

Newborn Hearing Screening  
Reference Center

# 2024 Annual Report

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NHSRC 

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# Organization

**ROSARIO R. RICALDE, MD, FPSO-HNS**  
NHSRC Director

## Consultants

**MA. LEAH C. TANTOCO, MD, FPSO-HNS, MClinaud**  
Assistant Director and  
Coordinator for Audiological Equipment/Devices

**CARLOS DIEGO ROZUL, MClinaud**  
Coordinator for Personnel Certification

**ART BRYAN MOLDON**  
Consultant Information Technology,  
Registry Database, Privacy

**FRANCIS ARLAN MAURICIO, RN, MClinaud**  
Coordinator for Standards & Certification of Hearing  
Screening Centers

**MAVIN G. REYES, RN, CSSYB**  
Coordinator for Social Media,  
Promotions, and Website

## Administrative Staff

### Finance

**ROMALYN P. AGAPAY**  
Administrative Officer II

**TRACY NICOLE NAVARRO**  
Administrative Assistant II

**EMMANUEL JOHN T. BARRENO**  
Administrative Assistant II

**MARIBETH G. BERNADAS**  
Senior Office Aide

### Operations

**ABNER A. ASPREC**  
Administrative Officer

**JAMES ANDREW M. SAN AGUSTIN**  
Administrative Assistant II

**JOEBIRT R. MILLANO**  
Administrative Assistant II

**CAMILO C. RANA**  
Administrative Aide IV

**ARLLAN B. MUHI**  
Senior Office Aide

**PETER JOHN S. FRANCISCO**  
Senior Office Aide

**SARAH JOY R. AGAO, LPT**  
Senior Office Aide

**JORIEL N. MAGDAEL**  
Senior Office Aide

### Human Operations

**CRIZELLE D. ALIWALAS, LPT**  
Administrative Officer

**JONALYN D. CAPITO, LPT**  
Administrative Assistant II

**LIANNE JUSTINE E. AGUILAR, RPM**  
Senior Office Aide

# MESSAGE FROM THE DIRECTOR

In 2024, all the commissioned project grants of the NHSRC that were supposed to address issues in implementing RA 9709 ended. It took longer than expected to start and complete the projects. Nevertheless, the Hearing Loss Intervention Program (HALIP), National Cochlear Implant Program (NCIP), ORL FARM, KALINGA app development were completed. All of these projects have 2nd phases and/or recommendations that have to be carried out.

Among the much-needed output from these grants was the Category D Newborn Hearing Screening Training and Simulation Laboratory which was supposed to be located at the new NIH Building. Unfortunately, the facility will instead be located at the Henry Sy Sr. Hall under the UP College of Medicine and SIBOL with the NHSRC providing subsidy. This way, the clinical validation and development of the Hearing for Life (HeLe) device, one of the products of the ORL FARM, can continue.

Many personnel and consultants are needed to follow-up the recommendations. Among the new positions at the NHSRC is an administrative officer dedicated to human resources. A coordinator for ENT Surgeons will facilitate Philhealth coverage for cochlear implants. A coordinator for Pediatricians will see to it that additional modules will be developed to improve the KALINGA mother-baby app and to promote its use.



**Rosario R. Ricalde, MD**

# MESSAGE FROM THE DIRECTOR

(cont.)

The envisioned telespeech program, which was supposed to be in collaboration with the UP College of Allied Medical Professions was not started. To address this issue, a coordinator for Speech Therapists was created. The quality control and compliance incentives to hearing screening personnel and facilities which was supposed to conduct annual audits of hearing center and personnel and to incentivize the best performing, most compliant facilities and personnel in the country did not also materialize.

On a positive note, the NHSRC hosted the first strategic planning activity which was attend by the NHSRC staff, consultants, Department of Health regional representative coordinators, regional technical advisers and representatives from the central DOH.

The three-day event was held at Bai Hotel in Cebu. The participants were all enthusiastic, gave informative reports and participated actively in the workshops. The output were plans for five projects in which DOH regional representatives, technical advisers as well as NHSRC staff will work together in a specific geographic area to address pressing issues in program implementation which were identified.

**Rosario R. Ricalde, MD**



# MESSAGE FROM THE DIRECTOR

(cont.)

The five projects will address the following: quality control process and tool, ease of encoding into the database, program promotion to leaders or organizations, ease of conducting personnel certification and program promotion to the general public.

Another first in 2024 was the presence of the NHSRC at the 68th Philippine Society of Otolaryngology Head and Neck Surgery, 25th Hearing International, and 9th ASEAN Academy of Neurotology Otology and Related Sciences (AANOAS) convention. The NHSRC had a booth which offered free onsite personnel certifying courses to attendees of the conference. Scholarships were awarded to clinical audiologists.

We showed our appreciation to the distinguished roster of international speakers who advocated for universal newborn hearing screening during the 1st AANOAS Meeting in Manila back in 2008 by hosting the speaker's dinner at Cantabria at the Westin Manila.

It was also this year that a scholar of the NHSRC graduated with a masters degree in Management Major in Public Administration. This should inspire the rest of the staff to aim high and take advantage of the opportunities that the NHSRC offers. With additional personnel and more projects in 2025, the NHSRC is truly expanding and improving its services.



**Rosario R. Ricalde, MD**

# VISION AND MISSION

## Vision

“To be the recognized authority in newborn hearing screening and intervention in the Philippines by 2028.”

## Mission

The NHSRC of the UP-NIH is committed to provide newborn and infants born in the Philippines equal access to comprehensive early detection and intervention of hearing loss through training and education, technology and facility assessment and certification, data systems management, and research funding support as mandated by law. We utilize innovative and current technologies, and engage well-trained, progressive, inclusive, multispecialty and multidisciplinary experts. As we respond to the national health need, we will ethically manage our resources to obtain self-sufficiency for our programs, and provide equitable opportunities for career and financial growth of our organization.

# MANDATE

## MANDATE

The Newborn Hearing Screening Reference Center – National Institutes of Health (NSHRC-NIH) as the technical arm of the Department of Health shall assist on the following:

1. Defines and recommends newborn hearing screening testing and follow-up protocols which includes hearing screening methods, devices used, location, manner, and timing of newborn hearing testing.
2. Conducts personnel certifying courses together with the DOH.
3. Conducts testing and certification of newborn hearing screening devices and methods with the DOH.
4. Distributes newborn hearing screening registry cards and levies fees as approved by the DOH.
5. Distributes advisory and advocacy materials in coordination with DOH.
6. Maintains and oversees the national hearing screening database and case registries.
7. Assists government and non-government agencies in all aspects of the program including implementation, training, awareness campaigns including overseeing the content of educational and other instructional materials

# ORGANIZATIONAL CHART

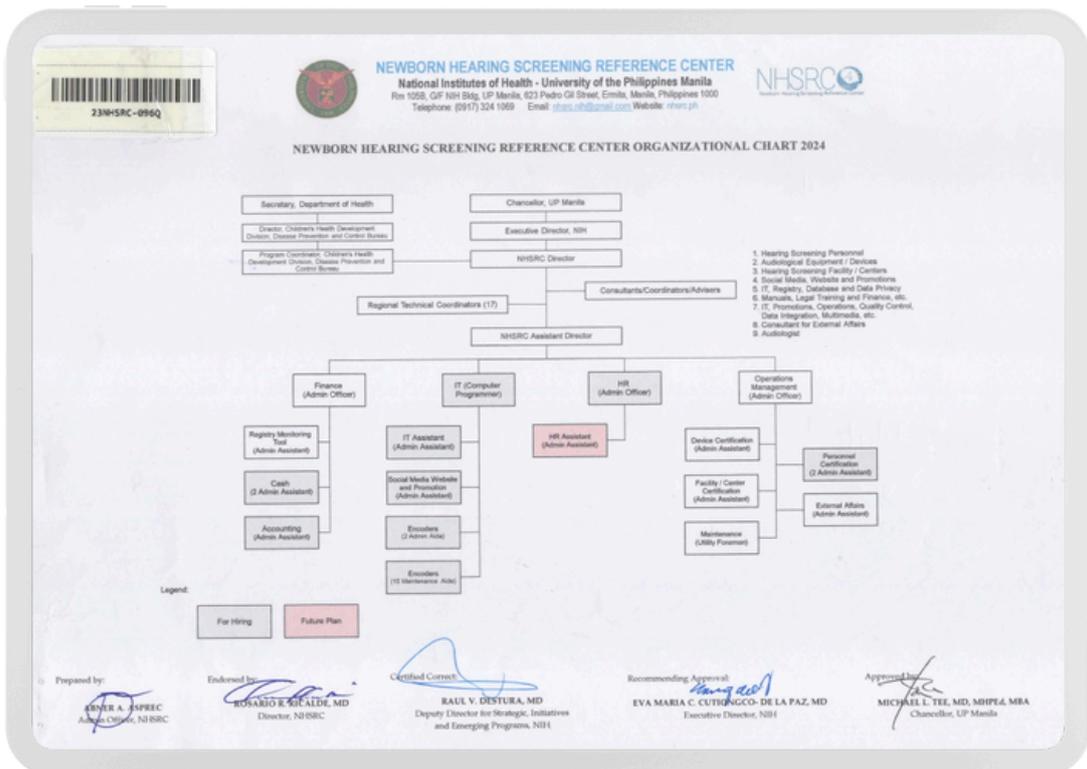
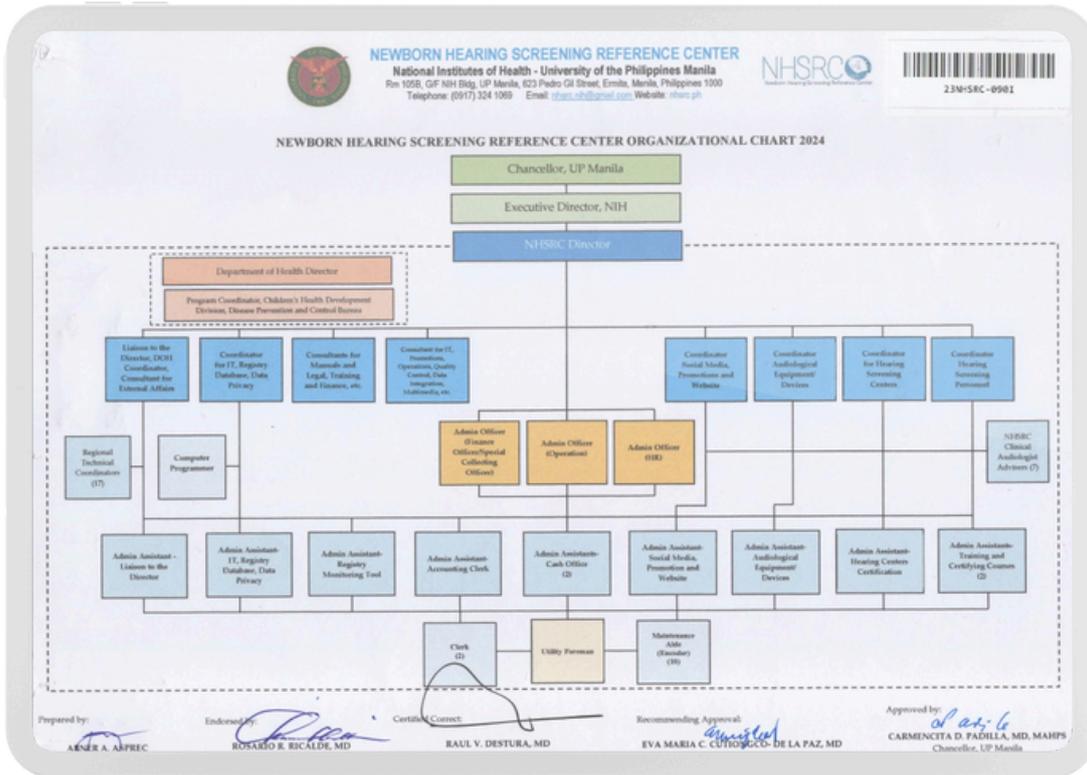
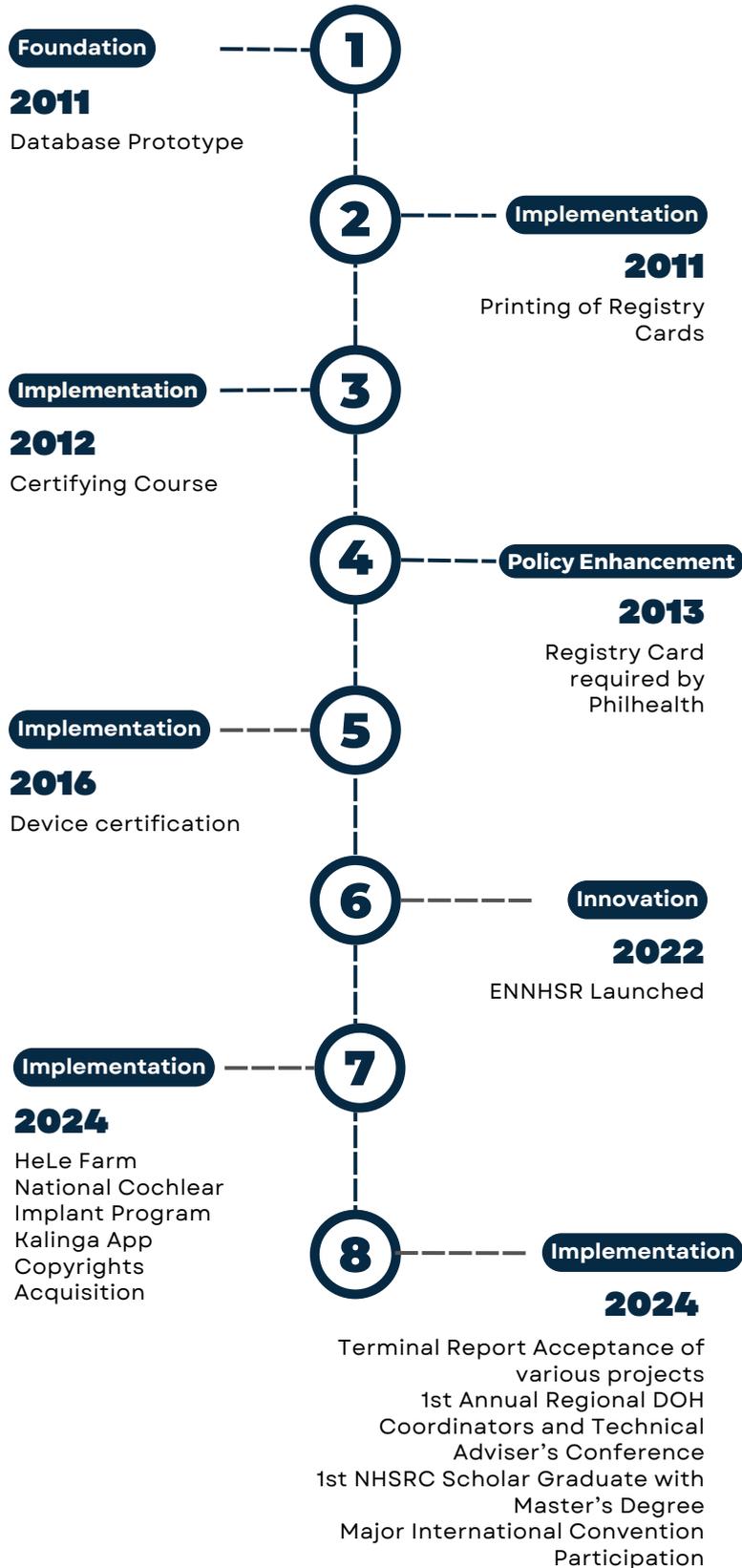


