Cochlear Implant Project - Third Party Assessment for the year 2023-2024

Conducted by Chhaaya Strategic Advisors LLP

June 2025

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Executive Summary

This independent impact assessment, conducted by Chhaaya Strategic Advisors LLP in June 2025, evaluates the Cochlear Implant Project supported by Persistent Foundation and implemented by Ashray Akruti in Hyderabad during the financial year 2023–24. The initiative focuses on children with profound hearing loss, enabling them to undergo cochlear implant surgeries and receive structured post-operative speech therapy for successful integration into mainstream society.

Background & Rationale

In India, a significant number of children are born each year with severe to profound hearing impairment, often undetected due to the absence of universal newborn screening. Without timely intervention, these children face lifelong communication barriers. Cochlear implants, though transformative, are prohibitively expensive for most families, especially those from marginalized communities.

Responding to this critical need, Persistent Foundation partnered with Ashray Akruti—a specialized nonprofit with deep expertise in disability care—to provide a holistic solution covering diagnosis, surgery, rehabilitation, and parent counselling. The program aims to restore not only hearing but also confidence, communication skills, and inclusion for the most disadvantaged children.

Assessment Scope & Methodology

The assessment covered a comprehensive review of 16 cases through personal interviews with beneficiaries, their families, and Ashray Akruti's project team. A six-parameter evaluation framework—Relevance, Adequacy, Effectiveness, Efficiency, Sustainability, and alignment with Persistent's mandate—was used. Data collection involved field visits, structured interviews, and secondary document review.

Despite language barriers requiring interpretation support, the evaluation ensured comprehensive stakeholder engagement. All beneficiaries were personally interviewed, and the service delivery chain was examined in detail.

Key Findings

1. Targeting the Most Vulnerable: All 16 children belonged to socioeconomically disadvantaged families (SC/ST/OBC), with limited access to healthcare. Persistent's support enabled access to a high-cost procedure otherwise out of reach.

2. Structured and Scalable Program: The program combines early diagnosis, ENT consultation, surgery, auditory-verbal therapy, and parent engagement. Ashray Akruti's outreach model includes camps, hospital referrals, and online therapy to enhance reach.
3. Visible Impact: Most children showed remarkable gains in speech, responsiveness, and social behavior. Around 80% are on track to integrate into mainstream education.
4. Strong Implementation Partner: Ashray Akruti's multidisciplinary team, long-standing experience, and adaptive approaches make it a sector leader in cochlear rehabilitation.
5. Effective Partnership: The Persistent–Ashray Akruti collaboration is grounded in shared values, growing mutual trust, and meaningful engagement—far beyond funding alone.

Recommendations

1. Expand Early Diagnosis: Increase public awareness and screening through PHCs, pediatricians, and digital outreach.
2. Enhance Therapy Access: Develop online and video-based therapy modules for families in remote areas.
3. Strengthen Parental Engagement: Build capacity through training and ongoing support to ensure consistent therapy.
4. Track Long-Term Outcomes: Establish systematic monitoring to measure rehabilitation success and processor upgrade needs.

Conclusion

The Cochlear Implant Project represents a meaningful, high-impact collaboration between Persistent Foundation and Ashray Akruti. By restoring hearing and speech capabilities in young children, it opens pathways to education, confidence, and social inclusion. Addressing logistical and awareness gaps through strategic scaling and deeper parental involvement will further elevate its impact and sustainability.

Section I: Introduction

About Cochlear Implants:

Cochlear implants are pieces of medical technology that can restore a sense of hearing to people with severe to profound hearing loss. Unlike hearing aids, which simply amplify sound, cochlear implants bypass damaged parts of the inner ear and directly stimulate the auditory nerve using electrical signals.

How they work:

External component: Worn behind the ear, it includes a microphone to pick up sound, a speech processor to convert it into digital signals, and a transmitter that sends those signals to the internal implant.

Internal component: Surgically placed under the skin, it receives the signals and sends them to electrodes implanted in the cochlea. These electrodes stimulate the auditory nerve, which then sends the information to the brain to be interpreted as sound.

The sound isn't exactly like natural hearing—it takes time and training to interpret—but many users report significant improvements in understanding speech, enjoying music, and engaging in conversations.

They're especially transformative for young children, helping them develop speech and language skills during critical developmental windows. But they're not for everyone—suitability depends on factors like the degree of hearing loss, overall health, and commitment to post-surgical therapy.

The Issue:

In India, it's estimated that 1 to 5 out of every 1,000 children are born with **severe** to profound hearing loss. That might sound like a small number, but given India's large birth rate, it translates to thousands of newborns each year entering the world without the ability to hear.

Among high-risk newborns—such as those with low birth weight, jaundice, or a family history of hearing loss—the rate can spike to as high as 49 per 1,000 births.

Many of these children go undiagnosed for months or even years due to the lack of universal newborn hearing screening. Early detection is crucial because the first three years of life are a golden window for speech and language development.

In India, early hearing screening is being gradually integrated into public health systems, though challenges remain. The National Programme for the

Prevention and Control of Deafness (NPPCD) is spearheading efforts by training healthcare workers, organizing screening camps at primary health centers and schools, and running awareness campaigns to encourage early check-ups and reduce stigma. Some hospitals and NGOs also conduct newborn hearing screenings using tools like Otoacoustic Emissions (OAE) and Auditory Brainstem Response (ABR) tests, which are quick, painless, and capable of detecting hearing issues shortly after birth. However, universal newborn hearing screening is not yet standard practice nationwide—especially in rural or low-resource areas, where babies are often discharged without any testing, and hearing loss may not be identified until speech delays become apparent. In addition, India currently lacks a dedicated national program for school-age hearing screening, though the importance of these checks is being increasingly recognized. Despite these gaps, there's growing momentum to establish nationwide screening protocols, enhance pediatric hearing care, and train more professionals. Early identification and intervention remain vital to ensuring that children with hearing loss have the opportunity to develop language and communication skills during their most formative years.

The Project:

Despite improvements in healthcare, hearing loss remains underdiagnosed and undertreated—especially in rural and underserved regions.

Persistent with a background of helping children born with facial cleft lip and palate, decided to address the issue and entered into a formal agreement with Ashray Akruti to support cochlear implant surgeries for children born deaf or with severe hearing loss. The initiative was designed to benefit children meeting the criteria.

Identification Criteria:

- Under the age of 6
- Approved for cochlear implantation following ENT consultation
- No radiological abnormalities other than hearing loss
- Diagnosed solely with hearing impairment, with no additional disabilities

Under this partnership, Persistent committed to providing financial support for a comprehensive range of services.

Treatment supported under the project:

- Cochlear implant surgeries
- Auditory Verbal Therapy (AVT) to help children develop listening, speech, and language skills
- Counseling for parents, when necessary

- Post-operative medical care and follow-up

The project is based in Hyderabad, utilizing Ashray Akruti's specialized facilities. While patients may come from Hyderabad and surrounding regions, all treatment and rehabilitation services are delivered at Ashray Akruti's central campus in the city.

About Ashray Akruti - Implementing Organization:

Ashray Akruti is a pioneering nonprofit based in Hyderabad, founded by Mr. Babu in response to personal experiences with hearing loss in his family. Originally focused on education for children with hearing impairments, the organization has grown into a leading center for cochlear implant surgeries—performing over 7,200 annually—and provides post-operative rehabilitation and support for children with various developmental disabilities including autism and cerebral palsy.

Its services are deeply holistic, delivered by a multidisciplinary team of experts such as psychologists, therapists, audiologists, and educators. In addition to clinical care, Ashray Akruti tackles broader social issues like gender inequality and consanguineous marriage, particularly in underserved communities. The organization is future-focused, incorporating technologies like AI and stem cell research, and supports livelihood training in sectors like multimedia, retail, and hospitality—helping 100–120 individuals with disabilities secure jobs each year.

Committed to systemic impact, it also trains professionals in the disability sector and is developing specialized courses and vocational schools. The team's strength lies in long-term staff retention and mission alignment. Through strong CSR partnerships, such as with Persistent Systems, and a clear brand vision rooted in sustainability, the organization expands only when it can ensure meaningful inclusion. While infrastructure costs pose a challenge, Ashray Akruti continues to advocate for comprehensive funding to sustain its mission: creating lasting, empowering change in the lives of people with disabilities.

Partnership with Persistent Foundation:

Initially, there was no formal connection between the organization and Persistent Systems in Pune. However, through proactive outreach, a meaningful collaboration gradually took shape. While the partnership took time to solidify, it has since flourished, growing stronger with each passing year. The chairperson of Persistent has personally visited, and representatives from the Persistent Foundation have engaged directly attending events in Hyderabad and deepening their understanding of the organization's work.

These engagements have created valuable opportunities to highlight key initiatives, particularly around employee involvement.

