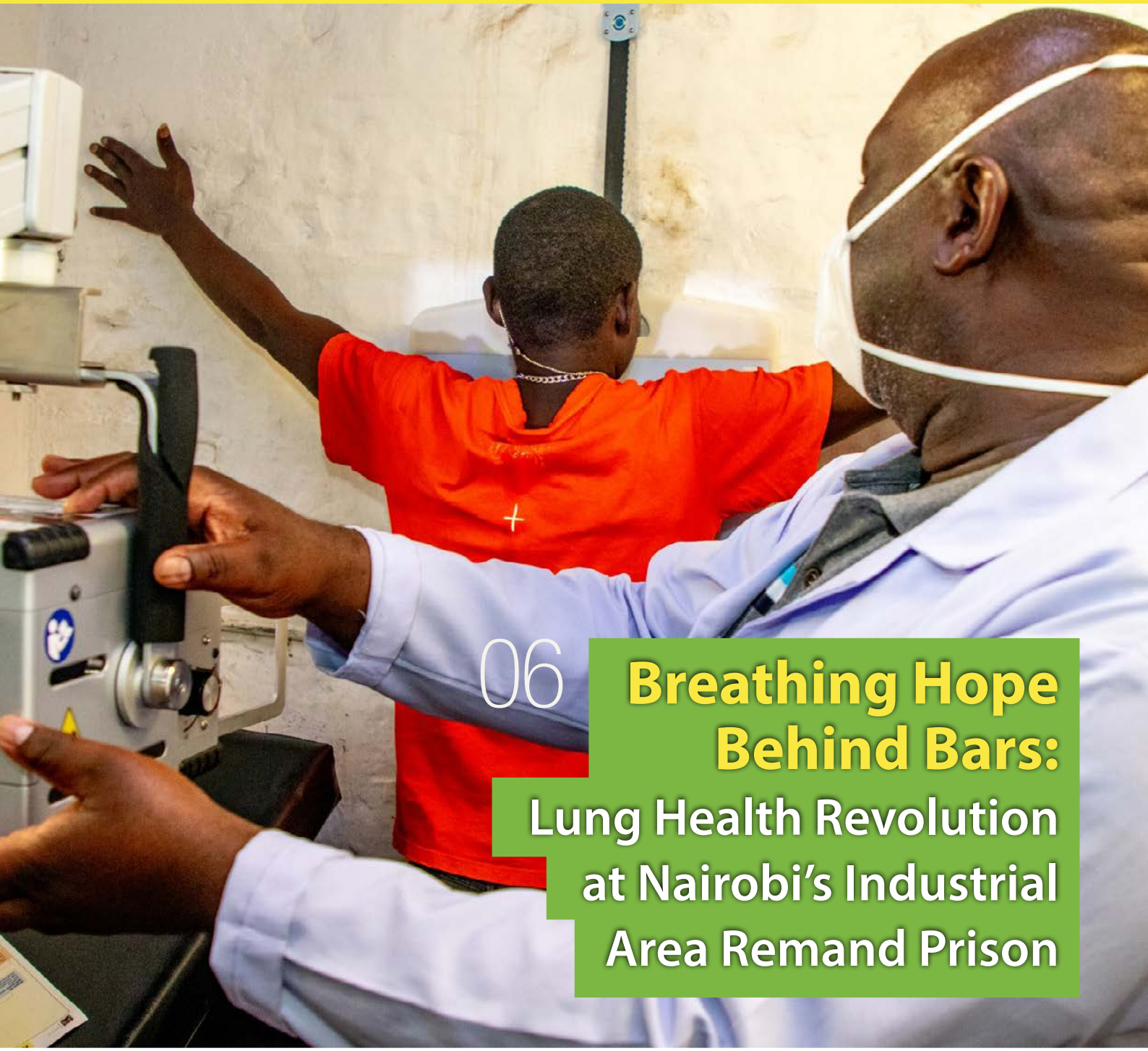
Ministry of Health
National Tuberculosis, Leprosy and Lung Disease Program

TiBa

A magazine for DTLD

ISSUE 16 / July - Sep 2025



We are ready to serve you!

Visit your nearest TB clinic for free testing, treatment, and support.

Dedicated to **Your Health!**

Together, we can #EndTB in Kenya!

Angamiza TB

REPUBLIC OF KENYA
MINISTRY OF HEALTH

NATIONAL TUBERCULOSIS, LEPROSY AND LUNG DISEASE PROGRAM

amref health africa

chs
Centre for Health Solutions - Kenya

inside

Editorial team

Executive Editor

Dr. Immaculate Kathure, OGW, Head, DTLD

Editor

Mbetera Felix: DTLD

Sub Editors

Dr. Nkirote Mugambi: Tamatisha TB
Dr. Macharia Stephen: DTLD
Drusilla Nyaboke: DTLD

Contributors

Mbetera Felix: DTLD
Aiban Rono: DTLD
Martin Githiomi: DTLD
Alfred Itunga: Tamatisha TB
Boaz Ouma: Tamatisha TB
John Gitau: Tamatisha TB
Sarah Kaminja: Tamatisha TB
Edel Sakwa: Light Consortium
Sharon Olwande: CHAI
Mary Odhiambo: Kisumu County

Layout/Design

Mbetera Felix
Communication Officer,
Division of Tuberculosis and other Lung Diseases

Photography:

Mbetera Felix
John Gitau

Division of Tuberculosis and other Lung Diseases,
Afya House Annex 1st Floor Kenyatta National Hospital Grounds
P. O. Box 20781-00202 Nairobi, Kenya
Email: info@nltp.co.ke
Website: www.nltp.co.ke
Facebook: NTLDKenya
X: @NTLDKenya

The editor welcomes articles from readers and stakeholders of DTLD

© 2025

Word from the
Head of Division of Tuberculosis and other Lung Diseases

Every day, in clinics and communities across Kenya, we meet people whose lives have been affected by tuberculosis—mothers who've lost their breath caring for children, fathers too weak to work, young adults whose dreams are paused by a cough that won't go away. Behind our case numbers, 120,000 Kenyans diagnosed with TB last year are real stories of pain, and worse, stories we never hear because 22% of TB cases remain undiagnosed and untreated.

That's why I write with hope. This quarter, the National TB program is deploying 80 ultra-portable digital X-ray machines with AI across all 47 counties. This is a leap forward in our fight against TB and lung disease. But this isn't just about technology; it's about reaching people earlier, wherever they are.

Imagine, a community health worker screening a grandmother in her village, diagnosing TB before she loses more weight, a miner in rural Kenya getting same-day results instead of waiting weeks for a distant hospital visit and a prison inmate receiving treatment faster, stopping outbreaks before they start.

These lightweight, battery-powered machines, approved by Kenya's Nuclear Regulatory Authority, bring the power of AI to the frontline. Like a skilled radiologist in a backpack, they spot TB with 90% accuracy, even in asymptomatic cases.

Why does this matter to us? For years, rural patients travel hours for diagnostics, manual systems mean missed follow-ups and late diagnoses rob families of livelihoods.

Now, we're rewriting that story. With partners like the Global Fund, WHO, CDC, CHAI, AMREF, and CHS Tamatisha we're prioritizing high-burden areas including slums, prisons, mines and areas where TB hides. We will be capacity building health workers to use these tools safely and effectively and link every diagnosis to care through our TIBU digital system, ensuring no one falls through the cracks.

Technology alone won't end TB. People will. To our county teams, let's get these machines where they're needed most. To our health workers, you're the heart of this mission and your hands will turn AI insights into lives saved. To our communities, help us spread the word. A simple screening could save a neighbour.

This is just the beginning. With every X-ray, we're not just finding TB, asthma and other lung abnormalities, we're restoring dignity, livelihoods, and futures. Let's move with urgency. One early diagnosis at a time. Let's make Kenya a leader in beating TB.

Dr. Immaculate Kathure, OGW

Ag. Head, Division of Tuberculosis and other Lung Diseases

Status of National Tuberculosis Epidemic and Response

Q2 2025

Drug Susceptible TB

24,624
Number of TB cases Notified

88%
Treatment success rate (All forms)

13%
Pediatric proportion

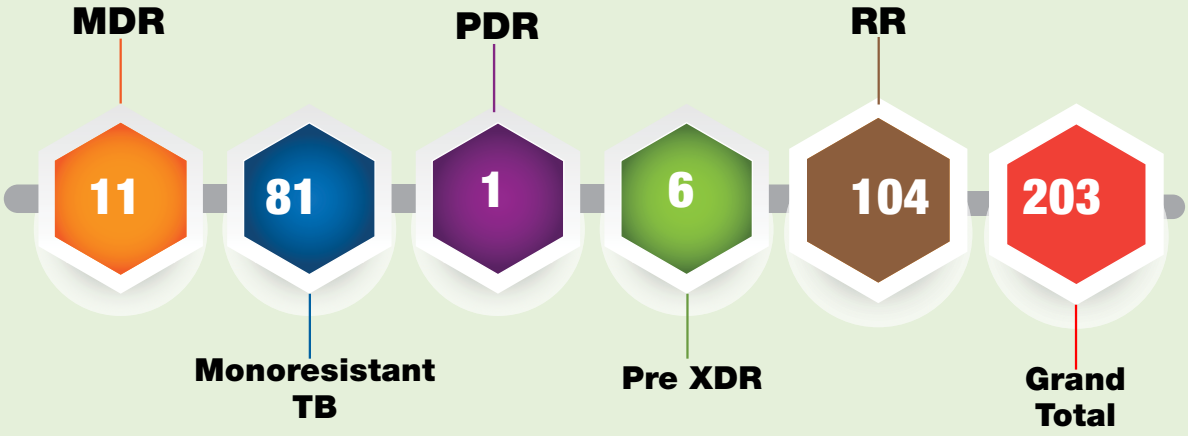
72%
Previously treated (DSTB) with DST results