Image 1 and 2. The updated Organization Chart of the Newborn Hearing Screening Reference Center as of December 31, 2024

# MAJOR MILESTONES



# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

As of December 2024, there are 1217 accredited hearing screening centers nationwide. An increase of 1.84% has been identified. Figure 1 shows the distribution of these accredited centers per region. Table 1 shows the number of accredited centers per region.

**877**  
2022 Centers

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**1195**  
2023 Centers

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**1217**  
2024 Centers

Figure 1

Category	2024 Centers	2024 Centers
A	1169	1198
B	13	9
C	4	2
D	9	8

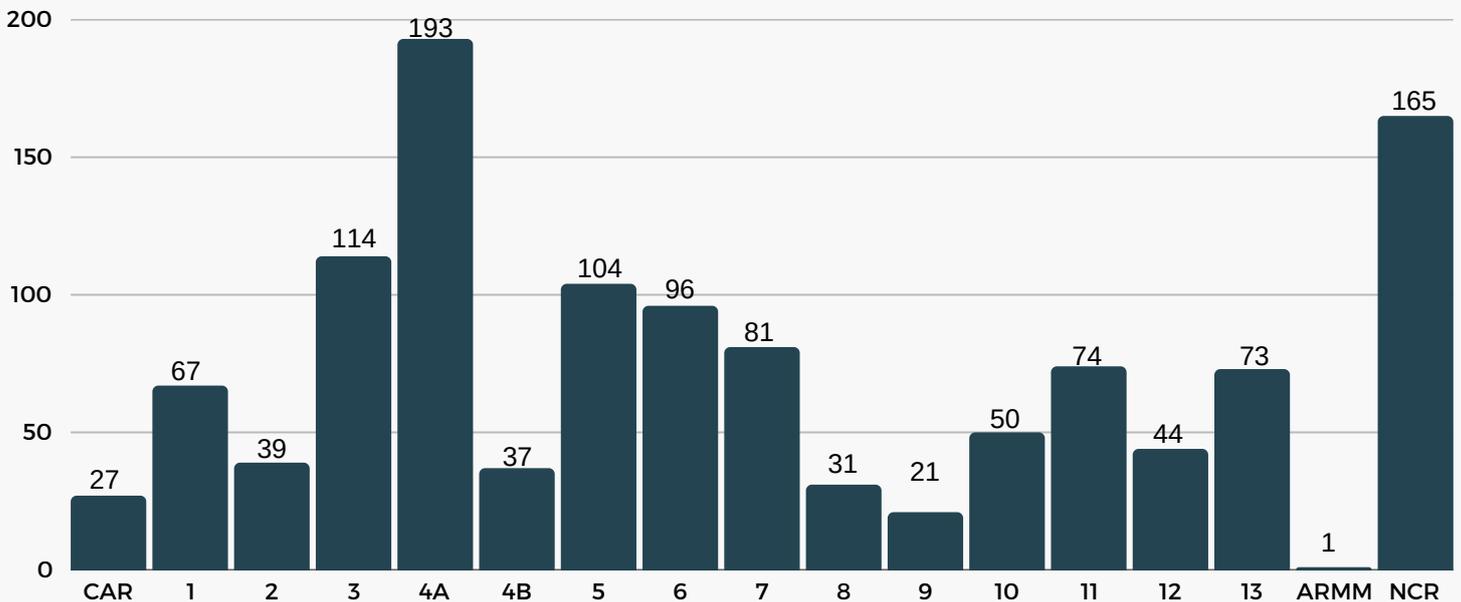


Table 1

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the distribution of facilities based on Category Certification.

## Category A Facilities in the Philippines

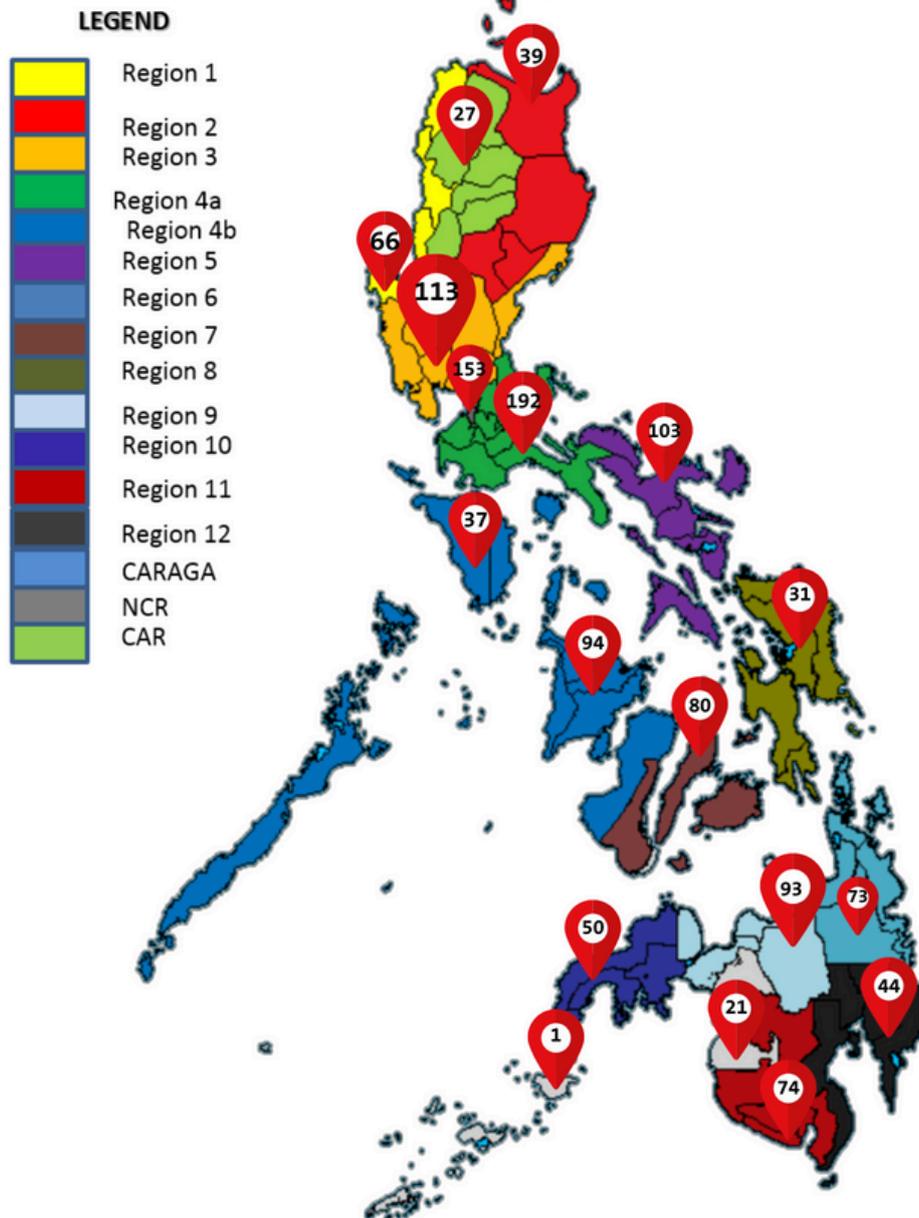


Image 3

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the distribution of facilities based on Category Certification.

## Category B Facilities in the Philippines

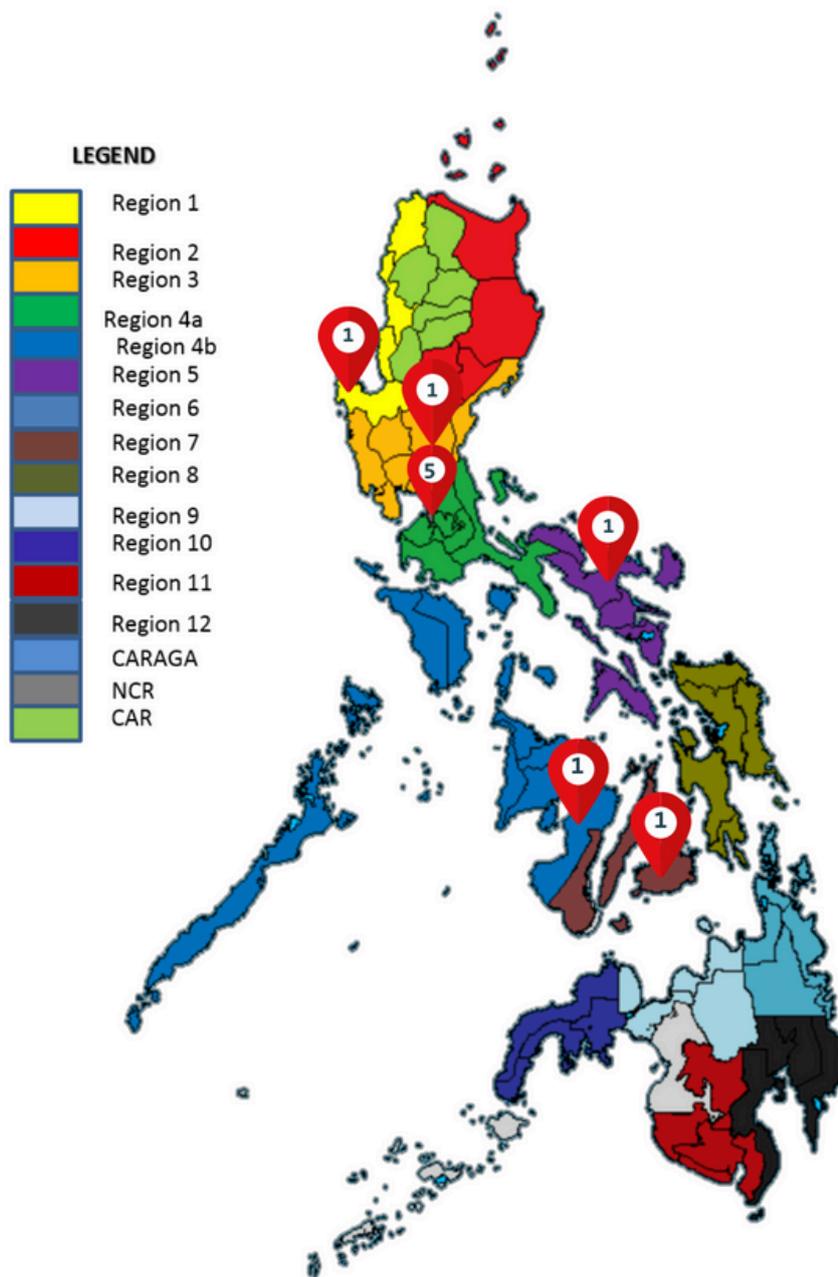


Image 4

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the distribution of facilities based on Category Certification.