A pivotal figure in nurturing this relationship has been Anuda, who ensures sustained and thoughtful communication with the Persistent Foundation team. Now in its third year, the partnership has seen a steady increase in funding, further reinforcing trust and shared commitment.

The organization remains ambitious, with a pipeline of 10–20 impactful projects poised to transform the lives of people with disabilities. Persistent Foundation has already shown exceptional dedication, with its annual forums showcasing a range of nonprofits and their work. Notably, Persistent stands out for its authentic, approachable ethos—grounded not in obligation, but in a deep-seated desire to drive meaningful change.

Looking ahead, deeper collaboration could yield even greater impact. By aligning more closely with Persistent's team and participating in their initiatives, the organization could multiply its reach and outcomes. Unlike companies that approach CSR as a checkbox, Persistent is distinguished by its heartfelt engagement and long-term perspective.

The organization continues to voice its needs, trusting that Persistent—and like-minded partners—will explore ways to enhance their support. Persistent advocacy remains essential; through continued dialogue, the case for backing critical programs becomes stronger, and over time, that momentum tends to inspire action.

Section II: Impact Assessment Framework and Process

1. Preamble:

Persistent Foundation has been actively supporting paediatric surgeries for many years, ensuring that children in need receive life-changing medical interventions. Within their comprehensive health portfolio, child health has remained a significant focus, particularly in cases requiring expensive surgical treatments.

In addition to facilitating facial cleft and various other paediatric surgeries, the Foundation expanded its initiatives in 2023-24 to include cochlear implant surgeries for children born with hearing impairment—whether profoundly deaf or experiencing severe hearing loss. This marks a crucial step towards providing these children with the opportunity to develop speech and communication skills.

Cochlear implantation is an exceptionally costly procedure, primarily due to the high price of the implant itself. However, the financial challenge does not end with surgery. Successful rehabilitation requires consistent and long-term speech therapy to help the child adapt to the implant and develop effective communication skills. Without sustained post-surgical intervention, the full benefits of the treatment may not be realized.

Recognizing these challenges, Persistent Foundation remains committed to making a difference by ensuring continuous support, not only through surgery but also by enabling the essential post-operative care required for these children to integrate seamlessly into the world of sound. Their dedication to such initiatives reflects a broader vision of creating lasting impact in paediatric healthcare.

As the project's budget has surpassed the Rs 1 crore mark, a third-party impact assessment is now mandatory. To ensure a comprehensive and objective evaluation, Persistent has entrusted this responsibility to Chhaaya Strategic Advisors LLP.

2. Scope and Methodology:

The project location is exclusively Hyderabad, though the patients may be from adjoining areas. Secondary data was provided by Persistent and primary data was collected by the evaluator during personal visit to Hyderabad.

Ashray Akruti is a single partner for the implementation of Cochlear implant project and since this was the first assessment of the project, it was decided to visit Hyderabad and conduct personal interviews with Ashray Akruti Team, the Founder and the beneficiaries.

No sampling was done. Since the number was small (only 16) all beneficiaries were called for the interviews.

The assessment was completed by taking the following steps:

- **Review of Secondary Data:** Existing records and data were used to evaluate trends and to measure progress.
- **Primary Data Collection and Analysis:** Stakeholders were directly engaged to gather insights and summarize findings.
- **Evaluation Outputs:** A detailed report outlining key findings, impact assessment, and data-driven conclusions.
- **Recommendations:** Actionable suggestions are given to improve service delivery and guide future growth strategies.
- **Strategic Insights:** Strategic insights to enhance the long-term sustainability and effectiveness of the initiative.

3. Stakeholder mapping:

Stakeholder mapping is an important exercise in impact assessment process. To get the overall view significant stakeholders' perspectives need to be taken into account. Following stakeholders were identified as significant an interviewed in person during the visit. The questionnaires used for the interviews are attached as Annexure-3 to this report.

- Mr Babu, the Founder of Ashray Akruti,
- Mr B.Jayanth, the Project Coordinator
- Ms E. Vishala Sr Speech and Language Therapist
- Several Family members of the beneficiaries

4. Limitations:

One of the key challenges encountered during the evaluation process was the language barrier between the beneficiaries and the evaluator. Since all beneficiaries communicated exclusively in Telugu, and in some instances Tamil, the evaluator, who was not fluent in either language, had to depend on the Project Coordinator and the Speech and Language Pathologist for interpretation and translation of both questions and responses.

While every effort was made to ensure accurate communication, the reliance on intermediaries may have introduced some gaps or missing details in the responses. Nuances in language, tone, and cultural context might not have been fully conveyed, potentially affecting the precision of the findings. Additionally, spontaneous or unstructured feedback that could provide deeper insights may not have been captured as effectively in the translation process.

5. Assessment Method and Scoring

Chhaaya has developed 6-point framework – Relevance, Adequacy, Effectiveness, Efficiency and Sustainability, and Persistent Mandate.

Parameters	Evaluation Questions
1. Relevance	How well do the project's objectives align with the priorities and concerns of stakeholders, including the community it serves?
2. Adequacy	Is the project's reach adequate to effectively address the community's needs? Does the number of beneficiaries represent a meaningful proportion of the potential recipients, both in absolute terms and relative to Persistent Foundation's overall coverage?
3. Effectiveness	To what extent has the project fulfilled its stated objectives? Has it tackled the root causes of the identified issues and successfully improved the baseline conditions? What measurable short-term and long-term impacts has it had on the community? Do beneficiaries feel empowered by the outcomes?
4. Efficiency	Has the project met its targets within the allocated timeline and budget? Were resources utilized efficiently to maximize impact? Is there potential for further cost-effectiveness?
5. Sustainability	How actively is the community engaged in the project? Is there a strong sense of ownership and participation? What are the prospects for the project's continuity and sustainability beyond Persistent Foundation's direct involvement? Which stakeholders are likely to carry forward its legacy?
6. Persistent Mandate	Does the project enhance Persistent's brand visibility? Is there an opportunity for employee engagement through volunteering or donations? Has the project received external or internal recognition? Are there partnerships that extend its benefits? How pressing and overlooked is the issue being addressed through this initiative?

The evaluation questions were presented to various stakeholders, and their responses were collected. Based on the feedback received, a scoring system was applied. If the project met a specific criterion, it was awarded a score of 1; if it did not, a score of 0 was assigned. In cases where the criterion was only partially fulfilled, a score of 0.5 was considered.

The following tables list 30 different aspects organized in 6 different parameters; hence total score is against 30. Each condition is exclusive; they are not sequential.

Parameters	If Y score 1, if N score 0, and for partially fulfilled condition score 0.5				
Relevance of the issue being addressed	Relevant for the target community	In accordance with CSR Law	Alignment with implementing partners' priorities	Importance within the broader development sector	Contributing to mitigate business footprint
Adequacy	Whether adequate outreach to demonstrate impact	Compre-hensive coverage of affected population	Inclusion of key stakeholders	Addressing various dimensions of the issue	Integration of diverse supporting interventions
Efficiency (resource use / design)	Sufficient outreach to showcase the project's impact	Whether external resources mobilized	Whether costs were percolated to beneficiaries	% of overheads kept low	Whether similar outreach in similar budget projects
Effectiveness in changing situation	Satisfaction level of beneficiaries	Achievement of defined objectives	Impact assessment in comparison to similar initiatives	Whether problem symptoms removed	Whether root cause addressed
Sustainability of project processes and outcomes	Whether reflected in robustness of the design	Whether prospects of continuity beyond the project period	Whether impacts sustainable beyond project period	Resolution of problem symptoms	Addressing the root cause of the issue
Persistent Mandate	Visibility through Display boards, credit sharing, acknowledgement by beneficiaries, references in formal documents	Opportunities for donations and volunteer participation	Internal appreciation, awards, media coverage, documented case studies	Defined roles within institutional partnerships, adoption of best practices	Tackling highly neglected and essential concerns

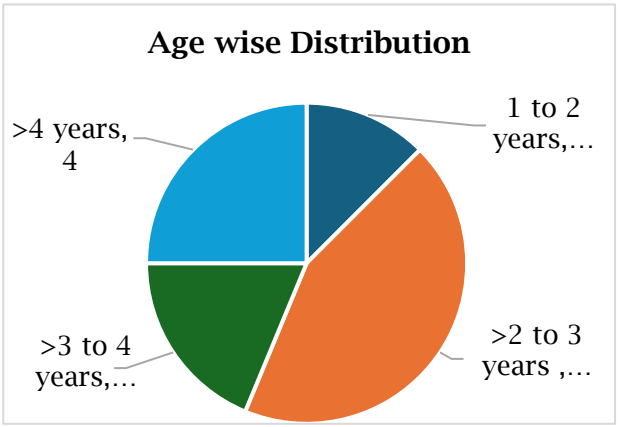
As the methodology incorporated both qualitative and quantitative assessments, the Chhaaya team exercised careful judgment in assigning scores. Their expertise and experience were instrumental in guiding the evaluation process effectively.