98%
Proportion of DSTB with known HIV status

4%
Lost to Follow Up

93%
Proportions on ART

Drug-resistant TB

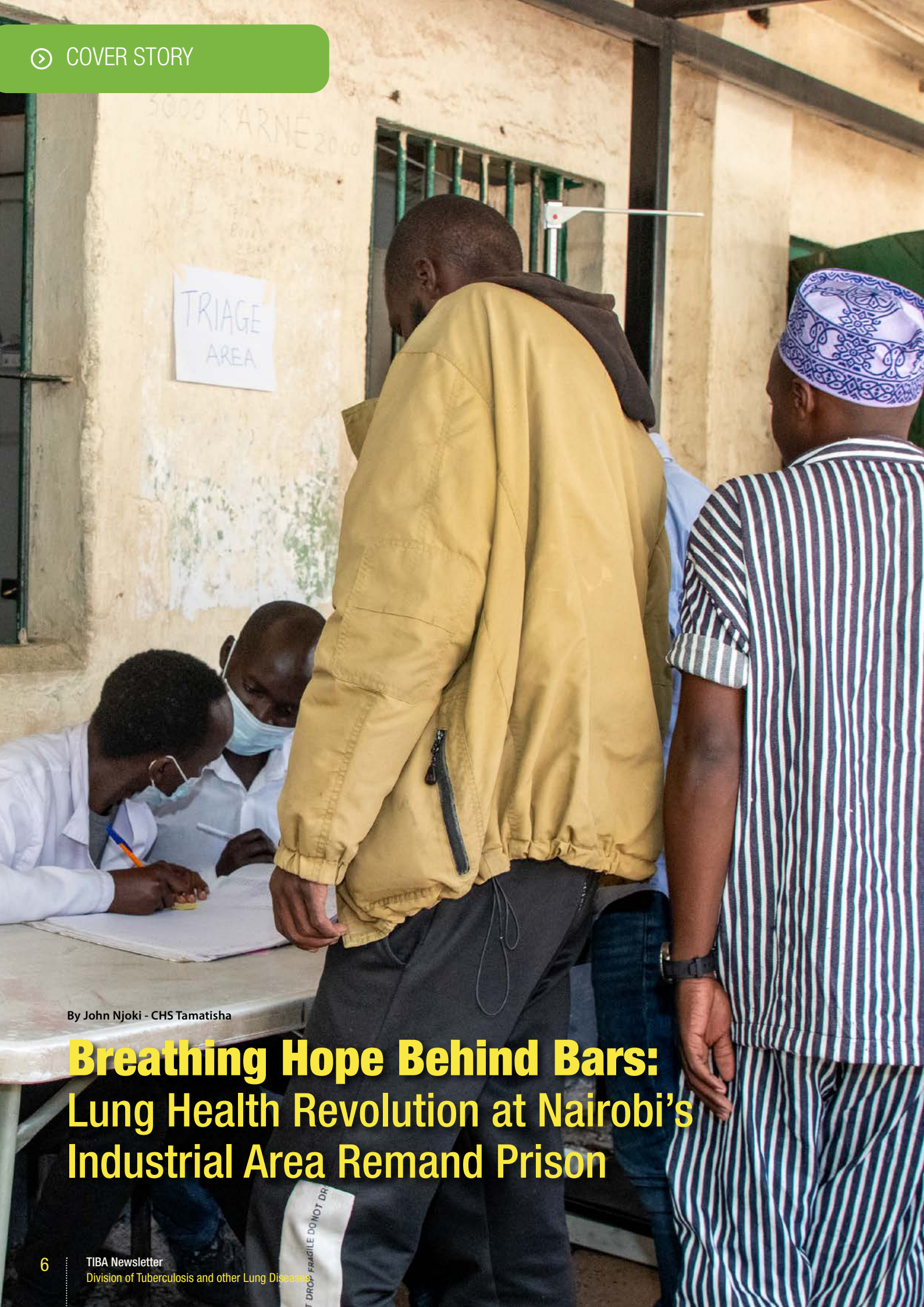


Leprosy

16
Number of Leprosy Cases reported

TB Prevention Therapy

12,394
Children <5 initiated on IPT (contacts of bacteriologically confirmed cases)



By John Njoki - CHS Tamatisha

Breathing Hope Behind Bars: Lung Health Revolution at Nairobi's Industrial Area Remand Prison

Nairobi's Industrial Area Remand Prison, sheltering over 4,000 inmates in cramped, poorly ventilated conditions, stands as a battleground against tuberculosis (TB) and lung diseases, where high inmate turnover and scarce diagnostics fuel a relentless health crisis. The World Health Organization highlights prisons as having TB rates up to 26 times higher than outside, yet past interventions struggled with limited tools and funding. In 2024, screening just 1,700 remandees uncovered 47 TB cases, one resistant to key treatments, sounding a stark warning.

Elizabeth Mueni, County TB Coordinator, noted, "The 2024 data, revealing 47 TB cases among 1,700 screened, laid bare systemic failures in Infection Prevention and Control, shaping our urgent 2025 response." Committed to equitable lung health for underserved communities, the National TB Programme (NTP), supported by Clinton Health Access Initiative (CHAI) and Kenya Prisons Service, launched a month-long outreach from June 9 to July 5, 2025, to save lives across the prison's maximum and medium facilities.

The recent outreach screened a cumulative total of 3,669 individuals both inmates & staff. 2,820 at the maximum facility and 849 at the medium using digital chest X-rays, with 415 showing abnormalities—180 suggestive of TB, 133 indicating other lung conditions and 102 showing signs of both. GeneXpert testing for TB was conducted on 603 individuals, confirming 29 cases (26 maximum, 3 medium), with 9 additional inmates (5 maximum, 4 medium) clinically diagnosed and started on treatment due to pending results for extrapulmonary TB. Spirometry and peak flow tests—91 peak flow tests (61 maximum, 30 medium) and 84 spirometry tests (74 maximum, 10 medium)—identified 19 asthma cases (15 maximum, 4 medium), 17 COPD cases (12 maximum, 5 medium) and 8 post-TB lung disease cases (7 maximum, 1 medium). Six (6) inmates at the maximum facility were referred for CT scans for suspected lung collapse or fibrosis, and 41 (33 maximum, 8 medium) required repeat spirometry after nebulization.

Mueni noted, "These figures highlight systemic gaps in prison healthcare. Past interventions laid the groundwork, but intensified strategies are critical to curb transmission and improve well-being. The NTP's commitment to underserved populations, including correctional facilities, drove the outreach's scale and focus.

Thomas Ogutu, speaking for the Officer-in-Charge at the Prison, explained, "The partnership with NTP and CHAI was pivotal, allowing us to screen 3,669 people and uncover critical cases. This initiative not only saved lives but also empowered inmates and staff by prioritizing their health, reinforcing the prison's role as a partner in public health."

The partnership with NTP and CHAI was pivotal, allowing us to screen 3,669 people and uncover critical cases.

Sharon Olwande from CHAI added, "The high yield including 29 confirmed TB cases and 44 non-TB lung conditions, underscores the crisis in overcrowded prisons. We extended the outreach to nearly a month to ensure inclusivity, and we're committed to securing ongoing care like CT scans, inhalers, and specialist reviews, with plans for twice-yearly screenings to reach 100% coverage."

Dr. Rose Thuo, Starehe Sub-County Medical Officer of Health, emphasized sustainability: "With 11% of X-rays abnormal and 603 tested for TB, routine screening, patient tracking, treatment adherence, and improved ventilation are essential. This is a long-term commitment, and NTP's focus on equitable healthcare ensures prisons aren't overlooked."

The prison's leadership facilitated block-by-block screenings and security, while NTP provided technical oversight and CHAI supplied equipment.

Thomas proposed quarterly screenings and on-site diagnostics, stating, "We need NTP's continued support and staff training to sustain this momentum and make lung health care a permanent fixture in our facility. The reception from inmates and staff was overwhelmingly positive, with many experiencing chest X-rays and spirometry for the first time, expressing gratitude for the non-invasive approach and empowerment through health awareness"

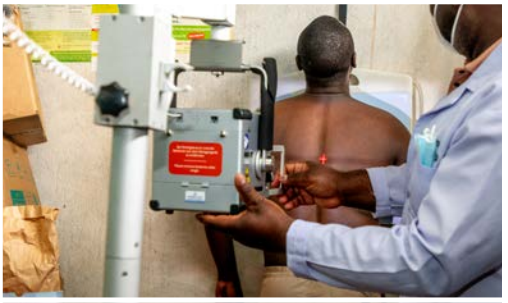
Mueni emphasized "For the future, the county plans to strengthen partnerships with prison authorities and enroll indigent inmates in health insurance schemes to ensure sustained access to care, fostering inclusivity and safeguarding health rights."

Dr. Thuo urged other facilities to adopt similar models, emphasizing NTP's role in equitable healthcare: "Collaboration with health departments strengthens resource mobilization and ensures quality care for all, especially in high-risk settings like prisons."

Ms.Olwande reinforced CHAI's dedication: "Our goal is to make these outreaches a regular lifeline, not a one-off. We're working with NTP to build systems that sustain diagnosis and treatment for TB and lung conditions in correctional facilities." Thomas expressed gratitude to the Government of Kenya, Ministry of Health, NTP, and CHAI: "Your dedication, guided by NTP's vision for underserved communities, ensures health rights for all."

The National TB Programme commits to redefining lung health in correctional facilities and underserved areas, encompassing TB, asthma, COPD, and chronic conditions. Through ongoing screenings, advanced diagnostics and strategic partnerships, we pledge to deliver inclusive care, ensuring respiratory wellness for every Kenyan. ■

IPACT FOR INMATES PICTORIAL




WHATEVER YOU DO, DO IT FOR THE
GLORY OF
GOD

Research Forum Reinforces Kenya's Commitment to Ending TB and Advancing Lung Health

Dr. Immaculate Kathure, OGW, Ag. Head, Division of Tuberculosis Leprosy and other Lung Diseases giving opening remarks during the forum.

By Mbetera Felix - DTLD

Highlighting a firm commitment to eradicating tuberculosis (TB) and advancing lung health in Kenya, the National Tuberculosis Program hosted a high-level TB and Lung Health Research Dissemination Forum at Nairobi's Weston Hotel. The event, supported by Global Fund, Light Consortium and Respiratory Society of Kenya brought together a diverse group of stakeholders, researchers, policymakers, civil society actors, and development partners, demonstrating the pivotal role of research forums in informing policy, guiding investments, and strengthening health programs.

Hosted in collaboration with key partners, the forum served as a platform for sharing groundbreaking evidence on innovations and challenges in TB care and broader lung health management. By promoting cross-sector dialogue and showcasing homegrown solutions, the forum reinforced the value of research as a powerful tool for transforming healthcare delivery and outcomes.

Dr. Immaculate Kathure, Acting Head of the Division of Tuberculosis, Leprosy, and other Lung Diseases (DTLD), commended participants for their tireless efforts in TB research, prevention, and care. "Kenya has made notable progress in TB treatment coverage. However, gaps remain, particularly in managing drug-resistant TB, post-TB complications, and co-existing health conditions," she stated.

Cont'd on pg 11

Cont'd fro pg 10

She further emphasized the need to transition from a disease-specific approach to a broader lung health framework, one that supports long-term recovery and quality of life for TB survivors. "Ending TB is not just about curing an infection, it's about restoring well-being and resilience," Dr. Kathure noted.

The forum focused on six critical thematic areas:

- Innovations in TB Diagnosis and Treatment
- Strengthening TB Prevention and Early Detection
- Integrated Care and Management of Comorbidities
- Tackling Drug-Resistant TB (DR-TB)
- Advancing Equity and Community Engagement
- Addressing Risk Factors and Protecting Vulnerable Populations

A key highlight was the Ministry's effort to institutionalize research as a strategic pillar in the fight against TB and other lung conditions. The newly established TB and Lung Health Research Task Force will coordinate national research priorities, accelerate the translation of findings into practice, and foster evidence-informed decision-making across all levels of the health system.

