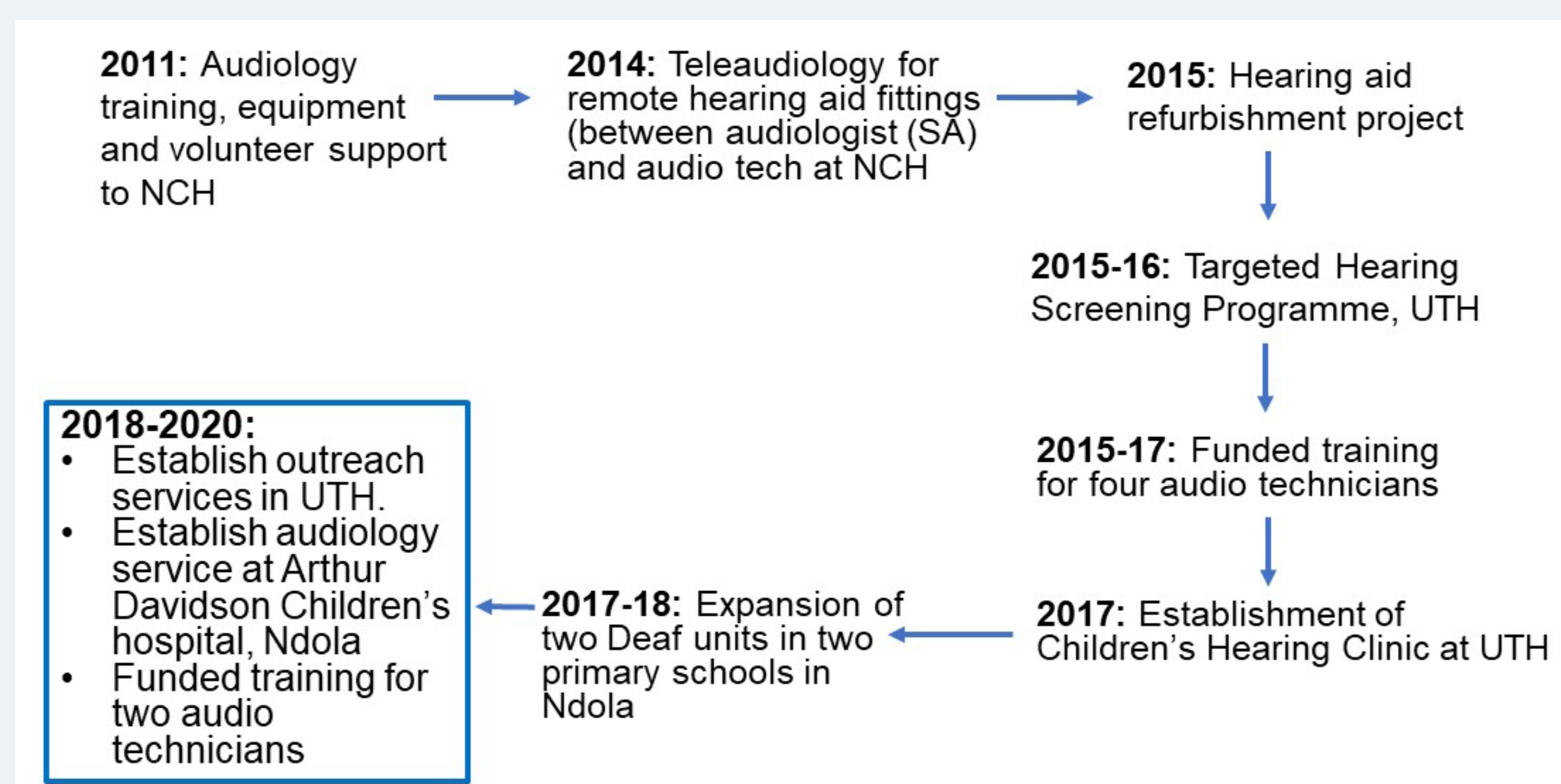


Figure 1: Timeline of work carried out by Sound Seekers in Zambia. UTH: University Teaching Hospital, Lusaka, Zambia, NCH: Ndola Central Hospital, Lusaka, Zambia. Outlined area indicates future planned work.

