

**FEASIBILITY STUDY REPORT**

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**PROJECT IDEA NUMBER : 000838**

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**STRENGTHENING EAR AND HEARING CARE CAPACITIES IN CAMEROON**

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**COMMISSIONING ORGANISATION : CHRISTIAN BLIND MISSION**

**PARTNER ORGANISATION : CAMEROON BAPTIST CONVENTION HEALTH SERVICES**

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## Acronyms

Acronym	Definition
BMZ	German Federal Ministry for Economic Cooperation and Development
C.	Circa (around / approximately)
CBCHS	Cameroon Baptist Convention Health Services
CBM	Christian Blind Mission
CBID	Community Based Inclusive Development Program
CSO	Civil Society Organisation
EHC	Ear and Hearing Care
ENT	Ear Nose and Throat
E.G.,	Exempli Gratia (for example)
ETC.	Et Cetera (and other similar things)
HI	Hearing Impairment
HSS	Health Sector Strategy
I.E.,	Id Est (that is)
MoU	Memorandum of Understanding
NGO	Non-Governmental Organisation
OECD DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
SCORL	Société Camerounaise d'Oto-Rhino-Laryngologie et de Chirurgie Cervico-Faciale (ENT Society of Cameroon)
SDG	Sustainable Development Goals
WHO	World Health Organization
XAF	Central African CFA Franc

## 1. Executive summary

We have assessed the feasibility of the project proposed by Christian Blind Mission (CBM) to Strengthen Ear and Hearing Care (EHC) Capacities in Cameroon through the training of EHC professionals, increasing accessibility of EHC equipment, and the development of a National Plan for EHC in the country. This project is to be funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and CBM International to the tune of approximately €733,333 and will be implemented over 50 months, commencing on May 1, 2024, until June 30, 2028.

Essentially, the purpose of our study was to assess the following: whether the problems identified in the project proposal are well-founded; the feasibility of project activities to address the problems; the capability of CBCHS as an implementation partner; and an assessment of the project against OECD DAC criteria. We present herewith our independent assessment of the points above, including some recommendations in relevant sections of the report to address the issues we have raised. To enable us to form and express our views on the feasibility of this project, we surveyed 2,035 individuals and also engaged a cross-section of stakeholders, including policymakers in the government ministries of Public Health and Social Affairs, Hospital Administrators, Ear Nose and Throat (ENT) surgeons and Clinical Officers across the country, EHC and Community-Based Inclusive Development (CBID) programs, Health and Sciences professionals and academic institutions, Deaf and Hard of Hearing persons, Civil Society Organizations (CSOs) working to improve EHC accessibility and strengthen national systems etc.

In our view, the problems identified in the project proposal are well-founded, based on the evidence we obtained, and the envisaged project activities have been generally well-designed to address the problems identified during our feasibility assessment. CBCHS has been assessed for competence and found to be a suitable partner capable of achieving the planned indicators, impact, and outcomes. This implementation partner is a faith-based organization that was founded in 1982 and has developed an impressive track record of working with various international donors to deliver a diverse array of projects, with a particular focus on persons with disabilities. Over the past three years, the CBCHS annual budget has averaged over €20 million. Our assessment of the project against OECD DAC criteria revealed no major issues.

The project is well-anchored within the World Health Assembly Resolution WHA70.13 Point 3 and the World Report on Hearing's call to action for integrated people-centered EHC through H.E.A.R.I.N.G. Furthermore, the Project Concept aligns perfectly with the Cameroon Health Sector Strategy (HSS), which states that "the main issue of the health system is its weak capacity to meet the social and health needs of the population and contribute to the development of a healthy and skilled human capital." Accordingly, planned project activities would support the government of Cameroon in attaining the objectives of Health Implementation Strategy 2.4.4, which mentions the necessity to conduct national surveys on the prevalence of hearing disorders to estimate their magnitude and organize screening campaigns for various target groups. The HSS also recognizes that persons with hearing impairments (HI) constitute the largest group of persons with disabilities in the country (38%).

Considering that this project is the first of its kind in Cameroon and the very low knowledge base on EHC among the populace, our overarching recommendation is for awareness-raising activities to be given more prominence during project implementation, with set indicators to monitor the success of community education initiatives. The high concentration of EHC professionals in urban metropolises, particularly in the two largest cities of Yaoundé and Douala, leads us to conclude that a strong community outreach program, especially in hard-to-reach areas, should be an essential component of the project's drive to strengthen primary EHC services. Placing greater emphasis on community education and community outreach (demand-side levers), in addition to the training of professionals and the provision of equipment on the supply side, should significantly strengthen EHC capacities. It is essential for deaf and hard of hearing persons to organize into groups, and the representatives of these groups should play an integral role in the development of the National Plan for EHC in Cameroon. The Plan should identify the major EHC challenges in the country and set out a roadmap for addressing the challenges identified.

All the key stakeholders we engaged during the study welcomed the proposed integrated approach to strengthen EHC access through the training of professionals, provision of infrastructure/equipment, and the development of a National Plan for EHC in Cameroon. Generally, the stakeholders unreservedly stated their willingness to cooperate and support project activities (95%).

## 2. Background and context

Cameroon is a lower-middle-income country with a population of over 27.2 million (as of 2021)<sup>1</sup> and it ranks 151 out of 191 in the 2021 Human Development Index.<sup>2</sup> The country is located along the Atlantic Ocean and shares its borders with the Central African Republic, Chad, Equatorial Guinea, Gabon, and Nigeria. Two of its border regions with Nigeria (Northwest and Southwest) are Anglophone, while the rest of the country is Francophone. Like in many parts of the global south, several local and international non-governmental organizations (NGOs) are active in Cameroon, addressing both development and humanitarian challenges.

Christian Blind Mission (CBM) is a Christian international development organization committed to improving the quality of life of people with disabilities in the poorest communities of the world, irrespective of race, gender, or religious belief. For nearly 40 years, CBM has been working with the Cameroon Baptist Convention Health Services (CBCHS) as an implementation partner to improve access to healthcare and enhance the livelihoods of persons with disabilities, following the CBM Community-Based Inclusive Development (CBID) approach, which includes Ear and Hearing Care (EHC) as one of the technical areas. CBCHS is a non-profit, faith-based healthcare organization that sources funds from various donors to offer holistic care to all as an expression of Christian love. The organization is now the country's second-largest provider of healthcare services, after the Cameroon government, with 103 health facilities in nine of the 10 regions of the country.

Over the years, CBCHS has developed into a multi-faceted organization offering a range of healthcare and related services to millions of people in a holistic manner, both in its health facilities and in community settings. With the support of CBM and various local and international donors, the organization has also developed a wide range of services for the prevention, treatment, and rehabilitation of disabilities, including eye care, mental health, physiotherapy, orthopedic care, and Ear Nose and Throat (ENT) services. Its EHC services address the needs of people across all social strata and include subspecialties in audiology and cochlear implantation.

According to the World Health Organization, around 430 million people worldwide have disabling hearing loss, with the majority of them residing in low and middle-income countries. In many developing countries, access to ear and hearing care services can be limited, leading to untreated hearing loss, which can have adverse effects on individuals' quality of life, education, and economic opportunities. In Cameroon, EHC services face challenges such as limited resources (e.g., trained EHC professionals), lack of awareness, and infrastructure constraints (e.g., insufficient EHC equipment). Considering the limited number of EHC professionals in the country, CBCHS has developed an 18-month training program for EHC Clinical Officers to help meet the ever-increasing demand for EHC services. The University Teaching Hospital of Yaoundé is also involved in the training of EHC professionals, despite the challenges involved.

Essentially, CBM and its partner CBCHS are looking to propose a project to the German Federal Ministry for Economic Cooperation and Development (BMZ) to help address the EHC challenges in Cameroon. The longstanding partners envisage that the proposed project will strengthen EHC capacities in the country and contribute to improving the quality of life of people with hearing impairments or ear diseases, or those at risk of them, through sustainable access to EHC services. Despite the progress that has been made in the EHC domain, there is still a long way to go. Coordination of efforts in the form of a National EHC plan could help ensure the sustainability of expected benefits from project activities aimed at strengthening EHC capacities.

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<sup>1</sup> Cameroon Overview: Development news, research, data | World Bank

<sup>2</sup> List of countries by Human Development Index - Wikipedia

### 3. Study objectives and approach

Essentially, the purpose of the feasibility study and the ensuing report is to provide an independent assessment to the project's co-funding organization (BMZ) and the implementing organizations (CBM and CBCHS) on the following: whether the problems identified in the project are well-founded; whether project activities are sufficient to achieve the intended results; and whether the implementation partner CBCHS is capable of delivering the expected project results. Additionally, we reviewed a draft version of the Project Concept Note to help inform our views on the extent to which the project aligns with the OECD DAC criteria (i.e., relevance, coherence, effectiveness, efficiency, impact, and sustainability) and inclusion.

The project is currently in its design phase, and implementation activities are expected to be carried out over a five-year period from 2024 until 2028. In summary, the project aims to provide quality EHC services to approximately 200,000 people in Cameroon; reach 400 Community and Primary Health Care workers through EHC awareness raising activities, train 80 Primary Health Care Workers on awareness raising, early identification, prompt intervention, and referral processes; train 16 EHC workers as Audiology Technicians; and train 24 new health workers in all 10 regions of Cameroon as EHC Clinical Officers to support existing EHC services. The direct (institutional) target groups of the project include policy makers in the Ministry of Public Health, EHC and CBID programs, Health and Sciences professional and academic institutions, associations of Deaf and Hard of Hearing persons, and key Civil Society Organizations (CSOs) working towards improving accessibility and quality of EHC services and strengthening national systems. The approximately 3 million people (i.e., 12% of the Cameroon population) who currently live in the catchment area of CBCHS hospitals and have access to EHC services are expected to benefit indirectly.

We deployed an inclusive community-based approach for the feasibility study, engaging religious and community leaders across the country, policy makers, i.e., 10 regional delegates in the government ministries for public health (five) and social affairs (five), 12 local administrators in municipal councils, and regional assemblies across the country, 105 hospital administrators and technical staff (i.e., 20 administrators and technical staff respectively) in 20 health facilities across nine of the 10 regions of Cameroon, i.e., 13 CBCHS facilities and 7 public facilities. Additionally, we held working sessions with the Director of the University Teaching Hospital of Yaoundé and the Dean of the ENT Faculty of the University, as well as with members of the "Société Camerounaise d'Oto-Rhino-Laryngologie et de Chirurgie Cervico-Faciale" (SCORL), which translates into English as the Cameroon Society of Otolaryngology Head and Neck Surgery. SCORL would be hereafter referred to as the ENT Society. We gathered input from 22 CSOs and conducted nine focus group sessions with deaf and hard of hearing persons.

At the core of the study was an assessment of the following:

- the relevance of the proposed project and its activities to address the problems identified;
- the draft logical framework, including expected results, associated indicators, and risk mitigation strategies;
- the phasing of activities, project organization, sustainability of results, project synergies and complementarities; and
- the inclusiveness of the project, i.e., the active participation of persons with disabilities and their representatives.

The work was carried out by a central team of six Project Assessors, supported by 50 data collectors and community organizers, and overseen by the Managing Partner of Cabinet Kuwan. All the data collectors and community organizers were selected from their respective regions, and our survey questionnaires were completed by 2,035 individuals (47% male and 53% female).

In essence, the team's efforts focused on assessing the extent to which the proposed project could achieve its overarching objective: "The quality of life of people with hearing impairment or ear diseases, or at risk of it, in Cameroon is improved through sustainable access to EHC services". Specifically, the three expected result areas of the project include:

1. Strengthening EHC capacities of CBM partner CBCHS and key stakeholders on the three levels of intervention across Cameroon: community and primary health care workers, technicians, decision-makers and trainers.
2. Improving accessibility of EHC services on the three levels of intervention across Cameroon.
3. Developing a National Plan for EHC in Cameroon, in collaboration with national health authorities, by the end of 2027.

## 4. Methodology

Given the complex nature of the project and the contextual factors rooted in anthropology, we concluded that a mixed-methods research approach would be the most suitable strategy. Consequently, we designed survey questions to capture primary data, enabling us to conduct a thorough assessment of the core areas outlined above. The survey was mainly conducted using the SurveyMonkey software, and 50 survey questions were designed in both English and French languages. Recognizing that a significant proportion of the populace does not have smartphones, we deployed our network of data collectors and community organizers in various communities to gather participants' responses to the survey questions. This door-to-door data collection was facilitated through the KoboCollect software installed on the phones of our data collectors.

Following the collection of survey responses, we used Microsoft Excel to analyze the data at a more granular level, providing valuable insights into the feasibility of the proposed project.

Regarding the survey sample size, many statisticians recommend that a minimum sample size of 100 is necessary for meaningful results. If your population is smaller than that, you should aim to survey all of the members. The same source suggests that the maximum number of respondents should be 10% of your population, but it should not exceed 1,000. For instance, if you have a population of 250,000, 10% would be 25,000. Since this is higher than 1,000, a sample size of 1,000 should be sufficient to obtain statistically significant results.<sup>3</sup>

Using the entire population of Cameroon (approximately 27.2 million) as the sample size and aiming for a confidence level of 99% (indicating the level of confidence users can have in the results), with a 3% margin of error, we used the SurveyMonkey software to determine an optimal sample size of 1,849.<sup>4</sup> To clarify, the margin of error is a percentage that indicates how closely the survey results are expected to reflect the views of the overall population. A smaller margin of error means that the survey is closer to providing the exact answer at a given confidence level.

Therefore, the survey of 2,035 individuals conducted during the feasibility study exceeds both the minimum sample size of 1,000 respondents needed for statistically significant results and the 1,849 responses required to achieve a 99% confidence level in the survey results with a 3% margin of error.

Furthermore, we developed separate Interview Guides and Focus Group Guides for different stakeholder groups, including Policy Makers, Local Administrators, Hospital Administrators, Hospital Technical Staff, CSOs, and Deaf and Hard of Hearing Persons Groups. Please refer to the appendices for the Interview Guides, Focus Group Guides, and the survey questions used during the feasibility study.

Our data collection activities encompassed all ten regions of the country. The selection of health facilities and communities for inclusion in the study was based on our professional judgment, taking into consideration the input of the implementation partner and the elected local authorities in the target areas. A summary of the research data collection methods used during the feasibility study has been tabulated below.

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<sup>3</sup> How to Determine Survey Sample Size: a Guide (survicate.com)

<sup>4</sup> Sample Size Calculator: Understanding Sample Sizes | SurveyMonkey



**Table 1. Summary of research methods deployed.**

Research method	Primary or secondary?	Qualitative or quantitative?	Example of when utilized (note that this is not meant to be an exhaustive listing)
<b>Survey</b>	Primary	Quantitative	Survey of direct and indirect project beneficiaries, such as EHC service users, EHC service providers (including primary care workers, community health workers, and health workers more broadly), as well as the general populace who are indirect beneficiaries of the project. The survey was designed to capture disaggregated information across various demographics, such as age, gender, disability status, location, etc.
<b>Experiment</b>	Primary	Quantitative	We conducted tests to explore cause-and-effect relationships within the proposed project. This involved investigating the potential impact of various factors on project outcomes and assessing whether certain conditions or actions lead to specific effects. By employing appropriate research methods, data analysis, and statistical techniques, our goal was to identify and understand the causal relationships between different variables in the project.
<b>Interview / Focus Group</b>	Primary	Qualitative	The feasibility study team conducted focus group sessions and interviews with key informants at CBCHS, government agencies, community and primary healthcare providers, EHC specialists, Deaf and Hard of Hearing persons, etc., to gain greater insights into EHC issues in Cameroon. During these sessions, we aimed to assess the extent to which the proposed project addresses the issues raised by the individuals we engaged.
<b>Observation</b>	Primary	Either	During our visits to the CBCHS healthcare facilities, we actively observed the conditions under which EHC services were being provided. By directly observing these aspects, we gained firsthand insights into the operational environment, service delivery processes, and the challenges faced by both EHC service providers and service users. This observational approach allowed us to gather valuable information to supplement the data we collected.
<b>Literature Review</b>	Secondary	Either	We conducted a comprehensive review of secondary data from various sources, including CBCHS, CBM, government agencies, as well as local and international NGOs. This review aimed to gather existing information and insights related to EHC services and relevant aspects within the project scope. By analyzing existing reports, studies, and data, we developed a contextual understanding of the current state of EHC services in Cameroon.