## Category C Facilities in the Philippines

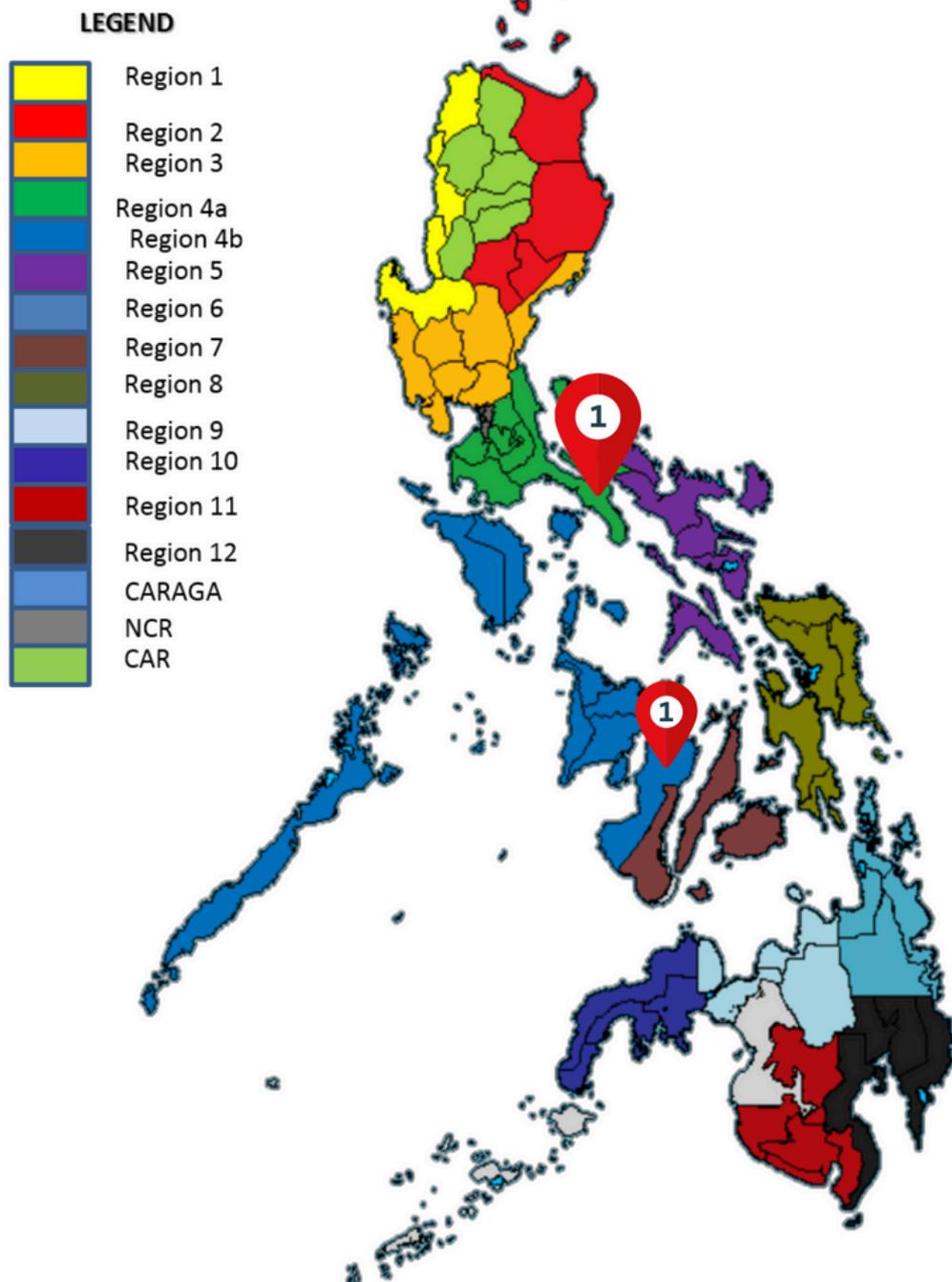


Image 5

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the distribution of facilities based on Category Certification.

## Category D Facilities in the Philippines

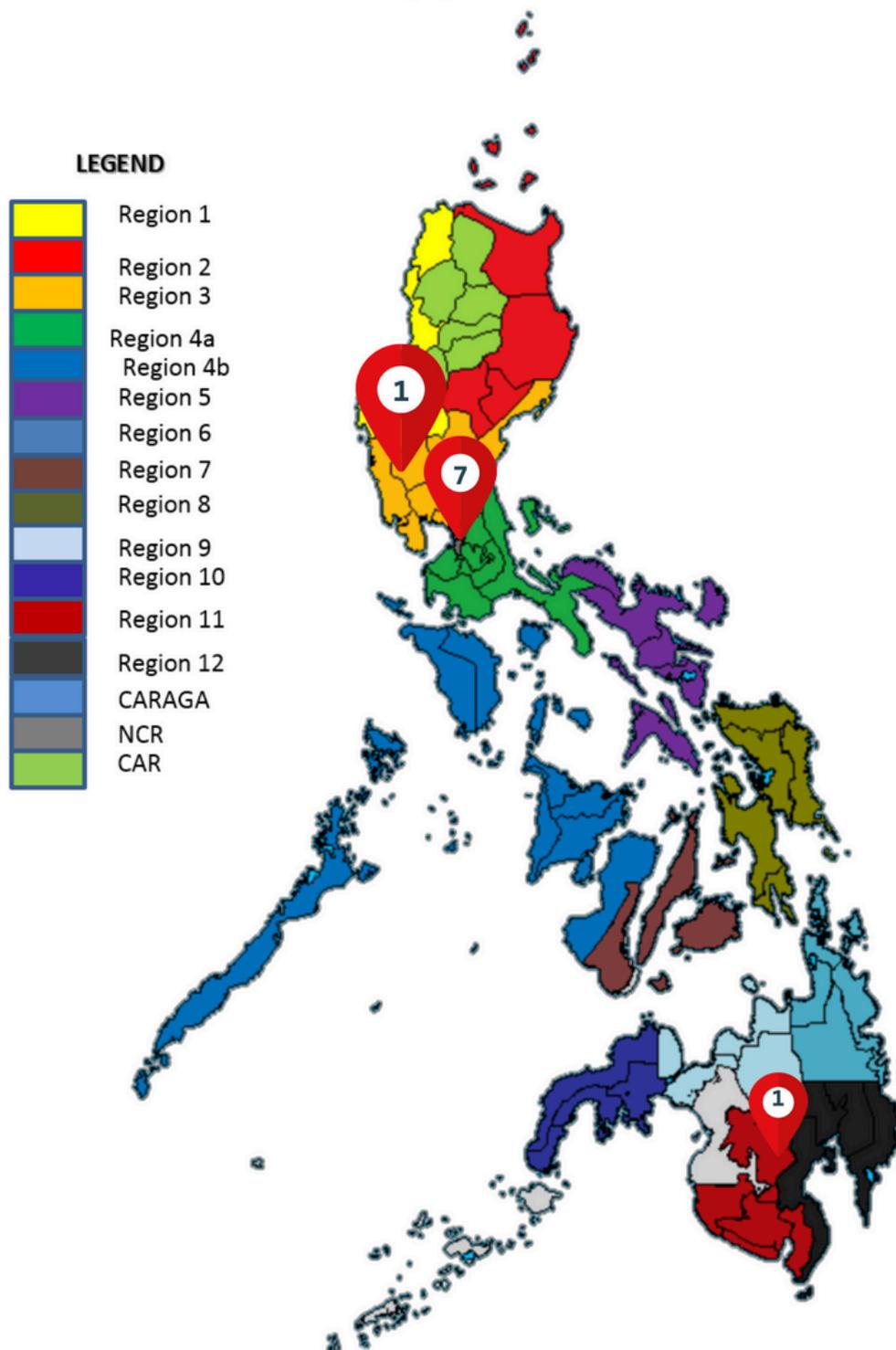


Image 6

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the total number of newborn hearing screening centers (Table 2) and certified managers and screeners (Table 3) from 2014 to May 2024

## NUMBER OF CENTERS

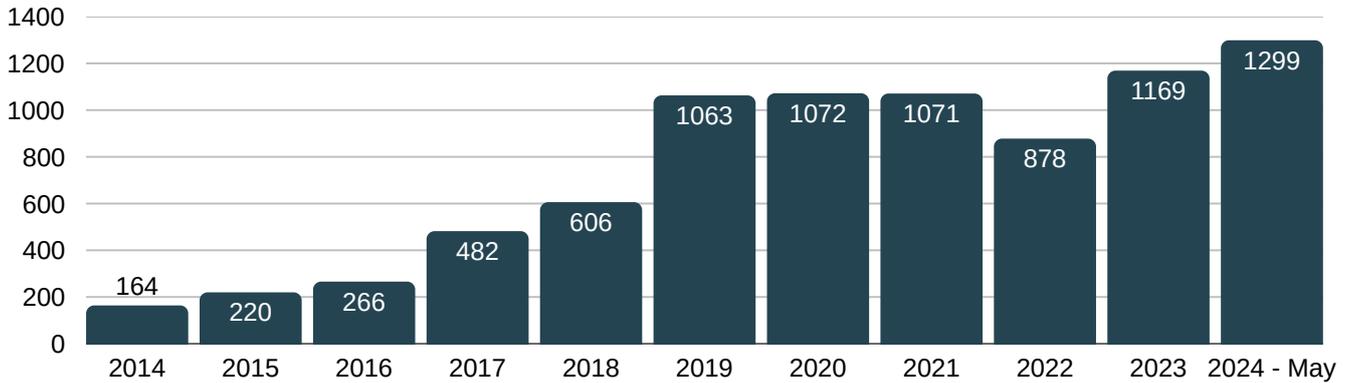


Table 2

## CERTIFIED MANAGERS AND SCREENERS

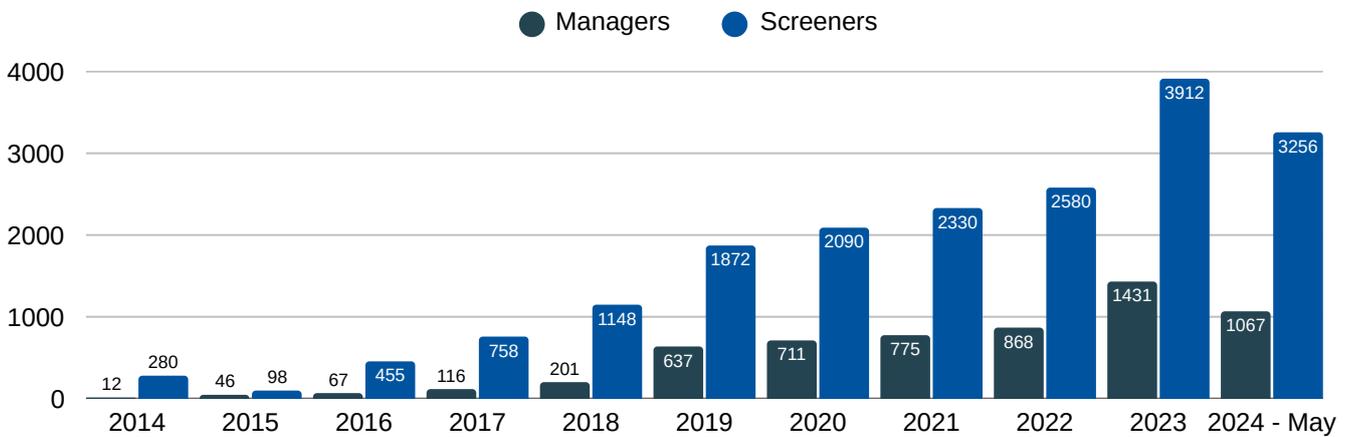


Table 3

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the total number of newborn hearing screening centers from 2014 to May 2024 per category.