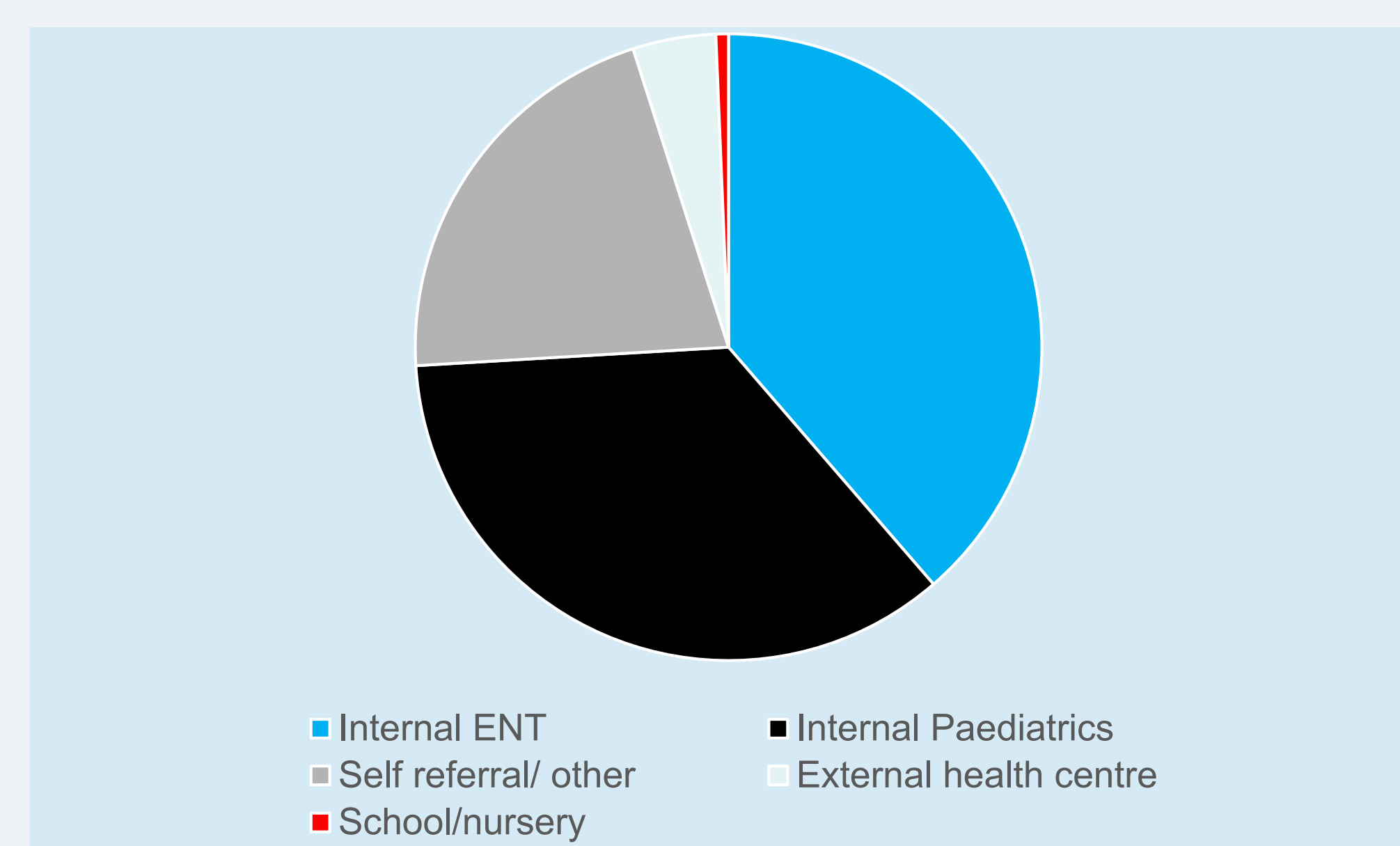


Figure 2: Referrals to the UTH audiology clinic.

The UTH Children's hearing clinic , Lusaka, Zambia - One year on

The Children's hearing clinic is based within the Children's hospital of University Teaching Hospital, Lusaka, Zambia. The clinic was officially launched in October of 2017 alongside the signing of the first Ear, Nose and Throat National Strategic Health plan.

Staffing: 1 Audiologist (Sound Seekers long term volunteer), 1 audio technician, 3 registered nurses, 1 clerk + sign language interpreter, 1 speech and language therapy assistant and 1 ear mould lab technician.

Equipment: This is currently the only public sector audiology department which can provide visual reinforcement audiometry, auditory brainstem testing and digital hearing aid fitting for patients of all ages.

Hearing aids: The Sound Seekers' hearing aid refurbishment programme (HARP) based in Lusaka allows for a steady flow of refurbished digital hearing aids to be distributed between all Sound Seekers project countries. Custom ear moulds are made on site.

Follow up: All patients with hearing aids are given regular follow up for hearing aid maintenance and counselling

Onward referral: patients are referred to the on site ENT department to address any medical conditions

Main Challenges: Lack of adequate local training, low awareness of impact of hearing loss, lack of affordable, local specialised audiology equipment and consumables, limited ENT/ Audiology/Speech therapy capacity(table 1).

