



Deaf Child Worldwide, part of National Deaf Children's Society

We're the leading charity dedicated to creating a world without barriers for every deaf child.

TITLE: Cost-benefit analysis of a universal newborn hearing screening and early intervention programme in Indonesia.

DEFINITIONS

By **deaf**, we mean any level of hearing loss. This includes unilateral hearing loss.

By **universal newborn hearing screening**, in the context of our work in Indonesia, we mean screening at a coverage of 80% or more.

By **early intervention**, we mean social and medical support offered to deaf children under the age of 5 and their families, following identification of deafness.

By a **cost-benefit analysis**, we mean comparing costs and benefits in monetary terms from a society-wide perspective.

BACKGROUND

We know that early identification and intervention is key to ensuring good outcomes for deaf children, which has heavily influenced our Every Moment Counts strategy 2023-2028.

Through our international work, we believe we can bring about systemic change through global and national influencing, with a focus on universal newborn hearing screening and early intervention. At present, relatively few low- to middle-income countries (LMICs) have introduced newborn hearing screening on a significant scale, meaning that population coverage is zero or very low (Neumann et al., 2020).

Deaf Child Worldwide is considering a 30-month programme in Indonesia's East Java province to develop an evidence-based universal hearing screening programme for the early identification of hearing loss in children 0-5 years old.

In Indonesia, including East Java, hearing screening is currently embedded within routine maternal and child health services (SDIDTK) at primary care level, relying largely on developmental screening and subjective assessment rather than universal, objective newborn hearing screening. Where relevant and where such information is required, East Java will serve as a pilot context, given its large and diverse population, mixed urban-rural puskesmas and referral hospital settings, and relatively mature health system infrastructure, with programme and administrative data availability is expected to be stronger than in many other provinces, models to national level.

A sub-objective of our programme design would be a cost-benefit analysis of an early identification system in Indonesia at both the East Java and national levels. National-



level estimates are expected to be indicative and illustrative, reflecting assumptions required for scale-up beyond the East Java context.

Robust economic data would support evidence-based decisions about funding and implementing an early hearing screening and intervention programme in Indonesia, as well as in other LMICs considering introducing universal early hearing screening and intervention programmes.

THE TASKS AND OBJECTIVES

We seek to commission a cost-benefit analysis of a universal early hearing identification system in Indonesia. The aim of this project is to generate evidence demonstrating the savings to the public purse and benefits to the measured economy if Indonesia invests in early hearing screening and intervention. In addition to stakeholders in Indonesia, we also plan to share these insights to other countries and key international stakeholders.

As a charity that prizes financial diligence, Deaf Child Worldwide is leveraging a full and open procurement to ensure we are using charitable resources effectively. We are open to proposals from anyone, including professionals and consultancy services or from partnerships. We also welcome collaborative approaches.

Specific factors that we'd ideally like the project to consider (but are not limited to):

- Cost-benefit analysis to inform the Government of Indonesia's consideration of covering early screening and intervention under its national health insurance – specifically, savings and economic benefits that would be realised by universal newborn hearing screening and early intervention.
 - Applicants should clearly state and justify the analytical time horizon adopted, recognising that the costs and benefits of early-life interventions accrue over different time periods. Also, where costs and benefits occur over time, proposals should indicate how future values are treated in the analysis.
- Costing of the early identification and intervention model (calculating direct and indirect costs for implementation), to help the government of Indonesia to determine the feasibility of scaling the East Java model nationally. For example:
 - Calculation of costs for service provision to remote locations, to include telehealth costs.
 - Calculation of costs of screening by training health workers at primary level.
 - Trade-offs between 1) increased costs associated with higher referral rates (i.e., costs associated with diagnostics) and doing only a one-stage OAE screening process, and 2) the additional cost of AABR equipment and implementing a two-stage screening protocol.

- o Cost implications of screening within the birth setting (for example, hospitals or local healthcare settings before discharge), or at an outpatient clinic.
 - o Applicants should make clear which major categories of societal costs and benefits are included, in line with the study objectives and data availability, with assumptions explained transparently. The results may be presented using standard cost–benefit metrics such as net benefits, benefit–cost ratios, or return on investment, as appropriate for policy audiences.
- Other possible research objectives.

A critical aspect of this project will be working closely alongside our Indonesian partners. As such, a successful proposal will demonstrate how you will work alongside our partners to incorporate their perspectives and build on insight already collected.