Section III: Impact Assessment Findings

Here are some findings based on the secondary data analysis, which reflect on the Project Performance and beneficiaries:

1. Project is reaches out to the most deserving:

More need and scope to identify the patients earlier:



The ideal age for cochlear implantation in children with severe hearing loss is as early as possible, typically around 9 to 12 months. Research suggests that early intervention leads to better speech and language development, as the first three years of life are crucial for auditory and cognitive growth. Children who receive cochlear implants before the age of two tend to achieve significantly better hearing outcomes compared to those implanted later. However, eligibility depends on medical evaluations and local regulations.

Among the 16 children who have undergone treatment, only 2 are under the age of two. While early intervention is ideal, many parents initially believe their child is simply delayed in developing speech rather than experiencing hearing loss. As a result, diagnosis and treatment are often delayed. The largest group of beneficiaries consists of 7 children aged 2-3 years, while the remaining 7 are older than 3 years.

Children who receive cochlear implants later than recommended—typically beyond the age of two—may face several challenges in their speech, language, and cognitive development. Early implantation allows children to develop spoken language naturally, but late implantation often leads to delayed speech and language acquisition. These children may struggle to master speech patterns and require more intensive therapy to develop effective communication skills.

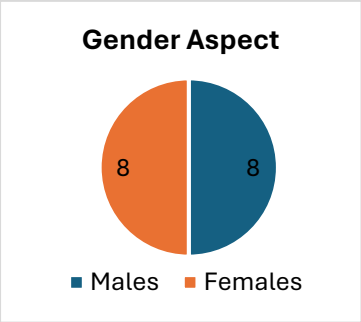
Additionally, late implantation can impact social and academic development. Difficulty in communication may lead to struggles in interacting with peers and performing well in school. As a result, children may feel isolated and less confident in social settings. This challenge can also manifest in behavioral difficulties, as frustration due to communication barriers may lead to concentration issues and social withdrawal.

Another concern is limited auditory processing. The brain's ability to adapt to sound diminishes with age, making it harder for late-implanted children to fully benefit from the cochlear implant. Prolonged hearing loss can also lead to degeneration in the central auditory system, reducing the overall effectiveness of the implant.

Early intervention is crucial to maximizing the benefits of cochlear implants. By receiving the implant at an optimal age, children can develop strong speech and language skills, integrate better into social and academic environments, and experience improved overall communication abilities.

No gender disparity noticed:

Research suggests that gender does not significantly impact the likelihood of being born with hearing impairment. However, some studies have explored gender differences in aspects such as diagnosis timing, intervention, and rehabilitation outcomes. Though social and cultural factors may influence how early parents seek medical attention. Research has found no substantial variation in hearing quality, behavioral responses, or success rates between male and female participants.

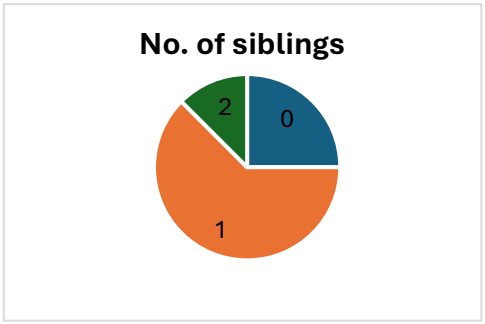


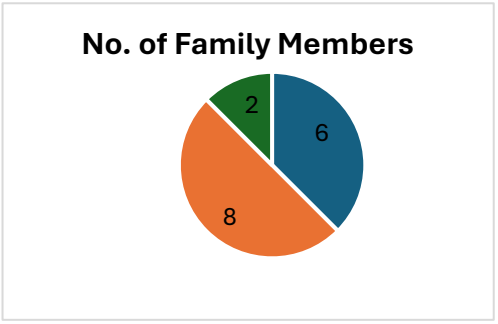
While biological factors do not appear to play a major role, societal influences—such as parental awareness, access to healthcare, and educational opportunities—may affect how boys and girls experience hearing impairment and its treatment.

The secondary data provided by Persistent aligns with research findings, indicating no apparent gender-related factors in the disorder. The distribution of male and female children receiving treatment through Persistent's support is equal, suggesting no significant gender disparity in its occurrence or intervention.

Children from smaller families get better attention

Most children belong to smaller families, typically consisting of four members. The majority of children have only one sibling.

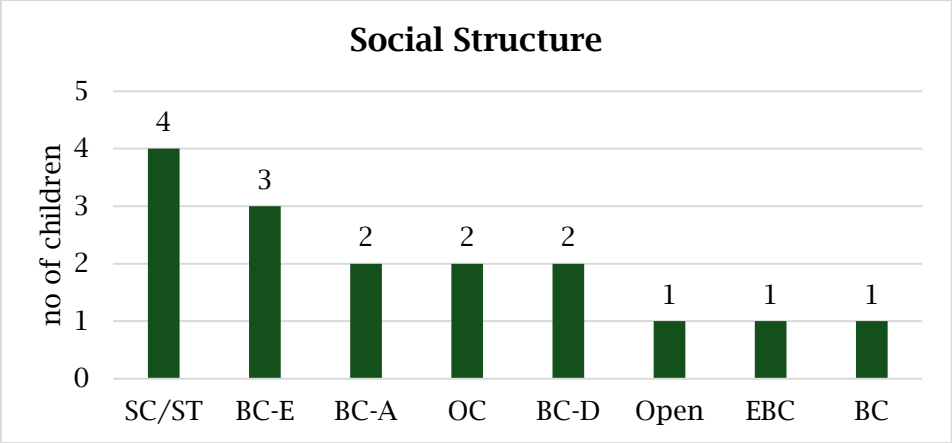




The project supported socio economically lower class families:

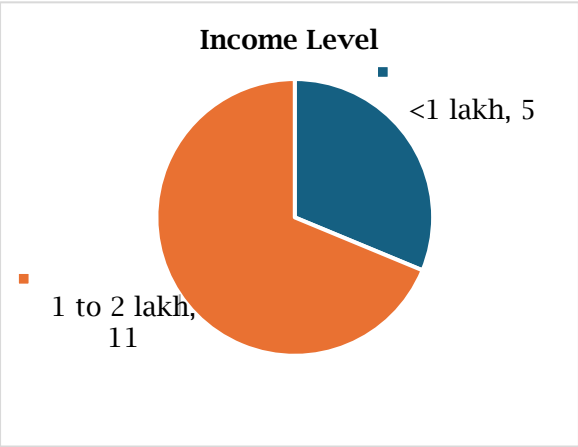
It was also found that, most of the parents have only a basic level of education. Hardly any mothers were well educated and were mostly unemployed.

Their occupations were mostly unskilled , which include farming, labor, and small business ownership.



All the patient families belonged to SC/ST and OBC categories, highlighting their status as part of a socially marginalized section of society. These communities often face economic hardships, limited access to quality healthcare, and social exclusion, making it difficult for them to seek specialized medical treatments.

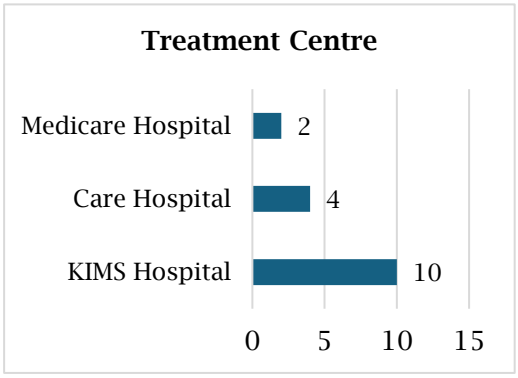
Due to financial constraints and a lack of awareness, many families struggle to afford advanced medical interventions such as cochlear implants, which require not only costly surgical procedures but also long-term rehabilitation, including speech therapy. Additionally, systemic barriers, including inadequate healthcare infrastructure and geographic limitations, further restrict their access to essential treatment.



All parents shared that their families rely on a single income, and they belong to a very low-income group. This highlights the critical role of financial assistance in enabling access to treatment for their children. Without this support, they would not have been able to arrange for the surgery on their own, let alone afford the necessary speech therapy, even if the procedure itself were provided at no cost.

2. Project is implemented systematically and effectively:

All patients were diagnosed with bilateral profound sensorineural hearing loss.



The majority of children—10 out of 16—received treatment at KIMS Hospital, reflecting Ashray Akruti's commitment to partnering with leading hospitals and skilled surgeons. Care Hospital and Medicare Hospital are also among their trusted healthcare partners. Ashray Akruti also has a multidisciplinary team of professionals, including clinical psychologists, speech therapists, occupational therapists, special educators, and audiologists, ensuring comprehensive care and rehabilitation for the children.

