Support the endTB Project

Grant Proposal Seeking $5,000,000 in Funding to Strengthen

Tuberculosis Prevention, Diagnosis, and Treatment in Southeast Asia

Through the endTB Initiative

Written by Verea Miller

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Verea Miller

University of Massachusetts Amherst

300 Massachusetts Ave,

Amherst, MA 01003

gueneveremil@umass.edu

Dec 15, 2025

Grants Review Committee

Centers for Disease Control and Prevention

U.S. Department of Health and Human Services

Dear Members of the Review Committee,

On behalf of Partners In Health (PIH) and its endTB initiative, I am pleased to submit this formal proposal requesting $5,000,000 over three years under the funding opportunity *"Strengthening Tuberculosis (TB) Prevention, Diagnosis, and Treatment in Southeast Asia to End TB."* This request supports a targeted, systems-strengthening effort to expand rapid TB diagnostics, scale effective treatment regimens, and reinforce community-based care and clinical capacity across high-burden regions of Southeast Asia.

Tuberculosis is the leading cause of death from infectious disease in the world, and Southeast Asia continues to account for a disproportionate share of the global TB burden. The COVID-19 pandemic also reversed years of progress; this proposal responds directly to that impact by

combining modern diagnostics, effective therapies, trained personnel, and community-centered patient support into a strategy for a measurable and sustainable impact.

PIH's endTB initiative brings over a decade of experience expanding access to lifesaving treatment and strengthening TB programs in some of the world's most low-resource places. Working in close partnership with various national Ministries of Health, PIH has demonstrated that TB care can be delivered effectively and equitably within public health systems.

We respectfully request the CDC's partnership in advancing this critical public health effort. The enclosed proposal outlines the scope of the problem, the proposed intervention, measures of success, available facilities, personnel qualifications, and a detailed and responsible use of funds. We believe this initiative represents a high-impact investment that will save lives, strengthen health systems, and contribute meaningfully to global TB elimination goals.

Thank you for your consideration of this proposal. We welcome the opportunity to provide any additional information that may assist in your review.

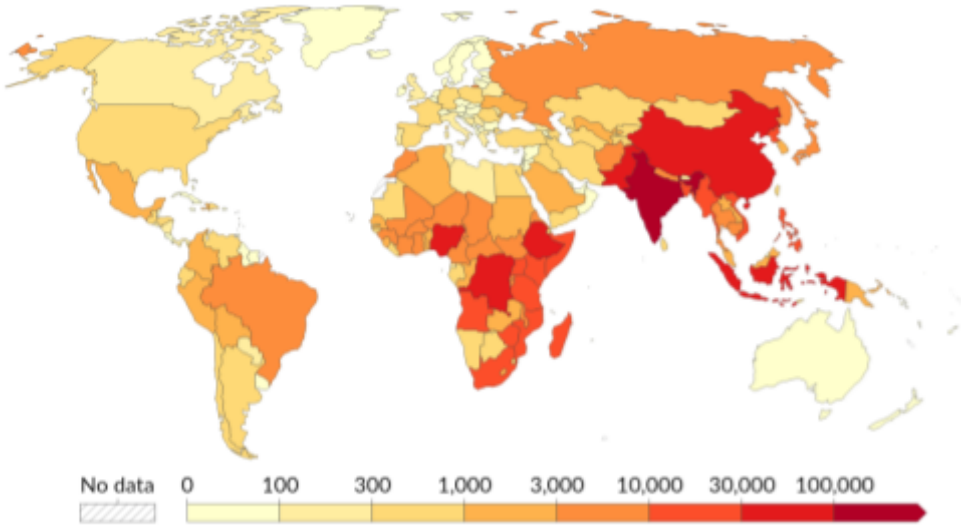
Sincerely,

Verea Miller

On behalf of Partners In Health

Discussing the Problem

Tuberculosis (TB) is one of the world's deadliest infectious diseases despite being both preventable and curable. In 2023 alone, TB claimed over a million lives, with an estimated 1.25 million TB deaths globally. (WHO, *Global tuberculosis report 2024*) The burden is especially severe in Southeast Asia, where countries such as India, Indonesia, Bangladesh, Myanmar, and the Philippines account for approximately 45% of all global TB cases. (WHO, *Ending tuberculosis in the...* 2025) These countries continue to face a disproportionate burden due to longstanding structural inequities, including poverty, overcrowding, limited primary care infrastructure, and delays in diagnostic access. These conditions consistently allow TB to spread and remain untreated, and diagnostic delays of weeks or months remain common in low-resource settings, contributing to preventable mortality. (Gundersen Storla et al., 2008)