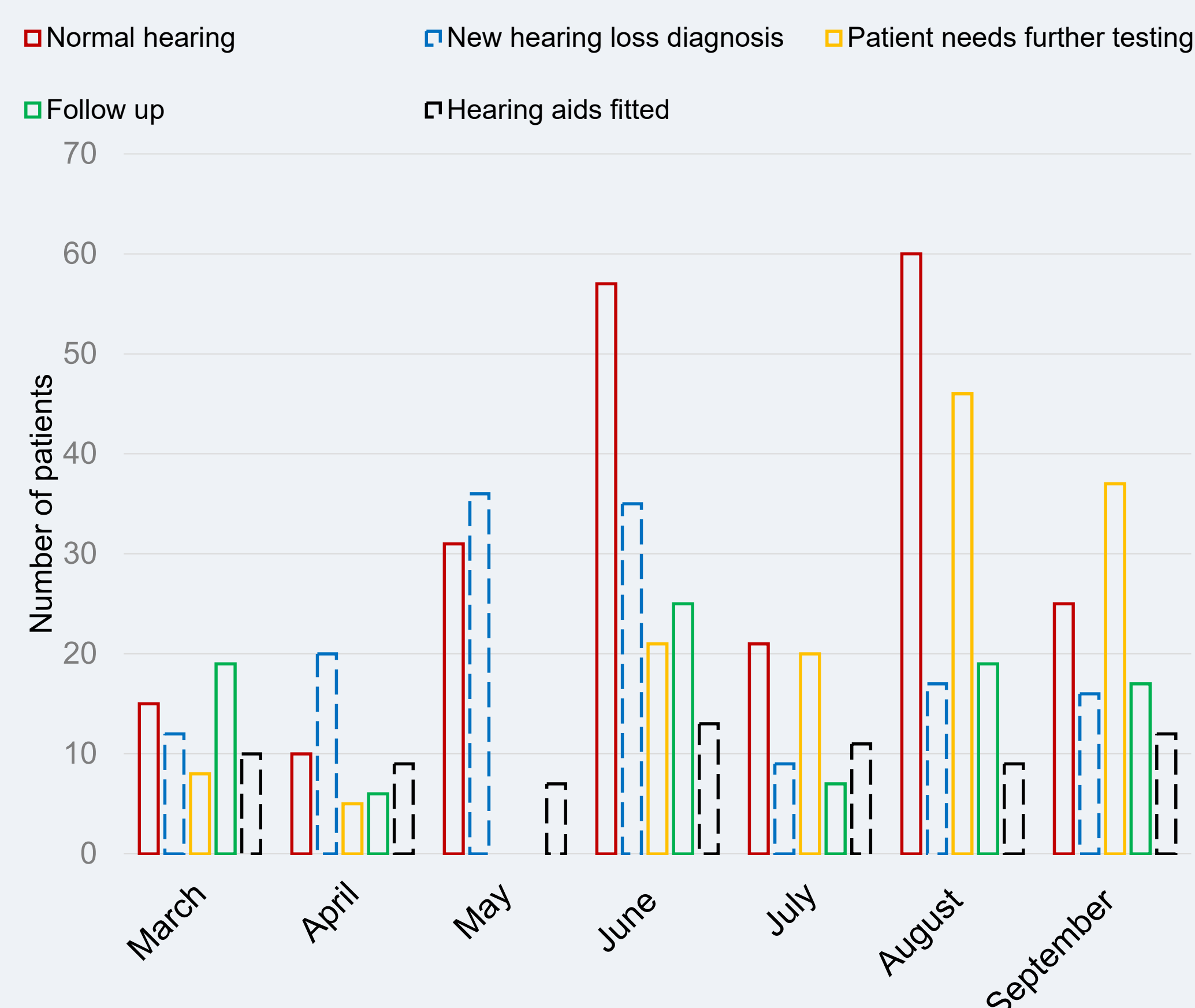


Figure 3: Clinical data from March– September 2018. Note: Hearing loss based on WHO classifications of disabling hearing loss

Conclusion

Children with hearing loss and their families require holistic, multidisciplinary support which can include, but should not be defined by, the fitting of a hearing aid. The Children's Hearing Clinic in Lusaka is able to provide diagnostic and rehabilitative services for people with hearing loss but there is an urgent need to raise awareness of the impact of hearing loss as well as the consequences of undetected hearing loss. Due to limited numbers of specialised health professionals, there is also great need for capacity building and training of audiology and ENT professionals in Zambia.

Sound Seekers are committed to helping people with hearing loss to realise their rights by gaining access to an integrated and comprehensive *Audiology, Community and Education (ACE)* programme that is sustained by national governments.