Project implementers are most suitable1:

Ashray Akruti launched its cochlear implant program between 2010 and 2015, with initial support from the *RRTS 3 scheme*, a government initiative in the then-united Andhra Pradesh. In the early years, most beneficiaries were children supported under this scheme. Over time, the program expanded through partnerships with corporate CSR initiatives—most notably with *The Hans Foundation*. Initially, surgeries were conducted at Max Hospital in Delhi, but later, partnerships with hospitals in Hyderabad made local surgeries possible.

To identify candidates, Ashray Akruti carries out robust community outreach programs, organizing medical camps at Anganwadis and child development centers across Hyderabad and nearby districts. The organization operates 15–17 centers in Hyderabad and one in Kadapa and also reaches families through social media and hospital referrals.

Once a child is identified, the program follows a structured process:

- Screening and evaluation, including MRI and CT scans
- Pre-surgical speech therapy (typically 2–3 months), with hearing aid support if needed
- Parental counseling on therapy expectations and post-surgical care

[1] *Detailed interviews are attached as Annexure-2 to this report*

- Cochlear implant surgery, usually in one ear, followed by post-operative therapy

The program primarily serves below-poverty-line families and verifies eligibility through financial documentation. A full cochlear implant procedure—including surgery and hospital costs—ranges from ₹12–13 lakh. In most cases, only one ear is implanted due to cost constraints, with a hearing aid provided for the other. For families that can afford it, bilateral implantation is encouraged for better sound clarity.

Outcomes depend on several factors, including the child's age at implantation, regularity of therapy, parental involvement, and medical conditions. With early intervention, around 80% of children are able to integrate into mainstream schools and develop fluent speech.

To maintain implant functionality, external processors must be upgraded every 5–7 years, at a cost of approximately ₹4 lakh. With donor support, Ashray Akruti has completed 70–80 processor upgrades for children who underwent surgery between 2015 and 2017.

The program has grown substantially over the years. Eight years ago, just 40 children were enrolled across three centers. Today, the SR Nagar center alone serves 150 students—testament to increasing awareness and the program's expanding impact.

Ashray Akruti functions as a therapy center rather than a residential facility. Children attend 45-minute therapy sessions three to four times a week. While therapy is free, families are encouraged to contribute ₹500–₹1,000 per month based on their capacity. These contributions promote commitment, and around 70–80% of families consistently follow the schedule.

To accommodate families facing barriers such as maternal pregnancy, online therapy sessions are also offered. Customized therapy plans are developed for each child, based on individual assessments and progress goals. Though anatomical or neurological conditions may affect outcomes, early and consistent intervention significantly improves success.

The organization also provides hearing aids for the non-implanted ear in unilateral implant cases. These aids help with sound localization and overall auditory balance. While implant upgrades aren't always necessary, newer processors offer benefits like noise cancellation and better speech clarity. Families are educated on this during counseling, and ongoing donor support helps bridge financial gaps

3. Beneficiary families are satisfied[2]:

Close interaction with the patient families highlighted the challenges and milestones of children with hearing impairments, primarily due to genetic factors or late diagnoses. The families come from diverse backgrounds, with varying degrees of financial stability and educational levels. Despite initial struggles, intervention through surgery and speech therapy has led to significant improvements in communication and responsiveness.

- **Medical Intervention & Progress:** Cochlear implants and speech therapy have been pivotal in enabling children to communicate. While some children showed immediate improvements, others took time to develop responsiveness and speech abilities.
- **Financial & Social Constraints:** Many families rely on financial assistance to afford treatment. Without organizational support (such as Ashray Akruti and Persistent), most would have struggled to provide necessary medical care.
- **Parental Adaptation & Involvement:** Parents exhibit varied reactions—some accept the condition readily, while others undergo emotional distress. Those who actively engage in speech therapy and learning strategies report more positive outcomes for their children.
- **Genetic Factors & Late Diagnosis:** Consanguineous marriages and family histories of hearing impairment play a role in many cases. Late diagnosis often results in delayed treatment, affecting speech development.
- **Community Awareness & Referral:** Some families, recognizing the impact of treatment, have referred others with similar challenges. This highlights the importance of raising awareness about early intervention and available medical solutions.

Overall, these stories underscore the life-changing impact of timely medical intervention and financial support. They also reveal the need for broader accessibility, awareness, and parental education to facilitate early detection and treatment.

4. Program Design is well thought:

Program design reflects a structured, **scalable**, and **community-integrated** approach that has significantly expanded its **reach, accessibility, and impact**.

- **Comprehensive initiative:** Ashray Akruti's Cochlear Implant Program has developed into a comprehensive initiative that integrates medical

[2] *Summary from Personal Interviews of the Patient Families:*

expertise, strategic partnerships, and community outreach to provide life-changing interventions for children with hearing impairments.

- **Candidate identification:** Candidate identification is carried out through medical camps at Anganwadis and child development centers, as well as social media outreach and hospital referrals.
- **Multiple centres:** The organization operates multiple centers in Hyderabad and one in Kadapa, ensuring wide coverage.
- **Structured process:** Once a child is identified, the program follows a structured process that includes screening and evaluation with MRI and CT scans, pre-surgical speech therapy lasting two to three months, parental counseling on therapy expectations and post-surgical care, and cochlear implant surgery with post-operative therapy.
- **Identifying most needy:** The program prioritizes families below the poverty line, verifying eligibility through financial documentation. The cost of a full cochlear implant procedure, including surgery and hospital expenses, ranges from ₹12–13 lakh. Due to financial constraints, most children receive implants in only one ear, with a hearing aid provided for the other.
- **Speech therapy:** Outcomes depend on factors such as the child's age at implantation, consistency in therapy, parental involvement, and medical conditions. With early intervention, approximately 80% of children integrate into mainstream schools and develop fluent speech.
- **Upgrade available:** To maintain implant functionality, external processors must be upgraded every five to seven years, at a cost of around ₹4 lakh. Through donor support, Ashray Akruti has facilitated 70–80 processor upgrades for children who underwent surgery between 2015 and 2017.
- **Flexibility to donate as per capacity:** Ashray Akruti functions as a therapy center rather than a residential facility, with children attending 45-minute therapy sessions three to four times a week. While therapy is free, families are encouraged to contribute a nominal amount based on their financial capacity, fostering commitment to regular attendance.
- **Availability of Online therapy:** Online therapy sessions accommodate families facing barriers such as maternal pregnancy, ensuring continuity of care. Each child receives a customized therapy plan tailored to individual assessments and progress goals.

5. Partnership is effective:

Persistent and Ashray Akruti partnership is built on shared values and a commitment to lasting impact, making it a strong example of collaborative social responsibility.

- **Strengthened Financial Support**: Funding from Persistent Foundation has gradually grown, enabling Ashray Akruti to expand its reach and improve its programs.
- **Deeper Engagement**: Persistent's leadership and Foundation representatives have actively participated in events, enhancing their understanding of the organization's impact.
- **Strategic Collaboration**: The relationship has moved beyond financial support, fostering discussions around long-term impact and sustainable growth.
- **Pipeline for Future Projects**: Ashray Akruti has identified 10–20 transformational projects, and Persistent's involvement creates opportunities for scaling them.
- **Authentic CSR Approach**: Unlike organizations that treat corporate social responsibility as a formality, Persistent Foundation is deeply invested in driving meaningful change.
- **Employee Involvement**: Efforts have been made to engage Persistent employees, opening avenues for volunteering and awareness-building.

6. Project has profound impact:

Cochlear implantation has a profound impact on both patients and their families, influencing various aspects of life.

Impact on Patients

- **Improved Communication**: Cochlear implants have enabled children with severe hearing loss to perceive sound, significantly enhancing their ability to communicate.
- **Speech Development**: Early implantation combined with speech therapy has helped them develop language skills, allowing them to express themselves more effectively.
- **Social Integration**: Early cochlear implantation and speech therapy have helped prevent the isolation that children might have experienced due to hearing and speech impairment. Instead, they can now enjoy a typical childhood, interact freely with their peers, and build meaningful social connections, fostering a strong sense of confidence.

- **Educational & Career Opportunities**: With improved hearing, children can attend mainstream schools, and eventually as adults will be able to access better job prospects.

Impact on Families

- **Emotional Journey**: Parents often go through a range of emotions, from initial distress to relief and hope as they witness their child's progress.
- **Financial Strain**: Cochlear implants and therapy are very expensive, making financial assistance crucial for many families.
- **Parental Involvement**: Families play a key role in ensuring consistent therapy and support, which directly affects the child's development. Ashray Akruti has helped them do that.
- **Community & Support Networks**: Ashray Akruti has provided treatment to numerous patients, leading their families to form a WhatsApp group. This platform allows them to exchange experiences and offer solutions to minor personal challenges they encounter.