## CERTIFIED CATEGORY A CENTERS

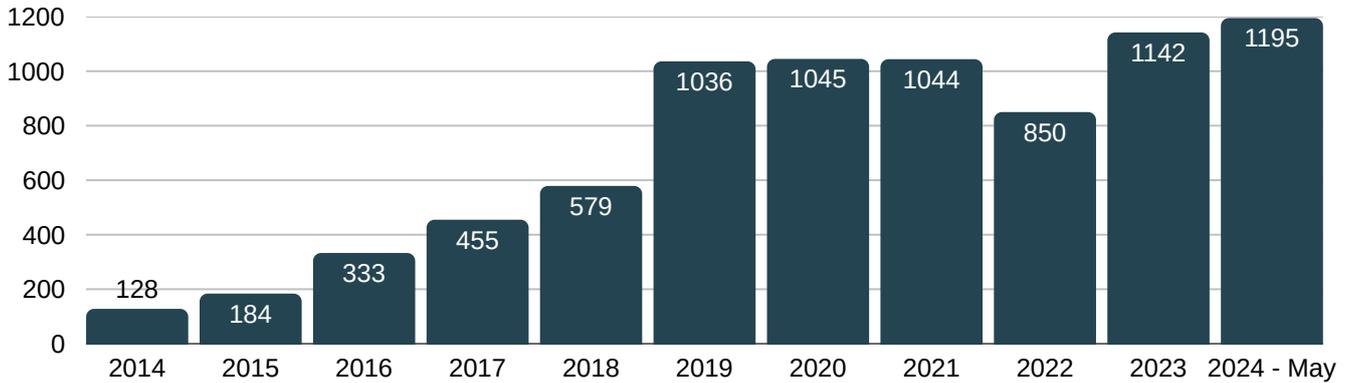


Table 4

## CERTIFIED CATEGORY B CENTERS

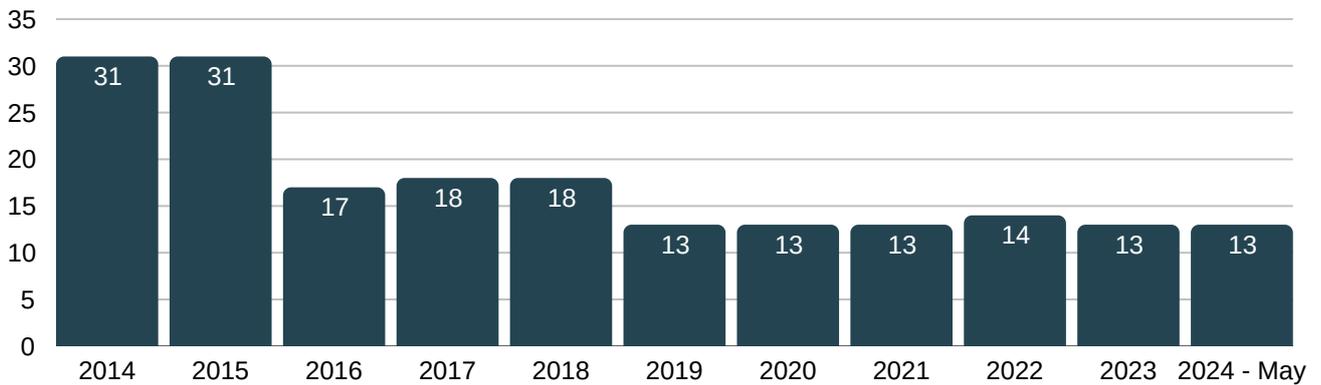


Table 5

## CERTIFIED CATEGORY C CENTERS

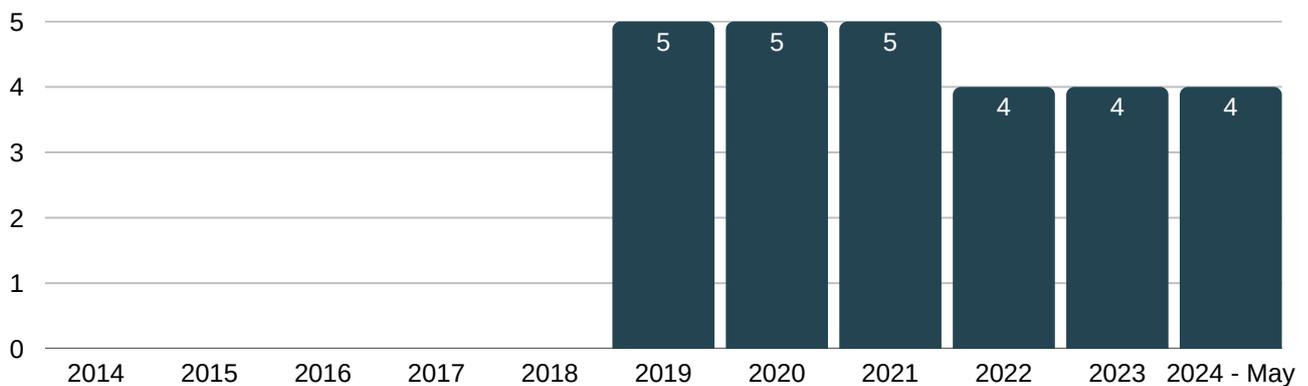


Table 6

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

Below is the total number of newborn hearing screening centers from 2014 to May 2024 per category.

## CERTIFIED CATEGORY D CENTERS

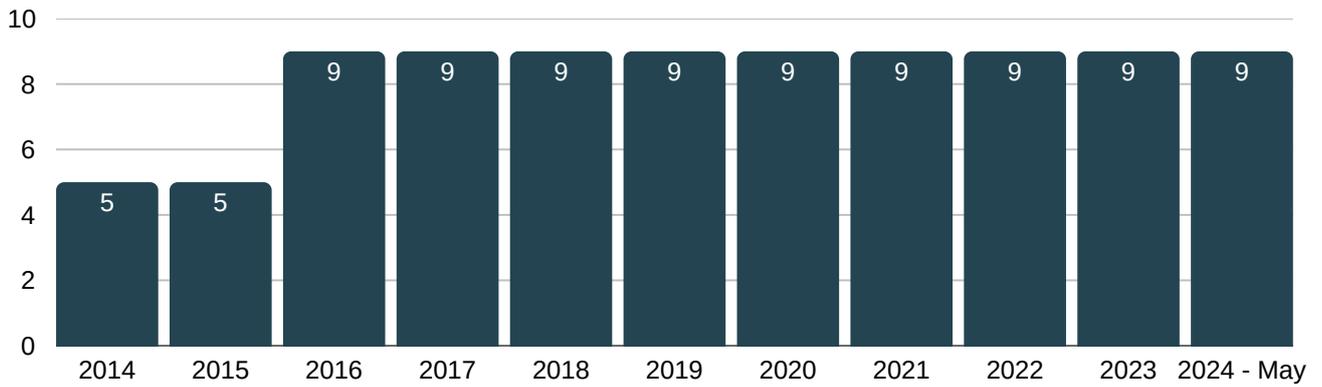


Table 7

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

## WHAT ARE THE CURRENT PROBLEMS FACED BY THE PROGRAM?

### CENTERS ARE NOT ENCODING INTO THE DATABASE

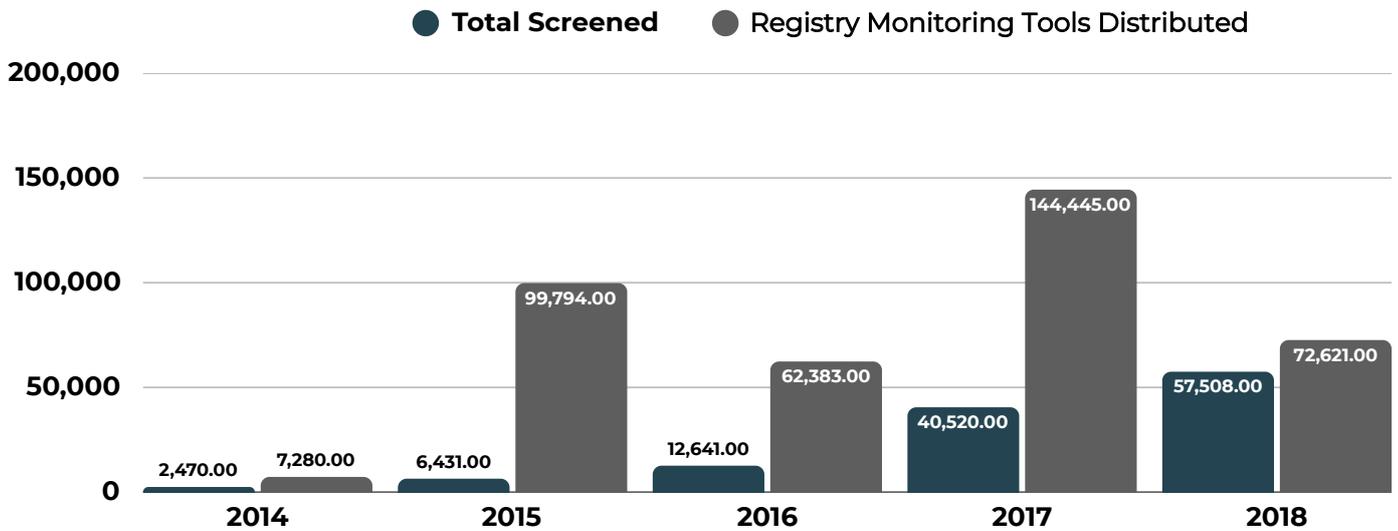


Table 8

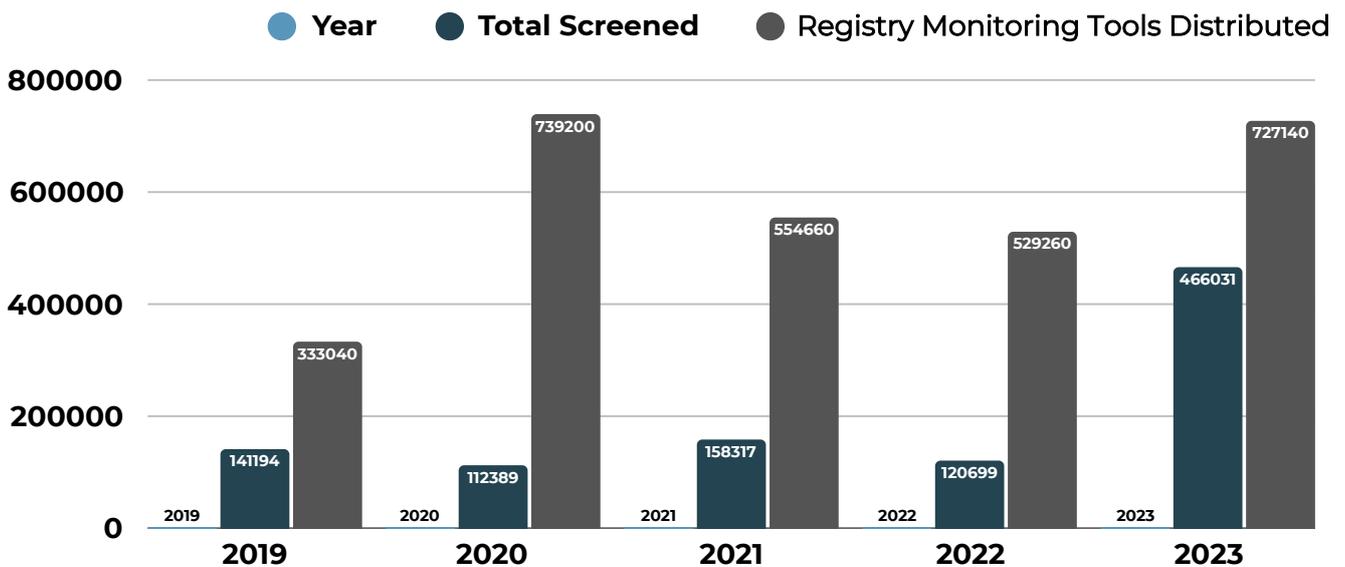


Table 9

# ACCREDITATION OF NEWBORN HEARING SCREENING CENTERS

## WHAT ARE THE CURRENT PROBLEMS FACED BY THE PROGRAM?

### CENTERS ARE NOT ENCODING INTO THE DATABASE

Year	Total # Screened	Registry Cards/Seals Distributed	% Encoded	Registry / Method
2014	2,470	7,280	33.93%	Hii
2015	6,431	99,794	6.44%	Hii
2016	12,641	62,383	20.26%	Hii
2017	40,520	144,445	28.05%	Hii
2018	57,508	72,621	79.19%	Hii and MS Excel
2019	141,194	333,040	42.40%	Hii and MS Excel
2020	112,389	739,200	15.20%	MS Excel
2021	158,317	554,660	28.54%	MS Excel
2022	120,699	529,260	22.81%	ENNHSR
2023	466,031	727,140	64.09%	ENNHSR

Table 10. Difference of Total Babies Screened versus Total Number of Registry Cards distributed to the facilities. Encoding of data is at average of 34.09% from 2014 to 2023.