In summary, our methodology for the study can be broken down into the five key stages below:

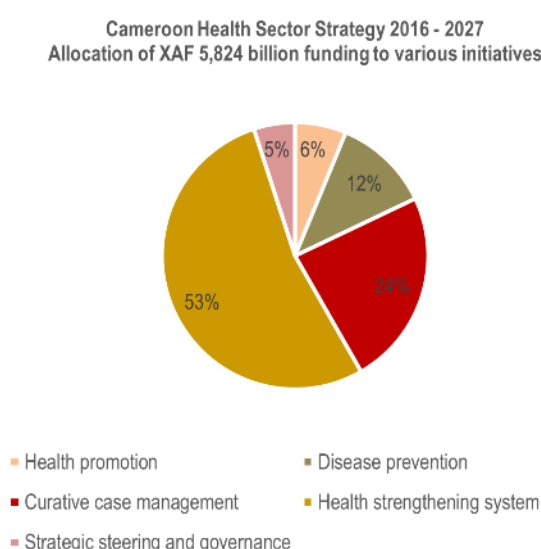
1. Preliminary analysis – review of the Terms of Reference and publicly available information.
2. Confirm research methodology – e.g., drafting survey questions, interview guides, and focus group guides.
3. Data collection, analysis, and validation – we used inclusive and participatory data collection methods. For quantitative data, we employed statistical analysis methods to examine relationships between variables. Meanwhile, qualitative data underwent techniques such as thematic analysis to discern patterns and extract meanings from the information collected.
4. DAC and inclusivity assessment – analysis of the draft Project Concept Note according to OECD DAC criteria (relevance, coherence, inclusion, effectiveness, efficiency, impact, and sustainability). Inclusiveness assessment regarding vulnerable groups such as persons with disabilities, women, and children.
5. Quality assurance – performed to fulfill our commitment to quality for our clients and to hold ourselves accountable to do our best.

## 5. Situation and problem analysis

Cameroon has a Health Sector Strategy 2016 – 2027 (HSS) built on the vision of the President of the Republic that the country should become a place where "global access to quality health services is guaranteed for all social strata by 2035, with the full involvement of communities." According to the HSS, "the main issue of the health system is its weak capacity to meet the social and health needs of the population and contribute to the development of a healthy and skilled human capital." Concerning health system strengthening, the overall objective of this strategic area in the HSS is to "increase the institutional capacity of health facilities for sustainable and equitable access to health care and services for the population." The strategies to achieve this objective by 2027 include ensuring the "availability of infrastructure, equipment, and services" and increasing the "availability of quality human resources for health in at least 80% of health districts and central departments<sup>5</sup>.

The funding allocation for various strategic initiatives in the HSS amounts to XAF 5,824 billion for the period from 2016 to 2027, resulting in an annual average of FCFA 485 billion. Of this, XAF 3,102 billion (53%) is earmarked for Health Strengthening System, as can be seen in the chart below. The proportion of the state budget allocated to health has varied between 6% and 8% since 2011. This proportion falls below the commitment made by African leaders during the Abuja Summit in April 2001, where they recommended the allocation of 15% of national budgets to health.

**Figure 1. Cameroon Health Sector Strategy 2016 – 2027, Allocation of XAF 5,824 billion funding to various initiatives.**



The country's Health Sector Strategy classifies non-communicable diseases into five groups, with Group 3 diseases comprising "Oral diseases, visual, and chronic hearing impairments." According to the HSS, "Deafness and visual disorders are the first and fourth most common handicaps in Cameroon, with prevalence rates of 38.8% and 10.9%, respectively." Although the prevalence of deafness is almost four times that of visual disorders (i.e., 38.8% of disabilities versus 10.9% of disabilities), there is a national strategic plan for eye health, but none for deafness or hearing impairments. Furthermore, although Specific Objective No. 2.4 of the HSS aims to "Reduce the prevalence of major non-communicable diseases by at least 10% by 2027," and Implementation Strategy 2.4.4 mentions the necessity to: "(i) conduct national surveys on the prevalence of oral diseases, visual and hearing disorders to estimate their magnitude and geographical distribution; (ii) build health personnel capacities to enable them to develop preventive strategies for oral diseases, visual and hearing disorders at all levels of the health pyramid and involving the community; and (iii) organize screening campaigns for the aforementioned diseases for target groups such as school-age children and the elderly," our study found little evidence to suggest that any of these commendable objectives had been significantly implemented to make a palpable difference in the availability of Ear and Hearing Care (EHC) services in the

<sup>5</sup> HSS\_english\_0.pdf (minsante.cm)

country. Moreover, hearing-related issues are mentioned in the HSS in combination with oral and eye issues, with notably limited specific information on hearing issues. For example, the HSS mentions that there is one dental surgeon per 87,500 inhabitants in Cameroon, but there is no similar statistic regarding the number of Ear Nose and Throat (ENT) surgeons available to address hearing-related issues in the country.

In general, very limited information has been published on the prevalence of hearing impairments (HI) or ear and hearing care (EHC) in Cameroon. This is partly due to insufficient prioritization of EHC and a lack of adequate data collection on EHC matters. The World Health Organization (WHO) defines EHC as "comprehensive, evidence-based interventions to prevent, identify, and treat ear diseases and hearing loss, and to rehabilitate and support persons with hearing loss" (WHO, 2015: 6). According to the WHO, nearly 20% of the global population (1.5 billion people) live with hearing loss, and 430 million people, which is over 5% of the world's population, require rehabilitation to address their disabling hearing loss. Hearing impairments can range from mild to moderate, moderately severe, severe, or profound, and they can affect one or both ears. The WHO estimates that by 2050, one in every 10 people will have disabling hearing loss. "Disabling" hearing loss refers to hearing loss greater than 35 decibels (dB) in the better hearing ear. Nearly 80% of people with disabling hearing loss live in low- and middle-income countries. Globally, 34 million children have deafness or hearing loss, with 60% of cases being due to preventable causes. At the other end of the lifespan, approximately 30% of people over 60 years of age have hearing loss<sup>6</sup>.

Limited information has been published about the prevalence of HI in Cameroon. This is partly due to the lack of EHC services in most hospitals and a general lack of adequate health information systems to capture data on various health pathologies. According to an article published in 2020 by various authors, including the Faculty of Medicine and Biomedical Sciences at the University of Yaoundé I in Cameroon, the prevalence of HI in Cameroon ranges from 0.9% to 3.6% in population-based studies and increases with age. Environmental factors contribute to 52.6% to 62.2% of HI cases, with meningitis, impacted wax, and age-related disorders being the most common causes. This is attributed to healthcare systems that are often inadequately equipped to prevent, screen, and manage the causes of HI. Hereditary HI comprises 0.8% to 14.8% of all cases, while the origin of 32.6% to 37% of HI cases remains unknown. Therefore, the high prevalence of diseases that are preventable by vaccination, such as meningitis, measles, rubella, and mumps (present in 41% of cases studied in the 2020 article), in the etiology of HI highlights the need to strengthen the current national immunization program in Cameroon. A cross-sectional study conducted at Mbingo Baptist Hospital in 2014, involving 320 children, also emphasized the link between rubella infection and deafness. The authors found that hearing-impaired children were seven times more likely to have positive rubella IgG serology<sup>7</sup>.

## 5.1 EHC capacities of CBCHS and key stakeholders across Cameroon – issued identified

Generally, we observed a chronic shortage of Ear and Hearing Care (EHC) professionals in Cameroon, particularly in community and primary ear and hearing care. As of March 2023, the ENT Society of Cameroon (SCORL) had 101 registered members, with at least two-thirds (67) of them practicing in the two largest cities in the country, namely 40 in Yaoundé and 27 in Douala, according to their practice addresses (see Figure 2 below). Considering that the population of Cameroon is estimated to be about 27.2 million, the reported 101 ENT surgeons represent a ratio of about 1 surgeon per 269,307 people.

A separate study published in 2021 indicated that 79.9% of the ENT surgeons in Cameroon are based in the Littoral and Centre regions<sup>8</sup>. While it's possible that there are some surgeons in the country who do not belong to the ENT society, adding them to the reported 101 surgeons is unlikely to significantly alleviate the chronic shortage of surgeons. In comparison to the World Health Organization's (WHO) recommended ratio of 1 doctor per 10,000 inhabitants in a population, the ENT doctor-to-patient ratio in Cameroon is approximately 269 times worse, with only 1 ENT doctor per 269,307 people.

It's important to note that only about a dozen ENT surgeons in the country are capable of performing complex surgical procedures, as most of the surgeons receive their training at the University of Yaoundé 1 in Cameroon and neighboring Francophone African countries. Unfortunately, these training facilities lack the necessary temporal bone laboratories,

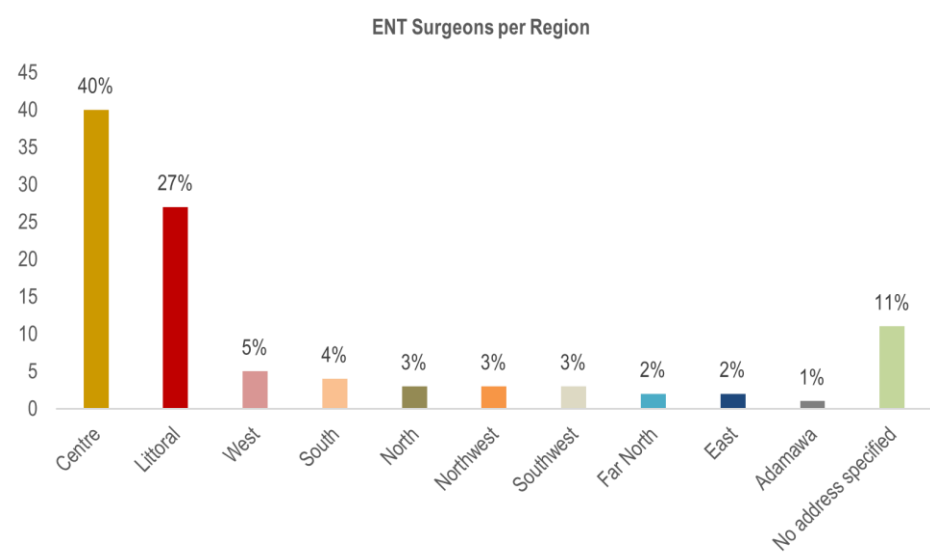
<sup>6</sup> Deafness and hearing loss (who.int)

<sup>7</sup> Identification of Ocular and Auditory Manifestations of Congenital Rubella Syndrome in Mbingo (hindawi.com)

<sup>8</sup> Approach and solutions to congenital hearing impairment in Cameroon: perspective of hearing professionals | Tropical Medicine and Health | Full Text (biomedcentral.com)

microscopes, and high-quality drills needed to facilitate training on surgical procedures. There is also a cultural and public health aspect to this issue, as the public would need to be educated about the benefits of donating the bones of their deceased relatives to establish a temporal bone laboratory in Cameroon in the future.

Figure 2. Number of ENT surgeons per region.



Since 2008, the University Teaching Hospital of Yaoundé has been offering four-year training programs to approximately 5 to 10 medical doctors who have already graduated as general practitioners after seven years of training. These programs aim to specialize them as ENT surgeons. The first batch of these specialized graduates graduated in 2012, and the University estimates that about three-quarters of the ENT surgeons in the country are graduates of this university. However, many of these graduates are unable to perform complex surgical procedures, as the university's laboratories lack essential equipment such as temporal bone models, microscopes, and quality surgical drills necessary for comprehensive surgical training. Consequently, a substantial number of these surgeons find themselves performing administrative tasks in hospitals or handling less complex cases that could be managed by well-trained Audiologists or ENT Clinical Officers. The overall lack of adequate medical equipment in hospitals, as further elaborated in Section 5.2 below, further exacerbates the situation.

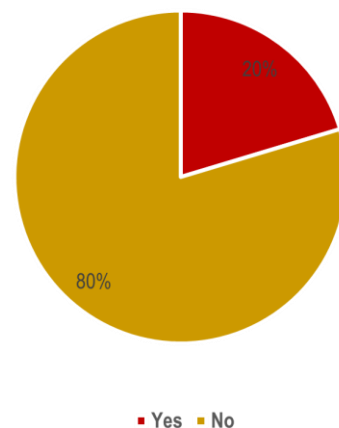
In addition to training ENT surgeons, the University Teaching Hospital has been offering training programs for about 4 to 5 ENT Nurses annually since 2019. These training programs last for two years and are open to state-registered nurses working in government hospitals. Consequently, approximately 12 to 15 ENT Nurses have graduated from the program in 2021, 2022, and 2023.

Previously, the University Teaching Hospital of Yaoundé used to train ENT Supervisors, a level of technical staff between ENT surgeons and ENT Nurses. However, this training was discontinued when it was discovered that the individuals trained lacked the necessary technical skills to effectively perform their duties in the field. Reflecting on lessons learned, some ENT Professors at the university noted that the training of ENT Supervisors was discontinued because the training required entrants to hold an academic degree in nursing but did not necessitate practical nursing experience. As a result, the graduates were unable to fulfill technical roles in hospitals and ended up working as administrators in government healthcare facilities.

The University Teaching Hospital in Yaoundé has nine lecturers involved in providing ENT training, and anecdotal evidence suggests that most of the graduates are employed in government health facilities. When respondents were asked whether they believed their nearest EHC service provider had an adequate number of ENT Technicians and ENT Clinical Officers, 80% of the respondents indicated insufficiency, as shown in Figure 3 below.

Figure 3. Survey respondents view on the availability of EHC Clinical Officers and EHC Technicians.

Do you believe your nearest EHC service provider has sufficient EHC Clinical Officers and EHC Technicians?



Apart from the government, CBCHS appears to be the only other provider of ENT training in the country. Their 18-month training program is open to individuals holding a recognized nursing diploma with a minimum of 2 years of practical nursing experience. While the training covers essential aspects such as the anatomy and physiology of the ear, nose, and throat, ENT pathology (diagnosis and treatment of common diseases), it does not encompass more complex areas such as audiological assessment and management for patients with hearing loss or ENT epidemiology, which involves the study of the distribution and determinants of diseases and health conditions related to the ear, nose, and throat within a population. It's important to note that training to become an Audiologist is currently unavailable in Cameroon. Thus, the project should consider sending audiology trainees to other African countries, such as Kenya, to ensure that set training targets are met. However, there is an opportunity for collaboration between the two leading healthcare providers in the country, the government of Cameroon and CBCHS, to significantly increase the pool of health workers trained as ENT Clinical Officers/Nurses.

According to statistics from CBCHS, in 2022, the organization had a total of 18 EHC staff, including 3 ENT Surgeons, 1 Audiologist Nurse, 2 Audiology Instrument Specialists, and 12 ENT Clinical Officers/Nurses, to address the needs of 28,421 patients. This results in a ratio of 1,579 patients per staff member. The chronic shortage of EHC staff is expected to worsen due to the ever-increasing demand. In 2022, 62% (17,522) of the patients seen were new patients who were reporting EHC issues for the first time. It's important to note that the 28,421 patients seen in 2022 required treatment for a total of 34,104 ear and hearing conditions, resulting in an average of about 1.2 ear and hearing ailments per patient. Interestingly, otitis was reported as the leading EHC pathology by 40% of the 2,035 persons surveyed.