Impact Stories

Aadhya Yechuri: Age 3 years

Adhya was diagnosed with hearing impairment on her first birthday and underwent surgery at 1.5 years of age. Before the procedure, doctors had to remove excess fluid from her brain to ensure a safe and successful operation.
Her father works in the IT sector and has a stable job, while her mother is a homemaker.

Grateful for the financial assistance, she is fully aware that Persistent is the organization supporting the project. Recognizing the impact of the initiative, she has referred the facility to an acquaintance facing a similar challenge. She has started speaking a few words now.

Zain and Ashraf Mohammad:

Both parents and their children have hearing impairment due to a genetic condition, leading to complete hearing loss. After undergoing surgery and speech therapy, the children have reached an important milestone by learning to say "appa" and "amma." However, their mother, being deaf herself, is unable to hear them.

When asked if she had concerns about having deaf children, given that both she and her husband have the condition, she expressed acceptance, stating that they were prepared to embrace whatever was destined for them.

Initially unaware that her first child would be born with hearing impairment, the mother was taken by surprise when the second child also had the same condition. Despite these challenges, she is immensely pleased with the progress her children have made in developing speech and language skills.

With the father earning a modest salary of ₹15,000, financial assistance has been essential in ensuring their children receive the necessary medical treatment and therapy.

Aishwarya Kethavath:

Aishwarya, now four years old, was not diagnosed with hearing impairment until she turned three, as her parents initially did not recognize the signs of hearing loss. Her mother has completed education up to the 10th grade, while her father is illiterate and can only sign his name. He works as a chef, earning a monthly salary of ₹15,000.

The parents are related to each other, which may have contributed to the child's condition. Aishwarya has a younger sibling who does not have hearing impairment, making her the first case in the family. Without the support of Ashray Akruti, her parents are uncertain about how they would have managed the situation.

Before the surgery, Aishwarya was unable to speak. However, after receiving the cochlear implant and undergoing speech therapy, she can now respond, communicate, and ask for basic necessities in complete sentences, marking a significant milestone in her development.

Maryam Mushtaq:

Maryam, a two-year-old child, has two older siblings who do not have hearing impairment. However, her father's uncle had a history of hearing impairment, which may have contributed to her condition.

Her parents took time to come to terms with her hearing impairment, as it was unexpected. The family has a history of consanguineous marriage, which can sometimes be a factor in genetic conditions. Despite the initial challenges, her mother is actively undergoing training to become a speech therapist, equipping herself with the skills to support Maryam's development.

Notably, Maryam is highly expressive and continuously attempts to communicate. She actively engages in speech and makes efforts to articulate words clearly, demonstrating strong determination and progress in her communication skills.

Eeshan Singh Thakur:

Before the surgery, the child showed no responsiveness. It was only after a year post-surgery that slight improvements began to appear. This case involved severe hearing loss, and the parents initially hesitated to proceed with the operation. However, after fully understanding the situation, they decided to go ahead with the surgery.

The child has an elder sibling. The mother holds an MBA in Human Resources but is currently not working, while the father works at Wells Fargo. In terms of feedback, the mother is happy with the progress but remains somewhat skeptical as she observes other children at Ashray Akruti.

She acknowledges that without the support of Ashray Akruti, accessing treatment would have been impossible. Many doctors had recommended bilateral surgery, which would have been financially and logistically challenging for the family.

Abdul Kareem:

Both parents have completed SSC, and the father works at a small firm. Their consanguineous marriage, along with a history of hearing impairment in several family members, suggests a genetic influence on the child's condition.

Since the mother is expected to stay at home, the responsibility of taking Abdul to therapy sessions falls entirely on the father. However, due to work-related leave constraints, he is unable to bring Abdul consistently. As a result, despite undergoing speech therapy, the child's responsiveness remains limited, emphasizing the need for sustained and regular intervention to support developmental progress.

Dhronikasree Empathy:

Originally from Karnataka, the family has now settled in Hyderabad. The child's hearing impairment was identified only at the age of three.

The father, an ITI diploma holder, works in Gadwal district. It was only after undergoing surgery that the child began speaking and responding effectively. She also has two older siblings.

In terms of feedback, the family expresses happiness and satisfaction with the outcomes. Without the support of Ashray Akruti, they would have relied solely on a hearing aid, as accessing advanced treatment would have been difficult.

Advika Moka:

The child's hearing impairment was identified at the age of two after a visit to NIHIS Bowenpally ENT, where they were subsequently referred to Ashray Akruti for further support. The family, residing 25 kilometers away, relies on the father's job in EVM manufacturing, earning a monthly salary of ₹20,000.

The child has a younger sibling who does not appear to have hearing impairment, though it has not been formally evaluated by a doctor. Initially, unaware of the child's condition, the family encouraged social interaction with other children, believing that it would aid in their development. However, after the diagnosis and subsequent surgery, the child has shown improvement, now able to say "Nana" and "Amma."

Without the support of Ashray Akruti, the family would have been limited to managing the condition with a hearing aid, as surgery would have been beyond their financial reach. Observations indicate that the child was somewhat withdrawn and unresponsive before treatment, possibly due to the delayed intervention.

Prashika Sandella:

Prashika's hearing impairment was identified when she was just seven months old. Following a check-up at a government ENT facility, she underwent surgery at the age of one.

Originally from Yadagirigutta, her mother has rented a room in Hyderabad for ₹16,000 per month to ensure Prashika receives proper treatment at Ashray Akruti. Thanks to the intervention, the child is now able to listen and respond.

Her father works in a pharmaceutical company, while her mother, despite her dedication to her daughter's treatment, longs to return to their village, where she has the support of her relatives and friends.

Shanmukh Raj Sheelapally:

Shanmukh is the middle of three siblings, with the other two having no hearing impairment. Their eldest sibling studies at Navodaya Residential School. During infancy, the child experienced three seizures within a span of two months, raising health concerns. However, hearing loss was only identified a year later when the parents noticed a decline in speech, as the child had been able to talk earlier.

The family is from Patancheru, and both parents have completed education up to the 12th grade. The father works at a private juice company. After intervention from Ashray Akruti, the child's speech has improved remarkably and is even able to communicate over the phone.

Initially, the parents believed the child would only need a hearing aid, but upon learning about the need for surgery, they were apprehensive. Now, the mother is hopeful that the child will achieve full communication abilities within the next two to three years. She is deeply grateful for the support received from Ashray Akruti.

Meethun Yadav Pudhuri:

The child's condition showed significant improvement after surgery, as he is now able to respond, communicate, and express basic needs. This is the first such case in the family, with no prior history of hearing impairment.

The mother, who had an arranged marriage with her cousin, has decided she will not have her children marry within the family. She first became aware of her child's hearing loss when he was 2.5 years old, after her sister, who resides in London, pointed it out. Initially, the family consulted a hospital in Nizamabad, but they later sought a second opinion in Hyderabad, where a relative referred them to Ashray Akruti.

She was married at the age of 17, and her husband works as a farmer, cultivating rice and wheat, with an income of ₹18,000 over six months. She admits that without the support of Ashray Akruti, she would have been at a loss for how to proceed with her child's treatment. Now, the child responds well in familiar environments, indicating progress in communication and adaptation.

Manvitha Kalva Kattla

The child's hearing impairment was identified at the age of one. Following treatment, she has made significant progress and can now form sentences. Her parents are delighted, especially as she is able to call out "Amma."

Her father is a farmer, and she has two younger siblings. The family expresses happiness and satisfaction with the improvements in her speech. Without the support of Ashray Akruti, they would have relied solely on a hearing aid, as accessing surgical intervention would have been difficult.

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Challenges identified

- Despite receiving free surgery, therapy, and additional support from Ashray Akruti**,** families often face difficulties in consistently attending speech therapy sessions. Many come from rural areas of Telangana or even other states like Andhra Pradesh and Karnataka. While they can manage travel and accommodation for the one-time surgery, ensuring regular speech therapy becomes a logistical challenge. In the critical early months post-surgery, 2-3 therapy sessions per week are essential for a child's successful speech development. Without this, the child's ability to listen and articulate sounds remains limited, making full rehabilitation difficult.
- Another major hurdle is lack of awareness due to low educational and intellectual levels among parents. Many belong to BPL (Below Poverty Line) or just above APL (Above Poverty Line) categories. As a result, they often struggle to understand the importance of speech therapy in their child's development. This lack of understanding leads to insufficient commitment and seriousness toward regular sessions.
- Additionally, hearing aids present a challenge. Cochlear implantation is only one part of the treatment; children also need to wear hearing aids behind their ears to hear properly. However, young children, especially those under two years old, often find them uncomfortable and remove them in frustration. Parents, in turn, keep the hearing aids safely aside, inadvertently defeating their very purpose.