## TRAINING AND CERTIFICATION OF HEARING SCREENING PERSONNEL

In 2024, forty eight (48) Certifying Courses were conducted. 19 courses were conducted online using a 3rd Party Service Provider, Canvas and 19 Face-to-face certifying courses were conducted in Room 402, New Gold Bond Marketing Corp. Bldg., F. Benitez St., Ermita, Manila. 8 face-to-face courses were conducted in various regions such as Cebu and Iloilo (Table 11).

**452**  
2022 Certified Personnel

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**924**  
2023 Certified Personnel

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**483**  
2024 Certified Personnel

Face to Face	Online Courses
17-Jan-24	17-Jan-24
24-Jan-24	24-Jan-24
14-Feb-24	14-Feb-24
21-Feb-24	21-Feb-24
13-Mar-24	13-Mar-24
20-Mar-24	20-Mar-24
17-Apr-24	17-Apr-24
24-Apr-24	24-Apr-24
15-May-24	15-May-24
22-May-24	22-May-24
19-Jun-24	19-Jun-24
17-Jul-24	17-Jul-24
31-Jul-24	31-Jul-24
14-Aug-24	14-Aug-24
11-Sep-24	11-Sep-24
18-Sep-24	18-Sep-24
16-Oct-24	16-Oct-24
23-Oct-24	23-Oct-24
6-Nov-24	6-Nov-24

Regional Courses
March 14 and 15, 2024
28-May-24
23-Aug-24
28-Aug-24
September 12 and 13, 2024
September 19 and 20, 2024
29-Oct-24
November 12 and 13, 2024
Special Courses
27-Jun-24
December 6-8, 2024

**2** Special Event Certification

**19** Face-to-Face Certification

**8** Regional and Special Courses

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Face to Face Venues	Regional Venues	Special Venues
Room 402, New Gold Bond Marketing Corp. Bldg., F. Benitez St., Ermita, Manila	Cebu Iloilo Bicol Davao Batangas Bohol Laguna Quirino Memorial Medical Center	UP College of Medicine (UPCM) Vicente Tiu Hall PSO-HNS Annual Convention

Table 11. List of Course Breakdown based on Learning Set-up and Initiatives..

# TRAINING AND CERTIFICATION OF HEARING SCREENING PERSONNEL

Image 7 and 8 show the dashboard of the Newborn Hearing Screening Course using the Canvas/Infrastructure Platform.

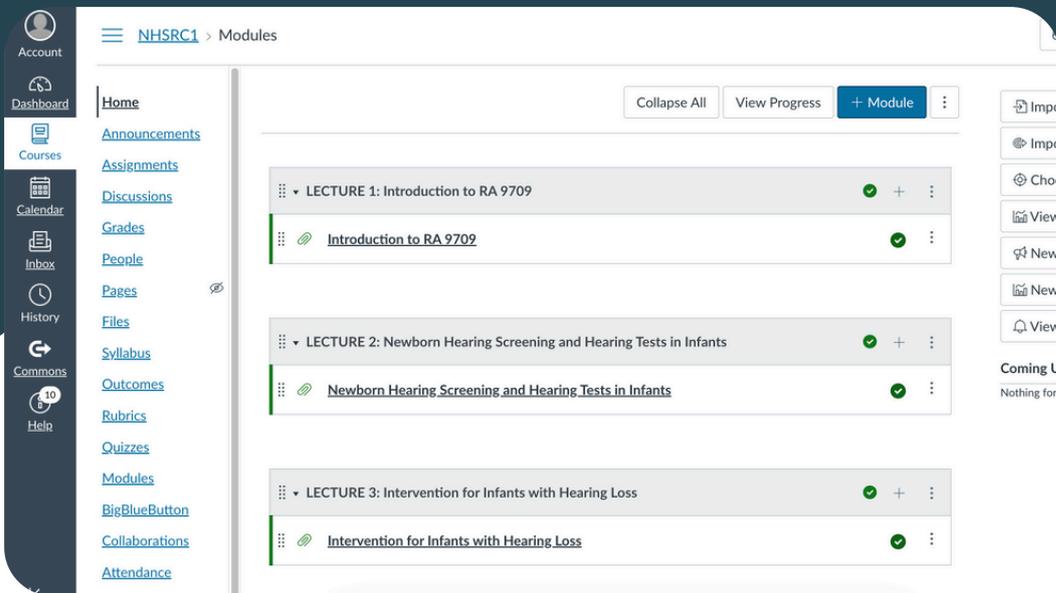


Image 7

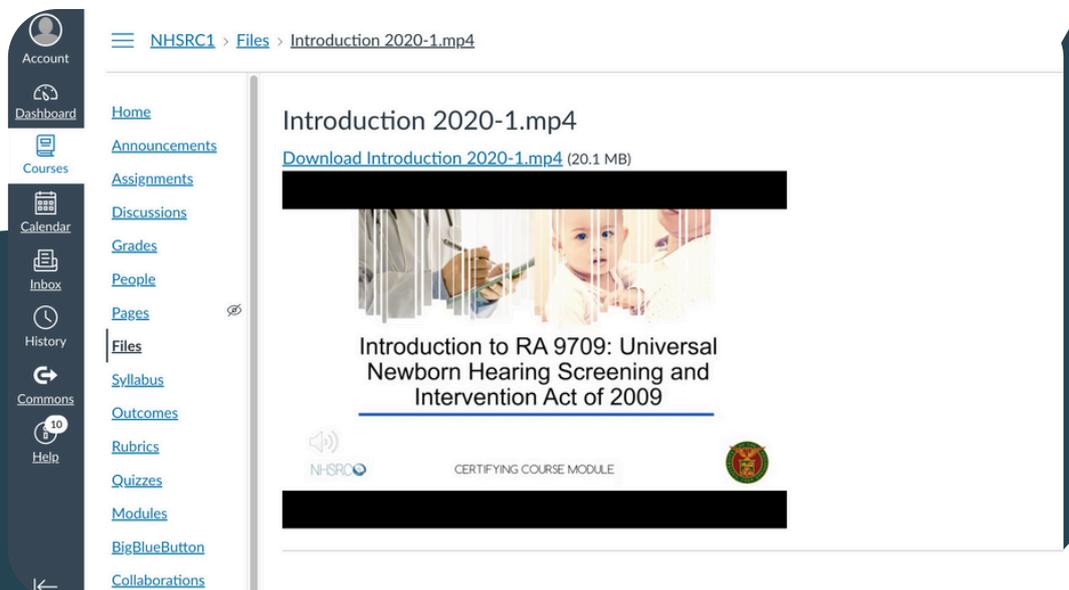


Image 8

## TRAINING AND CERTIFICATION OF HEARING SCREENING PERSONNEL

Images below are the photos taken during monthly face-to-face certification training at the NHSRC Main Office at Room 402, New Gold Bond Marketing Corp. Bldg., F. Benitez St., Ermita, Manila and one of the regional venues



NHSRC New Gold Bond Office



NHSRC Regional Certifying Course

## TRAINING AND CERTIFICATION OF HEARING SCREENING PERSONNEL

Images below are the photos taken during the face-to-face certification training at the Regional Certifying Courses.



## TRAINING AND CERTIFICATION OF HEARING SCREENING PERSONNEL

Images below are the photos taken during the special face-to-face certification training at the 68th Philippine Society of Otolaryngology Head and Neck Surgery, 25th Hearing International, 9th ASEAN Academy of Neurotology Otology and Related Sciences (AANOA) convention held at the EDSA Shangri-La Hotel Manila last December 6 to 8, 2024.



## SUMMARY OF DATA FROM THE NEWBORN HEARING SCREENING REGISTRY

Certified facilities submitted their reports through the ENNHSR. Table 12 shows the number of babies screened per region, respectively.

An increase of **637,067 (21.57%)** babies were screened as compared to 2023's 524,042.

The National Capital Region records the highest number of babies screened with 144,970, BARMM with the lowest number of babies screened with 2,798. The national average is at 40,244 babies screened.

From 2014 to December 31, 2024, the total babies screened is 1,904,568.

**193,989**

*2022 Babies Screened*

**524,042**

*2023 Babies Screened*

**637,067**

*2024 Babies Screened*

**1,904,568**

*Total Babies Screened since 2014*

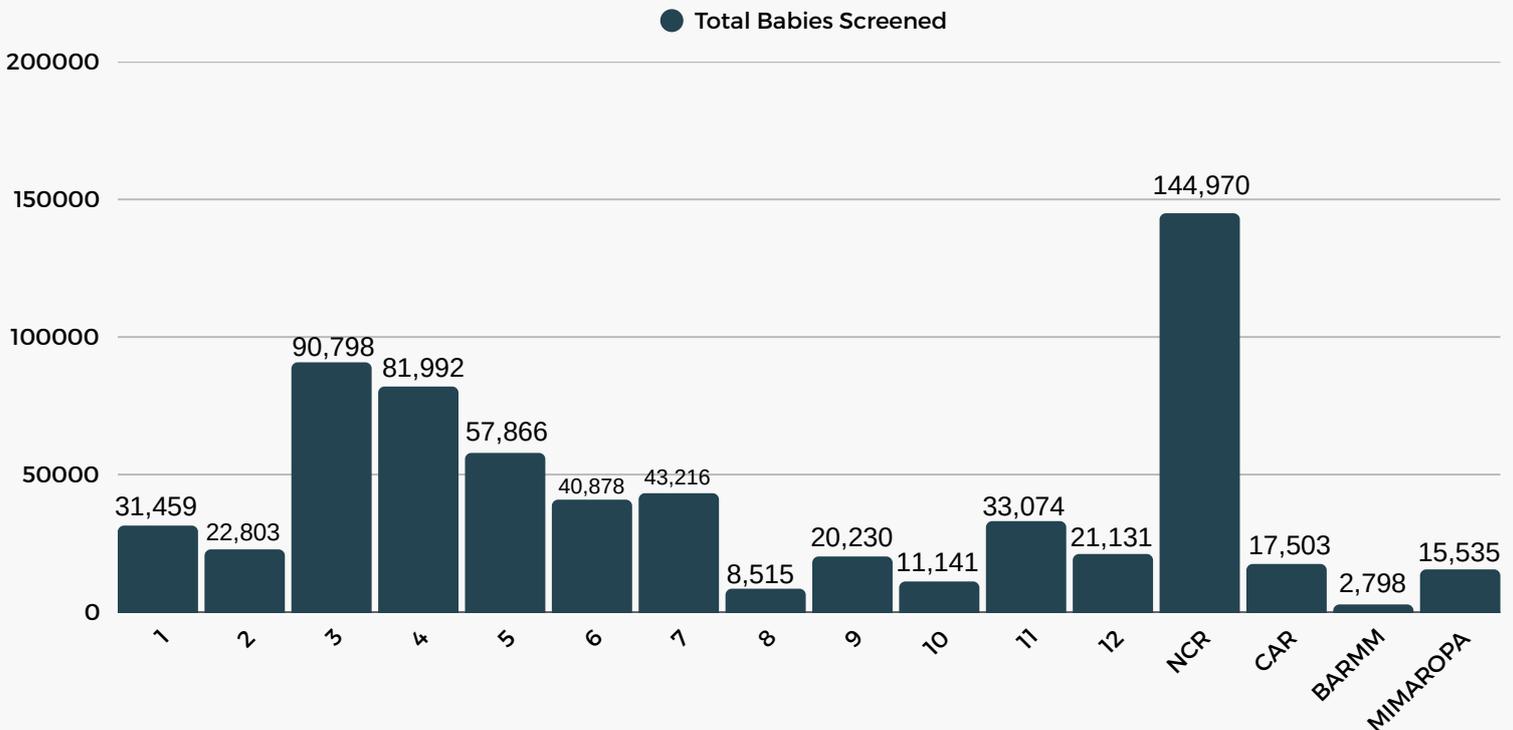


Table 12

## SUMMARY OF DATA FROM THE NEWBORN HEARING SCREENING REGISTRY

Certified facilities submitted their reports through the ENNHSR. Tables 13 and 14 show the distribution of results and breakdown per region, respectively. Data submitted showed that 42,530 (6.7%) babies had bilateral refer results, 32,626 (5.1%) had unilateral refer and 576,458 (90.5%) had bilateral pass results (Table 13).