From a gender perspective, 43% of CBCHS ENT patients in 2022 were male, while 57% were female. This appears to be at odds with the survey information, where respondents indicated that 64% of persons affected by hearing impairments in their community are male (47% men over 19 years and 17 boys under 19 years). However, this disparity could be explained by the fact that women are generally more cautious and health-conscious, making them more likely to seek medical attention when feeling unwell. This aligns with the perspective of the American National Institute on Deafness and other Communication Disorders, which asserts that "men are twice as likely to experience hearing loss but are less likely than women to seek help. Men are also less likely to talk about their hearing loss. When it comes to hearing loss, men tend to lose their 'hearing' in the higher frequency levels first. For women, hearing loss generally occurs in the lower-level frequencies<sup>9</sup>.

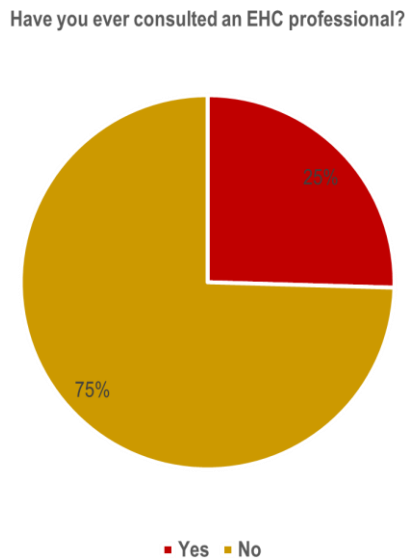
To assess the prevalence of Hearing Impairments (HIs) in Cameroon, the feasibility study surveyed respondents about whether they or anyone in their family had an HI. Out of the 2,035 respondents, 48% indicated that they or someone in their family had an HI. In terms of the severity of HI, 24% reported a Mild HI, while 11%, 8%, and 5% of respondents reported Moderate HI, Severe HI, and Profound HI, respectively. Therefore, the survey results conclude that almost half (48%) of families in Cameroon have someone living with an HI, with almost a quarter (24%) of families having someone with a Moderate, Severe, or Profound

<sup>9</sup> The Hearing Gap Between Men and Women - Hearing Aid Project ~ (hearingaidnations.org)

HI. These findings align with the statistics in the country's Health Sector Strategy, which confirms that "Deafness is the first handicap in Cameroon," representing 38.8% of disabilities, almost quadrupling the prevalence of visual impairments, which stand at about 10.9%

Our study found that about 75% of Cameroonians have never consulted an EHC professional. This conclusion is derived from our survey of 2,035 individuals conducted to achieve a 99% confidence level, with a 3% margin of error. Despite the concerning picture painted, we believe that the actual percentage of Cameroonians who have never consulted an EHC professional is, sadly, higher. This view is shared because about a third of the survey responses came from EHC service providers, who are more likely to have consulted an EHC professional.

**Figure 4. Proportion of people who have never consulted an EHC professional.**

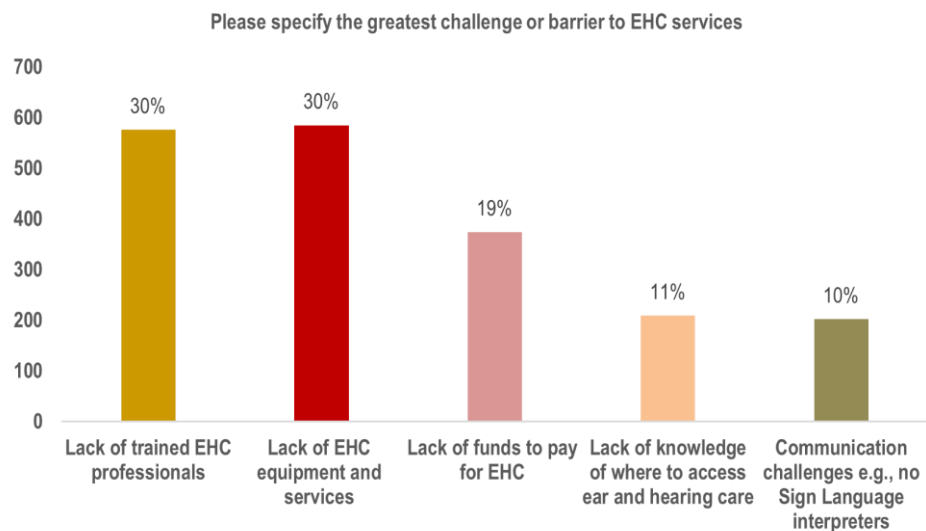


**5.2 Accessibility of EHC services – issues identified**

The accessibility of Ear, Nose, and Throat (ENT) and Hearing Care (EHC) services is influenced by three interrelated variables: (i) the supply of EHC professionals to meet the growing demand for EHC services; (ii) the availability of EHC equipment and infrastructure in both community and hospital settings to support EHC professionals in delivering their services; and (iii) the financial affordability of EHC services, which is a significant factor on the demand side, affecting the number of people who can afford EHC services. The analysis conducted in section 5.1 above reveals the chronic shortage of EHC professionals at CBCHS health facilities and in the country as a whole. Therefore, this section's focus is to evaluate accessibility from other perspectives, such as the availability of EHC services, EHC equipment in hospitals, Sign Language Interpreters, and the primary barriers hindering access to EHC services.

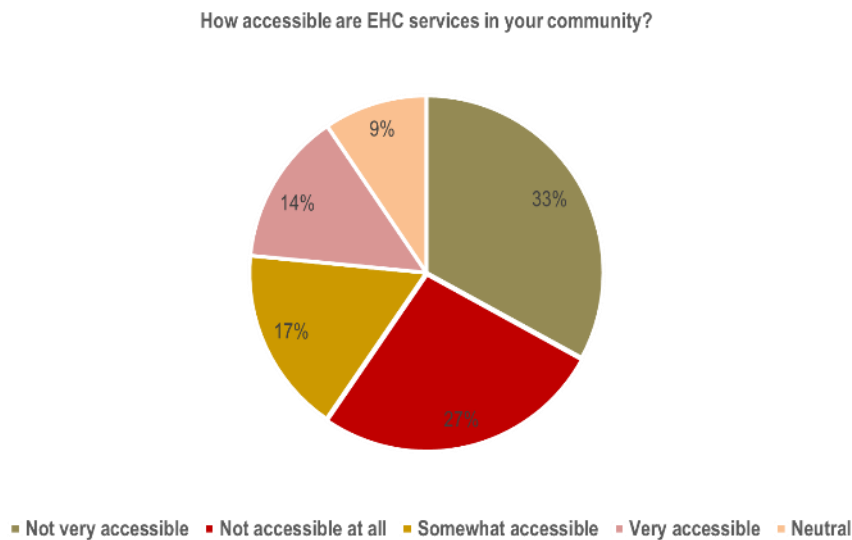
It's noteworthy that when survey respondents were asked to specify the greatest challenge or barrier to EHC services, 30% of them indicated the lack of trained EHC professionals, while a similar percentage (30%) cited the lack of EHC equipment and services. Approximately one in five of the respondents (19%) mentioned financial accessibility (i.e., lack of funds) as the primary barrier. Therefore, we can conclude that the project activities intended to increase the number of EHC professionals and enhance the availability of EHC equipment are well-directed toward addressing the key issues identified during the feasibility study.

Figure 5. Barriers to EHC services.



Additionally, nearly two-thirds (60%) of the 2,035 individuals surveyed reported that EHC services are not accessible in their communities. Among these respondents, over a quarter (27%) indicated that EHC services are “not accessible at all”, and a third (33%) stated that EHC services are “not very accessible”. It’s essential to note that a significant proportion of respondents who considered EHC services as ‘very accessible’ (14%) or ‘somewhat accessible’ (17%) reside in the country’s largest cities of Yaoundé and Douala, where more than two-thirds of the ENT doctors in the country are concentrated. Therefore, we strongly recommend that implementation activities aimed at improving EHC service accessibility include outreach visits to remote and underserved areas to ensure that individuals residing outside these major cities can also access EHC services.

Figure 6. Survey respondents view on the accessibility of EHC services.



The importance of increasing EHC access through organizing outreach visits is further underscored by the response to one of the survey questions, which indicates that 72% of survey respondents believe that the percentage of health facilities in their area or region offering EHC services is between zero to 25%, with 20% of respondents believing that somewhere between 26% to 50% of health facilities in their area or region offer EHC services. In other words, only 8% of the 2,035 persons surveyed reported that more than half of the health facilities in their area or region offered EHC services.



The limited facilities that offer EHC services in the country generally lack adequate equipment. Most of the more experienced EHC Technical Staff engaged during the feasibility study indicated that they were unable to effectively cater to the needs of their patients due to the shortage of equipment in their hospitals. Consequently, they spent their time performing less complex tasks such as the removal of foreign bodies from ears and the treatment of ear infections. Among the 2,035 individuals surveyed during the feasibility study, 79% indicated that their local hospitals lacked audiology equipment. Additionally, the availability of assistive devices for deaf and hard of hearing persons appears to be significantly challenging in Cameroon, with 70% of survey respondents reporting that hearing aids are not accessible to these individuals. Many of the EHC Technical Staff who participated in our focus group discussions mentioned that even when hearing aids are available, there is a shortage of audiology equipment to assess the extent of hearing impairments in patients, and there is a lack of knowledge among EHC staff to adjust the settings of the hearing aid to the needs of the patients. This reinforces the need for training of EHC professionals and the provision of equipment to go hand in hand.

Awareness of hearing assistive devices also appears to be an issue, as a significant 37% of survey respondents reported that they either lacked knowledge about hearing aids (31%) or their EHC provider never considered hearing aids (7%). It is no surprise that lack of money is the main barrier to the accessibility of hearing aids in Cameroon, considering that some hearing aids could cost up to XAF 400,000, which is almost ten times the minimum wage of Cameroon, standing at XAF 41,875<sup>10</sup>. Relatedly, we note that only three hospitals in Cameroon are able to perform cochlear implantation, including CBCHS, which has subspecialties in audiology and cochlear implantation<sup>11</sup>.

Given the challenging transport network in the country, including limited vehicle ownership, poor roads, and inadequate public transport infrastructure, the relatively long distances to reach the nearest EHC service provider also appear to hinder access to EHC services. Sixty percent of survey respondents reported that their nearest EHC service provider is over 30 kilometers away, with almost a third (30%) of respondents indicating that the travel distance to their nearest EHC service provider is over 75 kilometers.

Even if the points mentioned above were to be addressed, the shortage of Sign Language Interpreters in the country would still pose a challenge to the accessibility of EHC services, as deaf and hard of hearing persons struggle to communicate. All the policymakers in the Ministry of Public Health and the Ministry of Social Affairs interviewed during the feasibility studies pointed out the severe shortage of Sign Language Interpreters across the country. This view was equally shared by our survey respondents, as more than three-quarters of the 2,035 survey respondents reported a shortage of Sign Language Interpreters, with 27% indicating “no availability”, and 25% and 24%, respectively, reporting “poor availability” or “limited availability”. In seeking to boost the availability of Sign Language Interpreters to facilitate communication between deaf and hard of hearing persons and EHC professionals, there is also an ethical dimension that should not be lost sight of. This ethical dilemma relates to confidentiality, as deaf and hard of hearing persons may not want the Sign Language Interpreters to be privy to the health problems they would like to share with their doctors confidentially. To address this ethical dilemma, consideration should be given to the development of communication signs or a dictionary of Sign Language that deaf and hard of hearing persons could use to communicate with EHC professionals when they want to do so confidentially. Related to this, the development of a harmonized “Cameroon Sign Language” should be considered during the development of the National Plan for EHC in Cameroon.

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<sup>10</sup> Minimum Wage Updated in Cameroon from 21 March 2023 - July 03, 2023 - WageIndicator.org

<sup>11</sup> Approach and solutions to congenital hearing impairment in Cameroon: perspective of hearing professionals | Tropical Medicine and Health | Full Text (biomedcentral.com)

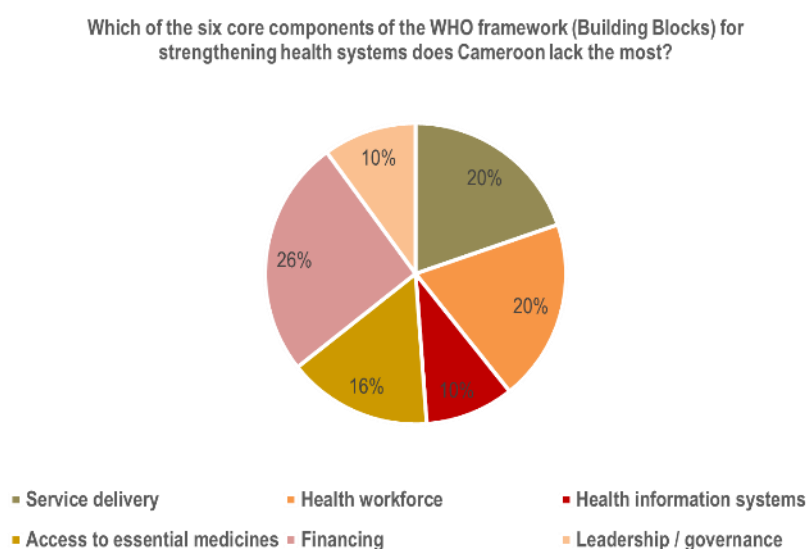


### 5.3 Development of a National Plan for EHC in Cameroon – issued identified

There is currently no National Plan for EHC in Cameroon, even though the country's HSS identifies deafness as the most prevalent disability, accounting for 38.8% of disabilities. In contrast to hearing impairments (HIs), visual impairments, which the HSS reports as the fourth most prevalent disability in the country, accounting for 10.9% of disabilities, have a National Strategic Plan for Eye Health in place. All the key informants we interviewed during the feasibility study and all the participants in our focus group discussions overwhelmingly welcomed the idea that the proposed project was aiming to develop a National Plan for EHC in Cameroon by the end of 2027.

We note that about four years ago, the ENT Society of Cameroon recognized the need to develop a National Plan for EHC in Cameroon, but the idea never came to fruition due to a lack of resources. Discussions with the ENT Society member (a professor in academia) who led the task force to develop the National Plan revealed that the planned activities to support the development of the plan were not carried out due to a lack of financial resources. There is, therefore, an opportunity for the proposed project to work closely with the ENT Society to ensure that the National Plan for EHC in Cameroon becomes a reality. It is imperative that the development of the National Plan for EHC considers the six core components of the WHO framework for strengthening health systems, ensuring that the Plan places greater emphasis on the core components that are most lacking in the local context in Cameroon. To this end, our survey asked respondents which elements of the six building blocks they believed were most lacking in Cameroon. We note that 26% reported financing as the component that is most lacking, with service delivery and health workforce each being reported by 20% of the respondents. Access to essential medicines was reported by 16% of respondents, and leadership/governance and health information systems were each reported by 10% of respondents.

**Figure 7. WHO “building block” that is most lacking in Cameroon.**



At present, the top-level officials at the Ministry of Public Health in Cameroon, including the Secretary General, are very receptive to the idea of developing a National Plan for EHC. The Secretary General is also an ENT Surgeon, which means they have a deep understanding of the challenges the country faces in the field of EHC services. It is crucial for project implementation activities to secure the support of the Ministry of Public Health, particularly while the current Secretary General is in office. This position is a political appointment, and there is no guarantee that the next appointee will have the same level of expertise in EHC or support the development of the National Plan for EHC to the same extent. The Memorandum of Understanding (MoU) that CBCHS has signed with the Ministry of Public Health should be leveraged to gain support from the relevant stakeholders for the development of the National Plan for EHC.

Community involvement should be a key element in the development of the National Plan, focusing on increasing EHC access and ensuring funding sustainability. According to the feasibility study, 23%, 17%, and 16% of survey respondents, respectively,

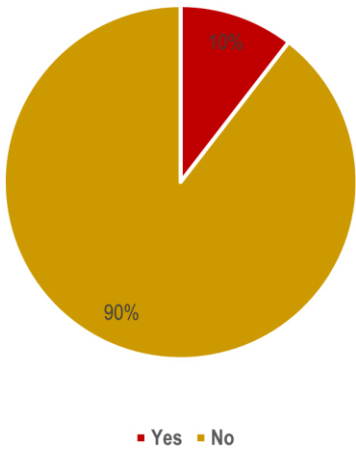
emphasized these points as the most critical aspects to ensure the sustainability of the project beyond its completion date in December 2028.