Dr. Kathure called for sustained partner engagement, bold policy shifts, and increased investments in research and innovation. "We must build resilient, people-centered health systems that not only respond to current disease burdens but also anticipate emerging threats, including the health effects of climate change," she urged.

In terms of bringing Kenya's TB and lung health response into line with both domestic priorities and international best practices, this research forum represents a critical turning point. It restates the importance of research in developing inclusive, successful, and progressive health policies. ■

Stakeholders present at the meeting.

Professor Chakaya, ReSOK.

Dr. Farida Geteri - NTP.

Dr Evans Amukoye - KEMRI.

Dr. Nkirote Mugambi, Tamatisha TB.

Dr. Jane Rahedi, KEMRI.

Dr.Samson Muga,Tamatisha TB.

Dr.Philip Owiti, AMPATH.

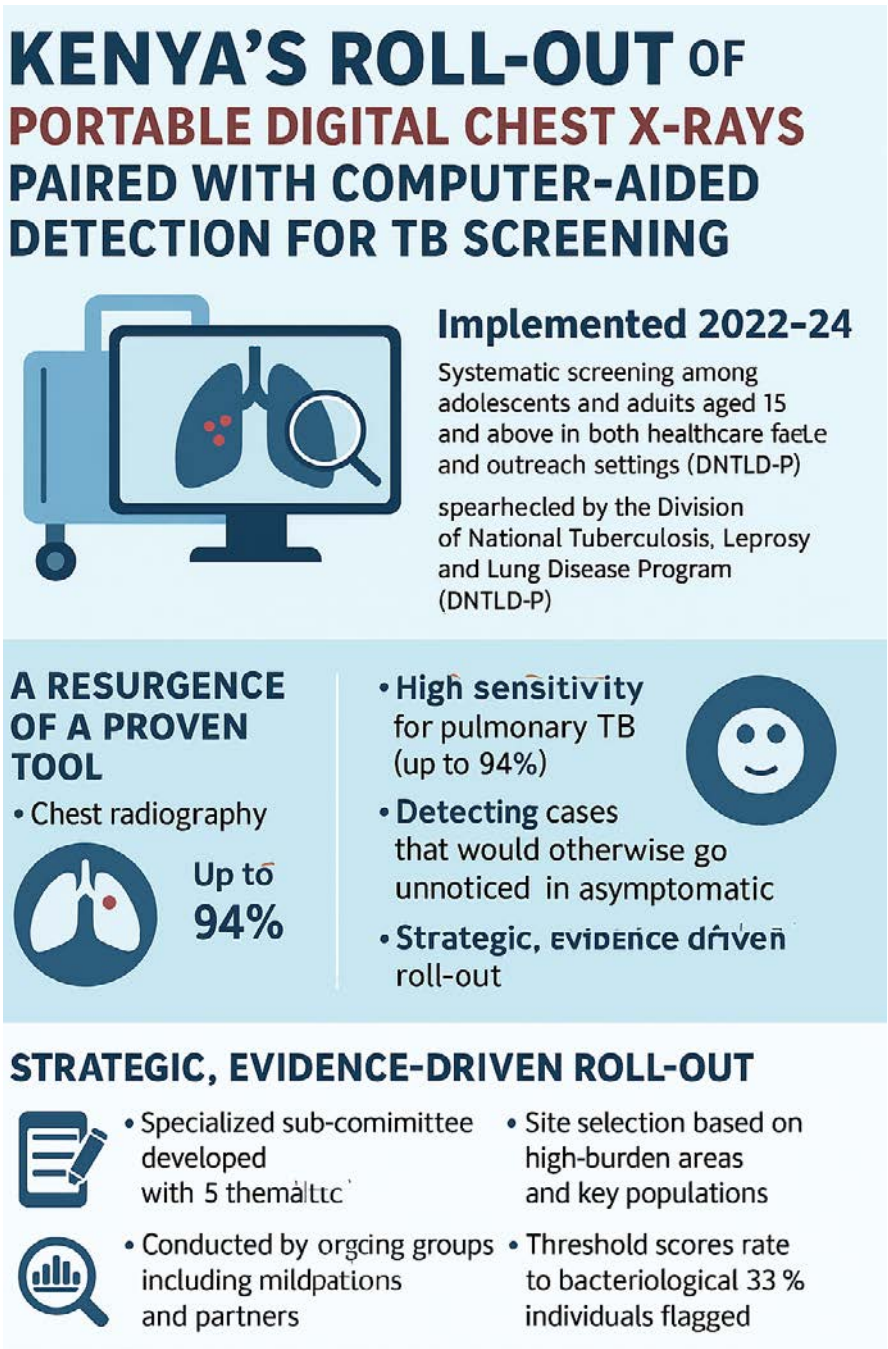
Aiban Rono, NTP.

Dr Videlis Nduba - KEMRI.

Dr.Brenda Mungai -AFIDEP.

Kenya's TB Innovation: How Portable Digital X-rays and AI are Changing the Fight Against TB

By Mbetera Felix - DTLD



Study done by:


Dr. S. Muga


K. Gichanga


Dr. B. Mungai


M. Lutta


Dr. N. Mugambi


Dr. I. Kathure


Dr. P. Wekesa


L. Kerubo


J. Ongoro

Kenya has successfully rolled out a programmatic deployment of portable digital chest X-rays (DCXR) paired with Computer-Aided Detection (CAD) software, an innovation with the potential to transform the country's approach to TB screening and diagnosis.

Cont'd on pg 13

Cont'd from pg 12

The roll-out, implemented between 2022 and 2024, targets systematic screening among adolescents and adults aged 15 and above in both healthcare facilities and outreach settings. This initiative, spearheaded by the Division of National Tuberculosis, Leprosy and Lung Disease Program (DNTLD-P), represents one of the most comprehensive attempts in sub-Saharan Africa to incorporate artificial intelligence into real-world TB control efforts.

A Resurgence of a Proven Tool

While chest radiography has a long legacy in TB detection, used extensively in the 20th century in high-income countries—it was largely abandoned in the 1970s due to WHO recommendations. However, a new wave of evidence, including global TB prevalence surveys, has reignited interest in CXR due to its high sensitivity for pulmonary TB (up to 94%) and its ability to detect cases that would otherwise go unnoticed, especially in asymptomatic individuals.

The Kenya roll-out draws from this renewed global momentum but goes further. By integrating CAD software (CAD4TBv7), it automates image analysis, thereby minimizing dependence on human interpretation and enabling deployment in low-resource settings where radiologists may be scarce.

Strategic, Evidence-Driven Roll-out

The planning behind the implementation was meticulous. A specialized CXR sub-committee was formed, drawing representatives from the National TB Program, the HIV program, county health departments, the Kenya Nuclear Regulatory Authority, and partners like USAID, CDC, AMREF, and CHS.

Five thematic working groups were created to handle various components—from algorithm development to radiation safety and human resources. Site selection was data-driven, prioritizing high-burden areas with existing molecular diagnostic capacity and partner support. Specific attention was paid to key populations including people living with HIV, prisoners, and outpatient department attendees.

Key Findings and Lessons

The use of threshold scores (initially set at 60) enabled targeted follow-up testing, improving diagnostic yield while conserving resources. According to interim results from July 2022 to September 2024, the bacteriological confirmation rate for individuals flagged by the CAD system was as high as 33%—a striking indicator of efficiency.

To support the initiative, Kenya hired seven radiographers and eight linkage assistants, while also investing in the training and equipping of healthcare workers with personal protective equipment. Radiation safety assessments ensured compliance with national standards, with mobile lead shields, dosimeters, and technical charts instituted to reduce scatter exposure.

One of the standout lessons was the need for sustained effort post-deployment. "The momentum of screening activities needs continued support in the form of human resources, logistics, and follow-up systems," the study notes.

How Kenya Compares Globally

Globally, pilot studies in countries like India, Vietnam, and South Africa have explored CAD-enabled TB screening with promising outcomes. For example, a study in India found CAD software performance comparable to experienced radiologists in high-burden urban slums. Similarly, in South Africa, the use of portable CXR and CAD in prisons significantly increased TB case notifications.

Yet, Kenya's study distinguishes itself in its scope, national coordination, and real-world integration into public health systems. Unlike many pilot-based projects, this was a programmatic roll-out with policy development, stakeholder buy-in, and health system integration at its core.

Why this Study Matters

The Kenyan experience fills a critical knowledge gap. While much has been published globally about the accuracy and diagnostic power of CAD tools, little has been written on the practicalities of implementation in programmatic settings. This study documents that process—offering a roadmap for other low- and middle-income countries keen to adopt similar technology.

The implications extend beyond TB. With rising cases of post-TB lung disease and non-TB respiratory conditions, digital radiography could also serve as a gateway to broader lung health surveillance, especially as integrated care models gain traction.

The successful deployment of CAD-enabled digital X-ray screening in Kenya underscores a key tenet of the WHO's End TB Strategy—early and equitable diagnosis. By embracing innovation while maintaining strong coordination, Kenya is setting a precedent that could shape the future of TB detection across Africa and beyond.

But the journey isn't over. As the study recommends, dedicated policy guidelines, follow-up care frameworks, and sustainable financing will be essential to keep the momentum alive.

In the words of one of the lead implementers, "This wasn't just a tech upgrade—it was a systems transformation."