NCR records the greatest number of incidences of Bilateral Refer and Unilateral Refer Results (Table 13 and 14).

**11,065**

*2022 Bilateral Refer*

**31,383**

*2024 Bilateral Refer*

**42,530**

*2024 Bilateral Refer*

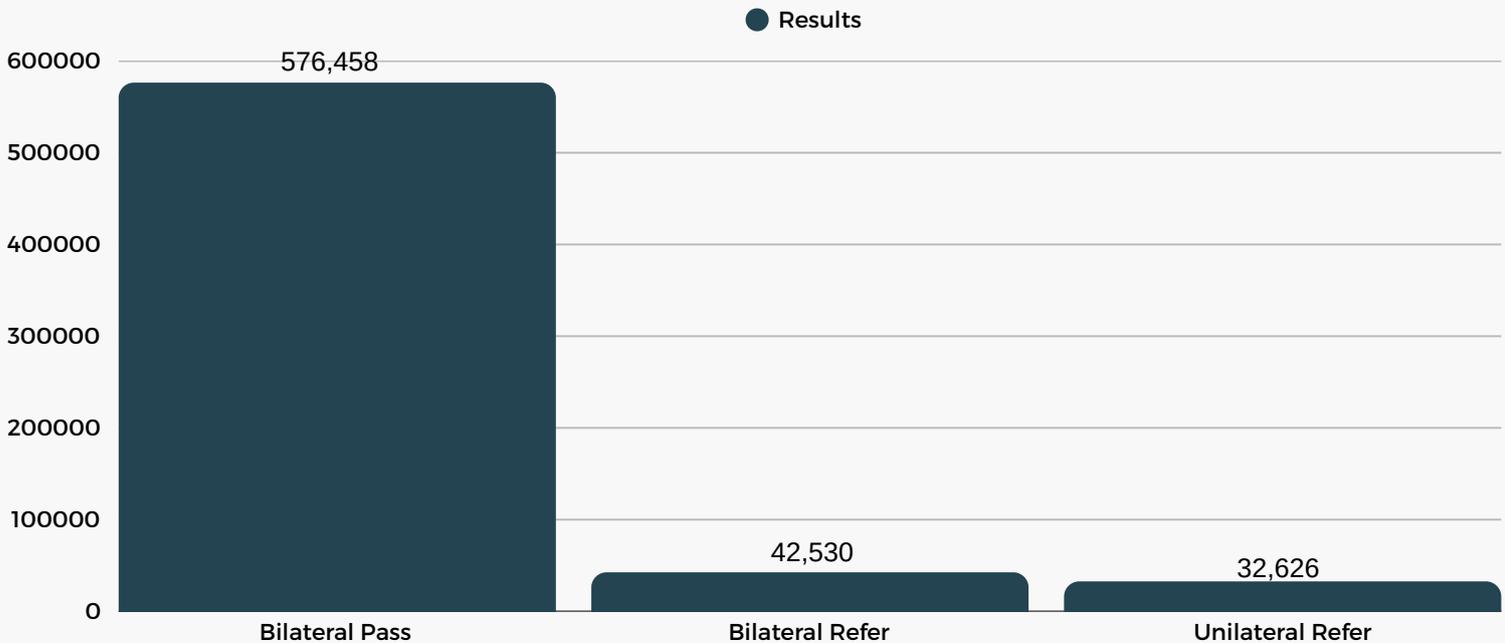


Table 13

## SUMMARY OF DATA FROM THE NEWBORN HEARING SCREENING REGISTRY

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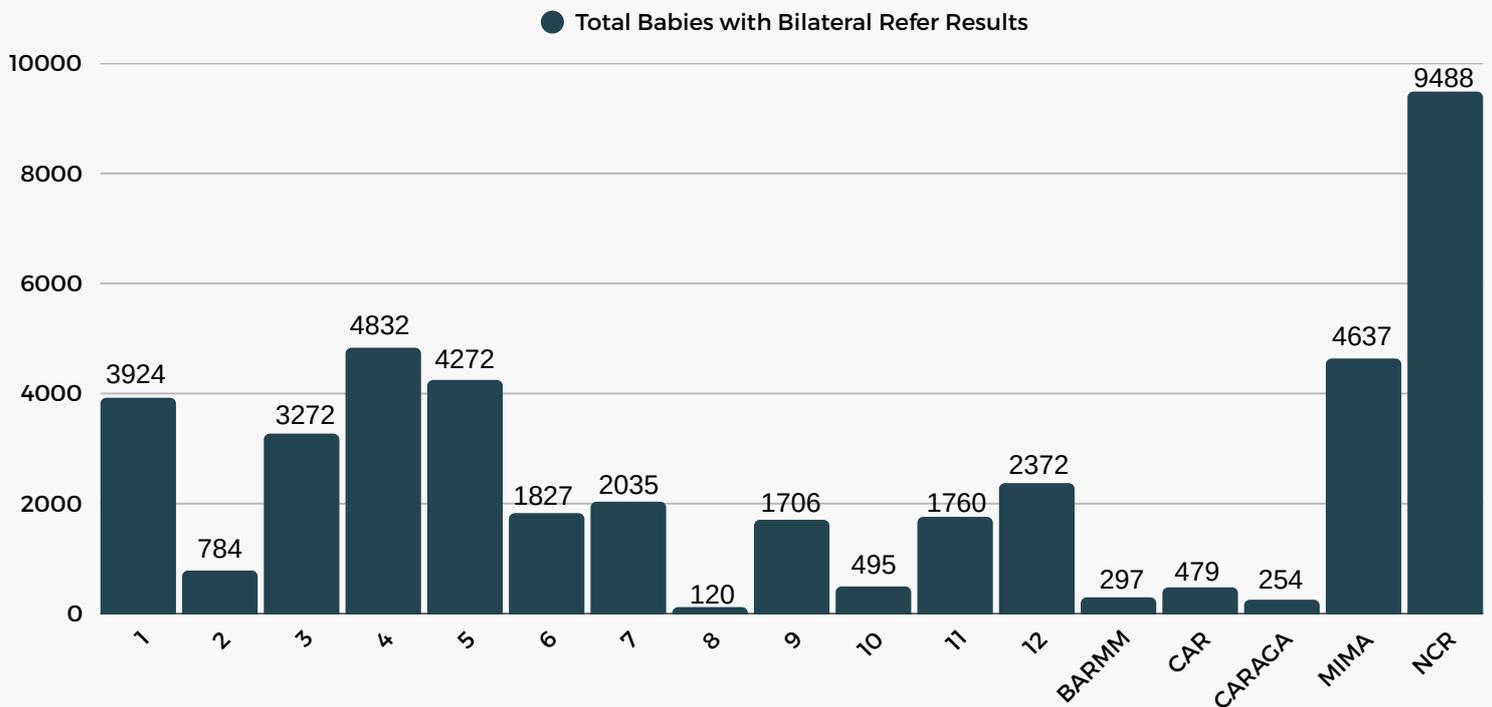


Table 14

## SUMMARY OF DATA FROM THE NEWBORN HEARING SCREENING REGISTRY

Certified facilities submitted their reports through the ENNHSR. Tables 13 and 14 show the distribution of results and breakdown per region, respectively. Data submitted showed that 42,530 (6.7%) babies had bilateral refer results, 32,626 (5.1%) had unilateral refer and 576,458 (90.5%) had bilateral pass results (Table 13).

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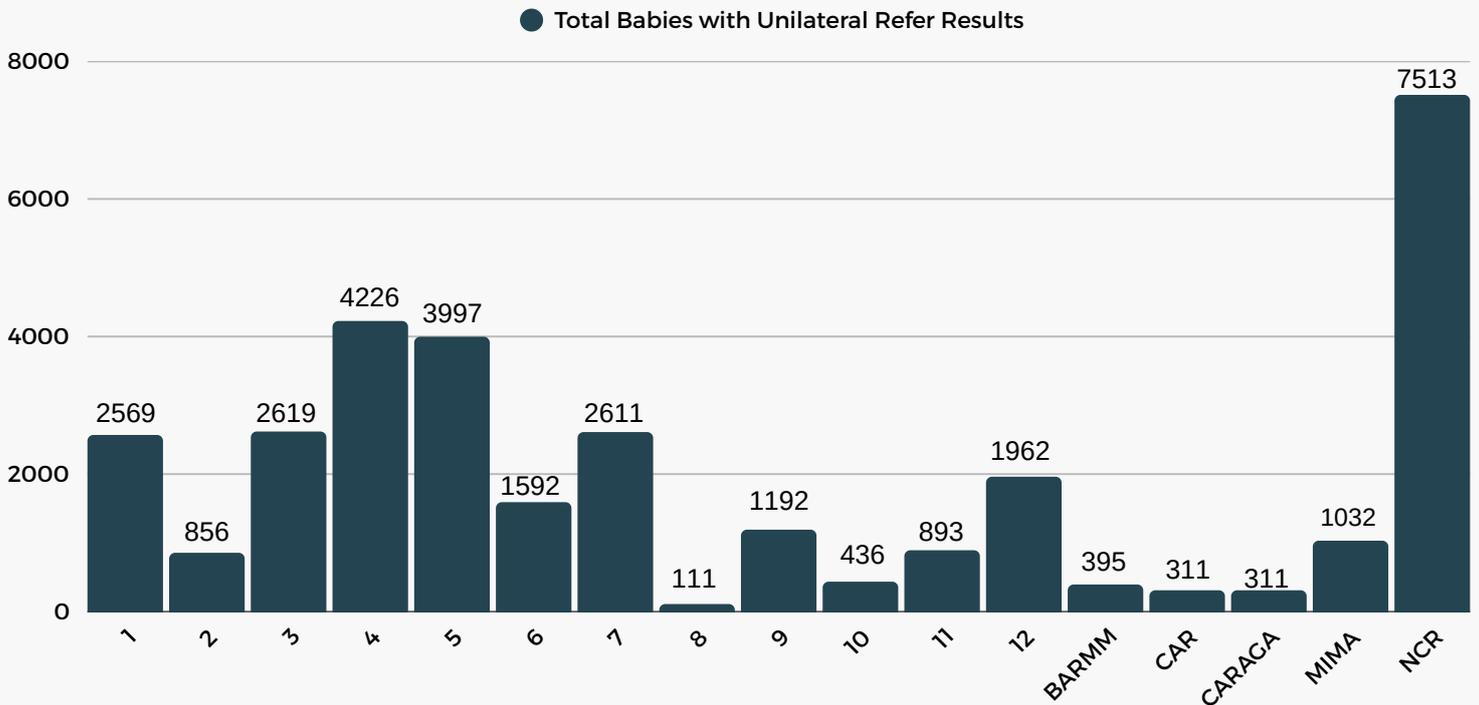


Table 15

## SUMMARY OF DATA FROM THE NEWBORN HEARING SCREENING REGISTRY

In 2024, a total of six (6) patients were identified with hearing loss and seven (7) upon confirmatory test

<b>2024 ABR</b>	
<b>ABR NORMAL HEARING THRESHOLD TOTAL</b>	<b>4</b>
<b>ABR BILATERAL HL TOTAL</b>	<b>2</b>
<b>ABR UNILATERAL TOTAL</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>6</b>

<b>2024 ASSR</b>	
<b>ASSR NORMAL HEARING THRESHOLD TOTAL</b>	<b>1</b>
<b>ASSR BILATERAL TOTAL</b>	<b>5</b>
<b>ASSR UNILATERAL TOTAL</b>	<b>1</b>
<b>GRAND TOTAL</b>	<b>7</b>

Table 16

## DEVICE CERTIFICATION

In 2024, there are three (3) additional hearing screening equipment was certified by the NHSRC. In total, there are 25 hearing screening devices certified by the NHSRC (Table 17). The additional hearing screening equipment were highlighted for reference.