Moreover, the National Plan for EHC should pay particular attention to the role of community and primary health care workers in raising awareness and educating the public about EHC services, conducting screening for early detection of EHC issues, and referring patients to EHC facilities. Based on the feasibility study survey, these activities align with the expectations of the population. Slightly more than half (52%) of the respondents indicated that community awareness and education were the best ways for primary care workers to enhance service delivery, while 22% and 14%, respectively, pointed to screening and early detection, and referral and follow-ups as the best approaches for community and primary health care workers to improve EHC service delivery.

Furthermore, organizing individuals with hearing impairments into deaf and hard of hearing persons groups should be a central aspect of the National Plan for EHC in Cameroon. This would give them a stronger advocacy voice to lobby for changes that positively impact their access to EHC services and overall well-being. The vast majority of those surveyed (90%) reported that they or the deaf and hard of hearing person in their family do not belong to such groups. Generally, local associations or CSOs engaged in promoting persons with disabilities across the country focus on all types of impairments, with some exceptions such as the 'Association de Lutte Contre la Déficience Auditive au Cameroun' (ALDAC), which has signed an MoU with the Ministry of Public Health to work together to address hearing impairments in the country. It is recommended that as part of the National Plan for EHC in Cameroon, the project implementation partner, CBCHS, should consider how to help organize deaf and hard of hearing persons across the country into various representative groups. Activities related to this should aim to replicate the successes that the CBCHS 'Services for Persons with Disabilities' Team achieved in the Northwest Region when they helped organize persons with disabilities into various representative groups under the umbrella of the Coordinating Unit of the Association of Persons with Disabilities in the region.

**Figure 8. Proportion of people with hearing impairments deaf and hard of hearing persons group.**

Do you or the person(s) with hearing impairment in your family belong to any deaf and hard of hearing persons group?



## 6. Target group analysis

A study conducted in 2021 involving 91 ENT professionals and 31 health facilities with ENT clinics aimed to assess the availability of hearing tests in Cameroon, neonatal screening, and the possibility of creating a national map of treatment opportunities. The study identified that 79.9% of ENT surgeons were concentrated in two out of the ten regions, namely Littoral and Centre. It also found that there were only eight Otoacoustic Emission (OAE) and nine Auditory Brainstem Response (ABR) machines for ear screening in the country, which is significantly low considering the national population of about 27.2 million people. Among the 31 facilities with otolaryngologists, 25 (88.6%) did not conduct systematic neonatal screening. Reasons cited included the unavailability of equipment and administrative delays. Additionally, 16 (51.6%) out of the 31 facilities had ENTs with additional training in otologic surgery, and 11 (35.5%) were equipped to perform ear surgery. Only three centers (9.7%) specialized in hearing aid provision and maintenance services, and another three hospitals (9.7%) had performed cochlear implantation. The study concluded that there was a "scarcity and overt unevenness in the distribution of specialists, equipment, and solutions. A serious negative health care consequence of this shortage is the unavailability of universal newborn hearing screening and implementation programs<sup>12</sup>.

The proposed project to strengthen EHC capacities in Cameroon primarily targets institutional groups such as policy makers at the Ministry of Health, EHC and CBID programs, health and sciences professionals, academic institutions, associations of deaf and hard of hearing persons, and CSOs working towards improving accessibility and quality of EHC services. It is our belief that enhancing national EHC systems in the country would effectively benefit all Cameroonians, not just the approximately 3 million people currently residing in the catchment area of CBCHS hospitals, who may either be current EHC service users or potential EHC service users in the future.

Our interviews with key informants, focus group sessions, and individual surveys of direct and indirect beneficiaries revealed that central and local government policy makers were well aware of the weak capacity of health systems to provide adequate EHC services, mainly due to the shortage of trained professionals and equipment. However, there have been no concrete actions taken to properly address the situation. Conversely, a significant portion of the population lacks awareness of EHC. According to our survey results, over a third of respondents (35%) have very limited knowledge of EHC, with 28% reporting limited knowledge. Therefore, the project should consider strategies to raise awareness and educate the population about EHC. In the cultural context of Cameroon, many people, especially in rural areas, tend to prefer traditional healers over hospitals to seek solutions for health problems, including hearing problems.

The high level of stigmatization faced by deaf or hard of hearing persons is likely a result of limited knowledge about hearing problems. This stigma can deter individuals from seeking treatment and lead them to live socially reclusive lives. Alarming, 78% of survey respondents confirmed having observed stigmatization directed towards deaf or hard of hearing persons.

Regarding the causes of hearing impairments, a third of survey respondents indicated infections, followed by genetics, noise exposure, and aging, which were selected by 17%, 13%, and 12% of respondents, respectively. Accidents, trauma, injury, and chronic diseases were chosen by 11% and 9% of respondents, respectively. Ototoxicity, or hearing damage caused by medications or substances, also plays a significant role in the etiology of hearing impairments in Cameroon. Five percent of survey respondents identified medication or ototoxic substances as the main cause of hearing impairments. This finding aligns with a longitudinal study conducted in two hospitals in different regions of Cameroon to assess the outcome of anti-tuberculosis treatment in multidrug-resistant tuberculosis patients. Among the 106 patients with audiometry data available, 46 (43.4%) exhibited hearing impairment after a 4-month follow-up<sup>13</sup>.

Some health and sciences professionals have attempted to assess the etiologies of hearing impairment in Cameroon in comparison to other African countries. The results of their assessments have been tabulated below.

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<sup>12</sup> Approach and solutions to congenital hearing impairment in Cameroon: perspective of hearing professionals | Tropical Medicine and Health | Full Text (biomedcentral.com)

<sup>13</sup> Approach and solutions to congenital hearing impairment in Cameroon: perspective of hearing professionals | Tropical Medicine and Health | Full Text (biomedcentral.com)

**Table 2. Etiologies of hearing impairment in Cameroon and comparison to other African countries.**

Country	Cameroon	Cameroon	Sierra Leone	Gambia
Year of publication	2013	2017	1991	1985
Reference	Wonkam, A.; Djomou, F.; Fieggen, K.; et al. 2013	Ferrite, S.; Mactaggart, I.; et al. 2017	Wright, A.D.O. 1991	McPherson, B.; Holborow, C.A. 1985
Number of patients	582	127	354	259
Hereditary	14.8%	0.8%	-	8.1%
Meningitis	34.4%	-	23.9%	31.7%
Impacted wax	-	31.5%	-	-
Age-related HI	-	22.8%	-	-
Noise-induced HI	-	1.5%	-	-
Measles	4.3%	-	4.1%	1.9%
Rubella	0.5%	-	-	1.5%
Mumps	2.1%	-	16.7%	-
Ototoxicity	6%	-	20.8%	-
Other	5.3%	6.4%	-	2.3
Unknown	32.6%	37%	34.8%	54.4%

A related study in Cameroon has also highlighted that some people consider hearing impairments (HI) as a spiritual curse, leading to reported cases of stigma and discrimination against persons with HI. People with HI are sometimes referred to as having an "intellectual disorder." During the study, interviewees pointed out the difficulties faced by individuals with HI in accessing education and healthcare services. They suggested the need for the government and health researchers to develop strategies for the prevention and early diagnosis of HI. These strategies include:

1. Raising awareness among the general population about HI.
2. Developing facilities for the proper management and newborn screening of HI.
3. Implementing premarital screening to reduce the burden of HI of genetic origin<sup>14</sup>.

### 6.1. Stakeholder analysis

A stakeholder analysis has been conducted with the primary goal of identifying key stakeholders, evaluating the potential benefits they could derive from the project, and exploring how they might influence the project's implementation. Additionally, actions have been proposed to manage potential negative impacts some stakeholders could have on the project. The implementation partner should maintain ongoing monitoring and management of stakeholder dynamics to ensure the project achieves the expected results.

<sup>14</sup> Frontiers | Knowledge and Challenges Associated With Hearing Impairment in Affected Individuals From Cameroon (Sub-Saharan Africa) (frontiersin.org)

**Table 3. Analysis of project stakeholders.**

No.	Stakeholder	Potential benefits from the project	Possible impact on the project	Actions to manage negative impacts
1	<b>Policy makers</b> i). Ministry of Public Health ii). Ministry of Social Affairs iii). Elected local authorities	<p>The project would contribute to the government's achievement of Specific Objective No. 2.4 of the HSS, which aims to "Reduce the prevalence of major non-communicable diseases by at least 10% by 2027."</p> <p>Moreover, strengthening EHC systems would enhance the situation of individuals with hearing impairments, who constitute the largest proportion of people living with disabilities in Cameroon (38.8%).</p> <p>Elected local authorities in the project's area of intervention would also benefit from the increased accessibility of EHC services in their localities.</p>	<p><b>Positive:</b></p> <p>Authorisation to carry out project activities.</p> <p><b>Negative:</b></p> <p>Refusal to authorize project activities.</p> <p>Interference in project delivery.</p>	<p>Targeted lobbying and advocacy efforts are essential to secure the full cooperation of government authorities.</p> <p>Conducting periodic meetings with policymakers, especially those in the Ministry of Public Health, is crucial to keep them updated on project progress and maintain their ongoing support.</p>
2	<b>CBCHS</b> i). Hospital Administrators ii). ENT Surgeons iii). Audiology staff iv). ENT Clinical Officers	<p>The project aims to alleviate the chronic shortage of EHC professionals and equipment at CBCHS hospitals.</p> <p>In essence, the project aligns with CBCHS's mission of providing comprehensive care to all as an embodiment of Christian love.</p>	<p><b>Positive:</b></p> <p>Active participation to facilitate project delivery and the achievement of expected results.</p> <p><b>Negative:</b></p> <p>Differing opinions on which hospitals should benefit the most from the EHC equipment to be procured or which professionals should receive training.</p>	<p>Establish objective criteria for the selection of professionals to be trained. The placement of EHC equipment in hospitals should be determined by the demand for EHC services at various hospitals. Ensure the project team collaborates closely with ENT Surgeons and Hospital Administrators during the project implementation.</p>
3	<b>Health and sciences professionals</b> i). University Teaching Hospital of Yaoundé ii). ENT Society (SCORL)	<p>The increased availability of EHC equipment and an increased pool of ENT Technicians and ENT Clinical Officers should make it easier for health and sciences professionals in academia and the ENT Society to ply their trade.</p> <p>The National Plan for EHC in Cameroon should help to focus the activities of the ENT Society, helping them to work in unison with health authorities to address EHC challenges in Cameroon.</p>	<p><b>Positive:</b></p> <p>Active participation in project delivery, especially in the development of a National Plan for EHC in Cameroon.</p> <p><b>Negative:</b></p> <p>Their cooperation might be limited if they are uncomfortable with CBCHS spearheading the project.</p>	<p>Active involvement of the University Teaching Hospital of Yaoundé and the ENT Society during project implementation.</p> <p>Hold regular meetings to address emerging issues and maintain their ongoing support.</p>
4	<b>Relevant CSOs</b> i). Associations of deaf and hard of hearing persons ii). CSOs working to improve accessibility of EHC services	<p>This project should assist in organizing deaf and hard of hearing individuals into associations that can effectively represent the interests of their members.</p> <p>CSOs working to enhance the accessibility of EHC services will be bolstered during project implementation.</p>	<p><b>Positive:</b></p> <p>Provide support for project delivery, for example, as sub-partners.</p> <p><b>Negative:</b></p> <p>Potential lack of cooperation.</p>	<p>Organizing deaf and hard of hearing individuals into associations and ensuring the active participation of association leaders and other relevant CSOs during project implementation.</p>

## 6.2 SWOT analysis of CBCHS

Based on the information gathered during our feasibility study, we outline below the strengths, weaknesses, opportunities, and threats of CBCHS concerning EHC.

### Strength:

- Dominant position as the second-largest healthcare provider in the country, following the government of Cameroon.
- Strong reputation as the national leader in providing comprehensive EHC services, with referrals from across the country.
- Decades of experience managing multimillion-euro projects concurrently, with a focus on persons with disabilities.
- Visionary leadership under veteran Professor of Public Health, enjoying significant goodwill and trust from the public.
- Training of Community Health Workers (to identify and refer cases) and EHC Clinical Officers.

### Weaknesses:

- Limited focus on developing resources and capabilities to achieve distinctive EHC competence.
- Suboptimal utilization of organizational and intellectual resources.
- Limited use of advanced technologies, including software, to facilitate EHC service management and provision.
- Weak efforts in protecting and promoting organizational culture, brand, and values.

### Opportunities:

- Potential to substantially strengthen EHC capacities in CBCHS facilities using resources provided by the project.
- Leverage the dominant position to negotiate exemptions on import duties for EHC equipment and supplies.
- Prospect of using the MoU with the Ministry of Public Health to lead the development of a National EHC Plan for Cameroon.
- Explore opportunities to work with the State on Strengthening Health Systems (accounting for 53% of the HHS budget).
- Expand the reach of “Services for Persons with Disabilities” to parts of Cameroon where they are currently absent.

### Threats:

- Shortage of skilled EHC professionals.
- Lack of government subsidies for faith-based organizations providing EHC services.
- Weak regulatory framework governing the provision of EHC services.
- Prolonged crises in the Northwest Region, where CBCHS's primary EHC facilities are located (i.e., Mbingo and Nkwen).

## 6.3 Assessment of project activities and expected results, considering issues identified

### 6.3.1 EHC capacities of CBCHS and key stakeholders across Cameroon

The first of the three expected result areas of the proposed project aims to strengthen the EHC capacity of CBCHS and key stakeholders in Cameroon. These planned activities align with the government of Cameroon's Health Sector Strategy (HSS) for 2016-2027, which seeks to ensure qualitative health services are accessible to all social strata by 2035, with community involvement<sup>15</sup>.

Moreover, these interventions support the United Nations Sustainable Development Goal (SDG) 3, specifically target 3.D, which focuses on strengthening the capacity of countries, particularly developing ones, for early warning, risk reduction, and the management of national and global health risks<sup>16</sup>.

At its core, this project aligns with the World Health Assembly Resolution WHA70.13 Point 3, which emphasizes the establishment of suitable training programs for human resources in ear and hearing care. It is also in line with the World Report on Hearing's call to action for integrated people-centered ear and hearing care through H.E.A.R.I.N.G. interventions delivered via strengthened health systems.

<sup>15</sup> [https://www.minsante.cm/site/sites/default/files/HSS\\_english\\_0.pdf](https://www.minsante.cm/site/sites/default/files/HSS_english_0.pdf)

<sup>16</sup> <https://www.un.org/sustainabledevelopment/health/>



Here is our assessment of staffing capacity issues along with a summary of some activities and our independent views on their feasibility.

