



OUTREACH ECHO MISSION

ANNUAL REPORT 2025



Burma Children
Medical Fund
Health for All

BACKGROUND INFORMATION

Congenital heart defects (CHDs), commonly atrial septal defect (ASD), ventricular septal defect (VSD) and tetralogy of fallot (TOF), are critical, life-threatening health challenges in Burma and along the Thai-Burma border. Approximately **8 in every 1,000 Burmese infants** are born with a congenital heart defect, emphasizing the urgent need for early detection and specialized treatment.

To mitigate these challenges, initiatives such as Health for All Foundation - Burma Children Medical Fund (HFA-BCMF) Outreach Cardiac Checkup and ECHO Screening Program serve as vital lifelines, providing essential diagnostic services and timely surgical referrals to reduce mortality and morbidity.





OBJECTIVES

- **Facilitate Early Detection and Cardiac Referrals:** Identify cardiac conditions in infants and young children to ensure timely medical interventions and specialist referrals, drastically improving long-term survival and health outcomes.
- **Enhance Access to Essential Healthcare:** Mitigate severe healthcare gaps for migrant communities and vulnerable border populations who face systemic barriers to formal medical infrastructure.
- **Strengthen Community Health Literacy:** Engage and educate local communities to elevate health awareness, empowering residents to recognize early warning signs and make informed decisions regarding their well-being.

MISSION OVERVIEW

Between May 7 and May 16, 2025, a series of **five ECHO outreach missions** was conducted across four locations in Tak Province along the Thai-Burma border over five days.

Locations and Dates

- Chediko Village, Phop Phra (May 7)
- Together School, Ban Tu, Mae Sot (May 12)
- Hope School, Phop Phra (May 13)
- Mae Pa Migrant Community, Mae Sot (May 15 and 16)





A total of **226 children** under the age of five—including children from migrant families and kindergarten students across several regional communities—received initial medical checkups and were provided over-the-counter (OTC) medicines for common illnesses, coughs, skin infections, and other non-serious conditions.

To investigate potential cardiovascular issues, HFA-BCMF team performed **23 echocardiograms (ECHO)** using Butterfly iQ+ portable ultrasound and ECHO machine for children presenting with abnormal cardiac murmurs or other suspected signs and symptoms. From these screenings, **four** children were detected with suspected congenital cardiac conditions. Additionally, the team also diagnosed **two** children with non-cardiac surgical conditions (hernia and clubfeet), requiring surgical interventions.



5

OUTREACH
LOCATIONS

226

PATIENTS
RECEIVED
CHECK-UPS

23

ECHOCARDIOGRAMS
PERFORMED

4

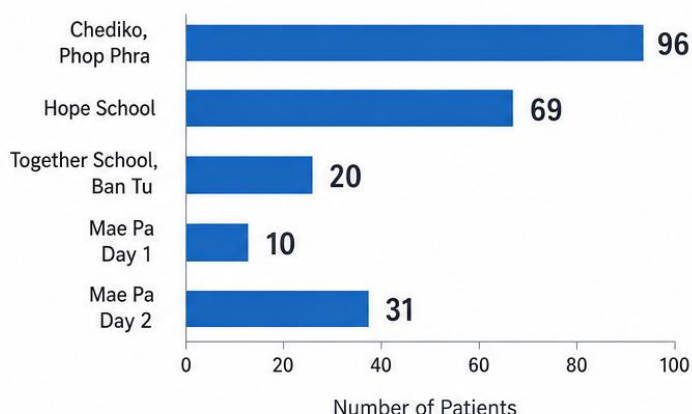
REFERRED FOR
SUSPECTED
CARDIAC CONDITIONS

2

REFERRED FOR
OTHER SURGICAL
CONCERNS

PATIENT COVERAGE BY LOCATION

Total check-ups conducted



SURGICAL OUTCOMES



4

PATIENTS RECEIVED
CONFIRMED SURGICAL
TREATMENT

2

CARDIAC
SURGERIES

2

OTHER SURGICAL
INTERVENTIONS

Highlights

- Chediko and Hope School combined represent **73%** of total mission impact (**165 out of 226 total patient checkups**).
- Conversely, Mae Pa Day 1 operated at a much smaller number (**10 patients**) but allowed for highly localized outreach.
- On average, **10.2%** of screened patients required an Echocardiogram diagnostic.
- **66.67%** of all urgent referrals successfully resulted in completed major surgeries and treatment within the same block period (4 out of 6 total referrals).
- At Mae Pa Day 2, **100%** of detected suspected cardiac conditions (**2 out of 2**) successfully navigated the pipeline and received completed surgeries.