OUTPUTS

The outputs will largely depend on the proposal and will be confirmed at a later point with the successful applicant. However, we would expect to see the following outputs in any proposal:

- A rapid cost-benefit analysis projection – to be ready within 3-6 months of the project’s April 2026 start date – of an early screening and intervention in Indonesia at the East Java and national levels, to be refined after programme completion (October 2028).
- A written final report to be shared with Indonesian stakeholders (Deaf Child Worldwide will arrange for the report to be translated into Bahasa). This will include: background, aims and objectives, methods, key findings with infographics, gaps and limitations, and recommendations for service improvement and future research.
- A plain English summary of the research to be published on our website.
- Interim reports and presentations, including monthly written updates and short, informal presentations at different stages of the project to keep internal colleagues updated.
- The research team should prepare a manuscript for submission to a health economics or other relevant peer-reviewed journal to increase rigour and impact. The published article should be open-access.
- Presentations at relevant national or international conferences.

Additionally, we are interested in how the cost-benefit methodology used for Indonesia could be replicated in and adapted to other LMICs. This model can be costed separately in your proposal.



This is outside of the scope of this specific project in Indonesia. We would, however, welcome any initial thoughts on the feasibility of wider replication in any proposal and, if appropriate, the cost implications of any follow-up project.

TENDERING PROCESS

We expect your tender response to be no more than 10 pages and include:

1. Background and project team

This section should tell us who you are and include information on:

- Team composition, including who will be working on this project and their relevant experience, skills, and expertise, making clear who the lead researcher would be and how local partners will be incorporated into the project team.
- Capacity, time commitment, partnerships/collaboration, and quality assurance (peer review outputs).
- Prior experience in public health, health economics, international development, and/or data science; experience working closely with partners in LMICs is preferred.

2. Methodological and technical approach

The Technical Application must include a written application in English describing in detail the applicant's methodological and technical approach, as well as how you will identify and engage stakeholders.

3. Timetable

An indicative timetable showing the time needed for each part of the project, which should be started by the end of May 2026, to coincide with the projected inception phase of our Indonesia programme. We anticipate that the full project will run from April 2026 until October 2028.

4. Outputs

This should confirm your intended outputs from this project.

You should also set out your expectations around intellectual property rights (IPR) in relation to these outputs. It is our normal practice that IPR sit with the National Deaf Children's Society, as the funder of the project, with outputs being published on our website on an open-access basis and with the research team being free to use the results for academic and training purposes. However, we are open to alternative approaches, providing that the key outputs are freely available to all, without charge.

5. Impact

This section should describe the potential impact of this project, extending beyond outputs.



7. Price

This should set out an indicative cost of the research. We are looking for price proposals that can show us that researchers have thought carefully about what would be needed to fulfil the required task(s) and objectives and how good value for money can be achieved. We are open to negotiations on the budget, depending on the quote provided.

The final budget will be confirmed prior to any contract being signed.

The budget should be presented in your local currency and confirm if any wider taxes (such as VAT if from the UK) would apply and if the price is inclusive of these taxes or not.

8. Additional documentation

Any other supporting information that will strengthen the application is welcomed. For example, it may be helpful to set out examples of previous and relevant work in an annex.

MANAGEMENT ARRANGEMENTS

The main contact at the National Deaf Children's Society will be Isla Harrison, International Evidence and Evaluation Lead.

Once we have agreed a partner, a contract will be prepared, which will set out the expected management arrangements.

We will ask for monthly written updates throughout the project; regular meetings with Isla Harrison; and short, informal presentations at different stages of the project to keep colleagues updated.

THE SELECTION PROCESS

Tenders should be sent to Isla Harrison by email at isla.harrison@deafchildworldwide.org by 23:59 GMT on 7th April 2026.

Questions about this tender can also be sent via email to isla.harrison@deafchildworldwide.org or elizabeth.sidell@deafchildworldwide.org.

An internal panel at the National Deaf Children's Society will review the tenders based on the below selection criteria. The highest-scoring applicant(s) will be asked to participate in a short interview and submit references.

1. Criteria for Selection

1.1. Technical Approach: 45 points

- Demonstrated understanding of the tender and Deaf Child Worldwide's requirements

- Soundness and feasibility of technical approach
- Reasonable implementation timeline

1.2. Competitive budget: 20 points

- Cost realism in response to tender requirements
- Clear presentation of necessary and reasonable costs
- Demonstrates good value for money and stewardship of charitable resources

1.3. Past performance and experience: 20 points

- Extent to which proposed personnel have relevant qualifications and experience
- Demonstrated capacity to execute the project

1.4. Commitment to local partners: 15 points

- Extent to which local partners will be meaningfully involved
- Clear explanation of how local partner expertise and perspectives will be incorporated
- Clear explanation of how the applicant will identify and leverage opportunities to transfer knowledge to local partners

REFERENCES:

Neumann, K., Euler, H.A., Chadha, S. and White, K.R. (2020) A survey on the global status of newborn hearing screening. *The Journal of Early Hearing Detection and Intervention* 5(2).[Online] Available at:
https://www.researchgate.net/publication/345311505_A_Survey_on_the_Global_Status_of_Newborn_and_Infant_Hearing_Screening (Accessed 13th November 2025)