**Table 4. Summary of staff capacity issues and core activities.**

Summary of issues identified	Overview of core project activities
<ul style="list-style-type: none"> <li>Chronic shortage of EHC professionals at targeted CBCHS (3 EHC Audiology staff, and 12 ENT Clinical Officers/Nurses).</li> <li>There are no EHC Clinical Officers and EHC Audiological Technicians available in targeted state facilities.</li> <li>No EHC Primary Health Care workers in Primary EHC are available in both targeted state and CBCHS facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Reach 400 Community and Primary Health Care workers through awareness raising activities, Training 80 EHC Primary Health Care workers, 16 EHC Audiology Technicians, and 24 EHC Clinical Officers in total.</li> </ul>
<ul style="list-style-type: none"> <li>About 101 ENT surgeons serving 27.2 million people, resulting in a doctor-to-patient ratio of 1:269,307 (WHO recommends 1:10,000).</li> </ul>	<ul style="list-style-type: none"> <li>Training EHC professionals should reduce the burden on doctors, making more ENT Clinical Officers available to help with less complex tasks.</li> </ul>
<ul style="list-style-type: none"> <li>High concentration of ENT surgeons in the two major cities (67%) and a chronic shortage of ENT staff at primary healthcare facilities.</li> </ul>	<ul style="list-style-type: none"> <li>The National Plan for EHC in Cameroon, to be developed in collaboration with policymakers, should help address the shortage of surgeons.</li> </ul>
<ul style="list-style-type: none"> <li>80% of survey respondents indicate that their EHC service provider lacks ENT Technicians and Clinical Officers.</li> </ul>	<ul style="list-style-type: none"> <li>Training of 24 ENT Technicians and Clinical Officers across the country/ four target regions.</li> <li>Training of trainers to ensure the sustainable supply of ENT resources.</li> </ul>
<ul style="list-style-type: none"> <li>Approximately 75% of Cameroonians have never consulted an EHC professional, particularly those living in rural areas. This is due to a combination of reasons such as the lack of knowledge of EHC services, financial affordability issues, inaccessibility of EHC services due to the shortage of trained professionals, and the insufficiency of EHC equipment.</li> </ul>	<ul style="list-style-type: none"> <li>CBID approach to project delivery should increase the availability of community health workers to identify and refer cases to hospitals.</li> <li>Activity 2.2: Production of didactic training material and awareness-raising content for audio, video, and print.</li> </ul>
<ul style="list-style-type: none"> <li>Lack of audiological professionals (audiology training is not available in Cameroon).</li> </ul>	<ul style="list-style-type: none"> <li>The project aims to train 16 audiology and hearing aid lead technicians.</li> <li>Activity 3.5 Reviewing training curricular for the University Teaching Hospital of Yaoundé.</li> </ul>
<ul style="list-style-type: none"> <li>Limited opportunities for EHC training. The largest ENT training provider in Cameroon is the University Teaching Hospital, Yaoundé, which trains only about 5-10 doctors and 4-5 ENT Nurses annually.</li> </ul>	<ul style="list-style-type: none"> <li>At least 2 EHC Capacity Development Programs (CDP) implemented in Cameroon, alongside CBM partners by the end of 2027.</li> <li>Training of Trainers to support EHC training in various settings.</li> <li>Conducting prevalence study will be shared to find gaps in the program (Activity 3.3).</li> <li>Production and publication of scientific articles will be shared with the University Teaching Hospital of Yaoundé (Activity 3.4).</li> </ul>

A close examination of the project's capacity strengthening-related activities vis-à-vis the issues identified during our study leads us to conclude that the project activities to strengthen EHC capacities at CBCHS and key stakeholders have been effectively designed to address the issues we identified. For example, the focus on training 400 Community and Primary Health Care workers, 20 EHC workers, and 24 new clinical officers should help address the chronic shortage of EHC professionals across the country. The planned EHC CPD should help address the limited opportunities for training and professional development open to EHC professionals.

We believe carrying out the activities envisaged in the Project Concept and achieving the expected result of strengthening the EHC capacities of CBCHS and key stakeholders is feasible considering the broad acceptance of the project that was observed in our interactions with different stakeholder groups (e.g., policy makers in central government, elected local authorities, CSOs, CBCHS Hospital Administrators, EHC Technical Staff, deaf and hard of hearing persons, etc.). The legal/political context also renders the project feasible as the planned interventions are in harmony with the Health Sector Strategy of the government of Cameroon. Operationally, the planned activities clearly address the needs that were identified in our study. However, considering the low base, it would be premature to assume that the significant EHC challenges in Cameroon would be completely addressed in a five-year window.

From a technical perspective, we also believe the project is feasible because the core competence of the implementation partner (CBCHS) is in the health domain, and they have prior experience of successfully carrying out similar health-related projects to benefit vulnerable people with hearing and other impairments. The organization has a presence in nine of the 10 regions of

Cameroon and is generally recognized as the national leader in the provision of EHC services, with referrals from across the country to its main EHC facilities in the Mbingo and Nkwen Baptist Hospitals. Furthermore, the community-based approach that includes the training of community health workers and ENT Clinical Officers should help ensure the sustainability of expected results long after the project ends, as the people trained will retain the skills to continue to positively impact EHC health outcomes in their communities after the project end date.

### 6.3.2 Accessibility of EHC services

Essentially, the purpose of the project is to increase the accessibility of EHC services in the country. We assess that the approach proposed to increase EHC access in Cameroon by strengthening systems at CBCHS and key stakeholders is well anchored in the WHO framework ("building blocks") for strengthening health systems. For example, increasing the supply of EHC services through the provision of training and equipment to EHC professionals addresses the Service Delivery and Health Workforce building blocks, and to a limited extent the Health Information Systems building block, as better-trained professionals would be better equipped to capture valuable information on the EHC needs of patients and service outcomes. Further, the development of a National Plan for EHC in Cameroon, in collaboration with relevant stakeholders, sits within the Leadership/Governance building block as it should provide help provide strategic direction and coordination for EHC activities in the country. Obviously, the funds to be made available by the donors (Euro c. 1.2 million) to increase EHC access/supply should address the Financial building block to some extent as the increase in supply of EHC services should create more competition among service providers and reduce price points for service users, thereby increasing the financial accessibility of the services. It is interesting to note that the majority of survey respondents reported Financing (26%), Service Delivery (20%), and Health Workforce (20%) as the "building blocks" most lacking in Cameroon.

By virtue of "Law No. 2021/018 of 16 December 2021"<sup>17</sup> and the revised "Law n° 2010/002 of 13 April 2010,"<sup>18</sup> the President of the Republic of Cameroon ratified the United Nations Convention on the Rights of Persons with Disabilities, emphasizing the protection and promotion of persons with disabilities in Cameroon. This demonstrates the government's willingness to include persons with disabilities in its development agenda, particularly persons with hearing impairments, who are the largest group of persons with disabilities in Cameroon (38.8%). It is our view that the proposed plan to increase EHC access in Cameroon accords with Pillar 2 of the country's National Development Strategy (2020 to 2030), which aims to "improve the living conditions of the populations and their access to basic social services"<sup>19</sup>.

We provide below our assessment of the issues we identified with regards to EHC access against a summary of some activities planned in this regard, as well as our independent views on their feasibility.

**Table 5. Summary of accessibility of EHC services issues and core activities.**

Summary of issues identified	Overview of core project activities
<ul style="list-style-type: none"> <li>Lack of EHC equipment, particularly outside major cities. 79% of survey respondents reported a lack of audiology equipment.</li> </ul>	<ul style="list-style-type: none"> <li>Specific indicators are to be developed around the provision of equipment and the number of persons screened and treated outside major cities.</li> <li>Activity 2.1: Purchase EHC equipment/instruments for Audiology technicians and EHC Clinical Officers' training and setting up new local technical service stations.</li> </ul>
<ul style="list-style-type: none"> <li>No temporal bone laboratory in the country to properly train ENT doctors on how to perform complex surgical procedures.</li> </ul>	<ul style="list-style-type: none"> <li>Increasing EHC accessibility through the greater support of properly trained ENT surgeons should be integral to the National Plan for EHC.</li> <li>Due to budgetary constraints, project implementation activities do not include the building of a temporal bone laboratory.</li> </ul>
<ul style="list-style-type: none"> <li>Inaccessibility of assistive devices. Seventy percent of persons surveyed indicated that hearing aids and assistive hearing devices are not available.</li> </ul>	<ul style="list-style-type: none"> <li>Specific indicators are to be developed to assess the number of persons identified as candidates for a new hearing aid or other hearing devices.</li> <li>CBCHS has been working to address this challenge by collaborating with various donor organizations to provide assistive hearing devices to people with hearing impairments. However, the demand has consistently exceeded the number of available assistive hearing devices.</li> </ul>

<sup>17</sup> Law No. 2021/018 of 16 December 2021 on the United Nations Convention on the Rights of Persons with Disabilities (prc.cm)

<sup>18</sup> Cameroon\_DECREE-OF-APPLICATION-2010-LAW-ENGLISH-VERSION.pdf (un.org)

<sup>19</sup> National Development Strategy 2020-2030 for structural transformation and inclusive development - Climate Change Laws of the World (climate-laws.org)



<ul style="list-style-type: none"> <li>20% of CBC ENT patients in 2022 presented with Otitis, and 40% of survey respondents reported Otitis as the main ENT pathology.</li> </ul>	<ul style="list-style-type: none"> <li>Specific indicators are to be developed to assess the number of persons diagnosed with Chronic Otitis Media and provided with treatment.</li> </ul>
<ul style="list-style-type: none"> <li>About a third of survey respondents reported a lack of equipment as the greatest barrier to EHC accessibility.</li> </ul>	<ul style="list-style-type: none"> <li>Project activities to increase the availability of equipment at EHC technical service stations should help address this challenge.</li> </ul>
<ul style="list-style-type: none"> <li>About a third of survey respondents indicated that they had to travel over 75 kilometers to their nearest EHC service provider.</li> </ul>	<ul style="list-style-type: none"> <li>Existing community health workers should help in awareness raising in primary settings, reducing the need to travel and as part of community contribution to project sustainability.</li> <li>The project will shape the community health plan to incorporate the ENT plan and assess its effectiveness at the community level.</li> </ul>
<ul style="list-style-type: none"> <li>Over a third of survey respondents (35%) reported very limited knowledge on EHC, with 28% reporting limited knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>Specific indicators are to be developed to assess the number of persons reached by the awareness-raising campaigns.</li> </ul>

In our view, it is reasonable for the project to focus on supply-side considerations (i.e., increasing access to EHC services by increasing the supply of EHC professionals and EHC equipment/infrastructure), as the demand for EHC services in the country far outweighs the capacity of service providers. Thirty percent of survey respondents indicated the lack of trained EHC professionals as the greatest challenge or barrier to EHC services, and a similar percentage (30%) indicated a lack of EHC equipment and services. Almost one in five of the respondents (19%) cited financial inaccessibility (i.e., lack of funds) as the main barrier.

We note that increasing EHC access to persons with hearing impairments would increase their level of participation in economic and civic activities, thus contributing to addressing one of the root causes of inequalities for persons with hearing impairments, and supporting the achievement of SDG 10, which strives to reduce inequalities by empowering and promoting the social, economic, and political inclusion of all, including persons with disabilities<sup>20</sup>. Further, SDG 10.2 calls for the empowerment and inclusion of all irrespective of factors such as disability<sup>21</sup>.

Increasing EHC access through the provision of equipment should help ensure the sustainability of project results, as the equipment would continue to provide EHC services beyond the end of the project in 2028. It is expected that the implementation of this project would help to generate some evidence on the magnitude of the EHC challenge in the country and help to crowd in other actors to the cause.

We also believe that carrying out the planned activities and achieving the expected result of increasing the accessibility of EHC services is feasible because the project was enthusiastically welcomed by the Regional Delegates in the Ministry of Public Health and Social Affairs that we interviewed, as well as health and sciences professionals such as the members of the ENT Society, the Director of the University Teaching Hospital in Yaoundé, and the Dean of the ENT Faculty and the university. The MoU that CBCHS has with the Ministry of Public Health should facilitate the buy-in for project implementation activities at public health facilities across the country. Further, CBCHS is already recognized as a leader in disability-inclusive development. Its department for Services for Persons with Disabilities is currently rounding up a pilot project entitled “Expanding Access to Quality Ear and Hearing Care in the Northwest Region,” and going by experience and the organization's track record of replicating good practices across the country, the lessons from this project will clearly be put to good effect in ensuring the success of the proposed project to strengthen EHC capacities in Cameroon.

### 6.3.3 Development of a National Plan for EHC in Cameroon

In our view, developing a National Plan for EHC in Cameroon, with the buy-in of key stakeholders, could be one of the most significant achievements of the project if various stakeholders are fully committed to working together to address the EHC challenges in the country in a sustainable fashion. Persons with HI are the largest group of people with disabilities in Cameroon (38.8%), and their condition presents economic challenges as they generally find it difficult to engage in meaningful income-generating activities. Poverty and disability are interlinked.... disability and poverty affect education levels and future livelihood, which in turn perpetuates the cycle of poverty (Eide et al. 2011; Wickenden & Elphick 2016). People living with disabilities experience unemployment due to stigma and discrimination (Groce et al. 2011; World Bank 2011). Moreover, disability may also influence the employment opportunities of the non-disabled family members who provide care (Ingstad, Baider & Grut

<sup>20</sup> Reduce inequality within and among countries - United Nations Sustainable Development

<sup>21</sup> <http://www.minas.cm/en/laws/130-loi-du-13-avril-2010-portant-protection-et-promotion-des-personnes-handicapees/file.html>

2011; Muyinda & Whyte 2011). Therefore, developing a National Plan for EHC in Cameroon would not only help to improve the health prospects of persons with HI, but it would also improve their economic conditions.

We have provided below some of the issues we identified, which we believe should be factored into the development of the National Plan for EHC in Cameroon. You will also find in the table below a summary of core activities planned in relation to the development of the National Plan for EHC in Cameroon, and afterward, we provide commentary on their feasibility.

**Table 6. Summary of issues related to the National Plan for EHC versus planned project activities.**

Summary of issues identified	Overview of core project activities
<ul style="list-style-type: none"> <li>Absence of a National Plan for EHC in Cameroon.</li> </ul>	<ul style="list-style-type: none"> <li>The project aims to develop a National Plan for EHC in Cameroon, alongside national health authorities, by the end of 2028.</li> </ul>
<ul style="list-style-type: none"> <li>Lack of reliable information on the magnitude of EHC challenges in the country.</li> </ul>	<ul style="list-style-type: none"> <li>To guide the development of the National Plan, a prevalence study will be conducted to establish the prevalence rate of persons living with HI.</li> </ul>
<ul style="list-style-type: none"> <li>Deaf and hard of hearing persons are generally not organized into associations. This hinders their attempts at effective advocacy.</li> </ul>	<ul style="list-style-type: none"> <li>The CBCHS Services for Persons with Disabilities team will help organize persons with hearing impairments into associations. Leaders of these groups will be involved in the development of the National EHC Plan.</li> <li>The Technical Committee is addressing the needs of Deaf and hard of hearing individuals.</li> </ul>
<ul style="list-style-type: none"> <li>Most survey respondents indicated that EHC services are either “not accessible” or “not at all accessible” in their community.</li> </ul>	<ul style="list-style-type: none"> <li>The main objective of the National Plan for EHC in Cameroon will be to increase access to EHC services in the country.</li> </ul>
<ul style="list-style-type: none"> <li>Chronic shortage of Sign Language Interpreters was reported by most survey respondents.</li> </ul>	<ul style="list-style-type: none"> <li>The project aims to conduct basic Sign Language courses for health workers in various regions of Cameroon.</li> <li>Activity 2.3: Conducting basic sign language courses for health workers in English and French basic sign language.</li> </ul>

A leading advocate for the inclusion of persons with disabilities commented during one of our focus group discussions that "I really do hope this is not one of those projects that will see a few technicians come into our communities to do some screenings, administer some basic treatment for less complicated cases and then leave with no strategy to address the root causes of the issues we face... Even if society has given up on us, at least something should be done for our children with hearing impairments as I believe less than 5% of them are currently going to school. What does the future hold for them? For this challenge to be addressed in a sustainable way, key stakeholders would need to forget any vested interest and work together to develop a national strategy to address the problem of deafness in the country, just like key people concerned with eye health have done."

We couldn't agree more with the sentiments shared above. The gentleman whose excerpt we have used above was equally reassured when we mentioned that a core tenet of the proposed project would be the development of a National Plan for EHC in Cameroon. It is our view that this result area could have the most long-lasting impact on the EHC landscape in the country if the National Plan is focused on addressing the root causes of the issues hindering access to EHC services. The proposed approach to begin with a baseline study to establish the prevalence rate of persons living with HI in year one and then conduct a follow-up study in year five should give a clear indication of the progress that has been made. We recommend that the project team liaises with the ENT Society in Cameroon to understand the steps that were previously taken towards the development of the National Plan planned and build from that. That will surely get the buy-in of the ENT Society, who are a key stakeholder in this, as well as the buy-in from the University Teaching Hospital in Yaoundé, as lecturers in the university were involved in the previous attempt to develop the Plan. Persons with hearing impairments should be center stage in the development of the plan as they "know where their shoe pinches."