INTERVENTION STEPS

- **Partnerships & Logistics:** Coordinated with local authorities and leaders as well as the partners, including the Planned Parenthood Association of Thailand (PPAT), to secure transport, lodging, and safety protocols.
- **Equipment Preparation:** The portable echocardiography (ECHO) machine and required equipment were pre-tested for immediate field readiness.
- **Clinical Screenings:** Conducted primary health checkups alongside initial cardiac auscultation to detect congenital and acquired heart anomalies in children.
- **ECHO Screenings:** Conducted targeted pediatric ECHO screenings for children with suspected cardiac anomalies



- **Data & Continuity of Care:** Logged medical records for every patient screened to establish baseline data for long-term tracking, future follow-ups, and clinical monitoring.
- **Community Feedback:** Hosted post-mission debriefs with beneficiaries and local leaders to assess effectiveness. The feedback gathered identified outstanding healthcare gaps to help optimize the design of future outreach missions.
- **Referral Pathway:** The team established streamlined patient referral pathways based on clinical findings



TARGETED REFERRAL PROCESS & PATIENT OUTCOMES

Cardiac Cases

The four children identified with suspected cardiac anomalies were referred to the two-day ECHO screening mission at Mae Sot Hospital (May 17-18), held jointly by Mae Tao Clinic (MTC), HFA - BCMF, and Paediatric Cardiac Surgery Foundation (PCSF), Thailand.

- **Mild Cardiac Cases (2 Patients):** Diagnosed with small ASDs that are structurally stable and only require routine monitoring rather than surgery.
- **Severe Cardiac Cases (2 Patients):**
 - Thae Su (10-year-old girl): Diagnosed with a moderate VSD.
 - Aung (3-year-old boy): Diagnosed with a severe VSD.
 - **Outcome:** Both children were fast-tracked through HFA-BCMF and PCSF partnership, undergoing successful corrective surgeries at Kasemrad Prachachuen Hospital in Bangkok.





Non-Cardiac Surgical Cases

Two children diagnosed with non-cardiac conditions were referred directly to the BCMF Patient Services Program:

- Thu (9-year-old student): Diagnosed with clubfeet.
 - Outcome: Provided with specialized orthopedic shoes and enrolled in routine follow-up treatment at Mae Sot Hospital to monitor mobility.
- Phyo (3-year-old boy): Diagnosed with a right inguinal hernia.
 - Outcome: Successfully underwent surgical hernia repair, completely resolving the condition.



CHALLENGES

- **Logistical & Travel Barriers:** Navigating and securing travel permissions for migrant families traveling from remote areas to specialized centers created significant administrative hurdles.
- **Field Constraints:** Operating advanced diagnostic procedure (ECHO) in temporary, non-clinical settings or environments made managing high patient volumes and keeping young children calm difficult.
- **High Follow-Up Vulnerability:** The high mobility of migrant populations due to seasonal work and security shifts poses a constant risk to long-term post-operative monitoring.

LESSONS LEARNED

- **Handheld Tech is Highly Effective:** The portable ECHO device has proven that advanced cardiac screening can be successfully decentralized and brought directly to marginalized communities.
- **Early Screening Saves Lives:** Catching severe defects early (such as in a 3-year-old boy or earlier) prevents irreversible cardiac damage before adulthood.



SUCCESS STORIES



Three-year-old boy Aung lives with his family in a village in Thai-Burma border. Aung was frequently suffered from a rapid heartbeat, poor appetite, and severe fatigue. Though his parents noticed his symptoms, they could not afford further diagnostic tests.

In May 2025, the HFA-BCMF Outreach ECHO team provided Aung with a free field echocardiogram, detecting a heart condition. He was referred to a screening at Mae Sot Hospital, where cardiologists diagnosed him with a VSD requiring surgery. Aung traveled to Bangkok and underwent successful heart surgery at the hospital with the support of HFA-BCMF. He then returned home fully recovered. Today, Aung is active, plays without tiring, and has a healthy appetite.

Aung's father said: *"I am so happy that surgery for my son was successful. Thank you so much for your support. Without your help, my family would not be able to help him receive it. I want Aung to be an educated person in the future."*



Thae Su is a 10-year-old girl who lives in Tak Province, Thailand. Born with Down syndrome, she frequently suffered from breathing difficulties, fatigue, and wheezing. Due to financial hardships, her family could not afford a cardiac checkup.

In May 2025, after hearing the village announcement, her mother took her to HFA-BCMF ECHO mission. She was diagnosed with a ventricular septal defect (VSD) and referred to Mae Sot Hospital, where pediatric cardiologists confirmed she needed surgery.

HFA-BCMF supported her treatment, alongside accommodation and transportation. Thae Su underwent successful surgery at Kasemrad Hospital. Today, her breathing troubles are gone, and she plays calmly.

Her mother shared: *"I would not have known that my child has heart disease. Because of the echo screening, I got to know this earlier."* She then added, *"I worried so much when I found out about her condition, but I feel relaxed now seeing her recovery after the surgery. Thank you so much to the team and donors. We never dared to hope for this opportunity."*

CONCLUSION

2025 HFA - BCMF Outreach ECHO Mission proves that specific targeted, on-field healthcare missions can successfully bridge massive health gaps for vulnerable border communities. The successful ECHO mission proved that early detection of congenital heart defects at the community level is entirely achievable. This proactive early screening was the pivotal first step that saved lives by identifying severe conditions before irreversible damage occurred.

Ultimately, this mission successfully dismantled the financial and geographical barriers that so often prevent migrant families from accessing specialized care. Through an effective and time-saving referral network, the children with critical cardiac conditions got access to the advanced hospital, where they received successful, life-saving surgeries. Moving forward, securing sustained funding and strengthening these cross-border pathways will be essential to ensure that every vulnerable child has a chance at a healthy, active future.