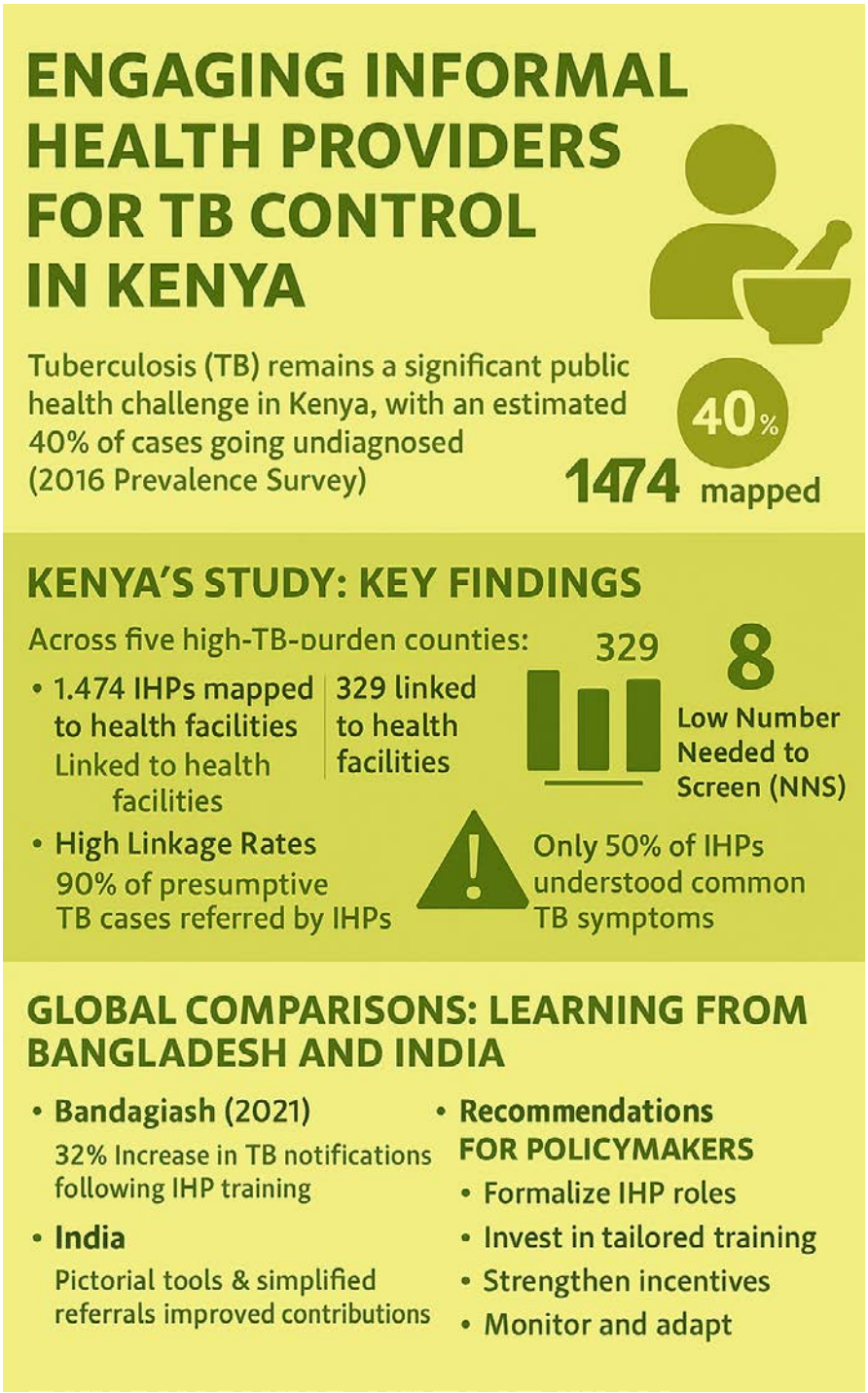
Editor's Note: The study featured in this story was presented at the National Tuberculosis Program Research Dissemination Forum on May 12, 2025, by Dr. Brenda Mungai and a team of multi-agency collaborators. It offers one of the first detailed documentations of how artificial intelligence and digital health tools are reshaping national TB screening approaches in Africa. ■

Engaging Informal Health Providers in TB Control: Lessons from Kenya and Global Insights

By Mbetera Felix - DTLD

Study done by:
Dr. Nkirote Mugambi-Nyaboga, Chief of Party, USAID Tamatisha TB - Centre for Health Solutions-Kenya

> **"IHPs are a hidden frontline in TB control. Their reach into underserved communities makes them indispensable, but their potential is hindered by systemic mistrust."**
>
> Dr. Mugambi-Nyaboga



Tuberculosis (TB) continues to pose a serious health concern in Kenya, with an estimated 40% of cases going undiagnosed, according to the 2016 Prevalence Survey. A critical yet often overlooked group in TB control efforts is Informal Health Providers (IHPs)—drug sellers, herbalists, traditional healers, and others who serve as the first point of contact for many patients. The study "From the Shadows to the System: Engaging Informal Health Providers for TB Control in Kenya" by Dr. Nkirote Mugambi-Nyaboga, funded by USAID, sheds light on the potential of IHPs to bridge the gap in TB detection and care. This feature explores Kenya's findings, compares them with global evidence, and highlights actionable recommendations for policymakers.

Kenya's Study: Key Findings

The study, conducted across five high-TB-burden counties (Nairobi, Kisumu, Homa Bay, Marsabit, Tharaka Nithi), mapped 1,474 IHPs, trained 329, and linked them to formal health facilities. Key outcomes include:

High Linkage Rates: 90% of presumptive TB cases referred by IHPs reached health facilities, leading to 140 diagnoses.

Low Number Needed to Screen (NNS): An NNS of 8 indicated high efficiency in case detection compared to general population screening (NNS >500).

Knowledge Gaps: Only 50% of IHPs understood common TB symptoms, underscoring the need for tailored training.

Engagement Barriers: Distrust of the formal health system and regulatory fears limited participation—only 383 of 1,474 mapped IHPs agreed to engage.

Dr. Mugambi-Nyaboga notes, "IHPs are a hidden frontline in TB control. Their reach into underserved communities makes them indispensable, but their potential is hindered by systemic mistrust."

Global Comparisons: Learning from Bangladesh and India

Kenya's findings align with global evidence on IHP engagement:

Bangladesh: A 2021 study in Tuberculosis Research and Treatment showed that training informal providers increased TB case notifications by 32%. Like Kenya, non-monetary incentives (e.g., recognition) boosted participation.

India: The RIPEND project demonstrated that pictorial tools and simplified referrals improved IHP contributions, mirroring Kenya's literacy-sensitive approach.

Malawi: Research by Godlonton & Okeke (2016) warned that banning IHPs without alternatives worsened healthcare access, reinforcing Kenya's emphasis on integration over exclusion.

"The parallels are clear," says Dr. Mugambi-Nyaboga. "From Asia to Africa, IHPs fill critical gaps. Kenya's data adds to this body of evidence, showing localized solutions are possible."

Why This Matters for Kenya

Scaling Up Detection: With 15% of symptomatic patients first visiting IHPs, their systematic integration could significantly reduce Kenya's 74,000 missed cases (2017 data).

Cost-Effectiveness: The low NNS (8) suggests IHPs are efficient case-finders in high-prevalence areas, optimizing limited resources.

Trusted Community Gatekeepers: IHPs' cultural credibility, especially in rural areas, can overcome barriers like stigma.

Recommendations for Policymakers

- Drawing from the study and global examples, Kenya can:
- Formalize IHP Roles: Develop policies recognizing IHPs as part of the Public-Private Mix (PPM) strategy, as recommended by WHO (2018).
- Invest in Tailored Training: Use pictorial tools and local dialects to address literacy gaps, as successfully done in India.
- Strengthen Incentives: Combine monetary (e.g., KES 300 per confirmed referral) and non-monetary (e.g., badges, community recognition) motivators.
- Monitor and Adapt: Track IHP performance through community health volunteers (CHVs), as piloted in Tharaka Nithi.

"Sustainability hinges on trust and systemic support," emphasizes Dr. Mugambi-Nyaboga. "This isn't just about TB—it's about building resilient, inclusive health systems."

Conclusion

Kenya's study provides a blueprint for leveraging IHPs in TB control, backed by global evidence. By addressing trust deficits, simplifying tools, and integrating IHPs into national strategies, Kenya can turn these informal providers into frontline allies—bringing the country closer to the Global End TB Strategy goal of zero deaths. As the data shows, the path to ending TB lies not just in clinics, but in the communities where IHPs are often the first and only healers. ■

Sources:

Mugambi-Nyaboga, N. (2025). Engaging Informal Health Providers in TB Control in Kenya. USAID.

WHO (2018). Public-Private Mix for TB Care: A Roadmap.

Thapa et al. (2021). PLoS ONE on IHP roles in LMICs.

Kenya National TB Prevalence Survey (2016).

Breathing New Life into Kenya's Health System: How a Nationwide Lung Health Initiative is Revolutionizing Respiratory Care

A hands-on training session on the operation of lung health diagnostic equipment in Nakuru.

By Mbetera Felix - DTLD

Kenya has embarked on a revolutionary path to transform lung healthcare throughout the nation in a daring and well-coordinated effort to counter the growing burden of respiratory diseases. With funding from GlaxoSmithKline (GSK) and the Gates Foundation through CHAI and led by the Ministry of Health Division of Tuberculosis, Leprosy and other Lung Diseases (DTLD), this initiative is already having a significant impact in counties like Nairobi, Nakuru, and Murang'a.

From the health facilities in Nairobi's informal settlements to the expansive hospitals of Nakuru and Murang'a counties, frontline health workers are now better equipped than ever to detect and manage chronic respiratory diseases. Over the past few weeks, the rollout of advanced diagnostic equipment, including spirometers and peak flow meters, has been paired with intensive, hands-on training sessions for healthcare providers. This marks a significant shift from traditional TB-focused interventions to an integrated model that includes asthma, Chronic Obstructive Pulmonary Disease (COPD), and Post-TB Lung Disease (PTLD).

"We are not just delivering equipment, we are building systems and capacity," says Philip Muchiri, Program Manager at CHAI. "This partnership is about sustainability, data integrity, and ensuring no Kenyan is left behind in the fight against respiratory illness."

More than 150 healthcare workers in Nakuru alone were recently trained in lung function assessment and community-centered care strategies. Similar sessions have been conducted in Nairobi and Murang'a, empowering providers with the skills to conduct accurate diagnosis using peak flow meters and spirometry tools, essential for identifying early signs of COPD and asthma.

The Nairobi County deployment saw 22 facilities receive peak flow meters and three key centers equipped with full spirometry kits. These include Dandora II Health Facility, Kibera Community Health Centre, and Bahati MDR Clinic. The deployment was accompanied by practical trainings on equipment use, data reporting through the Kobo tool, and integration of lung health indicators into routine service delivery.

At the heart of this initiative lies the newly developed Integrated Lung Health Curriculum, a comprehensive training model adopted nationally. According to Dr. Ibrae Umuro, Lung Health Focal Person at NTLD-P,

"By building our healthcare workforce's capacity, especially in under-resourced areas, we're laying a foundation for stronger health systems and improved patient outcomes."

Nakuru's County Executive Committee Member for Health, Roselyne Wanjiru Mungai, hailed the support as timely, emphasizing its alignment with the county's efforts to expand respiratory health services. "We pledge full

Cont'd on pg 17

Dr. Ibrae Umuro, Lung Health Focal Lead - NTP

Brandwell Mwangi - CHAI, during one of the sessions in Nakuru County.

Murang'a CTLC, Lucy Irungu demonstrates the spirometer to CDH, Dr. Mburu during deployment.

Group photo during the handover of lung health diagnostic tools and equipment to the Nakuru County health leadership.

Murang'a county health team receiving spirometers during the deployment supported by NTP and CHAI.

Cont'd from pg 16

accountability and efficient use of these tools, up to the last mile," she affirmed.

During the deployment of lung function equipment in Murang'a County, Dr. James Mburu, the County Director of Health, lauded the initiative as a timely intervention to strengthen the county's health system. He noted that the investment would have long-term benefits, including enhanced diagnostic capacity, data-driven policy development, and the continuous professional growth of frontline healthcare workers.