22

*2024 Certified Devices*

25

*2024 Certified Devices*

### Certified Hearing Screening Equipment

- Biologic Audx Pro Hearing Screening System 580-AXPBOX-01
- GSI AUDIOscreeener+ OAE Part number 2205-9730 without printer
- GSI 70 AUTOMATED OAE SCREENER Part # 1770 -9702(Multi-Patient with printer)
- GSI 70 AUTOMATED OAE SCREENER Part # 1770 -9708 (Single patient with printer)
- GSI Corti 1804314, 1804315, 1804316
- Interacoustics OtoRead Screener TE
- Interacoustics OtoRead Screener DP
- [Interacoustics Titan](#)
- MAICO703043x.P.SW/703041x.P.SW Ero Scan TEOAE or DPOAE
- MAICO MB11 BERAPhone AABR
- MAICO easySCREEN BERAPHONE 8516041
- MAICO EROSCAN 8106839

- NATUS Echo-Screen
- NEUROSOFT aSCREEN with Mini Thermal Printer POS-5805DD
- NEUROSOFT Audio-Smart with Mini Thermal Printer POS-5805DD
- NATUS Echoscreen III Pro
- Otodynamics Echocheck OAE screener
- Otodynamics Otoport Lite OAE screener
- [MADSEN ALPHA OAE+ Screener](#)
- OTOMETRICS MADSEN ACCUSCREEN Newborn Hearing Screener TEOAE, DPOAE
- Sentiero Eco SOH100098 TEOAE, DPOAE
- Sentiero Advanced SOH100360 TEOAE, DPOAE, AABR
- Sentiero Basic SOH100098 TEOAE, DPOAE
- Sentiero Desktop SIP10043
- [Sentiero Advance OAE, ABR, AABR, and ASSR](#)

Table 17

## MISCELLANEOUS ACTIVITIES

2024 marked the beginning of several projects and initiatives that will enhance the implementation of Newborn Hearing Screening. The following are the project grants in 2024.

### HEARING LOSS INTERVENTION PROGRAM (HALIP)

**Primary Investigator: Maria Rina T. Reyes-Quintos, MD, MClinAud, PhD**

**Implementing Institute: Philippine National Ear Institute**

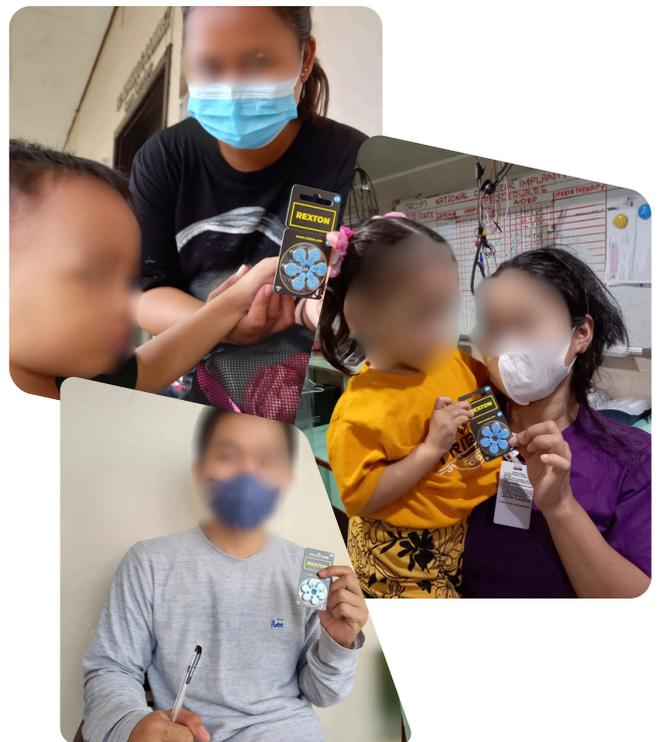
**Fund Amount: 3,000,000.00 PHP**

The Hearing Loss Intervention Program is intended to be a program that can showcase the benefits of receiving properly programmed binaural hearing devices with appropriate intervention, speech and language therapy, other needed rehabilitation services and monitoring through adequately funded public health programs.

Candidates are children aged 3 and younger with bilateral sensorineural who have undergone confirmatory testing under the Philippine General Hospital's Ear Unit, with the requisite that the child has no other diagnosed co-morbidity, has undergone newborn hearing screening and was referred from the outpatient department of ORL. One main boon of the program is that the patient's family does not need any insurance or financial requirement for application as the program will provide the hearing aids, and its post fitting aural and speech services for one year.

14 candidates were enlisted to participate in the program, and are currently continuing their aural and speech habilitation journey. Currently, 3 patients have been referred to the National Cochlear Implant Program. 10 others need further evaluation for cochlear implant referrals and one has been fully successful with the gains of the device.

The program has also encountered numerous challenges during its course. There were the initial administrative hurdles because it is one of the first programs to take on this kind of endeavor inside the UP Manila Central Administration and National Institutes of Health. There were also some minor issues during the implementation, like finding a common acceptable schedule for audiologic testing and therapy sessions, poor internet connection, referring to other specialty services and patient absences due to sickness.



The importance of keeping the patient and his/her care on center stage and close coordination with the multidisciplinary team were highlighted in this program. Indeed, its success was due to closely monitoring each patient and family as they completed the program with their issues and concerns addressed as soon as possible. In the end, this was a fulfilling activity for both the families and the HALIP team.

The results and findings from this program will hopefully contribute to policy making and improving public health programs catering to children with hearing loss

## HEARING FOR LIFE FACILITY FOR AUDIOLOGIC AND REHABILITATIVE MANUFACTURING (HELE FARM)

**Primary Investigator: Philip B. Fullante, MD**

**Implementing Institute: Philippine National Ear Institute**

**Fund Amount: 2,999,616.00 PHP**

HeLe FARM aims to establish a 3D printing manufacturing facility at the Philippine General Hospital to produce custom hearing aid molds, prosthetics, and anatomical models for audiology rehabilitation. Which will in turn lead to: (a) more affordable and patient specific hearing devices, (b) improving surgical and procedural training as well as integrating modeling via use of digital means to improve audiology and ENT education.

As of December 2024, the program has a Prosthesis Studio located at Lim Ka Thong Makerspace at UP SIBOL with complimentary DLP 3D printers scanners and software. In parallel with Simulation Laboratory, HeLe FARM in collaboration with the UP College of Fine Arts for conducting specialized training for prosthetics design, as well as art and sculpture workshops. Along with this, a manual of operation was developed for the digital fabrication which has already produced ten (10) prosthetic ears and five (5) anatomical models.

As with the earlier programs, HeLe FARM has also encountered numerous challenges primarily with procurement of the equipment, software, and materials, fabrication issues, and funding delays. All of which were resolved, but with the consequence of delays and extensions.

The program's second phase plans to develop a formal curriculum for digital prosthetic manufacturing for ENTs. Other areas considered for future expansions were the production of cochlear and brainstem implant components and a securing license to operate in large scale for the producing devices that will contribute to overall hearing health.



## NATIONAL COCHLEAR IMPLANT PROGRAM (NCIP)

**Primary Investigator: Charlotte M. Chiong, PhD**

**Implementing Institute: Philippine National Ear Institute**

**Fund Amount: 20,000,000.00 PHP**

The National Cochlear Implant Program (NCIP) is an initiative spearheaded by the Philippine National Ear Institute, which started in 2020 implemented by 3 tertiary care hospitals in the country, namely: Philippine General Hospital, Corazon Locsin, and Southern Philippine Medical Center. Currently, its second iteration is ongoing within the Philippine General Hospital.

It aims at providing early hearing intervention for Filipino children under five years old with bilateral profound hearing loss, which can lead to speech and cognitive disabilities. It does so by providing access to cochlear implantation and post-surgical habilitation services.

Along with HALIP it also aims to improve upon the implementation of the Universal Newborn Hearing Screening and Intervention Act of 2009, and seeks to improve the PhilHealth Z Benefits Package. The program follows a multidisciplinary approach, among them involves ENT specialists, audiologists, speech-language pathologists, developmental pediatricians, and other specialists.

As of December 2024, the program has successfully implemented six (6) patients, with four (4) undergoing mapping and speech therapy, with one (1) awaiting cochlear implantation and three (3) being reviewed by the Hearing Habilitation of Children Conference.



The program has encountered administrative and logistical challenges, such as funding delays, limited imaging capacity, and gaps in speech therapy services. To address the earlier concerns, the program team is conducting a cost-effectiveness analysis and a budget impact analysis to support a PhilHealth policy proposal for long-term cochlear implant coverage.

By continuously refining its processes and engaging stakeholders, the NCIP aspires to improve accessibility to hearing healthcare services and contribute to the betterment of hearing loss intervention.

# DESIGN, DEVELOPMENT, AND TESTING OF A MOBILE APPLICATION OF THE ENNHSR FOR IRON, AND RETINOL INTAKE AMONG PREGNANT WOMEN IN SELECTED NHSRC-ACCREDITED FACILITIES (KALINGA APP)

**Primary Investigator:** Arturo M. Ongkeko Jr., MSc, RN

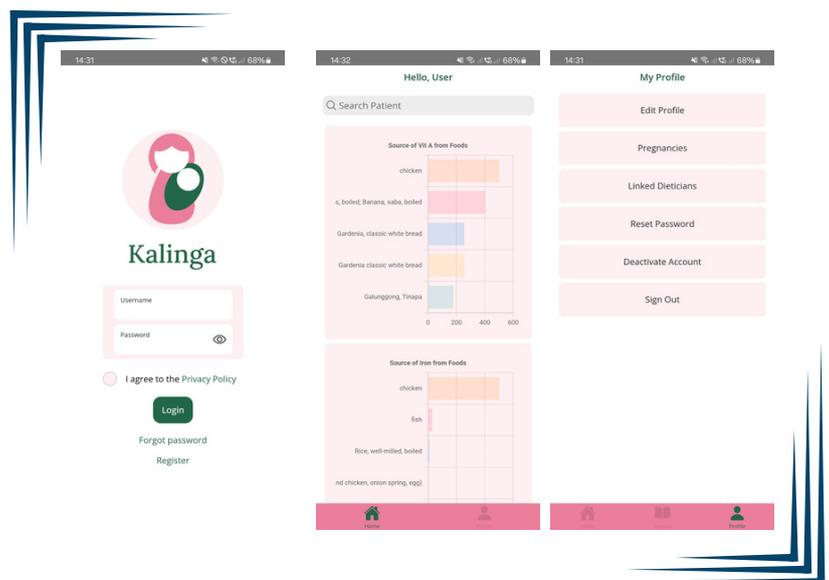
**Implementing Institute:** UP Manila National Telehealth Center

**Fund Amount:** 5,000,000.00 PHP

Kalinga App's aim is to be used as a mobile application which can be integrated with the Electronic National Newborn hearing Screening Registry (ENNHSR) to track and improve maternal nutrition during pregnancy. It allows mothers to log their iron and retinol intakes and get validation from registered nutritionists-dietitians (RNDs). The application seeks to contribute to the decision making of mothers for their own health management while making it accessible and layman friendly. Which in turn, supports the mandate of the Universal Newborn Hearing Screening by positively influencing newborn health.

Currently, the application has undergone Beta and User Acceptance Testing. Its module is now incorporated with the ENNHSR system usable for both iOS and Android devices, which includes features such as meal logging, nutrient tracking and real time RND validation.

However, it is not accessible for Android users as there have been approval delays from Google Play Store, where NHSRC plans to have its own developer account to circumvent the issue. Another concern was that only 55% of the beta testers had completed the test and had required extended training sessions to improve participation. Synchronization of data in real time has also been observed, as such, backend processing was done in order to streamline delays.



Amidst these challenges, the application has been successfully launched and named Kalinga Maternal Nutrition Mobile App which can be used by both end users (mothers and healthcare professionals). The application's system architecture was submitted for copyright protection.

Future plans for the app involve addition of telemedicine features such as automated dietary recommendations, newborn health outcomes tracking based on previous maternal records and seek funding opportunities to increase the scale of the project for nationwide coverage.

## NEWBORN HEARING SCREENING SIMULATION AND TRAINING LABORATORY (SIMLAB)

**Primary Investigator:** Rosario R. Ricalde, MD, FPSO-HNS

**Implementing Institute:** Philippine National Ear Institute

**Fund Amount:** 12,000,000.00 PHP

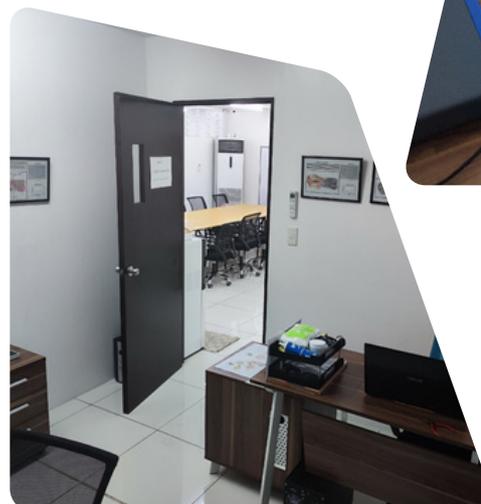
The Newborn Hearing Screening Simulation and Training Laboratory (SIMLAB) was envisioned to improve training of healthcare professionals and non-professionals in newborn hearing services. This laboratory does not only cater to NHSRC certifying course participants but also to UP Manila faculty and students who are inclined to learn more and practice newborn hearing related procedures. It will serve as a training facility in developing hands on training modules and will utilize teleaudiology, remote learning and other current technologies. It is currently located at the Henry Sy Sr. Medical Sciences Building under the UP College of Medicine.