Section IV: Recommendations and Conclusion:

Recommendations:

1. Expand Awareness & Early Diagnosis

There have been cases where the parents either did not realize that their children were born hearing impaired or they did not fully understand the difference between late speech development and hearing loss. Hence, developing some strategies to increase awareness may help to catch them young and improve the possibility of full rehabilitation.

2. Enhance Accessibility to Speech Therapy

Regular attendance at speech therapy has been difficult for individuals traveling from distant locations. Creating YouTube-based speech therapy sessions could offer a convenient and accessible solution to this challenge.

3. Improve Parental Education & Engagement

Ashray Akruti is already conducting awareness camps. Collaborating with pediatricians in urban areas and Primary Health Centers (PHCs) in rural regions can facilitate early identification of cases, enabling timely intervention for younger patients. Additionally, greater efforts are needed to educate parents on the importance of speech therapy to ensure consistent attendance and maximize rehabilitation outcomes.

4. Mapping the success rate

Consistently tracking patients throughout the rehabilitation period after surgery will help assess the program's success rate and ensure effective long-term outcomes.

Conclusion:

The Persistent's Cochlear Implant Program in partnership with Ashray Akruti has transformed the lives of children with hearing impairments, enabling them to develop speech and integrate into mainstream society. While the program has been highly impactful, addressing challenges related to accessibility, awareness, and financial constraints will further enhance its effectiveness. By expanding outreach, improving therapy accessibility, and strengthening parental involvement, the program can ensure long-term success for children and their families.

The project has scored 23.5 out of 30 points. That is an excellent score which shows the project is impactful.

Annexure 1: About Ashray Akruti

5. Genesis and Journey:

Mr. Babu's personal journey led to the founding of Ashray Akruti, driven by concern for his brother's future with hearing impairment. Years later, when his brother's son was diagnosed with the same condition, the emotional and financial challenges reinforced his commitment to ensuring better access to support and solutions for others.

Starting the organization was challenging, particularly in securing funding. Initially focused on education due to the lack of surgical options and testing facilities, Ashray Akruti aimed to bridge accessibility gaps. Over time, it expanded to healthcare, recognizing the need for medical interventions. Today, the organization streamlines access to cochlear implants, performing over 7,200 surgeries annually with minimal waiting time, and providing comprehensive post-surgical care including speech therapy and auditory verbal therapy. Diversification was a natural progression, as many children with hearing impairments face additional challenges. Expanding into preschool education and child development centers ensures holistic care and specialized support.

Through strategic nationwide partnerships, Ashray Akruti ranks among the top organizations supporting cochlear implants, thanks to dedicated efforts and donor support. While cochlear implants were the initial focus, the mission evolved to include early childhood education, developmental centers for children with autism, ADHD, cerebral palsy, and other disabilities. The organization's structured approach has gained corporate support through CSR funding.

Today, Ashray Akruti has a multidisciplinary team of professionals, including clinical psychologists, speech therapists, occupational therapists, special educators, and audiologists. Despite its growth, the organization remains committed to disability support, continuously striving to improve lives and create lasting impact. Its expertise and dedication have established it as one of the leading organizations in the field.

6. Outreach and Awareness:

Beyond its direct work with disabilities, the organization also prioritizes raising awareness on social issues that contribute to health challenges. Close-relative marriages in coastal regions have been linked to genetic conditions affecting children, making social awareness and education vital. The organization actively engages in initiatives aimed at addressing these concerns through community outreach and education.

In certain communities, young women are married off without their opinions being considered, silenced by deeply rooted family traditions that strip them of decisions over their futures. Through extensive research, the organization has identified these challenges and worked to connect with affected families, even across state boundaries. Although initial ties with some communities may have been limited, continuous outreach efforts have helped bridge gaps, fostering meaningful connections that drive change.

7. Future Technologies:

The future of disability support is driven by technological advancements, with innovations like stem cell research, invisible implants, and AI transforming accessibility and medical care. Ashray Akruti remains committed to embracing these developments to enhance lives. Expanding beyond education, the organization now operates across multiple states, impacting schools nationwide. While many organizations struggle to adapt, Ashray Akruti's forward-thinking approach, shaped by personal experiences, ensures continuous progress.

AI is increasingly valuable in paediatric disability support, aiding medical diagnostics and accessibility. By staying ahead of advancements, Ashray Akruti secures long-term sustainability.

The organization envisions thriving indefinitely, evolving with technology while maintaining its core mission. Beyond cochlear implants, its programs span multimedia and animation training, retail and hospitality, and employment support for individuals with special needs. It has placed over 600 young adults into various fields, facilitating 100 to 120 job opportunities annually. Support extends beyond employment, fostering lifelong connections with those assisted. The organization celebrates milestones, offers career guidance, and advocates for workplace inclusion.

8. Creating Expertise:

Ashray Akruti has built an extensive ecosystem to support individuals with hearing impairments, offering specialized courses for educators, audiologists, speech pathologists, and sign language interpreters. Yet, the ambition to do more persists, with plans for schools, vocational programs, and tailored courses requiring substantial resources.

Data-driven strategies guide project development, ensuring long-term community impact. Corporate social responsibility (CSR) partnerships remain crucial, with the organization prioritizing mutual alignment to secure funding that benefits the community.

9. Team:

The organization manages a complex process that includes coordinating patient care, handling documentation, facilitating surgeries, and providing essential post-surgical therapies. Thoughtful planning is crucial to maintaining impact and efficiency.

A strong and dedicated team has been instrumental in driving the mission forward. The hiring process is rigorous, involving multiple interview rounds to ensure committed professionals are brought on board. The organization has a full-fledged HR department that carefully selects candidates based on expertise and alignment with its mission. Rather than poaching talent from other organizations, it prioritizes sourcing individuals genuinely committed to making a difference. Once they join, they tend to stay for the long term, with some team members remaining for over 8 to 18 years—rare in today's job market.

10. Brand and Reputation:

Through its sustained efforts and strategic approach, the organization continues to safeguard its reputation while creating meaningful impact. It is committed to long-term success, ensuring that its work benefits generations to come. The overarching goal is to create a lasting impact—not just through individual projects but by strengthening the foundation of its work for generations to come.

11. Persistent Partnership:

Initially, the organization had no connection with Persistent Systems in Pune, but proactive outreach eventually led to a collaboration. Though the partnership took time to establish, it has now continued year after year. The chairperson has visited, and representatives from the Persistent Foundation have engaged directly, even attending events in Hyderabad. These interactions have provided opportunities to showcase efforts, particularly in employee engagement. A key figure in maintaining this partnership is Anuda, who ensures consistent communication with the Persistent Foundation team. Now in the third year of collaboration, funding has steadily increased, reinforcing the organization's faith in the partnership.

The organization's appetite for growth remains strong, with an additional 10 to 20 projects that would significantly benefit people with disabilities. Persistent Foundation has already demonstrated remarkable commitment, and its annual events highlight numerous organizations presenting their initiatives. As a down-to-earth and highly approachable entity, Persistent has proven to be an impactful organization driven by genuine intent.

It would be invaluable if Persistent Systems could extend its support further. A deeper collaboration, traveling alongside their teams and aligning with their groups, could significantly enhance the impact of the initiatives. Unlike some companies that contribute to corporate social responsibility (CSR) as a statutory obligation, Persistent operates with genuine intent, focusing on meaningful change rather than just fulfilling corporate requirements.

The organization continues to express its needs, hoping that Persistent and other partners will find ways to provide additional support. Consistency in advocacy is crucial—repeated efforts reinforce the importance of funding essential projects. Over time, companies recognize the necessity and act accordingly.

12. Expansion and Funding:

Opportunities are carefully assessed to avoid pursuing projects solely for funding. For example, a proposal for a project in another state will be undertaken only if the initiative has a clear purpose and Ashray Akruti has a presence or supporting ecosystem there. On the other hand, if the project aligns with Ashray's mission, particularly in disability support, collaboration becomes possible. Every initiative must actively involve people with disabilities, ensuring they play a meaningful role rather than being passive beneficiaries.

Considering the current economic landscape—with rising costs, uncertainties, and unfavorable conditions—the need for additional support is evident, particularly in infrastructure. While new facilities are being developed to enhance sustainability, the organization still incurs significant rental costs for its children's homes, schools, and other operations. Long-term infrastructure support is crucial, though it is understood that some foundations may have funding limitations in this regard.