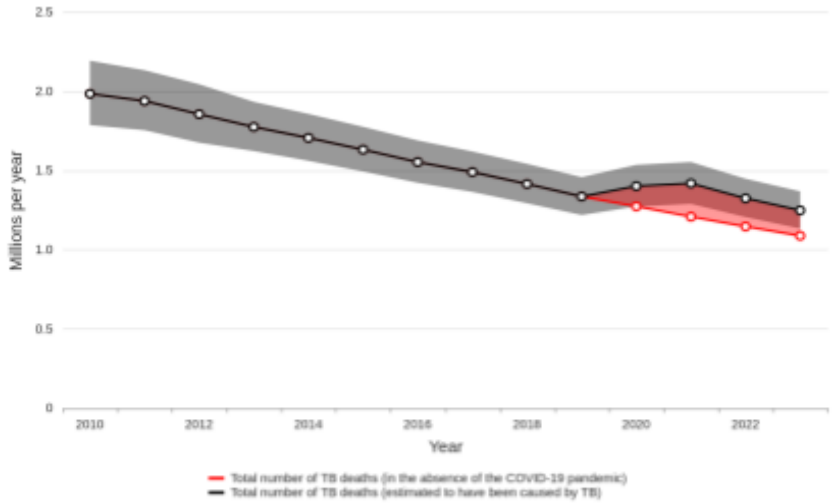
Map of TB deaths around the globe in 2021 (Source: ourworldindata.org)

The urgency is heightened by the rise of multidrug-resistant tuberculosis (MDR-TB) across the region. Southeast Asia is home to one of the world's largest populations of people with rifampicin-resistant (RR-TB) and MDR-TB, according to the World Health Organization (WHO).

(WHO, *Global tuberculosis report 2023*) Historically, MDR-TB treatment required up to two years of painful, toxic therapy with poor outcomes. (WHO, *Global tuberculosis report 2023*) Despite newer drugs (e.g. bedaquiline; delamanid; pretomanid) making shorter and far more effective regimens possible, (WHO, *Global tuberculosis report 2023*) access to these treatments remains limited in many Southeast Asian health systems due to cost, supply chain fragility, and insufficient clinician training.

Although effective scientific tools exist to end TB (including rapid diagnostics, all-oral short-course MDR-TB regimens, and community-based care) access to these tools remains unequal. The distribution of molecular diagnostics such as GeneXpert is inconsistent, particularly in rural areas, and diagnostic delays remain one of the strongest predictors of worse outcomes. (Gundersen Storla et al., 2008) Furthermore, community-based TB care, which has been shown to improve adherence and survival, is still underdeveloped in many settings.

The COVID-19 pandemic further worsened the situation. WHO reports that the pandemic caused the first increase in global TB deaths in over a decade, largely due to diagnostic disruptions, treatment interruptions, and clinical workforce diversion. (WHO, *Tuberculosis & Covid-19* 2020) In Southeast Asia specifically, reduced detection and delayed care have reversed years of progress and contributed to increased community transmission and drug



Excess number of deaths caused by TB during the COVID-19 pandemic and its aftermath, 2020–2023
https://www.who.int/teams/global-programme-on-tuberculosis-and-lung-health/tb-reports/global-tuberculosis-report-2024/tb-disease-burden/1-2-tb-mortality

resistance. (WHO, *Tuberculosis & Covid-19* 2020)