Echoing this sentiment, Lucy Irungu, the County TB and Lung Health Coordinator (CTLC), emphasized the importance of integrating lung health management into routine facility care. She highlighted the urgent need to fully utilize these tools to address the rising burden of chronic respiratory diseases. Lucy also expressed gratitude to CHAI for their sustained support—particularly in training over 150 healthcare workers across more than 60 facilities and in facilitating the deployment of essential diagnostic tools.

As donor support shrinks and public health challenges evolve, Kenya's strategic pivot toward holistic respiratory care underscores its commitment to long-term impact. Dr. Immaculate Kathure, Ag. Head, National TB Program captured the essence of this shift: "This is more than equipment distribution, it's a commitment to sustainability and health system strengthening."

With plans to digitize lung health reporting tools and integrate services into the national Social Health Authority framework, Kenya is not only responding to current respiratory health needs , it is setting a gold standard for future-ready, patient-centered care. ■

Philip Muchiri,CHAI Kenya in a handover ceremony with Nakuru CEC - Roselyne Mungai

Health care Workers listening in during a training session in Nakuru County

Peak flow meter demonstration during the Nakuru HCWs Training

Spotlight on Kenya's Journey to Integrated Lung Services

Clients undergoing X-ray screening in a customized garage space during the outreach in Kayole.

By Sharon Olwande - CHAI

Over the past year, Kenya has taken critical steps to transform its lung health services through comprehensive assessments, policy development, and innovative tools. A nationwide Service Availability and Readiness Assessment (SARA) visited 199 facilities, revealing wide gaps in diagnostic capacity, with only 18 sites offering spirometry (mostly private). While over 70% had oxygen and pulse oximeters, tools like peak-flow meters and adequate PPE were scarce. The assessment confirmed a strong nursing presence and vibrant TB outreach, but limited readiness for broader integrated lung health services.

To bridge these gaps, the Ministry of Health led the review and development of integrated guidelines in March 2025, bringing TB, asthma, COPD, PTLD, lung cancer, and occupational diseases into one life-course framework. These guidelines positioned spirometry as the diagnostic gold standard, emphasized psychosocial and nutritional care, and introduced emergency action plans for chronic lung disease patients.

A nationwide Service Availability and Readiness Assessment (SARA) visited 199 facilities, revealing wide gaps in diagnostic capacity.

An accompanying Essential Service Package defined minimum care standards for each facility level and integrated patient pathways, linking them to the forthcoming Social Health Authority benefits package. Tools such as peak-flow meters and spirometers were declared essential for primary care.

To operationalize the guidelines, training materials and registers were updated, and national experts convened in Machakos to refine indicators and align M&E systems. Interim tools—such as lung health registers and daily drug tracking logs—were disseminated, capturing real-time data on diagnosis, treatment, and stock status.

Additionally, a technical review of WHO-prequalified spirometers led to the selection of a high-performing model, prompting a phased rollout of 13 spirometers and complementary tools in Nairobi, Nakuru, and Murang'a. Procurement emphasized quality, connectivity, and service support. These efforts are paving the way for routine, accurate lung function testing across Kenyan health facilities. ■

Bringing Services Closer: Community Outreaches and Health Worker Training

Customized space for sputum collection during the outreach in Kayole.

By Sharon Olwande - CHAI

In 2025, the iPACT program, led by the Ministry of Health and supported by Clinton Health Access Initiative (CHAI), intensified efforts to reach high-risk populations through targeted community screening and facility-level training.

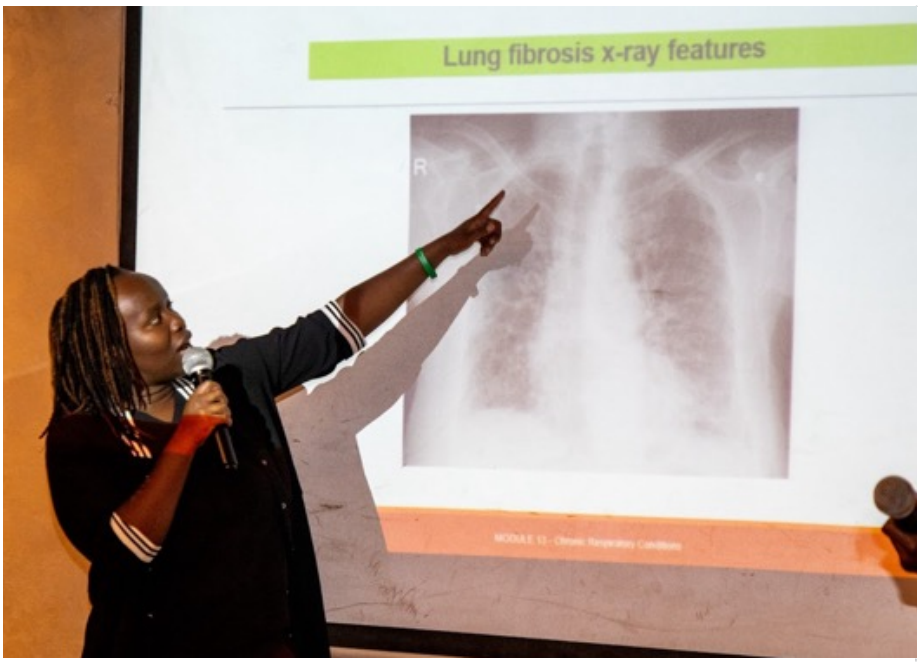
In Nairobi, mobile lung health outreaches were conducted in informal settlements and high-burden zones like Kayole, Mlango Kubwa, Mathare, and Muthurwa guesthouses. Of the 2,392 people screened, 96 were diagnosed with TB, while 47 asthma, 16 COPD, and 34 PTLD cases were confirmed. Digital chest X-rays and on-site GeneXpert testing revealed a broader burden of respiratory illness, and additional diagnoses of hypertension and diabetes highlighted the benefits of a holistic health model. Despite challenges with diagnostics and stigma, the approach proved effective in reaching underserved populations.

Meanwhile, Murang'a County focused its lung health outreach on health workers, PLHIV, and prison populations, conducting screenings at hospitals and prisons. In facilities like Maragua and Kandara, over 100 individuals were screened per site, identifying TB cases among both HCWs and PLHIV. In Maranjau Prison, 610 individuals were reached, with 18 initiated on TB treatment and others diagnosed with asthma and COPD via spirometry. These campaigns showed the power of targeted interventions in both institutional and community settings.

Outreach at Kandara Hospital.

Simultaneously, capacity building for healthcare workers accelerated. TOTs trained under the new curriculum led rollouts in Nairobi, Nakuru, and Murang'a. Hundreds of health professionals—including nurses, Clinical Officers, lab staff, and Health Records Information Officers were trained in integrated care for TB, asthma, COPD, and Post TB Lung Disease (PTLD), using tools like spirometry, peak-flow meters, and AI-enabled X-rays. The training emphasized early detection, psychosocial support, and multidisciplinary care. ■

Generating Evidence and Sustaining Momentum



Caroline Wanjiru, a radiographer, describing chest X-ray findings during a lung health training session.

Michael Mwalimu, SCTLC, during the training.

A participant undertaking a spirometry test.

By Sharon Olwande - CHAI

As Kenya expands its lung health agenda, robust research and knowledge-sharing efforts have been set in motion. Two major manuscripts are currently being developed under the iPACT project:

"Breath of a Nation" highlights the hidden burden of non-TB respiratory diseases like asthma and COPD, which account for nearly 29% of outpatient cases but remain underdiagnosed. It points to indoor air pollution (affecting 73% of homes), smoking, and urban air pollution as key drivers, especially among women.

"Breathing Beyond TB" shares findings from the SARA, emphasizing critical gaps in diagnostics and health worker capacity, and calling for a move from a TB-only model to fully integrated respiratory care.

In parallel, four abstracts were submitted to The Union's 2025 Lung Health Conference, showcasing:

- Kenya's journey toward integrated lung health through the iPACT project
- AI-supported community screening results from Nairobi
- Innovative moonlight outreaches in Muthurwa
- Integrated facility and prison screening pilots in Murang'a

To further strengthen the evidence base, research protocols are under review to test AI chest X-rays, digital stethoscopes, and spirometry integration in routine care assessing diagnostic accuracy and health worker experiences.

Looking ahead, the iPACT program is shifting focus toward sustaining the quality of lung health service delivery. In the coming months, teams will intensify efforts to strengthen capacity and improve patient outcomes. This will include conducting targeted continuing medical education (CME) sessions in facilities with high clinical diagnoses to reinforce accurate diagnosis and integrated management. There will be increased collaboration with community health actors to boost awareness, promote early care-seeking, and enhance referral linkages for chronic respiratory diseases. Monthly lung health outreaches will continue in hotspots guided by data, while routine data analytics supported by ongoing data quality reviews and continuous quality improvement cycles will help track progress, identify gaps and inform timely decision-making.

In parallel, dissemination of early findings and intensified advocacy at both community and policy levels will aim to generate demand and mobilize additional support for integrated lung health services. These next steps are critical to translating Kenya's investments in training, equipment and system readiness into meaningful and lasting improvements in the lives of those affected by respiratory conditions. ■

Over 9,000 Kenyans Screened for TB Across 10 Counties Using Cutting-Edge AI-powered tools

Members of the public queue at Thokoa Market in Meru during an outreach activity for the AI TB Screening Challenge.

By Alfred Itunga- CHS Tamatisha

Between March and May 2025, Kenya participated in the global "AI Against TB Screening Challenge" organized by the StopTB Partnership. The initiative aimed to enhance tuberculosis screening through artificial intelligence, aligning with broader objectives to eradicate the disease. The campaign involved the deployment of artificial intelligence (AI)-powered chest X-ray technology for TB screening.

Ten counties – Nairobi, Kitui, Meru, Homa Bay, Kisumu, Migori, Turkana, Murang'a, Mombasa, and Siaya participated in the global campaign for a period of 7 days. The campaign was aimed at enhancing early TB detection and treatment, leveraging AI-powered image analysis to revolutionize the screening process.

Transforming TB Detection with AI Technology

Traditional TB screening methods often rely on symptom-based assessments, which poses the risk of missing asymptomatic cases. The integration of AI into chest X-ray analysis addresses this gap by providing rapid, accurate interpretations of radiographic images. AI algorithms can detect subtle signs of TB on imaging that might be overlooked by the human eye, ensuring more comprehensive screening outcomes.

In Turkana County, a four-day free TB screening event held in California Market and Canaan Village utilized AI-powered chest X-rays to screen over 500 residents. The swift, non-invasive procedure yielded rapid results, facilitating prompt linkage to care for individuals who tested positive.

The impact of the campaign was tangible:

9,344
individuals screened

3,191
presumptive TB cases identified

1,804
investigated with WHO-recommended molecular diagnostics

266
TB cases diagnosed

100%
treatment initiation rate

Cont'd on pg 22

Cont'd from pg 21

The AI tools demonstrated high diagnostic precision, with a 14.8% positivity rate among those tested. In Nairobi, the campaign recorded the highest number of diagnosed cases (50), followed closely by Murang'a (44). The high linkage-to-care rate underscores the campaign's efficiency in converting screening into treatment.