Additionally, corpus funds remain essential for sustained impact. Previously, a donor supported cochlear implants to a certain extent, allowing the organization to build a strong program over time. However, when donor support is withdrawn, an impactful initiative should still be able to continue. For this reason, current foundation partners are urged to consider funding key requirements such as infrastructure, building maintenance, and unrestricted expenditures—including corpus funds and management costs.

Most funding today comes with restrictions, but organizations like Ashray Akruti face a variety of operational needs beyond predefined allocations. Unrestricted support would enable the continuation of impactful work without financial constraints.

Infrastructure support remains a key area of reflection. Securing the right partners can make a significant difference in ensuring long-term sustainability. The organization has fostered strong relationships with various companies over time, largely due to the positive impact of its work. Many corporate entities, particularly in Hyderabad, are aware of its initiatives and contributions to disability support. Preserving its reputation and maintaining excellence in service remain crucial, especially in an ever-evolving world.

Committed to long-term success, the organization does not view its work as a temporary endeavor. Its dedication remains unwavering, driven by the goal of creating lasting change in the lives of the individuals it serves.

Annexure 2: Interactions with Project Team

Ashray Akruti's cochlear implant program initially started between 2010 and 2015, with support from the RRTS 3 scheme, a government initiative in Telangana, which also included Andhra Pradesh at the time. For the first few years, the beneficiaries were primarily children supported under this scheme. Over time, the organization expanded its efforts to include corporate funding through CSR initiatives. The Hans Foundation, based in Delhi, was one of the early supporters, funding cochlear implant surgeries in Hyderabad. Initially, these surgeries were conducted in Delhi at Max Hospital, where screening was also performed. Later, Ashray Akruti partnered with hospitals in Hyderabad, allowing surgeries to be performed locally.

To identify children in need of cochlear implants, the organization runs a dedicated community outreach project. Medical camps are conducted at Anganwadi centers, child development centers, and other locations across Hyderabad and surrounding districts. Awareness is spread through word of mouth and pamphlets. Ashray Akruti operates 15–17 centers in Hyderabad and one in Kadapa. With nearly three decades of experience, they leverage social media campaigns to reach more families. Some children are referred through partner hospitals that have signed MOUs with the organization, while others approach them directly after hearing about the services.

Once a child is identified, a comprehensive screening process follows. If diagnosed with bilateral profound hearing loss, the child is referred to a surgeon. Partner hospitals conduct evaluations, including MRI and CT scans, to determine whether the child is suitable for cochlear implantation. While some referrals come from doctors, most children are identified through mobile clinics and community outreach programs. Many families do not seek medical intervention initially, believing their child’s condition is permanent.

Before surgery, children are enrolled in a pre-surgical speech therapy program lasting two to three months under Ashray Akruti’s early intervention initiative. Even if a child cannot hear, they are fitted with hearing aids to initiate speech therapy. If the hearing aids prove ineffective, cochlear implantation is recommended. During this period, parental counseling is provided, covering topics such as the surgical process, post-operative care, therapy duration, and expected outcomes. Children with additional developmental conditions like autism, ADHD, cerebral palsy, or developmental delays are referred to multidisciplinary centers where they receive speech therapy, occupational therapy, and physiotherapy.

Ashray Akruti primarily serves below-poverty-line families, including ration card holders and those with an annual income below ₹2 lakh. Necessary

financial documents are collected for verification. The cost of cochlear implantation varies based on the implant model. A basic implant costs approximately ₹6.75 lakh, but with surgery and hospital expenses, the total reaches ₹12–13 lakh. Higher-end models come at an increased cost.

The organization generally supports implantation in only one ear, though hearing loss is typically present in both ears. Operating on both ears would be significantly more expensive. While the child receives an implant in one ear, they are provided with a hearing aid for the other ear to aid in sound localization. In cases where families can afford the second implant, a bilateral implantation is performed for greater clarity.

The entire process begins with identification through the outreach program, followed by audiological evaluation, hearing aid fitting, and therapy initiation. The pre-cochlear implant program can last anywhere from one to six months, during which time the child is familiarized with therapy and learns basic listening skills. Parents are counseled on the importance of post-surgical therapy and precautions to follow. Simultaneously, the child undergoes MRI, CT scans, speech and language assessments, and psychological evaluations.

The surgery itself takes approximately three hours. Thanks to pre-medical evaluations, complications are rare, as precautionary measures are taken to ensure smooth recovery. However, cochlear implantation may not always be effective, particularly in cases involving cochlear abnormalities or auditory nerve issues. Parents are counseled regarding expected outcomes. Some children develop only basic sound awareness, while others progress to forming sentences and verbal communication.

Success in therapy depends on several factors, including the age at implantation, regularity of therapy sessions, parental motivation, and the therapist's approach. As awareness has improved, more families seek intervention earlier—sometimes when children are as young as two years old. Early surgery helps maximize the critical language development period, allowing children to integrate into mainstream schools. In earlier years, surgery was often performed after age five, which limited language acquisition. The current success rate for Ashray Akruti's cochlear implant program is approximately 80%.

Though the internal implant remains permanently, the external processor requires upgrades every five to seven years. The outer processor costs around ₹4 lakh and enhances features such as noise cancellation, speech clarity, and additional channels for improved hearing. While upgrades are not mandatory, technological advancements offer better speech clarity and sound processing. Through donor support, Ashray Akruti has facilitated 70–80 processor upgrades for children who underwent surgery between 2015 and 2017.

Persistent Foundation has primarily supported surgeries, but in recent years, the organization has expanded its CSR support to include essential accessories such as cables, coils, and batteries, which are necessary for maintaining implants. These items are expensive, but necessary for ensuring continued hearing capability. Future initiatives aim to incorporate additional enhancements to provide comprehensive support for children with hearing impairments.

Speech development in children with hearing loss has significantly improved due to early interventions. More families now seek treatment when children are as young as two years old, allowing them to maximize the critical language development period. After two to three years of therapy, many children are able to speak normally and enroll in regular schools. In earlier years, surgeries were often performed after the age of five, which limited language acquisition and speech development.

The cochlear implant program has seen considerable growth over time. Eight years ago, there were around 40 students across three centers. Currently, SR Nagar alone serves 150 students, demonstrating the increasing awareness and impact of early intervention.

Ashray Akruti operates as a therapy center rather than a school or residential program. Children attend 45-minute therapy sessions and return home after each visit. While therapy is free for all children, a minimal charge of ₹500–₹1,000 per month is requested based on the family's financial status. Children typically attend therapy three times a week, with an additional group therapy session on Saturdays, making it four sessions per week. The program is sustained through donations.

Parental contributions are voluntary and considered donations. Families who can afford to contribute are encouraged to do so, but those who cannot are not required to pay. The primary objective is to instill a sense of responsibility in parents. If therapy were entirely free, some families might not prioritize appointments or fully commit to the treatment process. A nominal fee encourages parents to stay engaged and consistently bring their child to therapy, as attending three sessions per week requires effort and commitment. Approximately 70–80% of families diligently follow the therapy schedule, ensuring their child benefits fully.

Parental participation can sometimes be affected by external challenges. One common reason for inconsistent attendance is maternal pregnancy, which can make it difficult for mothers to travel and attend therapy sessions with their child. To address this, Ashray Akruti has introduced online therapy sessions, allowing parents to participate remotely and continue supporting their child's development.

Several factors determine the success of cochlear implant therapy. Early implantation plays a crucial role in language acquisition. Regular therapy attendance, parental motivation, and the expertise of therapists all contribute to positive outcomes.

Despite the effectiveness of cochlear implants, some complexities may arise. Cochlear abnormalities and auditory nerve issues can sometimes limit the success of surgery. In such cases, outcomes vary—some children develop only basic sound awareness, while others progress to forming sentences and effective speech communication. The severity and nature of the abnormality determine the extent of speech development.

Hearing loss can be caused by various factors, including genetic conditions, complications during pregnancy, birth trauma, oxygen deprivation, and environmental influences. Due to these varying causes, therapy must be customized for each child. Each child follows an individualized therapy plan based on baseline assessments of listening and speech skills, personalized short- and long-term goals, and monthly progress evaluations.

Success in the program is measured by whether a child can speak fluently after two years of therapy, narrate stories, follow conversations, and integrate into mainstream education. Currently, about 80% of children achieve full speech development through therapy, highlighting the effectiveness of early intervention and continued parental involvement.

This structured approach ensures the best possible outcomes for children undergoing cochlear implant therapy, helping them integrate into society with developed communication skills. Let me know if you'd like further refinements!

Children who undergo cochlear implantation often require a hearing aid for the non-implanted ear to assist with sound localization. While cochlear implants provide direct stimulation to the auditory nerve, a hearing aid helps balance auditory perception. Persistent Foundation currently funds surgeries, but Ashray Akruti offers additional support by providing hearing aids to children in need.