The feasibility study team has no doubt as to the feasibility of the development of the National Plan for EHC considering the enthusiastic welcome the idea received from all the key stakeholders involved in the study, including policy makers in the ministries of Public Health and Social Affairs, elected local authorities, hospital administrators and technical staff, CSOs, and deaf and hard of hearing persons, etc. The favorable legal framework in the Republic of Cameroon on the inclusion of persons with disabilities as well as the recognition in the country's HSS that hearing impairment is the leading disability should equally ensure the buy-in of government officials during the development of the National Plan for EHC.

Given the different stakeholder groups that would need to be involved in the development of the National Plan for EHC in Cameroon, we recommend that a communication and engagement strategy is developed to ensure their views are fully considered and their active participation during the development of the Plan is ensured. Good communication channels and feedback mechanisms would mitigate the risks of planned activities being derailed due to the failure to manage the conflicting priorities of the different stakeholder groups.

## 7. Independent project risk assessment

Our assessment of the risks that could jeopardize the achievement of some of the expected project results, impacts, and outcomes has been tabulated below, including suggested mitigation actions.

**Table 7. Project risks and mitigation actions.**

No.	Risks	Mitigation actions
1.	Shortage of suitable candidates to train as EHC Technicians and EHC Clinical Officers during the project duration.	Develop a strategy to create awareness of training opportunities and establish open and fair selection criteria that earn the trust of potential trainees.
2.	Change in government following the 2025 presidential elections. A new government could have different healthcare priorities.	Implement targeted lobbying and advocacy to ensure that EHC remains center stage in the healthcare agenda of any new government.
3.	Resurgence of security issues in humanitarian hotspots, e.g., some parts of the Far North, Northwest, and Southwest regions.	Stay informed about and follow government security advice. Travel through "red zones" in convoys accompanied by the State military.
4.	Interference from the government and/or limited buy-in.	Employ targeted lobbying and advocacy to secure early government buy-in.
5.	Lack of cooperation from other key stakeholders, such as the ENT Society, deaf and hard of hearing persons, the University Teaching Hospital, etc.	Develop a communication and engagement strategy to ensure that the views of key stakeholders are fully considered, and their active participation is ensured. Establish adequate feedback mechanisms.
6.	Duplication of efforts, missing opportunities to carry out other activities that could have a greater impact or better lead to the achievement of expected results.	Keep "eyes and ears open" to stay informed about the activities of other major CSOs that may become involved in similar projects, so that activities can be coordinated to achieve synergies and avoid duplication.
7.	Lack of community engagement.	Map relevant stakeholders in the community and actively engage them.
8.	Corruption and diversion of project resources.	Follow a rigorous selection process when hiring staff and engaging other participants to be involved in the project. Require relevant stakeholders to sign up to an anti-bribery and corruption policy.
9.	Failure to safeguard the needs of the vulnerable or asking for favors from beneficiaries in exchange for assistance.	Strictly adhere to an adequate Safeguarding Policy that takes into account the specificities of different parts of the country.
10.	Resurgence of COVID-19 or a similar pandemic that adversely impacts project implementation activities.	Follow government and WHO measures regarding COVID-19 or similar pandemics, which could adversely impact the project.

## 8. Assessment of the implementation partner (CBCHS)

We designed a work program to assess the adequacy of processes and controls in place at CBCHS. This assessment was carried out to form and express a view regarding the suitability of CBCHS as an implementation partner for this CBM and BMZ funded project. Our work, based on the five pillars listed below, included a review of the management of at CBCHS to ensure that the following objectives could be achieved:

- Appropriate governance and oversight arrangements are in place.
- Adequate financial management processes and controls are in place to ensure effective use of funding from CBM/BMZ.
- Projects of a similar scale are implemented in accordance with contractual agreements and associated addendums.
- Adequate safeguards are in place to ensure value for money.
- Adequate safeguards are in place to ensure value for money.

Our review at CBCHS involved the performance of the following procedures:

- Review of available reporting;
- Walk-through of key processes;
- Interviews with responsible employees;
- Obtaining and reviewing documentation;
- Substantive testing procedures as deemed necessary; and
- Assessing the effectiveness of controls and oversight activities.

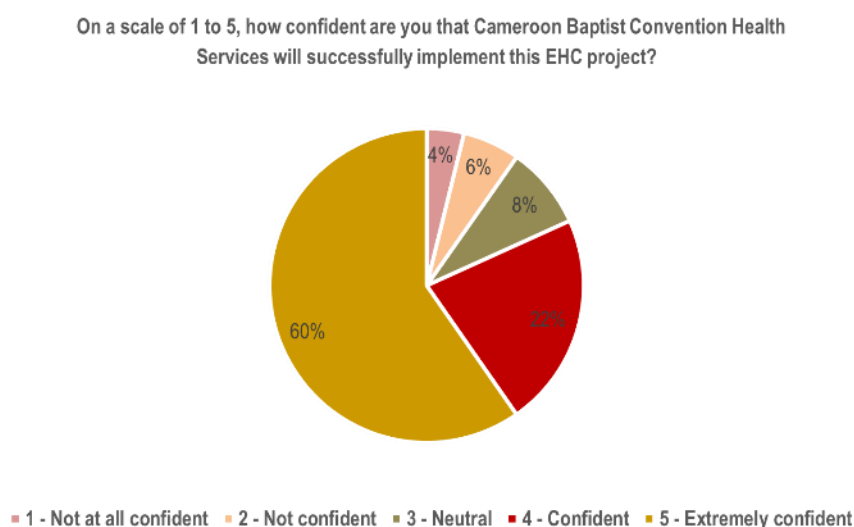
#### Conclusion:

In our opinion, CBCHS is suitably qualified to act as the implementation partner for this project. No material issues were identified that could significantly impact CBCHS's ability to achieve the planned indicators, impact, outcomes, and expected results.

In forming our view, we considered the following, among other observations made during our review:

- CBCHS has been implementing projects in partnership with CBM since 1982.
- The implementation partner's project budget averages about Euro 20 million annually, and the maximum annual budget for this EHC project is just under a quarter of a million Euros in the first year.
- The proposed partner is currently implementing a BMZ-funded project of a larger scale in Cameroon, alongside other projects it is managing concurrently to improve the plight of persons with various disabilities, including hearing impairments.
- CBCHS has a dedicated department for "Services for Persons with Disabilities," and they are active in most regions.
- The Services for Persons with Disabilities department is currently concluding a related project ("Expanding Access to Quality Ear and Hearing Care in the Northwest Region") which should provide lessons to ensure the success of this project.
- CBCHS has a rigorous process for selecting partners to collaborate with and has worked with some CSOs in the country on various health initiatives, with a particular focus on the inclusion of persons living with disabilities.
- This organisation has a great track record of effective collaboration with the government on projects involving persons with disabilities. An excellent example is the Clubfoot Project that CBCHS initiated in the Northwest and used evidence to convince the government to expand the project into other regions of the country.
- The high level of confidence that the population has in CBCHS. 82% of the 2,035 persons surveyed reported confidence in CBCHS's ability to successfully implement the project, with 60% indicating that they were "extremely confident." The 10% of respondents who reported a lack of confidence pales in comparison to the 82% who are confident.

**Figure 9. Survey respondents' confidence in CBCHS to successfully implement the EHC project.**



## 8.1. Synergies, complementarities, and duplication risk

In our view, it is essential for the EHC project team to collaborate with other organizations across the country to maximize synergies and complementarities. Since most CSOs work on specific interventions at set locations and timeframes and then move on to other projects and locations, it is recommended that CBCHS works more closely with the government regional delegations for Public Health and Social Affairs, which have a permanent presence in all the regions of the country. This recommendation is partly informed by the fact that CSOs are expected to inform relevant government ministries of planned activities in various parts of the country, and working closely with the government will keep the project informed of related projects that they could collaborate with. Furthermore, from our experience, we note that the country offices of the WHO usually play a key role in coordinating the effects of healthcare projects implemented by major international organizations in different countries. Therefore, we recommend that the project implementation team maintains periodic contact with WHO representatives in Cameroon to stay informed about any related projects that could complement the proposed EHC project. Given the very low baseline of EHC in Cameroon, we believe the risk of duplication of effort is very low. The country's weak capacity in this regard has led to a situation where the demand for EHC services far exceeds the supply in terms of trained professionals and equipment required to deliver the necessary services.

## 9. Assessment of project against OECD DAC Criteria

We have used the information obtained from our feasibility study and project materials received from CBM and CBCHS to assess this project against OECD DAC Criteria, and our findings are outlined below.

### a) Relevance

We have assessed the project's relevance in terms of its adequacy in addressing the EHC capacity challenges in Cameroon and the extent to which the specific needs of the target groups will be met in a sustainable manner, i.e., changes that will endure after the end of the project. Our assessment has found that the project to strengthen EHC capacities in Cameroon is highly relevant for the reasons below.

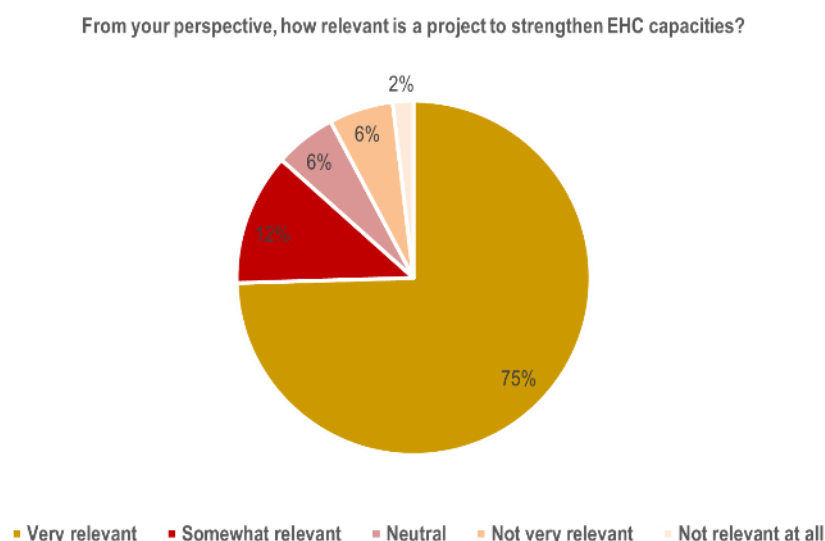
The proposed project clearly addresses access to EHC for deaf and hard of hearing persons, who, according to the Cameroon Health and Social Services (HSS), constitute the largest group of persons with disabilities (38.8%). Our study revealed that 75% of Cameroonians have never consulted an EHC professional, particularly those living in rural areas, as over two-thirds of ENT surgeons are based in the two largest regions of the country. The relevance of the proposed project in Cameroon cannot be overstated, as the Cameroon government itself recognized the need to strengthen health systems in the country and allocates 53% of its health budget to this effect. Strengthening EHC Capacities in Cameroon would support the government of Cameroon in achieving Specific Objective No. 2.4 of the HSS, which aims to "Reduce the prevalence of major non-communicable diseases by at least 10% by 2027." Implementation Strategy 2.4.4 mentions the necessity to conduct national surveys on the prevalence of hearing disorders to estimate their magnitude and organize screening campaigns for various target groups such as school-age children and the elderly. Over a third of survey respondents (35%) reported very limited knowledge of EHC, with 28% reporting limited knowledge, and 79% of survey respondents reported a lack of audiology equipment. Furthermore, there is currently no National Plan for EHC in Cameroon. The government of Cameroon has also demonstrated its willingness to include persons with disabilities in its development agenda, particularly persons with hearing impairments, by virtue of "Law No. 2021/018 of 16 December 2021"<sup>22</sup> and the revised "Law n° 2010/002 of 13 April 2010"<sup>23</sup>, which ratified the United Nations Convention on the Rights of Persons with Disabilities, emphasizing the protection and promotion of persons with disabilities. It is therefore obvious that the proposed project is highly relevant considering the challenges faced by EHC service providers and service users in the country.

When asked about the relevance of the EHC project, 87% of respondents responded affirmatively, with 75% indicating it is very relevant and 12% indicating it is somewhat relevant. 6% of the respondents were neutral, and only 8% felt the project was not relevant, which is quite remarkable considering the various healthcare, development, and humanitarian challenges that the country currently faces.

<sup>22</sup> Law No. 2021/018 of 16 December 2021 on the United Nations Convention on the Rights of Persons with Disabilities (prc.cm)

<sup>23</sup> Cameroon\_DECREE-OF-APPLICATION-2010-LAW-ENGLISH-VERSION.pdf (un.org)

**Figure 10. Survey respondents' view on the relevance of the project.**



## b) Coherence

Fundamentally, this project aligns with the World Health Assembly Resolution WHA70.13 Point 3, which emphasizes the establishment of suitable training programs for human resources in ear and hearing care. It is also in line with the World Report on Hearing's call to action for integrated people-centred ear and hearing care through H.E.A.R.I.N.G. interventions delivered via strengthened health systems. Furthermore, the interventions proposed in the project would contribute to the achievement of SDG 3, specifically target 3.D, which focuses on strengthening the capacity of countries, particularly developing ones, for early warning, risk reduction, and the management of national and global health risks<sup>24</sup>.

It is our view that the approach proposed to increase EHC access in Cameroon by strengthening systems at CBCHS and key stakeholders is in coherence with the WHO framework ("building blocks") for strengthening health systems. For example, increasing the supply of EHC services through the provision of training and equipment to EHC professionals addresses the Service Delivery and Health Workforce building blocks, and to a limited extent, the Health Information Systems building block, as better-trained professionals would be better equipped to capture valuable information on the EHC needs of patients and service outcomes. Further, the development of a National Plan for EHC in Cameroon, in collaboration with relevant stakeholders, aligns with the Leadership/Governance building block, as it should provide strategic direction and coordination for EHC activities in the country. Obviously, the funds to be made available by the donors (approximately €1.2 million) to increase EHC access/supply should address the Financial building block to some extent, as the increase in the supply of EHC services should create more competition among service providers and reduce price points for service users, thereby increasing the financial accessibility of the services.

Further, the planned project activities and expected results are consistent with the Cameroon HSS, which clearly states that "the main issue of the health system is its weak capacity to meet the social and health needs of the population and contribute to the development of a healthy and skilled human capital." Concerning health system strengthening, the overall objective of this strategic area in the HSS is to "increase the institutional capacity of health facilities for sustainable and equitable access to healthcare and services for the population," and the strategies the government proposed to achieve this objective by 2027 include ensuring the "availability of infrastructure, equipment, and services" and increasing the "availability of quality human resources for health in at least 80% of health districts and central departments<sup>25</sup>". We note that the ENT Society of Cameroon

<sup>24</sup> <https://www.un.org/sustainabledevelopment/health/>

<sup>25</sup> HSS\_english\_0.pdf (minsante.cm)



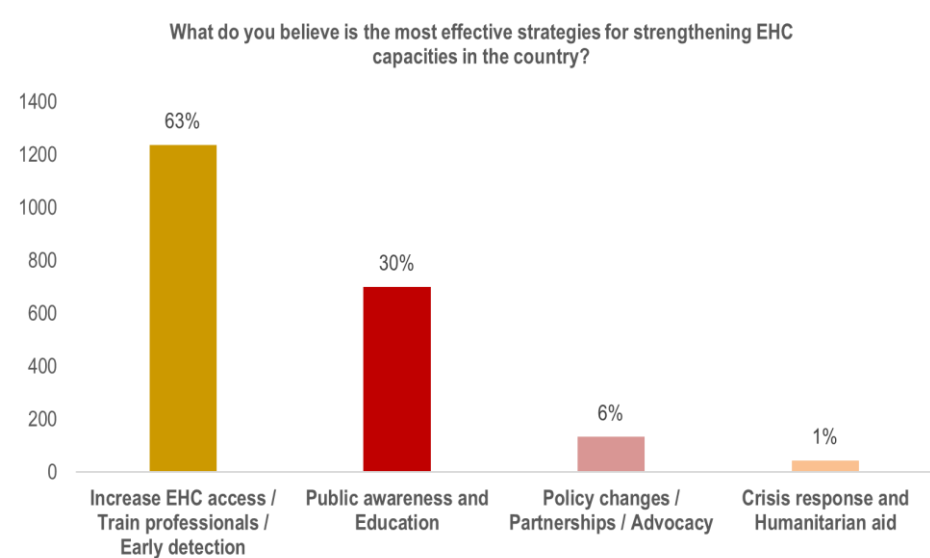
recognized the need to create a National Plan for EHC in Cameroon, but this was unable to come to fruition due to resource constraints, so the proposed project is very clearly coherent with the needs that the target groups themselves recognize.