These systemic barriers create an urgent public health crisis where individuals with TB are not diagnosed early enough, are not linked to appropriate care quickly, and often do not receive the most effective treatment. The result is continued transmission, rising antimicrobial resistance, and deepening economic and health inequities. Without substantial investment, Southeast Asia will remain the global epicenter of TB mortality, making the international goal of ending TB by 2030 unattainable. (WHO, *Global tuberculosis report 2024*)

The endTB Project logo
(Source: WHO)

Partners In Health's endTB initiative was created to address these challenges directly. Since 2015, endTB has worked to expand access to new MDR-TB drugs, train clinicians, and implement shorter, safer regimens across multiple high-burden countries. (Unitaid, *endTB Project*) The project has demonstrated that high-quality MDR-TB care is feasible even in resource-limited settings, and that patient outcomes improve significantly when modern regimens are adopted. (Unitaid, *endTB Project*) Yet despite these successes, the need for expanded endTB programming far exceeds the resources currently available in Southeast Asia, where high disease burden intersects with the greatest barriers to care.

Thus, the problem is not a lack of effective medical tools but rather the lack of equitable access, trained health workers, community-centered care infrastructure, and sustained funding.

Addressing these barriers now is crucial as the window to prevent further antimicrobial resistance is narrowing, and millions remain at risk from a preventable disease.

Funding Request

Partners In Health (PIH), on behalf of the endTB consortium, respectfully requests $5,000,000 over three years from the Centers for Disease Control and Prevention under the funding opportunity *"Strengthening Tuberculosis (TB) Prevention, Diagnosis, and Treatment in Southeast Asia to End TB."* These funds will support an integrated regional effort to expand molecular diagnostics, scale WHO-recommended short-course MDR-TB regimens, and strengthen community-based and facility-based systems of care across high-burden settings.

The requested amount has been carefully calibrated to align with current WHO cost benchmarks and the operational realities of MDR-TB treatment expansion in Southeast Asia. While WHO estimates a median full provider cost of approximately $5,000 per MDR-TB patient (WHO, *WHO issues rapid communication…* 2022), the proposed project reflects the marginal cost structure typical of endTB-supported programs, in which national TB programs continue to provide core facility infrastructure, staffing, and baseline services. Within this framework, PIH anticipates supporting diagnosis, treatment, and follow-up care for approximately 1,500–1,700 MDR-TB patients over the three-year project period.

Additional funds will be used to expand diagnostic capacity through the procurement of rapid molecular testing platforms and cartridges (WHO, *Global tuberculosis report 2023*; WHO, *Tuberculosis & Covid-19* 2020), reduce diagnostic delays associated with TB mortality (Gundersen Storla et al., 2008), strengthen community-based support systems that have

proven critical to treatment adherence (Unitaid, *endTB Project*), and reinforce national monitoring and reporting frameworks disrupted by the COVID-19 pandemic (WHO, *Tuberculosis & Covid-19* 2020). At this scale, the investment will deliver substantive improvements in case detection, treatment outcomes, and continuity of care while contributing directly to national TB strategies and WHO regional elimination goals.

PIH believes that this funding will enable a high-impact, scalable demonstration of strengthened MDR-TB care and health-system capacity that can be replicated across additional provinces and countries as further resources become available.

Description of Proposed Work

PIH, through the endTB initiative, proposes a comprehensive three-year intervention to expand and strengthen tuberculosis (TB) and multidrug-resistant TB (MDR-TB) prevention, diagnosis, and treatment services across targeted high-burden regions of Southeast Asia. This program will build directly on endTB's globally validated model of expanding access to rapid diagnostics, scaling WHO-recommended short-course MDR-TB regimens, strengthening clinical capacity, and reinforcing community-based patient support systems (Unitaid, *endTB Project*).

The proposed work addresses the structural, diagnostic, and treatment barriers identified in the Statement of the Problem, where Southeast Asia accounts for approximately 45% of the global TB burden (WHO, *Ending tuberculosis in the...* 2025), diagnostic delays remain widespread (Gundersen Storla et al., 2008), COVID-19 disruptions have weakened TB services (WHO, *Tuberculosis & Covid-19* 2020), and access to modern MDR-TB therapy remains limited (WHO,

Global tuberculosis report 2023). The project is designed to deliver measurable improvements in detection, treatment outcomes, and continuity of care.