Community Engagement and Testimonials

The success of the AI against TB screening campaign was not only hinged on technological innovation but also on community participation. Community Health Promoters conducted door-to-door sensitization of the screening activities which helped to raise awareness about the services available and to mobilize members of the public to visit the various screening stations. Mobile screening units were stationed at accessible public and health facilities, ensuring widespread reach.

Joyce, a participant in the screening program, shared her experience: "It was quick and painless. I felt safe and informed!" Her testimonial underscores the community's positive reception of the new technology and its role in demystifying TB screening.

National Impact and Future Prospects

Across the 10 participating counties, over 9,000 individuals were reached, marking a significant achievement in Kenya's fight against TB. The deployment of AI technology not only enhanced diagnostic accuracy but also streamlined the screening process, allowing for efficient identification and treatment of TB cases.

Kenya's engagement in the AI TB Screening Challenge aligns with global health strategies advocating for the integration of digital technologies in disease management. By adopting AI-powered diagnostic tools, the country demonstrates a commitment to modernizing its healthcare infrastructure and improving patient outcomes.

A healthcare worker consults with a patient during the Thokoa Market health outreach.

A client undergoes digital chest X-ray screening at Githurai.

Across the 10 participating counties, over 9,000 individuals were reached, marking a significant achievement in Kenya's fight against TB. The deployment of AI technology not only enhanced diagnostic accuracy but also streamlined the screening process, allowing for efficient identification and treatment of TB cases.

Conclusion

The AI against TB screening challenge has set a precedent for innovative healthcare solutions in Kenya. By combining advanced technology with community-centered approaches, the initiative has strengthened TB detection and treatment efforts. As Kenya continues to invest in such transformative health interventions, it moves closer to achieving its goal of eliminating TB as a public health threat.

For more information on TB screening and treatment services in Kenya, please visit the National TB and Leprosy Program official website or contact your local health facility. ■

Siaya County Strengthens TB Fight with AI-Powered X-ray Technology

Dr. Paul Wekesa of CHS-Kenya briefs Siaya Governor Dr. James Orengo on the functionality of the Digital Chest X-ray (dCXR) machines.

By Sarah Kaminja - CHS Tamatisha

Siaya County, Kenya – A substantial leap forward in TB control has been made in Siaya County with the recent introduction of two state-of-the-art Ultraportable Digital Chest X-ray (dCXR) machines. These machines, which are equipped with advanced artificial intelligence (AI) diagnostic software, were officially handed over by the Centre for Health Solutions – Kenya (CHS) on June 5, 2025. This pivotal moment is expected to greatly enhance the county's efforts against TB and other prevalent lung diseases.

The handover ceremony was attended by Siaya Governor James Orengo, alongside senior health officials, community leaders, and partners. The integration of AI into the county's healthcare infrastructure was warmly embraced by Governor Orengo. The substantial disease burden faced by the county, particularly concerning TB, HIV, and malaria, was also acknowledged. Profound gratitude was expressed for the unwavering support received from partners like CHS and AMREF, as this partnership has enabled the acquisition of essential equipment and tools for screening and diagnosis.

Siaya County is recognized as one of Kenya's top ten high TB burden counties, with between 3,000 to 3,500 new cases reported annually. A case notification rate of 320 per 100,000 people is significantly higher than the national average of 260 per 100,000.

Cont'd on pg 24

Cont'd from pg 23

Siaya County is recognized as one of Kenya's top ten high TB burden counties, with between 3,000 to 3,500 new cases reported annually. A case notification rate of 320 per 100,000 people is significantly higher than the national average of 260 per 100,000. Despite these challenging statistics, an impressive TB cure rate exceeding 90% is consistently maintained each year, a testament to the dedication of healthcare professionals and collaborative efforts.

The introduction of these AI-powered machines is anticipated to revolutionize early diagnosis and elevate the overall quality of care. Compelling data from a similar AI-powered dCXR machine, previously installed by CHS through USAID funding at Madiany Sub-County Hospital, was shared by Mary Juma Wambura, the County TB and Leprosy Coordinator. Before the machine's installation in 2022, 57 TB cases were diagnosed at the hospital. This number dramatically increased to 148 in 2023 and further to 281 in 2024, demonstrating the profound impact that enhanced diagnostic capabilities can have. Furthermore, the machine proved instrumental in identifying other lung diseases, with detected cases escalating from zero in 2022 to 26 in 2024.

The Health Department expressed its enthusiasm for receiving the two new machines, as they are expected to improve early TB diagnosis and the quality of care provided. A powerful plea for sustained collaboration was made by Governor Orengo, who concluded the event by emphasizing the critical need for such advanced diagnostic tools in a region grappling with a high TB incidence. It was underscored that this equipment will support screening and diagnosis of TB in Siaya. ■

This donation was made possible through the generous support of the United States Government through the Centers for Disease Control and Prevention (CDC).

Group Photo - CHS team alongside the Governor and Siaya County Health Officials.

Siaya Governor Dr. Orengo guided through Qure AI diagnostic technology.

Mary Juma, CTLC Siaya, sharing key insights with the Governor.

Nairobi Launches Advanced Diagnostic Equipment to Strengthen Fight Against TB and Lung Diseases

A group photo during the launch of lung health diagnostic equipment at City Hall, Nairobi.

By John Njoki - CHS Tamatisha

In a milestone for respiratory health,, Nairobi City County has unveiled cutting-edge diagnostic tools for detection and management of tuberculosis (TB), asthma, chronic obstructive pulmonary disease (COPD), and other lung conditions.

The launch, held at Nairobi's City Hall, was attended by key national and county health officials, development partners, and implementing organizations, underscoring a unified commitment to strengthening primary healthcare and expanding access to quality lung health services.

Speaking during the ceremony, Nairobi County Chief Officer for Public Health, Tom Nyakaba, emphasized the city's pivotal role in Kenya's TB response.

"Nairobi accounts for nearly 15% of TB cases nationally. With limited resources, partnerships have been our lifeline. We thank CHAI, CHS, CIHEB, and the Respiratory Society of Kenya for their support. Early diagnosis and prompt treatment are essential to saving lives."

The newly launched equipment package—comprising six spirometers, 22 peak flow meters, and four digital X-ray machines—will be distributed across Level 4 and 5 facilities, particularly in underserved sub-counties where the disease burden is highest.

Dr. Carol Ngunu, Director of Preventive and Promotive Health, affirmed the county's readiness to utilize the

"Nairobi accounts for nearly 15% of TB cases nationally. With limited resources, partnerships have been our lifeline. We thank CHAI, CHS, CIHEB, and the Respiratory Society of Kenya for their support. Early diagnosis and prompt treatment are essential to saving lives."

Cont'd on pg 26

Cont'd from pg 25

new tools: "All our health facilities have received training and are fully prepared. We're not just receiving equipment—we're ready to put it to immediate use to transform patient care."

Representing the National Tuberculosis Program (NTP), Wesley Tomno, Head of Care, highlighted the broader vision for integrated respiratory care:

"Too often, patients are misdiagnosed with TB when the underlying issue is asthma, COPD, or even cancer. Our goal is to equip counties with the tools they need to make accurate diagnoses and ensure that lung health is fully integrated into routine healthcare services. This is a national priority."

Nairobi County TB Coordinator, Elizabeth Mueni, echoed this, stressing the importance of diagnostic capacity:

"We've lost many opportunities over the years due to inadequate diagnostic tools. With this new equipment, we are better positioned to detect and treat conditions that were previously missed."

The initiative is part of the Integrated Program for Asthma, COPD, and TB (iPACT), a project led by the Ministry of Health, with support from CHAI and funding from GSK and the Gates Foundation.

Sharon Olwande, representing CHAI Kenya, noted that this milestone is just the beginning:

"This is a critical leap forward for Nairobi, but there's more to come. CHAI remains committed to embedding lung health into everyday healthcare so that communities can access services when and where they need them."

As the rollout begins, Nairobi's approach is being seen as a model of successful collaboration between national and county governments and development partners—proving that with the right investments and partnerships, gaps in respiratory health can be closed and quality care brought closer to the people.

Elizabeth Mueni-County TB Coordinatort, discussing the peak flow meter with Chief Officer, Tom Nyakaba and Dr. Carol Ngunu.

Chief Officer, Tom Nyakaba giving his closing remarks during the launch of the tools.

The National TB Program is helping Kenya move towards a future where every breath counts by making lung health a top public health priority. counts. ■

Too often, patients are misdiagnosed with TB when the underlying issue is asthma, COPD, or even cancer.

Chief Officer for Public Health, Tom Nyakaba with Wesley Tomno, Head Care section NTP.

Stakeholders Validate National TB Acceleration Plan Targeting TB/HIV Syndemic

By Dr. Grace Kaluai - DTLD

The Ministry of Health through the Division of Tuberculosis, Leprosy and Other Lung Diseases (DNLTP) in conjunction with the National AIDS and STI Control Program (NASCOP) had a 2 day stakeholders meeting in Nairobi, Four Point's Sheraton Hotel.

The stakeholders forum brought together national and county representatives, PLHIV networks, and partners-WHO, PEPFAR, USAID /CHS to finalize and validate the Kenya's TB Acceleration Plan (TAP) - a transformative 6-year initiative aiming to dramatically improve the fight against tuberculosis among people living with HIV, with a clear goal of finding and treating 90% of all TB cases in HIV patients by 2030 - potentially saving over 156,000 lives.

Currently, TB remains the leading killer of people with HIV in Kenya, with 1 in 10 HIV patients with TB dying from the disease.

This acceleration plan will introduce cutting-edge technology like AI-powered chest X-rays, improve TB-HIV program coordination, and ensure life-saving TB prevention treatment reaches all who need it.