The program team is composed of four (4) Otolaryngologists, two (2) audiologists, and one (1) speech-language pathologist. Course offerings under development include Universal Newborn Hearing Screening and an Audiometrician and Pediatric ABR Training Courses which are complemented with training videos and materials for hearing screening, hearing aid fitting and cochlear implant programming.

The program faced challenges in its development, particularly in the following:

- (a) infrastructure delays with the new National Institutes of Health Building,
- (b) lack of Pediatrician involvement,
- (c) administrative constraints particularly in procurement. All of these have been circumvented to ensure that objectives are met and delivered.

There are plans to launch pilot classes for its courses in 2025 and to develop another training program in coordination with the Department of Health called the Newborn Hearing Center Inspector's Training Course. Future plans involve further refinement of the laboratory to serve as a standard in equipment and set-up and for other NHSRC accredited facilities.



## COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:

Republic of the Philippines  
**INTELLECTUAL PROPERTY OFFICE OF THE PHILIPPINES**  
 Bureau of Copyright and Related Rights  
 Taguig City, Philippines

*Certificate of Copyright Registration*  
 Transfer Certificate No. 2024-05273-L-TCCR

Be it known that on November 12, 2024, the **UNIVERSITY OF THE PHILIPPINES MANILA**, City of Manila, NCR caused the recordation and transfer in its name, the copyright of the work with the following specifications:

Title	: COUNSELLING DEMONSTRATION IN THE NEWBORN HEARING SCREENING RESULT
Unpublished/Published (Publisher)	: Unpublished
Author(s)/Producer(s)/Broadcaster/Performer	: Carlos Diego A. Rozul
Citizen of/Domiciled in/Headquarters	: Philippines
Class	: Class L (Audiovisual works and cinematographic works and works produced by a process analogous to cinematography or any process for making audio-visual recordings)
Date of Creation	: July 1, 2023
Date of First Publication/Broadcast/Performance	: N/A
Country of First Publication/Broadcast/Performance	: N/A
Period of Protection	: Fifty (50) years from the date of publication and, if unpublished, fifty (50) years from the date of making.

By virtue of a notarized Deed of Assignment dated July 30, 2024 executed by **CARLOS DIEGO A. ROZUL** and duly recorded in this office on November 12, 2024. The transfer/assignment of copyright shall not affect the copyright term or period of protection of the copyrighted work as indicated in this Transfer Certificate of Copyright Registration.

The recordation of copyright transfer is submitted to the National Library of the Philippines (NLP), through the Intellectual Property Office of the Philippines (IPOPHL), for the purpose of completing the records of the NLP in accordance with Section 182 of Republic Act No. 8293, the Intellectual Property Code of the Philippines. This certificate is a transfer from Certificate of Copyright Registration No. 2024-05272-L (totally cancelled) by virtue hereof in so far as the above-described work is concerned.

Issued on November 15, 2024 in the City of Taguig, Philippines.

  
**ATTY. EMERSON G. CUYO**  
 Director IV  
 Bureau of Copyright and Related Rights



Certificate of copyright registration for the Counselling Demonstration in the Newborn Hearing Screening Result.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Counselling in Newborn Hearing Screening.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Interventions for Infants with Hearing Loss.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Introduction to Republic Act (RA) 9709 or the Universal Newborn Hearing Screening and Intervention Act of 2009.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Local Experience in Implementing the Universal Newborn Hearing Screening Program.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Newborn Hearing Screening and Hearing Tests in Infants.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Otoacoustic Emission (OAE) Test Demonstration.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Philhealth and Updates in the Universal Newborn Hearing Screening Program 2023.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Philhealth and Updates in the Universal Newborn Hearing Screening Program 2024.

# COPYRIGHTS

In 2024, NHSRC was awarded with the following copyrights that allows the seamless data collection for newborn hearing screening:



Certificate of copyright registration for the Automated Auditory Brainstem Response (AABR) Test Demonstration.

## OTHER ACTIVITIES

### PHILIPPINE SOCIETY OF OTOLARYNGOLOGY HEAD AND NECK SURGERY (PSO-HNS) CONVENTION

For the 1st time, the NHSRC was present in a major international conference which was the 68th Philippine Society of Otolaryngology Head and Neck Surgery, 25th Hearing International, 9th ASEAN Academy of Neurotology Otolary and Related Sciences (AANO) convention held at the EDSA Shangri-La Hotel Manila last December 6 to 8, 2024. There were over 1,700 delegates consisting of ENT surgeons, clinical audiologists and other hearing and speech related professions from all over the world. There were more than 50 international and 30 local speakers. The NHSRC had a booth which offered free onsite personnel certifying courses to attendees of the conference. There were 4 personnel who were certified and 799 who visited the booth. 21 scholarships were awarded to clinical audiologists.



## OTHER ACTIVITIES

### ASEAN ACADEMY OF NEUROTOLOGY, OTOLOGY AND AUDIOLOGY (AANO) DINNER EVENT

We showed our appreciation to the distinguished roster of international speakers who advocated for universal newborn hearing screening during the 1st AANO Meeting in Manila back in 2008 by being a major sponsor at the AANO Speaker's Dinner at Cantabria, Westin Manila. There were 47 speakers in attendance during the event.



## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### BANGSAMORO AUTONOMOUS REGION IN MUSLIM MINDANAO

**Event Name:** Orientation, Newborn Hearing Screening to Maguindanao Provincial Hospital Staff  
**Date:** June 24, 2024  
**Location:** Maguindanao Provincial Hospital  
**Participants:** 25 Nurses and Midwives  
**Description:** The activity is designed to provide an overview and basic information about newborn hearing screening test, step by step demonstration of the procedure and reporting system allows participants to do return demonstration of the procedure.

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### NATIONAL CAPITAL REGION

**Event Name:** NBHS Budget Meeting  
**Date:** July 15, 2024  
**Location:** Caloocan Medical Center  
**Participants:** 20 NBHS Staff and Hospital Administration  
**Description:** Meeting for the allocation of funds for the hearing screening facility.

**Event Name:** Weekly Out-patient Lectures to Expectant Mothers  
**Date:** Weekly  
**Location:** Caloocan Medical Center  
**Participants:** 60 expectant mothers per week  
**Description:** Weekly lecture to expectant mothers to increase compliance and awareness to the importance of newborn hearing screening

### REGION 2

**Event Name:** Orientation and Demonstration of Newborn Hearing Test Machines  
**Date:** October 2, 2024  
**Location:** Cauayan Medical Specialists Hospital  
**Participants:** 6-10 Nurses  
**Description:** To familiarize the staff on how to properly perform Newborn Hearing Test as well as proper handling/care of the machine.

**Event Name:** Health teaching with Expectant Mothers  
**Location:** Cauayan Medical Specialists Hospital  
**Participants:** 1-2 Mothers per day  
**Description:** Explaining the importance of newborn hearing test and early detection of hearing loss.

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 5

**Event Name:** 2024 NBHS Conference for Category A Hearing Screening Centers in Bicol Region  
**Date:** November 13-15, 2024  
**Location:** Caloocan Medical Center  
**Participants:** Not available  
**Description:** Presentation of Milestones of the NBHS Program in Bicol Region. Philhealth and Facility Certification Updates

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 6

**Event Name:** Category A Newborn Hearing Screening Personnel Certifying Course  
**Date:** August 23, 2024  
**Location:** Punta Villa Resort, Iloilo City  
**Participants:** 31 Personnel  
**Description:** To capacitate health service providers in the provision of Newborn Hearing Screening Program services.

**Event Name:** World Hearing Day Celebration with the Theme: "Changing Mindset: Let's make ear and hearing care a reality for all."  
**Date:** March 4, 2024  
**Location:** Robinson's Place, Pavia, Iloilo  
**Participants:** 100  
**Description:** The advocacy activity organized by the Non-Communicable Disease Section aims to showcase the commitment of DOH WV CHD in educating the public about the prevention of hearing loss and the value of early detection and intervention.



**Event Name:** Attendance to the Launching of the Hearing Test Room of Corazon Locsin Montelibano Memorial Regional Hospital Newborn Hearing Screening Center  
**Date:** July 24, 2024  
**Location:** Corazon Locsin Montelibano Memorial Regional Hospital, Bacolod City, Negros Occidental  
**Participants:** ORL-HNS Department, CLMMRH  
**Description:** The upgrade is a significant milestone towards achieving the goal of providing health care services in Negros Island.

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 6

**Event Name:** Lactation Management Training and Integrated Approach on Essential Maternal and Neonatal Care

**Date:** April 3-5, 2024

**Location:** Kabankalan City, Negros Occidental

**Participants:** ORL-HNS Department, CLMMRH

**Description:** This integrated training focuses on combining lactation management skills with essential care practices for mothers and newborns, aiming to improve health outcomes through a unified approach.

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 7

**Event Name:** Category A Newborn Hearing Screening Certifying Course for Primary Ear Care Workers in Central Visayas  
**Date:** May 28, 2024  
**Location:** Cebu City  
**Participants:** 39 Physicians, Midwives, Nurses and IT Personnel  
**Description:** This training equipped health service providers with newborn hearing screening skills.

**Event Name:** Mother's Class  
**Date:** March 4, 2024  
**Location:** Diagcare Birthing Suite  
**Participants:** 10 Pregnant mothers  
**Description:** These essential prenatal care steps involve educating and counseling expectant parents, closely monitoring the baby's development and well-being, and conducting necessary laboratory tests for a healthy pregnancy.

**Event Name:** Facility Visit and Program Monitoring on Newborn Hearing Screening  
**Date:** April 2-5, Sept. 24-27, November 5-7, 12-14, 2024  
**Location:** Camotes Island  
**Participants:** Not Available  
**Description:** Facilities were evaluated using a monitoring tool focused on Newborn Hearing Screening Program implementation, including advocacy, activities, integration with Newborn Screening, and future plans.

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 9

**Event Name:** National Rare Disease Week

**Date:** February 2024

**Location:** Mindanao Central Sanitarium

**Participants:** 50

**Description:** To raise awareness on newborn hearing screening during National Rare Disease Week.

**Event Name:** Safe Motherhood Week

**Date:** May 2024

**Location:** Mindanao Central Sanitarium

**Participants:** 50

**Description:** To raise awareness on newborn hearing screening during Safe Motherhood Week.

**Event Name:** Mother Baby Friendly Hospital Week

**Date:** August 2024

**Location:** Mindanao Central Sanitarium

**Participants:** 50

**Description:** To raise awareness on newborn hearing screening during Mother Baby Friendly Hospital Week.

**Event Name:** Newborn Hearing Screening Personnel Orientation and Updates

**Date:** December 2-16, 2024

**Location:** Online

**Participants:** 1

**Description:** To acquire and continually update knowledge, skills, and attitude in newborn hearing screening.

## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 11

**Event Name:** International Ear Care Day/ World Hearing Day  
**Date:** March 5, 2024  
**Location:** Not Available  
**Participants:** Barangay Health Workers in various Districts of Davao City  
**Description:** The Universal Newborn Hearing Screening Act of 2009 requires hearing tests for all newborns, focusing on early prevention, diagnosis, and intervention for hearing loss through comprehensive care.



## OTHER ACTIVITIES (REGIONAL INITIATIVES)

Below are initiatives and programs launched by the regions.

### REGION 12

**Event Name:** Lecture on Breastfeeding, Newborn Screening and Newborn Hearing; HIV and Venereal Disease Testing

**Date:** May 9, 15, 2024

**Location:** Brgy. New Pangasinan and Magsaysay, Koronadal City

**Participants:** 33

**Description:** Celebrating its 20th anniversary, Allah Valley Medical Specialists' Center Inc. holds community health lectures, conducts follow-ups, and offers HIV testing, demonstrating commitment to resident well-being and empowering parents.

**NOTE:** NHSRC received no submissions from regions absent from the list.

# Questions? Contact us.

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**NHSRC**   
Newborn Hearing Screening Reference Center