1. Expand Molecular TB Diagnostics and Laboratory Capacity

PIH will deploy molecular diagnostic platforms (e.g., GeneXpert and other endorsed WHO rapid tests) to increase early detection of TB and MDR-TB. Work includes:

- Procuring and installing new diagnostic machines in strategically selected facilities across participating provinces
- Expanding cartridge procurement and supply chain reliability
- Training laboratory technicians in rapid molecular testing, sample processing, and biosafety
- Strengthening specimen transport networks to ensure timely testing for remote communities
- Improving laboratory data reporting systems for national TB programs

Rapid molecular diagnostics are the global standard for TB and MDR-TB detection and dramatically reduce harmful diagnostic delays (Gundersen Storla et al., 2008; WHO, *Global tuberculosis report 2023*). Strengthening these systems directly counters pandemic-related setbacks that caused the first rise in TB deaths in a decade (WHO, *Tuberculosis & Covid-19* 2020).

2. Scale Access to WHO-Recommended Short-Course MDR-TB Regimens

The project will expand access to modern all-oral regimens such as BPaLM, BPaL, and related short-course combinations, which WHO recommends as the preferred treatment for RR/MDR-TB (WHO, *WHO issues rapid communication...* 2022). Work includes:

- Procuring sufficient quantities of short-course MDR-TB drugs to meet program targets (Global TB Community Advisory Board 2024)
- Supporting national adoption and rollout of WHO updated MDR-TB guidelines
- Training clinicians in regimen selection, monitoring, adverse event management, and pharmacovigilance
- Supporting safe initiation and continuation of therapy at both facility and community levels

These interventions address severe gaps in Southeast Asian access to short-course MDR-TB treatments despite their proven superiority over historical two-year regimens (WHO, *Global tuberculosis report 2023*).

3. Strengthen Clinical and Health-System Capacity

To ensure sustainability, PIH will invest in long-term, locally embedded capacity building. Work includes:

- Conduct ing in-service training for clinicians, nurses, laboratory staff, and community health workers
- Delivering mentorship programs modeled on existing endTB continuous learning systems (About the ENDTB project)
- Supporting Ministries of Health in updating national guidelines and protocols to align with WHO recommendations
- Strengthening provincial TB program leadership, supervision, and quality assurance

These activities ensure that the expanded diagnostic and treatment systems can be operated and maintained by national and local health authorities beyond the grant period.

4. Expand Community-Based TB Care and Patient Support

PIH will strengthen community-based care teams to improve treatment continuity and reduce loss to follow-up. Work includes:

- Recruiting and training additional community health workers
- Providing patient transportation support, nutritional supplements, and treatment adherence tools
- Engaging families and community networks to reduce stigma and support care retention
- Expanding accompaniment and home-based care where needed

Community-based care is a core pillar of PIH's global health delivery model and has been proven to improve TB outcomes in resource-limited settings (Unitaid, *endTB Project*).

5. Implement Targeted Prevention and Contact Tracing Measures

PIH will attempt to reduce transmission in high-burden communities. Work includes:

- Strengthening contact tracing coordinated with national TB programs
- Providing preventive therapy
- Campaigning for community risk education/reeducation
- Integrating TB screening into routine outreach and existing primary care activities

Reducing transmission is essential in Southeast Asia, where crowding and healthcare access barriers drive persistent TB spread (WHO, *Ending tuberculosis in the...* 2025).

6. Monitoring, Evaluation, Data Systems, and Operational Research

The project will incorporate rigorous data collection and reporting systems.Work includes:

- Routine monitoring of diagnostic outputs, treatment outcomes, and household-level indicators

- Strengthening of data management platforms compatible with national TB systems
- Periodic program reviews with Ministries of Health
- Targeted operational research to improve diagnostics, treatment delivery, and community support models

These systems will ensure accountability and allow PIH to generate evidence supporting national and global TB strategies (Unitaid, *endTB Project; Financing for TB prevention…* 2024).