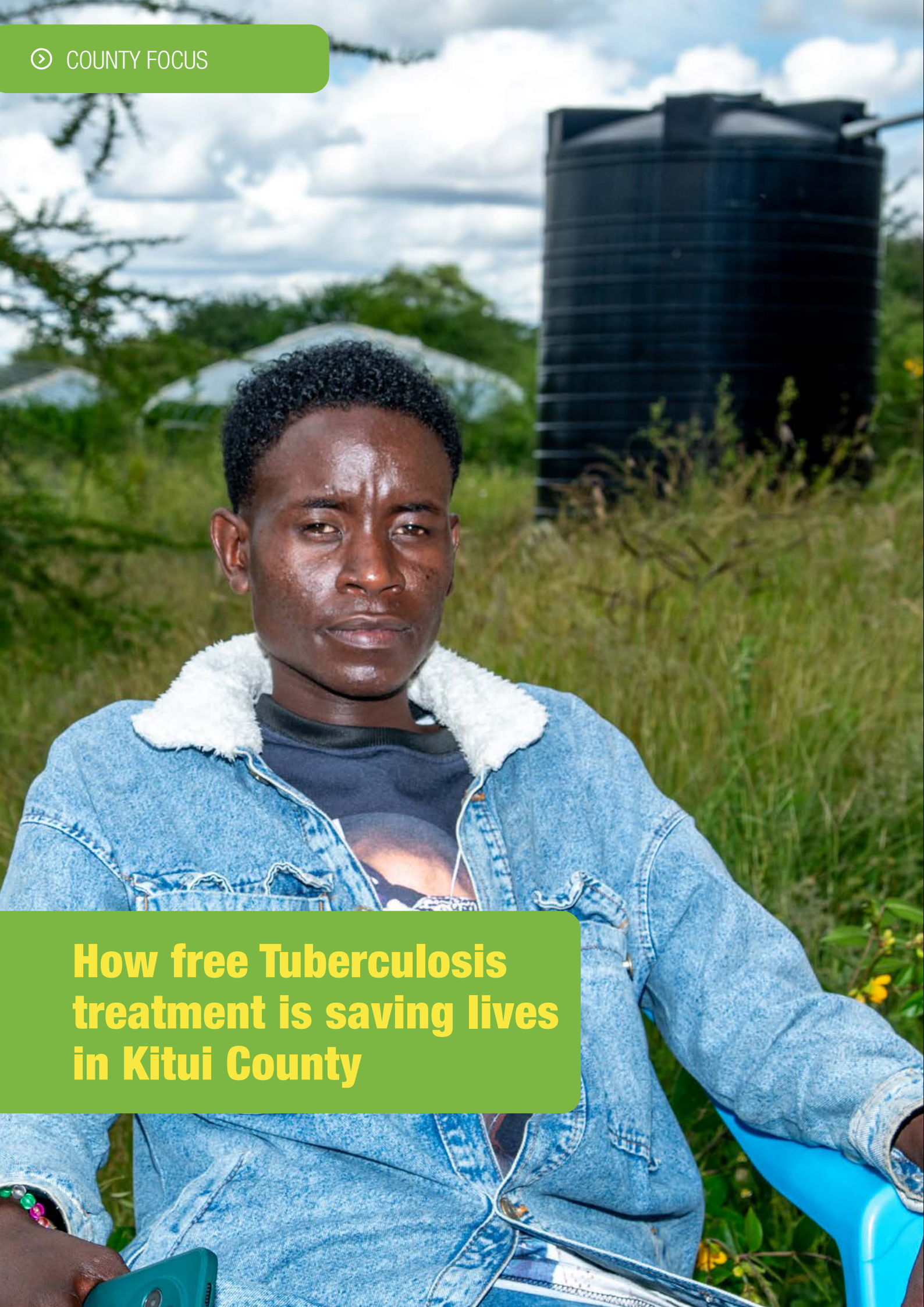
Dr. Grace Kulai, NTP.

County team representation.

Group discussion sessions.

The development comes at a strategic time, following the NSP 2023-2028 launch in January 2024 and during the national AHD management framework development, highlighting Kenya's commitment to address TB/HIV gaps through high-impact interventions.

This collaborative effort spans all 47 counties, uniting government, development partners, communities, and civil society organizations to ensure no one is left behind. The plan builds on Kenya's impressive progress in reducing TB deaths by 54% since 2015, representing the country's commitment to end TB and HIV as public health threats by 2030 and meet targets set at the 2023 UN High-Level Meeting. ■



How free Tuberculosis treatment is saving lives in Kitui County

By Mary Odhiambo - Kisumu County

Lucas Wambua knew almost little about tuberculosis (TB), an infectious bacterial disease, prior to his 2023 diagnosis.

He remembers learning about TB from his teacher during a biology class and seeing media campaigns to raise awareness of the disease.

The 24-year-old, who left school in form three because of his lowly origins, admits that he had not given the illness much thought during this time.

Lucas, who is currently receiving TB treatment, adds, "This explains why I was shocked after being diagnosed with TB in 2023; I thought I was going to die."

Prior to his diagnosis, Lucas, a resident of Kitui had relocated to Mombasa where he started a job as a fruit vendor.

Later, he advanced to a barbershop job where he would regularly engage with a variety of people.

But in 2023, he began to feel ill and exhibit symptoms including exhaustion, night sweats, and general body weakness.

"After my hand swelled, I went to a neighbouring health center. My illness only deteriorated when I was taking medication," he claims.

He would later be taken to a nearby hospital, where the doctors recommended surgery to treat his swollen hand.

A few days later, the wound started to heal before he could have surgery. Lucas maintains that he decided to go back to his Kitui house to get more medication as his weight continued to drop.

Tests at Kitui County Referral Hospital showed that he had tuberculosis. Despite being put on TB treatment, Lucas's condition kept getting worse.

He had continued to lose weight during his successive hospital stays. In addition to his dry cough, exhaustion, and night sweats, he also experienced a painless swelling in his neck.

His doctor examined a pus sample from his inflamed neck for tuberculosis (TB) after two weeks of therapy, and the findings were positive.

Before starting a fresh course of treatment, he also needed a blood transfusion because his blood level had fallen.

Lucas remembers experiencing isolation and stigma at home due to a lack of knowledge about tuberculosis.

After his parents passed away, his aunt took on the position of guardian, but she remained and continued to accompany Lucas on his healing path.

Lucas claims that taking medication on an empty stomach caused his next headache since he was unable to work.

"My recuperation process has been somewhat facilitated by the fact that TB medications are also provided at no cost in public hospitals."

Every day, a health professional would come to my aunt's house to check on me and give me my medication. Lucas explains, "She would make a meal and let me eat before taking medication whenever she came to visit and saw I had nothing to eat."

After telling her, she would return to check on me and give me new medication, but occasionally I would end up throwing up the medications after she left, he continues. I think she's the reason I'm still here today.

Lucas is appreciative that he was included in a government program that guarantees him and other TB sufferers get a Sh9000 monthly stipend.

Since he is still unemployed, he claims that the money that comes at the end of each month is utilized to purchase food and other necessities for the home.

He claims that he can eat a balanced meal every day thanks to the stipend program.

"My recuperation process has been somewhat facilitated by the fact that TB medications are also provided at no cost in public hospitals," he says.

He now advises his fellow young people to seek medical assistance as soon as possible for early intervention rather than to be afraid to visit hospitals. ■

Mary Odhiambo engaging a clinician at the facility during the interview.

Working as a TB champion to create awareness, link patients to treatment

By Mary Odhiambo - Kisumu County

Since 2018, Ms Miriam Namayi, a Community Health Promoter (CHP) has served her people in Kitui County raising awareness on primary health care.

One of her key focus areas is tracking down and referral of tuberculosis patients to hospital for early interventions.

While she has never been infected by the bacterial infection, Ms Namayi is motivated to serve her community due to the pain she has seen the TB patients go through.

The CHP attached to Kitui County Teaching and Referral Hospital says one of her major roles is to identify patients displaying symptoms similar to TB and refer them to the health facility for screening.

Identifying the patients, she says, has been made possible by the fact that she has gone through a rigorous training as a TB champion.

"Through the training, we were made to understand a range of signs and symptoms of TB," says Ms Namayi.

The CHP says at the beginning, one of her biggest challenges was creating awareness among members of the public that TB could infect anyone.

She further explains that the villagers also found it hard to believe that the infectious disease could be passed down to children.

"I have made my community aware that TB is treatable while those infected cannot transmit the bacteria once they are on drugs," She adds "I am glad to say that my community is now aware that no one is immune to the airborne disease,".

One of the CHPs most memorable moments is when she identified and linked a nine-month-old TB patient to a health facility for treatment.

Ms Namayi says she identified the child during a church service. She was coughing and crying the better part of the service.

The following day, she tracked down the child's grandmother, also her guardian, eager to know if the child had received any medical attention.

The grandmother informed Ms Namayi that the baby had been diagnosed with malaria and was under medication.

The CHP was also informed that the child had been separated from her mother who works in Nairobi.

When perusing through the baby's routine clinic book, Ms Namayi realized her weight was way below what is expected at her age.

"I was informed that the baby could barely eat, whenever she tried to swallow anything, she would vomit," says Ms Namayi.

Concerned about the baby's health, she advised the guardian to take her to the hospital but she had initially declined.

The baby's grandmother informed Ms Namayi that she was on her way to attend a menial job for income generation purposes. She says, was to remain at home sleeping under a tree until she came back later in the day.

"I managed to convince her and even promised to settle the transport fee to the hospital and back," says Ms Namayi.

At the Kitui County Teaching and Referral Hospital, the baby was tested for tuberculosis and the results came out positive as explained by the CHP.

The baby, she said also weighed five kilograms and had delayed developmental milestones. "She was placed on treatment while I was tasked with the job of conducting routine follow-up," she says.

The baby was on medication for the next six months, amid treatment, she started gaining weight.

To establish the origin of the infection, the babies' close family members including the mother were taken through a TB test but the results came out negative.

According to the CHP, the baby is now three years old and is able to walk and run around just like other children.

"She has since been declared free from TB infection," says Ms Namayi adding that the child's grandmother went ahead to share the news of how she helped save the life of her granddaughter in the church.

Since then, the church often allocates time to allow the CHP to create TB awareness to the congregants.

"I always feel good whenever the patients I link up to the facility get treatment and are reintegrated back into the community without re-infecting others," she concludes. ■

Miriam in consultation with a clinician at the TB Clinic.

Blinded but Not Broken: Prison Officer Wamunyau Leads TB Awareness Crusade

By Mary Odhiambo - Kisumu County

Prison inspector Mr. Silla Wamunyau can hardly contain his happiness as we prepare for our interview.

Having been pronounced free of TB, which took his left eye, he is happy to be alive today.

He had been suffering an unidentified medical issue for weeks at a time like this last year, and he was going from hospital to hospital in the hopes of finding a cure.

The prison inspector has started a trip to educate other staff members and inmates about the contagious disease, even though he has since come to terms with the fact that he can no longer see with the damaged eye.

"My advice to members of the public is that they should be quick to seek medical attention in case of any health concern," says Mr. Wamunyau.

The 55-year-old claims he noticed something was wrong after losing weight and his clothes no longer fit, and he regrets not going to a medical facility when his left eye started to leak.

Additionally, Mr. Wamunyau claims that he was weak and having overall body ache.

He went to the Kitui County Teaching and Referral Hospital in April 2024, but as he waited to be seen, he experienced excruciating, intense pain in his left eye.

The jail guard got tested and prescribed medication to treat his ailment after leaving the patient line to see an optometrist in the same building.

Only half an hour after his diagnosis, he lost his left eye's vision. He also had elevated blood pressure, according to additional medical testing.

"I was admitted to the hospital and started taking medication for pneumonia and hypertension. A TB test was also performed by the medical professionals, and the results were negative," he claims.