Expanding its corporate social responsibility (CSR) efforts, Persistent has recently agreed to fund essential accessories necessary for maintaining implants. These include cables, coils, and batteries, which can be expensive but are crucial to ensuring the functionality of the devices.

Individuals with sensorineural hearing loss, particularly age-related cases, sometimes struggle with hearing clarity in noisy environments. Even advanced hearing aids may not fully resolve this issue, making social interactions in group settings challenging. Cochlear implants differ from hearing aids in that

they directly stimulate the auditory nerve, allowing for a more natural processing of speech and sound.

Whether a hearing aid is still necessary after receiving a cochlear implant depends on the extent of implantation. If a patient receives only one implant, they may continue using a hearing aid in the non-implanted ear to improve localization and overall clarity. However, with bilateral implantation, the need for an additional hearing aid is significantly reduced.

Despite the advantages of bilateral cochlear implantation, many families choose single-ear implants due to financial constraints. A bilateral procedure is considerably more expensive, so families often prioritize one ear first and may opt for a second implant later if finances permit. Otherwise, they rely on hearing aids for the non-implanted ear.

The external processor of cochlear implants requires upgrades every five to seven years due to advancing technology. While the internal implant remains permanently, the outer processor costs approximately ₹4 lakh and provides enhancements such as noise cancellation, improved speech clarity, and additional channels for better hearing.

Upgrading a cochlear processor is not always necessary. If the existing processor functions properly, there is no urgency to replace it. However, newer models offer enhanced features, similar to how smartphones evolve over time, improving sound clarity and noise reduction.

Families are educated about upgrade requirements during counseling sessions, ensuring they understand future needs for maintaining their child's hearing ability. The organization has successfully facilitated 70–80 processor upgrades through donor support for children who underwent surgery between 2015 and 2017. These upgrades are exclusively funded by external donations and CSR partnerships, allowing children to continue benefiting from improved hearing technology.

Annexure 3: Questionnaires for Interviews

Questionnaire for Agency working in partnership with Persistent

1. **Your Background**
    - What inspired you to work on this issue?
    - Can you share details about your journey, experience, and the genesis of this initiative?
    - Was there a personal or professional trigger that motivated you to focus on this cause?
2. **Collaboration with Persistent**
    - How did you first approach Persistent for their support?
    - What led to this partnership?
    - How long has Persistent been involved, and in what capacity?
    - Have there been any key milestones or challenges in this collaboration?
3. **Patient Outreach Strategies**
    - Do you have specific methods to identify and reach out to patients?
    - Are there awareness programs or community engagement efforts?
    - How do you ensure inclusivity in patient selection?
4. **Medical Partnerships**
    - Have you partnered with specific doctors, hospitals, or medical institutions for surgeries?
    - How do these partnerships work, and what role do they play?
    - Are there specialists involved in the process?
5. **Variability in Cases**
    - Are all cases similar, or do they differ in complexity?
    - Can you share examples of different types of disabilities treated through this initiative?

- How do you tailor your approach to each patient's unique needs?

6. **Financial Aspects of Surgery**
   - What is the average cost of the surgery?
   - How much of this cost is subsidized, and who funds the subsidy?
   - Are there financial assistance programs for patients outside Persistent's support?
7. **Post-Surgery Support**
   - Are hearing aids needed after the implant?
   - If so, is the cost of hearing aids covered under this support program?
   - If Persistent does not provide this support, who do you approach for assistance?
8. **Comprehensive Patient Care**
   - Apart from surgery, what other peripheral services are available to patients?
   - If certain services are not covered, have you partnered with other organizations to provide them?
9. **Parental/Guardian Engagement**
   - What strategies do you use to work with the parents or guardians of patients?
   - Do you conduct counseling or awareness sessions?
   - How do you ensure that families are fully prepared for post-surgery care and rehabilitation?
10. **Other Collaborations**
    - Besides Persistent, are there other agencies or partners supporting this initiative?
    - Who are they, and what role do they play?
    - Do these collaborations extend beyond medical care, such as rehabilitation or community support?

11. **Data Analysis & Impact Measurement**
    - Are you conducting any analysis of patient data?
    - What insights have emerged from this data, and how do they inform future decisions?
    - Are there measurable outcomes or success stories you can share?
12. **Your Perspective**
    - What is your personal take on this issue and the progress achieved so far?
    - How has your partnership with Persistent influenced the overall impact?

Questionnaire for Cochlear Implant Patients & Their Families

Section 1: Patient Background

1. How long have you had a hearing impairment, and when did you decide to consider a cochlear implant?
2. What were your biggest concerns before deciding on the surgery?
3. Did you receive counselling or guidance before making the decision? If so, was it helpful?
4. What were the key factors influencing your choice of hospital and doctor?

Section 2: Awareness & Outreach

5. How did you first learn about cochlear implants and their benefits?
6. Did any outreach or awareness programs help you make an informed decision?
7. Were you provided with enough information about the surgery, risks, and post-surgery care before proceeding?

Section 3: Surgery & Hospital Experience

8. What was your experience like during the surgery process?
9. How did the hospital staff and doctors assist you before, during, and after the procedure?

10. Was the medical facility well-equipped for your needs?
11. Did you face any challenges in accessing care or scheduling the surgery?

Section 4: Financial Aspects & Support

12. How much did the surgery cost, and were you able to receive any financial assistance?
13. Was the cost covered through government schemes, corporate sponsorships, or insurance?
14. Did the hospital help you navigate financial aid options?
15. If costs were subsidized, how did you apply for and receive support?

Section 5: Post-Surgery Experience & Rehabilitation

16. How was your recovery process after the surgery?
17. Did you receive sufficient follow-up care and rehabilitation support?
18. Are you using hearing aids post-implant, and did you receive support in acquiring them?
19. What were the biggest adjustments you had to make after receiving the implant?

Section 6: Family & Social Support

20. Did you receive any counselling or guidance on how to support the patient post-surgery?
21. Has your child faced social challenges in adapting to the cochlear implant?
22. Are there any community support programs or peer groups that have helped in his/her journey?

Section 7: Accessibility & Additional Services

24. Were any additional services, such as speech therapy or specialized training, available to you?
25. If not covered by your medical provider, did you approach other organizations for support?
26. What improvements would you like to see in accessibility for cochlear implant patients?

27. Did you face any logistical difficulties in traveling to the hospital or attending follow-up visits?

Section 8: Your Perspective & Recommendations

28. How has your quality of life changed after receiving the cochlear implant?

29. What advice would you give to others considering cochlear implant surgery?

30. Do you think there are any gaps in patient care or financial support that should be addressed?

31. Would you recommend your hospital and surgeon to others? Why or why not?

Annexure 4: Score on the Impact Assessment Framework:

Parameters	Relevance of the issue being addressed from the point of view of					Total
Aspects	Beneficiary Community	The CSR mandate	Implementing partners	Development sector	Business footprint	
	1	1	1	1	0	4
	Most relevant	Child health	Solely dedicated to the cause	Child health is a priority	No direct relation	
Parameters	Adequacy of Project outreach to demonstrate impact					
Aspects	Absolute outreach	Extent of coverage of affected populations	Inclusion of key stakeholders	Various aspects of the issue addressed	Variety of interventions	
	1	0.5	1	1	1	4.5
	Maximum possible outreach	Coverage only in Hyderabad	All imp stakeholders included	All aspects addressed	Comprehensive model	
Parameters	Efficiency in resource Use / project design					
Aspects	Cost Consciousness	Mobilization of external resources	Percolation to the beneficiaries	% Overhead costs	Outreach in similar budget projects	
	1	0.5	1	1	0.5	4
	Tie up with hospitals ensure low-cost surgeries	Beneficiaries pay for initial tests and donate as much as possible	Sole beneficiaries are the patient and families	All experts are trained and available in-house	Ali Yavar Jung Institute may have better outreach	
Parameters	Effectiveness in changing situations					
Aspects	Beneficiary satisfaction	Achieving defined Objectives	Impact compared to similar Projects	Removal of problems symptoms	Addresses root causes of the problems	
	1	1	1	1	0	4
	Beneficiaries are highly satisfied	All defined objectives are achieved	Highly impactful	Children are able to hear and speak	Causes are genetic and heriditary	
Parameters	Sustainability of project processes and outcomes					
Aspects	Reflected in robustness of the design	Prospects of continuity beyond the project	Sustainability of impacts	Adaptation (of intervention, process)	Institutiona-lization	
	1	0.5	1	1	0.5	4
	Tested model	Funding scale may affect outreach	Life long	Similar models applied by others	Can be improved	
Parameters	PSL's mandate (impact, visibility, employee engagement)					
Aspects	Visibility of the organisation	Neglected issue	Employee volunteering	External Recognition	Collaboration (for scale up)	
	0.5	1	0.5	0.5	0.5	3
Total Score						23.5