7. Coordination with Ministries of Health and Local Partners

PIH will collaborate closely with:

- National and provincial TB program directors
- Local health centers and district hospitals
- Community organizations and networks of TB survivors
- International consortia working on TB in the region

This multi-level coordination ensures integration with national strategies and contributes directly to WHO regional TB goals (WHO, *Global tuberculosis report 2024*; WHO, *Ending tuberculosis in the…* 2025).

8. Implementation Timeline (Summary)

Year 1: Diagnostic expansion, procurement, site selection, workforce training, and early patient enrollment

Year 2: Full-scale treatment rollout, matured community support networks, and intensified M&E

Year 3: System optimization, sustainability planning, gradual handover to national programs, and final evaluation

Measuring Project Success

The success of this project will be measured through a combination of both quantitative and qualitative improvements in the delivery of TB and MDR-TB care across the targeted regions. These measures align with WHO-endorsed evaluation standards and PIH's longstanding internal monitoring frameworks, ensuring that progress can be assessed with clarity, rigor, and comparability to national and global indicators. Because Southeast Asia carries approximately forty-five percent of the global TB burden (WHO, *Ending tuberculosis in the...* 2025), improvements in detection, treatment access, and continuity of care within this region offer the potential for measurable gains not only in local health outcomes but in global TB control efforts as well.

A major indicator of success will be the expansion of rapid molecular testing and a corresponding reduction in diagnostic delays, which remain one of the strongest predictors of avoidable TB mortality in low-resource settings (Gundersen Storla et al., 2008). By strengthening laboratories, placing additional diagnostic machines, and improving specimen transport, the program aims to document meaningful year-over-year increases in the number of patients receiving timely molecular testing. Improvements in diagnostic turnaround time will be monitored closely, especially in areas where COVID-19 disruptions significantly reduced TB detection capacity (WHO, *Tuberculosis & Covid-19* 2020). A sustained increase in early detection (relative to baseline clinic data collected before the project) will serve as a critical benchmark for assessing program impact during all three years of implementation.

Equally important will be the expansion of access to WHO-recommended, all-oral short-course regimens for MDR-TB. Historically, patients in Southeast Asia have struggled to access these

regimens despite their clear clinical advantages over the older toxic two-year therapies (WHO, *Global tuberculosis report 2023*). The introduction and scale-up of regimens such as BPaLM and BPaL, now recognized by WHO as preferred treatment options (WHO, *WHO issues rapid communication...* 2022), present an opportunity to substantially improve outcomes. Program success will therefore be measured not only by the number of patients initiated on these modern regimens but also by documented improvements in treatment completion and cure rates, informed by endTB's prior demonstrations of feasibility and success in resource-limited settings (Unitaid, *endTB Project*). A shift toward these shorter treatments at the facility level will provide strong evidence that clinicians are adopting updated standards of care.

Another important indicator will be increased clinical and laboratory capacity across the participating health facilities. The program anticipates training substantial numbers of clinicians, nurses, laboratory staff, and community health workers in updated diagnostic and treatment protocols. These trainings will be supplemented by mentorship and routine supervision, enabling PIH and national partners to evaluate improvements in clinical decision-making, adherence to WHO guidelines, and the quality of patient management. Evidence of strengthened clinical systems (including but not limited to consistent documentation, improved adverse event monitoring, and adoption of newly updated treatment guidelines) will represent an essential qualitative dimension of project success.

The reinforcement of community-based TB care systems will serve as a further measure of the project's impact. PIH's experience has repeatedly shown that accompaniment, nutritional support, transportation assistance, and regular home visits improve adherence and reduce loss to follow-up among TB and MDR-TB patients (Unitaid, *endTB Project*). Success in this domain will be measured by reductions in treatment interruption, increased continuity of care among

vulnerable populations, and qualitative improvements in patients' ability to access and complete treatment. These metrics are especially critical in Southeast Asia's rural and peripheral regions, where geographic and financial barriers often prevent patients from sustaining long-term therapy.