**c) Effectiveness**

Based on our assessment, the three-pronged integrated approach of the proposed project, i.e., training professionals, increasing accessibility of equipment/infrastructure, and developing a National Plan, is appropriate for strengthening EHC capacities in Cameroon. As mentioned above, the proposed project approach effectively aligns with the WHO framework for strengthening health systems. We consider that the planned expected project results have been well-conceived to measure the extent to which the proposed project will strengthen the EHC capacities of CBCHS and key stakeholders. The participation of government stakeholders, the ENT Society, and deaf and hard of hearing persons groups during the implementation of the project should ensure their buy-in and cooperation, supporting the effective delivery of the project. The design effectiveness of the proposed project is underscored by the fact that it begins with a baseline study in year one to establish the prevalence rate of persons living with hearing impairments in Cameroon and concludes with a follow-up study in year five to assess the progress that has been made. We recommend that a monitoring and evaluation team is set up to continuously measure the suitability and achievement of the indicators, among other things.

It is interesting to note that the target groups also share the view that the project has been designed effectively to address the underlying EHC challenges in the country. When asked about what they believe to be the most effective strategies for strengthening EHC capacities in Cameroon, almost two-thirds (63%) of the survey respondents indicated increasing EHC access, training professionals, and early detection, while about a third (30%) indicated public awareness and education.

**Figure 11. Survey respondents’ view on the most effective strategies for strengthening EHC capacities in Cameroon.**

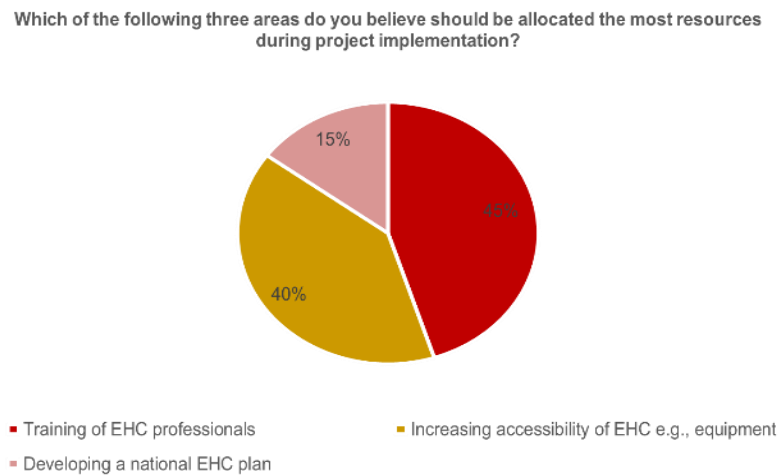


**d) Efficiency**

The delivery of the project is planned from March 1, 2024, to December 31, 2028, and the initial indication from the Project Concept note is that the approximately €1.2 million funding would be spread across the five years as follows: €248,071 (31%) in year one, €229,520 (29%) in year two, €61,650 (8%) in year three, €151,333 (19%) in year four, and €98,465 (12%) in year five. The allocation of funding for each of the five years suggests that the project team intends to front-load implementation activities in the first two years, where 60% of the total funding has been allocated. We recommend that an exercise is performed to phase planned implementation in a detailed activity-based budget in such a way that lessons learned in the initial years are factored into later years, as part of an "agile" implementation plan.

Going by the responses from our survey, we recommend that 45% of the planned budget goes toward result area one (training of professionals), with 40% and 15% allocated to result areas two (increasing EHC access, e.g., provision of equipment) and three (developing a National Plan for EHC in Cameroon), respectively.

**Figure 12. Survey respondents' view on resource allocation by result area.**



At a high level, we believe that if well-managed, allocated funds would go a long way in strengthening EHC capacities in Cameroon and making significant progress in the three expected result areas. CBCHS has a track record of efficiently delivering similar projects economically. However, considering the low maturity of EHC services in Cameroon, it is unlikely that the significant EHC challenges in Cameroon would be completely addressed in a five-year window. Therefore, we suggest that the high funding allocation in the initial years is used to generate evidence on the EHC challenges in the country and the tangible difference that could be made if various stakeholders work together to properly address the underlying root causes of the issues hindering EHC access. In that way, the evidence generated could be used to convince and engage local and international actors in strengthening EHC access in Cameroon. To ensure project financial sustainability, an appropriate balance should be struck between infrastructure development at health facilities and direct beneficiary-oriented support.

We recommend that responsibilities and accountabilities between CBM and CBCHS are clearly defined to ensure the efficient implementation of the project. This could be something akin to a RACI (Responsible, Accountable, Consulted, Informed) matrix, stating "who is responsible/accountable for what/in what situations" and clear rules on when CBM needs to be Consulted or kept Informed by CBCHS.

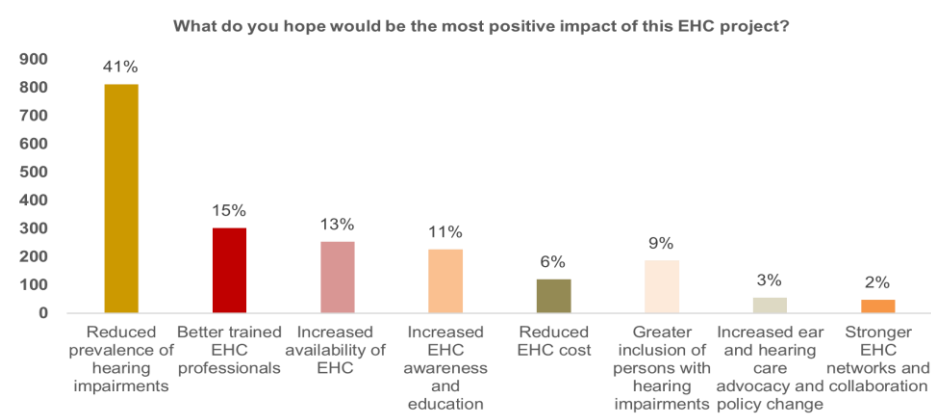
#### **e) Impact**

In our view, the significance of this project cannot be overemphasized. This project is the first of its kind, attempting to strengthen EHC capacities in Cameroon. We believe that the training opportunities that the project would offer to EHC professionals and the equipment to be provided in health facilities would make a palpable difference to EHC service users and service providers. At a practical level, the increased availability of EHC equipment and an increased pool of ENT Technicians and ENT Clinical Officers should make it easier for health and sciences professionals in academia and the ENT Society to ply their trade. Furthermore, the National Plan for EHC in Cameroon should help to focus the activities of the ENT Society, helping them to work in unison with health authorities to address EHC challenges in Cameroon.

Most survey respondents (73%) have never previously heard of a project to strengthen EHC services in Cameroon. We believe that increasing EHC access for deaf and hard of hearing persons would not only help to address their health issues but would also go a long way to support their socio-economic empowerment. With better health due to increased access to EHC services, they should be in a better position to engage in income-generating activities for their livelihoods and sense of self-worth. When asked about what they expected to be the most positive impact of the EHC project, 41% of survey respondents indicated a reduced prevalence of hearing impairments, followed by better-trained EHC professionals (15%) and increased availability of EHC (11%) – the latter two points should equally help to reduce the prevalence of hearing impairments. It is worth reminding that deaf and hard of hearing persons are the largest group of persons with disabilities in Cameroon (38%), so the impact of the project on persons with disabilities in the country cannot be overstated.



Figure 13. Survey respondents' view on the expected impact of the project.



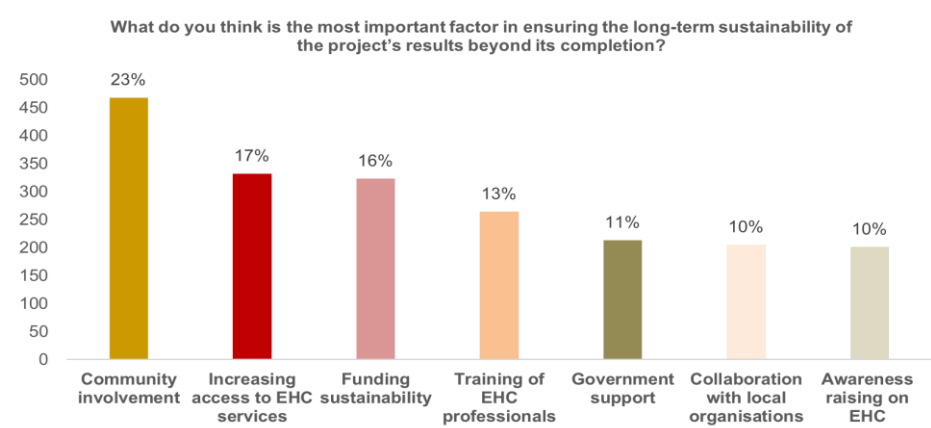
f) Sustainability

This project is premised on strengthening EHC capacities in Cameroon through the training of EHC professionals, increasing access through the provision of infrastructure/equipment, and developing a National Plan for EHC in Cameroon. The community-based approach that includes the training of community health workers and ENT Clinical Officers should help ensure the sustainability of expected results long after the project ends, as the people trained will retain the skills to continue to positively impact EHC health outcomes in their communities after the project end date. The same is true for the equipment that will be procured during the project as it would continue to be used in various health facilities after the project's completion.

If properly developed with the active participation of various key stakeholder groups (e.g., policymakers, ENT Society, health and sciences professionals, CSOs, deaf and hard of hearing persons, etc.), the National Plan for EHC in Cameroon should help provide the much-needed strategic direction and roadmap to address the root causes of the issues hindering EHC access in Cameroon. Clearly, the National Plan should continue to help focus the activities of the ENT Society, assisting them in working in unison with health facilities and policymakers to address the EHC challenges in Cameroon.

We note that an overwhelming majority (95%) of survey respondents indicated a willingness to support the project in any way they can, which bodes very well for sustainability. When asked what they believed to be the most important factor in ensuring the sustainability of the project results, 23% of survey respondents indicated community involvement as the most important factor, as can be seen in Figure 14 below. Therefore, we recommend that the project implementation team develops adequate plans to ensure the communities buy into the project, as sustainability would be far-fetched without the support of the communities. That said, we are confident that adopting the CBID approach, as CBCHS has done on a number of CBM-funded projects, would ensure appropriate community engagement and help ensure the sustainability of expected project results.

Figure 14. Survey respondents' view on factors that could have a bearing on project sustainability.



## 10. Recommendation for institutional set-up and conclusion

Considering that this project is the first of its kind in Cameroon and the very low knowledge base on EHC among the populace, our overarching recommendation is for awareness-raising activities to be given more prominence during project implementation, with set indicators to monitor the success of community education initiatives. The high concentration of EHC professionals in urban metropolises, particularly in the two largest cities of Yaoundé and Douala, leads us to conclude that a strong community outreach program, especially in hard-to-reach areas, should be an essential component of the project's drive to strengthen primary EHC services. We believe that placing greater emphasis on community education and community outreach (demand-side levers), in addition to the training of professionals and the provision of equipment on the supply side, should significantly strengthen EHC capacities in Cameroon. It is essential for deaf and hard of hearing persons to organize into groups, and the representatives of these groups should play an integral role in the development of the National Plan for EHC in Cameroon. The Plan should identify the major EHC challenges in the country and set out a roadmap for addressing the challenges identified.

Even though the demand for EHC services in Cameroon far exceeds the capacity of the country's health systems, very little evidence has been published on the prevalence of hearing impairments in Cameroon and their etiologies. Therefore, we believe that placing greater emphasis on demand-side levers in the initial years, as mentioned above, should help generate concrete evidence on the prevalence and etiologies of hearing impairments on a large scale. Clearly, EHC challenges in Cameroon are not going to be completely resolved within a five-year window, so generating the aforementioned evidence should help to attract other national and international benefactors to join the cause of increasing EHC access in Cameroon. This would be viewed as a two-phased project, with the first phase focusing on community education, community outreach, training of EHC professionals, and the provision of equipment. The second phase could then focus more on system strengthening on the supply side, as well as targeted lobbying, advocacy, and the development of partnerships among key stakeholders to ensure they work together effectively to increase EHC access in the country, as per the National Plan developed to strengthen the country's EHC capacities.

Our recommended institutional arrangement to ensure the successful delivery of the project is set out below, comprising the following three core pillars: steering and oversight; program and project management; and support functions.

- a) **Steering and oversight:** We recommend that a steering and oversight committee be constituted to guide and oversee project activities, balancing the needs of key stakeholder groups to ensure they are properly addressed. The purpose of project steering and oversight mechanisms is to provide strategic guidance, determine priorities, provide challenge, and appropriate oversight of "management" activities to ensure the achievement of planned indicators, impacts, and outcomes. This committee should include representatives from the stakeholder groups mentioned above and members from all the 10 regions of Cameroon.
- b) **Program and project management:** Effective program and project management is critical to the success of any program and related projects. A suitably qualified Program Director should be recruited, supported by a Program Manager who should directly manage the activities of Project Officers. Project Officers should be recruited to coordinate implementation activities, with a dedicated Project Officer for each result area. A governance framework should be put in place whereby more frequent project-level operational meetings take place to ensure the progress of activities for each result area, with issues escalated to program-level meetings that take a broader view of issues across all result areas. Support functions (below) should be established to underpin activities. Naturally, salient points from project and program meetings should be escalated to the steering and oversight committee.
- c) **Support functions:** Core "support functions" should include Finance, Safeguarding, Gender and Equality, Coordination, Communication, External Affairs (e.g., to liaise with government and other CSOs), Monitoring, Evaluation, and Learning. Support functions should help the steering and oversight committee and program and project management achieve expected results.

### **Conclusion:**

In conclusion, we reiterate the principal message from our feasibility study: the problems identified in the project proposal are well-founded, based on the evidence we obtained, and the envisaged project activities have been generally well-designed to address the problems identified during our feasibility assessment. CBCHS has been assessed for competence and found to be a suitable implementation partner capable of achieving the planned indicators, impact, and outcomes. Our assessment of the project against OECD DAC criteria revealed no major issues. The project aligns with the World Health Assembly Resolution WHA70.13 Point 3 and the World Report on Hearing's call to action for integrated people-centred EHC through H.E.A.R.I.N.G.

## Appendices

### Appendix 1 – Policy Makers Interview Guide

#### 1. **Relevance:**

- How do you perceive the relevance of the proposed project and its activities in addressing the identified EHC issues?
- Do you believe the project aligns with the current priorities and needs of deaf and hard of hearing person?
- What data / statistics are available on the prevalence of hearing-related issues, and how are these collected / analysed?

#### 2. **Policy Objectives and Priorities:**

- How does ear and hearing care fit into the broader healthcare policy agenda in the country / region?
- What are the main priorities and objectives of the government regarding EHC in the country / region?
- How does the proposed project align with current national policies and strategies related to EHC services?
- Are there specific targets related to EHC capacities or outcomes that the government aims to achieve?