The program will also evaluate its success through strengthened case-finding and prevention activities. By collaborating with Ministries of Health to expand contact tracing, household screening, and targeted community outreach, PIH expects to identify a measurable increase in early or asymptomatic TB detection relative to baseline trends. Given that household crowding and delayed care contribute significantly to transmission in the region (WHO, *Ending tuberculosis in the...* 2025), enhanced case-finding represents both a preventive outcome and a direct contribution to the region's long-term TB control.

Finally, strong monitoring and evaluation systems will ensure that progress is tracked with transparency and accuracy. Program data will be integrated into national reporting platforms and reviewed regularly with Ministries of Health, aligning project activities with national TB strategies and WHO's global End TB Framework (WHO, *Global tuberculosis report 2024*). PIH will prepare periodic reports summarizing diagnostic output, treatment outcomes, training results, community engagement, and operational challenges. These reports will allow the CDC and national counterparts to track improvements over time and assess whether the project is advancing the shared goal of recovering from pandemic-related setbacks while accelerating progress toward TB elimination.

Taken together, these measures will provide a comprehensive and credible account of the project's impact. By focusing on earlier detection, improved access to modern MDR-TB

treatment, strengthened clinical capacity, and community-centered care models, PIH will generate both immediate improvements in patient outcomes and long-term gains in health system resilience. The combination of quantitative benchmarks and qualitative indicators will allow the program to demonstrate a clear return on investment and ensure that the work contributes meaningfully to reducing the burden of TB across Southeast Asia.

Existing Facilities and Staff

Partners In Health (PIH) and the endTB consortium have an existing, integrated network of clinical, laboratory, community-based, and data systems developed through more than a decade of collaboration with Ministries of Health and national TB programs across Southeast Asia. These facilities and personnel are already engaged in the delivery of TB and MDR-TB services and are equipped to support rapid diagnostics, modern all-oral treatment regimens, patient accompaniment, and standardized reporting aligned with WHO guidance (WHO, *Global tuberculosis report 2023*; WHO, *WHO issues rapid communication…* 2022). Because this infrastructure is already operational within public-sector health systems, implementation can begin immediately upon funding.

PIH-supported clinical facilities include district hospitals, provincial referral centers, and dedicated TB treatment units that routinely evaluate patients, initiate therapy, and manage complications throughout treatment. Many of these sites function as MDR-TB referral hubs, enabling efficient enrollment of patients into WHO-recommended short-course regimens such as BPaLM and BPaL (WHO, *WHO issues rapid communication…* 2022). These facilities are staffed by clinicians, nurses, pharmacists, and laboratory specialists trained through prior PIH and endTB initiatives to deliver evidence-based TB care, apply standardized monitoring tools,

and participate in continuous mentorship and supervision (Unitaid, *endTB Project*; WHO, *Global tuberculosis report 2023*). Their integration within government hospitals ensures that the project strengthens national capacity rather than operating parallel systems.

Laboratory capacity is a central component of this existing infrastructure. PIH-supported laboratories already conduct molecular testing and culture-based diagnostics and operate WHO-endorsed rapid diagnostic platforms for detecting TB and rifampicin resistance (WHO, *Global tuberculosis report 2023*). Laboratory personnel are trained in biosafety, quality assurance, specimen handling, and equipment maintenance, and work closely with national reference laboratories. This technical expertise is essential to reducing diagnostic delays that contribute to preventable transmission and mortality (Gundersen Storla et al., 2008). The proposed project will expand testing volume and specimen transport, but it builds on systems that are already functioning effectively.

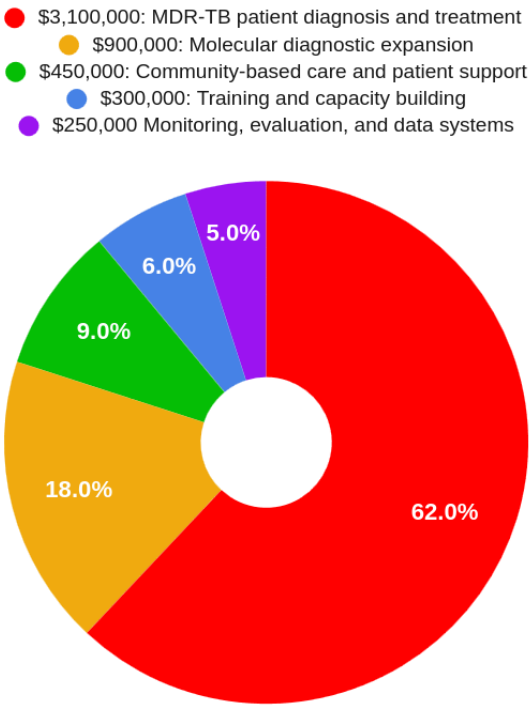
Complementing facility-based services, PIH maintains extensive community-based networks of trained community health workers who support treatment adherence, conduct follow-up visits, and help patients overcome financial, geographic, and social barriers to care. These accompaniment models have been central to PIH's documented success in TB and MDR-TB treatment delivery and are particularly well suited to Southeast Asia, where many patients live far from health facilities (Unitaid, *endTB Project*; WHO, *Ending tuberculosis in the…* 2025). Community-based personnel serve as a critical link between patients and clinical services, ensuring continuity of care throughout diagnosis and treatment.

The project also benefits from PIH's established monitoring, evaluation, and data-management systems. Facilities use standardized reporting tools aligned with national TB information

systems, enabling real-time monitoring of diagnostic performance, treatment outcomes, and supply chain needs. These systems proved essential during COVID-19–related disruptions to TB surveillance and remain critical to transparent reporting and adaptive program management (WHO, *Tuberculosis & Covid-19* 2020; WHO, *Global tuberculosis report 2024*; Financing for TB prevention… 2024).

Together, PIH's existing facilities and highly qualified personnel form a reliable and scalable platform for the proposed work. The combination of experienced clinical teams, skilled laboratory staff, robust community-based care networks, and strong data systems ensures that the project is technically sound, operationally feasible, and positioned to deliver measurable reductions in TB and MDR-TB burden across Southeast Asia.

Proposed Budget



Over the three-year project period, the $5,000,000 requested will be allocated to maximize both direct patient impact and long-term system strengthening. The budget reflects typical endTB-style funding, which supplements existing national TB program investments in facilities, staffing, and routine care. As a result, a substantial share of the budget is directed toward marginal costs associated with MDR-TB diagnosis, treatment, and adherence

support, enabling the project to reach a significantly larger patient population than would be possible if full provider costs were borne by the grant alone.

Approximately 60–65 percent of the total budget will directly support MDR-TB patient care. These funds will cover procurement gaps for WHO-recommended all-oral short-course regimens such as BPaLM and BPaL (WHO, *Global tuberculosis report 2023*; WHO, *WHO issues rapid communication…* 2022), laboratory monitoring, adverse-event management, and the programmatic costs associated with treatment initiation and follow-up. Within this structure, the project is designed to support treatment for approximately 1,500–1,700 MDR-TB patients over three years, consistent with WHO financing data and the scale of prior endTB implementation efforts (Unitaid, *endTB Project*).

A second major component of the budget will strengthen molecular diagnostic capacity across priority districts. Funds will support the targeted procurement and deployment of rapid molecular testing platforms, including GeneXpert machines, as well as cartridges, maintenance, and quality-assurance supplies (WHO, *Global tuberculosis report 2023*; WHO, *Tuberculosis & Covid-19* 2020). These investments are intended to reduce diagnostic delays that contribute directly to ongoing transmission and preventable mortality (Gundersen Storla et al., 2008). By focusing on strategic site selection and integration within existing laboratory networks, the project will increase testing volume and geographic coverage while maintaining cost efficiency.