#### 3. **Regulatory Framework and Future Plans:**

- Are there specific plans or strategies in place to strengthen EHC capacities in the near future?
- How can external support or partnerships contribute to these plans?
- How does the central government coordinate with regional or local authorities to ensure the provision of EHC services?

#### 4. **Human Resources:**

- Do you believe there are enough EHC surgeons, Audiology Technicians, EHC Clinical Officers are there in your region?
- Could you provide insights into the training programmes available to strengthen the capacity of EHC professionals?
- Are there concrete plans underway to train more Community and Primary Health Care workers on EHC, or recruit more Audiology Technicians and EHC Clinical Officer?

#### 5. **EHC Infrastructure and Technology:**

- How would you describe the availability of EHC facilities, Audiology equipment, Hearing aids etc. in your region?
- Are there concrete plans for strengthening EHC infrastructure and technology at health facilities in your region?

#### 6. **Causes of hearing impairments and preventive measures:**

- From your knowledge or experience, what do you believe are the main causes of hearing impairments?
- In your opinion, what are the most effective preventive measure that can reduce the risk of hearing impairments?

#### 7. **Strategies for strengthening EHC Capacities:**

- What do you believe are the most effective strategies for strengthening EHC Capacities in your region?
- Which of the six core components of the WHO framework or “building blocks” for health systems is your region most lacking in? [i.e., (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing, and (vi) leadership/governance]

#### 8. **Logical Framework:**

- Could you provide your assessment of the proposed logical framework, commenting specifically on the feasibility of the expected results i.e., training EHC professionals, provision of equipment, developing a national plan for EHC?
- What risks do you see in the project, and what strategies do you propose to mitigate these risks?

#### 9. **Sustainability:**

- What key factors could contribute to the sustainability of the project's results beyond its completion?
- Are there specific government measures or strategies that could ensure the project's long-term impact?

#### 10. **Existing Programmes and Initiatives:**

- Could you provide an overview of existing government programmes or initiatives related to EHC?
- What has been the impact of these programmes, and what lessons have been learned?
- How does the government monitor and evaluate the effectiveness of EHC policies and programmes?
- Are there any existing partnerships or collaborations between the central government and NGOs, international agencies, or private sector entities related to EHC in your region or at national level?

**11. Synergies and Complementarities:**

- How do you envision the project creating synergies and complementarities within different programmatic areas (sectors) and among project stakeholders?
- Are there potential opportunities to collaborate or coordinate with existing initiatives or organisations?

**12. Inclusiveness:**

- How do you engage with deaf / hard of hearing persons - are there deaf / hard of hearing persons groups in your area?
- How does the government ensure equitable access to EHC services, especially for persons living with disabilities and other vulnerable groups like women, children, and elderly persons?
- What are your thoughts on the availability of Sign Language Interpreters at EHC facility in your area?

**13. Public Awareness and Education:**

- What strategies or plans exist to raise awareness about the importance of EHC in the populace?
- Are there educational programmes in place to prevent hearing loss and promote early intervention?
- What measures are in place to reduce stigmatisation faced by deaf and hard of hearing persons?

**14. Project Organisation and Phasing:**

- How best could project activities (relating to the training of EHC professionals, increasing accessibility of EHC services, and developing a National EHC Plan for EHC) be phased to ensure maximum impact?
- Any thoughts on the optimal institutional setup required to successfully implement this EHC project?

**15. Challenges and Barriers:**

- What are the key challenges and barriers faced in improving EHC (e.g., shortage of trained EHC personal, lack of EHC infrastructure / equipment, lack of collaboration among stakeholders, lack of funding, lack of awareness on EHC)?
- Which of the above challenges in the provision of EHC do you believe need the most urgent attention?
- How can these challenges be addressed?

**16. Financing:**

- Are there existing budget allocations / funding streams specifically dedicated to EHC in your region or at national level?
- How does the central government ensure the accessibility and affordability of hearing aids and other necessary equipment for individuals with hearing impairments?

**17. EHC Services Accessibility:**

- Do you capture disaggregated data on EHC needs / what are most the requested EHC services in your region?
- What proportion of health facilities in your area or region offer EHC services / are the EHC services accessible?
- Are there some services that deaf and hard of hearing persons require that you are unable to provide (e.g., sign language education and interpreting, audiological services and hearing devices, community and social support services, access to healthcare and mental health services, accessible education and specialised support)?

**18. Recommendation:**

- Based on your assessment, are there any recommendations for further actions or potential modifications to the project?
- As a key stakeholder in the domain of health, what key suggestions / recommendations could improve EHC delivery in the region?

## **Appendix 2 – Local Administrators Interview Guide**

### **1. Relevance:**

- In your view, how relevant is the proposed project and its activities in addressing the identified challenges related to ear and hearing care within our local community?
- Do you believe the project aligns with the current priorities and needs of deaf and hard of hearing person in your area?
- What data / statistics are available on the prevalence of hearing-related issues, and how are these collected / analysed?

### **2. Logical Framework:**

- Could you provide your assessment of the proposed logical framework, commenting specifically on the feasibility of the expected results i.e., training EHC professionals, provision of equipment, developing a national plan for EHC?
- What risks do you see in the project, and what strategies do you propose to mitigate these risks?

### **3. Sustainability:**

- From your perspective, what factors are critical for ensuring the sustainability of the project's outcomes beyond its initial implementation period?
- Are there local resources or partnerships that can contribute to sustainability?

### **4. Synergies and Complementarities:**

- How do you envision the project creating synergies and complementarities among different sectors within the local government and with relevant stakeholders?
- Are there opportunities for coordination with existing local initiatives or organisations?

### **5. Financing:**

- Are there existing budget allocations / funding streams specifically dedicated to EHC in your municipality?

### **6. Project Organisation and Phasing:**

- How best could project activities (relating to the training of EHC professionals, increasing accessibility of EHC services, and developing a National EHC Plan for EHC) be phased to ensure maximum impact in your municipality?
- Any thoughts on the institutional setup required for successful project implementation in our community?

### **7. Inclusiveness:**

- What do you think is the best way for the project to ensure the active participation of persons with disabilities (and their representative organisations) in all aspects of the project within our local jurisdiction?
- Are there local mechanisms to promote inclusiveness and accessibility that the project can leverage?

### **8. Local Policies and Strategies:**

- Are there any existing local government policies or strategies related to EHC, healthcare or disability services that the proposed project should consider and align with?

### **9. Human Resources:**

- Do you believe there are enough EHC surgeons, Audiology Technicians, EHC Clinical Officers are there in your area?

### **10. EHC Infrastructure and Technology:**

- How would you describe the accessibility of EHC facilities, Audiology equipment, Hearing aids etc. in your municipality?

### **11. Public Awareness and Education:**

- What strategies or plans exist to raise awareness about the importance of EHC in your communities?
- Are there educational programmes in place to prevent hearing loss and promote early intervention?
- What measures are in place to reduce stigmatisation faced by deaf and hard of hearing persons?

### **12. Challenges and Barriers:**

- What are the key challenges and barriers faced in improving EHC (e.g., shortage of trained EHC personal, lack of EHC infrastructure / equipment, lack of collaboration among stakeholders, lack of funding, lack of awareness on EHC)?

### **13. Recommendations:**

- Based on your understanding, do you have recommendations for specific activities the EHC project should implement?
- Are there specific areas where customisation or enhancements are needed at the local level?

### **Appendix 3 – Hospital Administrators Interview Guide**

1. Among the six core components of the WHO framework or “building blocks” for health systems, namely service delivery, health workforce, health information systems, access to essential medicines, financing, and leadership/governance, which do you believe is most deficient in your hospital?
2. Could you please describe the current state of Ear and Hearing Care services at your hospital, including the availability of trained professionals and equipment?
3. From your perspective, what are the most significant challenges or gaps in the provision of EHC services in your hospital?
4. In what specific domains do you believe training is most needed to strengthen ear and hearing care in hospitals?
5. How well do you believe your hospital is equipped in terms of technology and infrastructure to deliver quality EHC services?
6. What kind of training or capacity-building initiatives related to EHC have been conducted for your hospital's staff?
7. In what specific domains do you believe training is most needed to strengthen ear and hearing care in hospitals?
8. In your opinion, what are the main challenges or issues related to EHC in your hospital and the broader healthcare system?
9. How do you perceive the relevance of the proposed EHC project in addressing the identified problems and challenges in the target groups and sectors?
10. Which of the following three areas do you believe should be allocated the most resources during project implementation?  
[Select one: Training of EHC professionals, Increasing availability of EHC equipment, Developing national EHC plan]
11. Do you believe the proposed project aligns with the healthcare priorities and policies set by national health authorities?
12. In your opinion, what is the level of awareness among healthcare staff about the importance of Ear and Hearing Care?
13. Are there any existing partnerships or collaborations with organisations or institutions that focus on EHC within your hospital?
14. What are your thoughts on the potential synergies and complementarities between the proposed project and existing healthcare programs or services?
15. Can you share insights on the current availability of trained EHC professionals, including EHC technicians, within your hospital and region?
16. What are the current referral mechanisms for patients with hearing-related issues, and are they effective?
17. What is your assessment of the proposed project's logical framework, including its outcomes, outputs, indicators, and assumptions, in the context of your hospital and region?
18. How would you assess the feasibility of integrating EHC services into your hospital's existing healthcare system?
19. What resources or support, if any, do you think would be required to strengthen EHC capacities in your hospital?
20. What role would you play in ensuring the long-term impact / sustainability of the project's technical components?
21. How do you envision the potential impact of the proposed project on Ear and Hearing Care services within your hospital and the broader community?
22. How do you perceive the feasibility of the financing proposal for the project, considering the specific activities and interventions it aims to undertake?
23. Are there any specific challenges or concerns you foresee in implementing the proposed project, and do you have any recommendations for addressing them?
24. From your perspective, what institutional structures or changes might be required to effectively implement the proposed project and ensure its sustainability?
25. In your opinion, what would be the major obstacles or challenges to implementing the proposed project to strengthen EHC capacities in Cameroon, especially within your hospital?
26. What do you see as the potential benefits of strengthening EHC capacities within your hospital, both for patients and for the healthcare system as a whole?
27. Any considerations regarding the technical institutional structure required to successfully implement the project in hospitals?
28. Based on your experience, do you have any recommendations on how the proposed EHC project could be improved?



#### **Appendix 4 – Hospital Technical Staff Interview Guide**

1. Could you provide an overview of the current state of EHC services within your hospital, including the range of services offered and the capacity to meet demand?
2. Could you please describe your current role and responsibilities related to ear and hearing care at the hospital?
3. Does your hospital disaggregate data (e.g., gender, age, impairment type, treatment outcomes) relating EHC service?
4. What are the major challenges and limitations you encounter when providing EHC services, particularly in terms of equipment, resources, and staffing?
5. Are there any existing partnerships or collaborations with external organisations, both public and private, related to EHC services? If so, how effective have these collaborations been?
6. What is the most common ear and hear pathology managed in your hospital?
7. How many EHC Surgeons, EHC Technicians, and EHC Clinical Officers, are there in your hospital?
8. How do you assess the training and qualifications of your technical staff (EHC Technicians and EHC Clinical Officers) in terms of their ability to provide quality EHC services?
9. Could you share your insights on the availability and functionality of EHC equipment and technologies within the hospital, and do you foresee any issues related to maintenance and procurement?
10. In your opinion, what are the specific needs and gaps in EHC service delivery within your hospital, and how do these align with the proposed project's objectives?
11. How do you currently collect and manage health data related to EHC services, and do you have a functioning health information system in place for this purpose?
12. Could you please provide any information on the patient load and demographics of those seeking EHC services within your hospital, including any variations in demand across different regions or populations?
13. From your perspective, what are the key resources or equipment that are lacking or needed to improve ear and hearing care services at the hospital?
14. Could you please share your insights on the existing referral system for patients with ear and hearing issues within the hospital and to external services?
15. How do you envision the proposed project impacting the accessibility and quality of EHC services at the hospital?
16. Are there any concerns or potential challenges you foresee in the implementation of the project within the hospital setting?
17. What improvements do you think are necessary in terms of the hospital's infrastructure to support better EHC services?
18. In your opinion, what role should hospital technical staff play in the successful implementation of the project, which aims to strengthen EHC capacities?
19. What are your views on the proposed project's potential impact on strengthening EHC capacities, improving accessibility, and supporting the development of a National Plan for EHC in Cameroon?
20. From your perspective, what would be the critical success factors for the proposed project, and are there any foreseeable risks or challenges that should be addressed during project planning and implementation?
21. Are there mechanisms within the hospital to promote inclusiveness and accessibility for persons with disabilities?
22. What concrete results with regards to EHC services have been achieved in your health facility thus far (e.g., number of persons reached, hearing impairment detected / corrected / improved upon etc)?
23. Which of the following three areas do you believe should be allocated the most resources during project implementation?  
[Select one: Training of EHC professionals, Increasing availability of EHC equipment, Developing national EHC plan]
24. In what specific domains do you believe training is most needed to strengthen ear and hearing care in hospitals?
25. What role would you play in ensuring the long-term impact / sustainability of the project's technical components?
26. Any considerations regarding the technical institutional structure required to successfully implement the project in hospitals?
27. Based on your experience, do you have any recommendations on how the proposed EHC project could be improved?

## **Appendix 5 – Deaf and Hard of Hearing Persons Focus Group Guide**

### **Introduction:**

1. **Welcome and Introductions:** Begin by welcoming the participants and introducing the purpose of the focus group discussion. Also, introduce the facilitator and any support staff.
2. **Explanation of Feasibility Study:** Briefly explain that the purpose of the discussion is to gather insights and feedback from the deaf and hard of hearing community about the proposed project to strengthen EHC capacities in Cameroon. Emphasise that their input is crucial in ensuring that the project addresses their needs and concerns effectively.

### **Discussion Questions:**

1. **Access to current EHC Services:**
  - Can you describe your experiences with accessing EHC services in your community or region?
  - What are the main challenges or barriers you've faced in accessing these services?
2. **Quality of EHC Services:**
  - How would you rate the quality of EHC services you've received, including the availability of sign language interpreters or other accessibility features?
  - What improvements or changes would you suggest to enhance the quality of EHC services for the deaf and hard of hearing community?
3. **Awareness and Information:**
  - How aware are you and others in your community about the importance of ear and hearing health?
  - Where do you typically seek information related to ear and hearing care?
4. **Community Engagement:**
  - Are there existing organisations or groups representing the interests of deaf and hard of hearing individuals in your community?
  - How can these organisations be involved in strengthening EHC capacities and advocating for improved services?
5. **Challenges and Needs:**
  - From your perspective, what are the specific challenges and unmet needs of the deaf and hard of hearing community in relation to ear and hearing care?
  - Are there any particular areas where you believe the proposed project could make a significant difference?
6. **Project Impact and Sustainability:**
  - What are your expectations regarding the impact of the proposed EHC project, particularly in terms of strengthening capacities and improving accessibility?
  - How can the project ensure its results are sustained beyond its completion?
7. **Community Participation:**
  - How can the deaf and hard of hearing community actively participate in the different aspects of the EHC project, ensuring their voices are heard?
8. **Recommendations and Modifications:**
  - Based on your insights and experiences, do you have any specific recommendations or modifications to suggest for the project proposal?
9. **Potential Risks and Mitigations:**
  - From your perspective, what are the potential risks or challenges that could hinder the success of the EHC project, and how can they be addressed?
10. **Closing Remarks:**
  - Invite participants to share any final thoughts, concerns, or additional comments they may have.

### **Conclusion:**

1. **Summary and Closing:** Summarise the key points discussed during the focus group. Thank the participants for their valuable input and reassure them that their voices will be heard in the project planning and implementation process.
2. **Next Steps:** Inform participants of the next steps in the feasibility study and how they can stay involved or informed about the project's progress.
3. **Closing Remarks:** Conclude the discussion with a final round of thanks and express appreciation for their participation.