Technician in Indonesia runs a test on a GeneXpert machine (Source: USAID)

Community-based care and patient support will represent another critical budget area. Resources will support community health worker engagement, patient transportation and nutritional assistance, and adherence monitoring in hard-to-reach settings. These investments address well-documented social and economic barriers to treatment completion and reflect PIH's established accompaniment model, which has demonstrated success in MDR-TB programs globally (Unitaid, *endTB Project*; WHO, *Ending tuberculosis in the…* 2025). Although modest relative to total clinical expenditures, these funds play a disproportionate role in reducing loss to follow-up and improving treatment outcomes.

The budget also allocates funding for training and capacity-building among clinicians, nurses, laboratory personnel, and community health workers. These activities include in-service training, mentorship, and coordination with national TB program staff to support safe and consistent implementation of WHO-recommended regimens (WHO, *Global tuberculosis report 2024*; WHO, *WHO issues rapid communication…* 2022). Because PIH and endTB operate within existing public-sector facilities, these training investments remain cost-efficient while producing durable improvements in clinical quality and standardization.

Finally, a dedicated portion of the budget will support monitoring, evaluation, and data systems. Funds will strengthen routine reporting, treatment outcome tracking, and supply-chain monitoring aligned with national TB information systems (WHO, *Tuberculosis & Covid-19* 2020; *Financing for TB prevention…* 2024). Administrative and coordination costs will remain limited, consistent with PIH's emphasis on reinforcing public-sector capacity rather than establishing parallel systems, while ensuring accountability and program quality throughout implementation.

Together, this budget structure enables the project to achieve meaningful diagnostic expansion, treat a substantial number of MDR-TB patients, and strengthen health-system capacity, all while remaining within the $5,000,000 funding ceiling.

Conclusion

Tuberculosis remains one of the most pressing public health challenges in Southeast Asia, where overcrowding, delayed diagnosis, and persistent structural barriers continue to sustain one of the highest TB and MDR-TB burdens in the world. The COVID-19 pandemic further disrupted national TB programs, reversing nearly a decade of progress and widening existing gaps in detection and treatment. These setbacks demand immediate intervention. Without substantial reinvestment in rapid diagnostics, short-course MDR-TB therapies, and robust systems of patient support, the region will remain far off-track from global TB elimination targets. The project proposed here directly addresses these challenges through a practical, evidence-driven, and scalable set of interventions rooted in more than a decade of endTB's leadership in expanding access to modern drug-resistant TB care.

The proposed work focuses on strengthening the entire continuum of TB and MDR-TB care. PIH will expand the availability of rapid molecular diagnostics, reducing delays that undermine treatment outcomes and fuel transmission. The project will scale WHO-recommended short-course regimens, replacing older toxic therapies with safer, fully oral treatments that improve adherence and dramatically reduce the length of MDR-TB care. Clinical staff, laboratory personnel, and community health workers will receive targeted training and supervision, while community-based support systems will help patients navigate the financial and logistical barriers that often interrupt treatment. Strong monitoring and evaluation systems

will ensure accurate reporting, ongoing quality improvement, and alignment with national TB program goals.

The facilities and personnel required to implement this project are already in place. PIH and its Ministry of Health partners operate a network of hospitals, laboratories, and community-level systems capable of supporting rapid diagnostic expansion and MDR-TB treatment scale-up. Because PIH's model strengthens public-sector systems rather than running parallel programs, the benefits of the project will extend beyond the three-year implementation window, building lasting national capacity.

The requested $5,000,000 represents a strategic investment in a region where improved TB control would have global impact. Allocated over three years, these funds will support diagnosis and treatment for approximately 1,500–1,700 MDR-TB patients, expand diagnostic capacity across priority districts, reinforce community-based accompaniment, and help restore progress lost during the pandemic. The interventions proposed are inherently scalable: strengthened laboratory networks, trained clinicians, and community care systems can be extended to additional provinces and adapted to evolving epidemiological needs.

PIH and the endTB consortium bring a proven track record of delivering high-quality TB and MDR-TB care in some of the world's most challenging settings. Funding this proposal will yield immediate improvements in TB diagnosis and treatment while strengthening the long-term resilience of national health systems and accelerating progress toward ending TB in Southeast Asia.

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