Mr. Wamunyau says that after being sent to a medical facility in Nairobi County for additional testing, his TB test results were once more negative.

Mr. Wamunyau in discussion with Miriam Namayi,a CHP,outside a TB clinic.

In the meantime, his health declined and he kept losing weight.

On May 15, 2024, Mr. Wamunyau was referred to another medical facility for the third time.

The hospital's medical professionals suspected Mr. Wamunyau of having tuberculosis and sent him to a private laboratory for testing.

He was told to return a week after the test to get the findings.

"I was told I had TB of the eye when I came for the results," he recalls.

However, he admits that he was not shocked by the results; rather, he was relieved that at least it was time to start taking medicine and possibly regain his vision.

He was told that TB treatment was provided for free at public hospitals

"The attending physician asked me where I was from and informed me that Kitui Teaching and Referral Hospital, my hometown facility, offered free TB medicine. A letter of recommendation was also given to me," he adds.

Back at the county facility, Mr. Wamunyau was told that, with the exception of hair, teeth, and nails, every part of the body might be impacted by the airborne disease.

When the medical staff evaluated his weight before putting him on medication, it had substantially decreased from 74 to 64 kg.

According to Mr. Wamunyau, "I was put on medication under strict supervision of the medics," and his family was there for him during that time.

He also discloses that, other than the several instances in which he felt a strong want to throw up, he had no trouble taking his prescription.

Additionally helpful, his employer gave him a three-month leave of absence to recuperate before he returned to work.

After that, I went back to work, although my responsibilities would be limited. Because I am blind, I am also listed as a person with a disability," the jail inspector states.

Mr. Wamunyau, who was deemed TB-free earlier this year, expresses gratitude to the government and its partners for providing the medication at no cost.

He claims that charging for the drugs in public health facilities would prevent many patients from receiving treatment. ■

He Was Just a Street Boy, Until He Spoke Up: Samuel's battle against TB

By John Njoki - CHS Tamatisha

Samuel Mwendo spent most of his young adult life on the streets of Eastleigh, Nairobi. He was 24, jobless and survived by collecting and selling scrap metal with a group of friends. They lived rough, shared whatever little they had and got through each day as best as they could.

When Samuel first fell sick, he thought it was malaria. He had chest pain, coughed often, felt weak, and would wake up soaked in sweat. Still, he kept going—buying painkillers from chemists and hoping it would pass. "I'd feel drowsy all day. I couldn't stand for long or even eat. I'd cough up blood and barely sleep at night," Samuel recalled.

One night, his condition worsened. He could hardly breathe or talk. "That night, I knew I needed help," he said. His friends, worried, encouraged him to return to Mwingi, where he had grown up. At Mwingi Level 5 Hospital, doctors tested and diagnosed him with TB.

He was started on treatment immediately. But Samuel had no home, no food, and no family support. "I didn't even have fare to get to the hospital daily," he said. That's when he was linked to a Community Health Promoter, Ursula Kimanzi.

Ursula began checking on him every day. "He showed me where he stayed, just next to a plot," she shared. "We agreed that he'd take his medicine at 4 p.m. every day. Sometimes I'd find him asleep without food, so I'd buy him chapatis and fruit."

"I thank Madam Kimanzi. She always asked how I was doing. She brought me food and reminded me to take my medicine," Samuel said.

Slowly, his health improved. The coughing eased, he regained strength, and he started eating again. "I'm grateful. I wouldn't want to go back to sleeping cold on the streets again," he said.

Samuel's recovery made him think deeply about others in similar situations. "At the shelter, we used to ask each other if someone else was also coughing," he shared. Now, with first-hand experience, he tells others, "If you're sick, go to the hospital. Don't wait. TB is treatable."

Ursula Kimanzi,CHP, engaging with Samuel briefly outside the clinic at Mwingi Level 5 hospital.

His case changed how health workers in Mwingi approached TB care among homeless people. Winfred Ngami, the Sub-County TB Coordinator, said, "When we engaged CHPs like Ursula, we started seeing results. People like Samuel finally complete treatment. Before that, many would just disappear."

Anne Ngunti, a clinician at the chest clinic, agreed. "He used to come back with medicine he hadn't taken. But when the CHP got involved, he adhered to full treatment. Seeing him cured meant one less person spreading TB in the community."

But it hasn't been easy. Ursula often puts herself at risk. "Sometimes I visit their bases and I'm the only woman there. I carry food and medicine. I'm always with a boda rider for safety," she said. Still, she keeps going. "I do it because I've seen it work."

Even now, Samuel still lives on the margins. He collects scrap metal for daily survival. But he's no longer silent. "When I see someone coughing like I did, I tell them to get tested. When I meet my peers dealing with health complications,I urge them to visit a health facility. I know how it feels to be that sick. I tell them, TB can be treated, but you must take all your medicine."

Samuel may not have much, but his voice now carries weight among his peers. His journey has helped others see that getting help is possible—even for those without a roof or a warm bed.

As he puts it, "I want my friends in the streets to know: TB has treatment. Don't be afraid. Go get checked." ■

A Voice for the Voiceless: Refugee Youth Bridges Healthcare Gap in TB Fight

Sarah Ajok during the interview.

By Mbetera Felix - DTLD

Sarah Ajok became aware of the significant obstacle Sudanese refugees in Kenya faced in accessing healthcare services after a sick relative was diagnosed with tuberculosis (TB).

Ms. Ajok was surprised to discover that many refugees from her native country seldom ever accessed medical services while she was taking her ailing aunt to the hospital earlier last year.

She claims that the language barrier caused the immigrants to feel discriminated against whenever they sought medical attention at the hospital in the Bungoma County Hospital.

Most Sudanese residents did not make an effort to visit a health facility, while some would spend hours looking for a translator to help them interact with the health specialists.

For her aunt, however, this was not the case. As a translator, Ms. Ajok was always there to assist the doctors in comprehending and even diagnosing her medical condition.

"After seeing this for a while, I felt compelled to assist my people by serving as a liaison between them and a medical professional," Ms. Ajok explains.

Ms. Ajok acknowledges that before the aunt was diagnosed, she knew very little about tuberculosis and had only relied on local superstitions that all TB patients were HIV-positive.

According to the 24-year-old, she decided to work closely with Sudanese TB patients who might otherwise have a delayed diagnosis because of a language barrier after speaking with her aunt.

According to her, immigrants who constantly reside in overcrowded shelters run the risk of infecting their loved ones with the airborne disease.

She decided to become a TB champion after receiving additional education about the illness from the Bungoma county government and from her experience caring for her ailing aunt.

According to Ms. Ajok, who claims that her assistance significantly improved her aunt's health, "I was also inspired by the fact that after multiple hospital visits, my aunt was declared free of TB after six months."

She began her career by setting up refugee forums where newcomers may discuss their struggles. According to Ms. Ajok, the Sudanese expressed dissatisfaction over the lengthy lines at the medical facilities and the dearth of interpreters.

She also spent time raising awareness of TB symptoms, diagnosis, and treatment methods at the forums.

Additionally, she would go to prayer services where she was given the opportunity to talk to the immigrants. Gradually, the refugees began to respond to her appeal.

I work as a translator at the Bungoma County Hospital. Many TB patients have been identified and treated early enough because to my crucial contribution," Ms. Ajok explains.

"I also occasionally attend trainings on TB treatment and prevention provided by the Ministry of Health and the County Government of Bungoma," she adds.

Now, the champion hopes to educate as many Sudanese immigrants as possible about the fact that tuberculosis is treatable and airborne. ■

Lucy Adala: A Young Champion Turning TB Tragedy into Community Action

Lucy Adala during the interview.

By Mbetera Felix - DTLD

Although Lucy Adala has never been diagnosed with TB, she has seen members of her immediate family pass away from the illness.

When she first learned about the illness, her father, a medical professional, had just gotten a diagnosis of TB pericarditis, a serious complication of TB that is associated with a higher mortality rate.

Unfortunately, her father passed away from the illness in 2014, the same year he was diagnosed with the disease.

2018 saw another visit from death. Another healthcare professional, Lucy's aunt, was diagnosed with TB meningitis. Later, in the middle of her therapy, she passed away.

"After losing my loved ones, I felt terrible. We must prevent the sickness, even though it is airborne. It is always painful when a loved one is impacted. According to Lucy, "no one ever thinks their close relatives could be diagnosed with the condition."

In 2019, the adolescent who had enrolled in Nangina Girls High School in Busia County started raising awareness about tuberculosis.

She took on the role of a peer counsellor, conducting life skills classes while educating her peers on the signs, diagnosis, and treatment of tuberculosis.

"Aside from the fact that it is airborne, I knew very little about the disease at the time," Lucy adds.

Lucy claims that her perspective on the airborne disease has altered since she was chosen to join the Bungoma County TB champions in 2022.

She has participated in a number of training sessions designed to increase her knowledge of the illness. Being a champion, Lucy is eager to reach the undiagnosed TB patients.

In an effort to dispel myths and misconceptions around the illness, she regularly teaches in public settings. According to Lucy, one of the main misconceptions regarding the illness in Bungoma County is that TB is caused by HIV/AIDS or witchcraft.

According to Lucy, "there is a lot of stigma associated with the disease. When someone is diagnosed with TB, especially in a rural setting, they are separated from friends and family, and some are even imprisoned in separate homes."

She claims that the stigma causes depression and that the patient is more likely to stop receiving therapy since they are not supported.

Lucy claims that she started a mental health support group for TB patients where they may express their opinions in an effort to combat stigma.

According to her, the support group also makes sure that patients don't stop taking their medications.

The 19-year-old who chose to accompany her mother on her road to recovery adds, "My mother was also diagnosed with TB earlier last year."

After undergoing a TB screening, Lucy was prescribed medication to keep her from contracting the illness while she took on the responsibility of caring for her mother.

Her mother continued to deteriorate during treatment and lost her ability to walk. Additionally, she would frequently lose her memory while the physicians said that she was not improving with medication.

She was usually yelled at by her mother. However, Lucy wasn't the kind to give up easily.

Some neighbours were alleging her mother had HIV, Lucy adds. "I remember some people in the village started spreading rumors that my mother was just stressed because she was a widow," Lucy recalls.

Lucy would spend time talking to the people about TB and its effects on patients rather than condemning them.

However, Lucy is happy that her mother is now healthy and well. She claims to have persuaded other individuals with TB-related symptoms to seek treatment at the Bungoma County Hospital.

"We have the chance to receive free TB testing and treatment; the process is quick and painless," Lucy explains.

Lucy, who always aspired to be a lawyer, is now waiting to start nursing school because of her frequent encounters with TB clients.

She claims that her intense desire to care for patients was the driving force behind the choice.

"To those still afraid of screening, TB *INA TIBA NA KUPIMWA TB NI BURE. Ugonjwa wa TB hupitia hewa na kila mtu anaweza ipata. Hakuna mtu aliye na hewa yake.* ■

LIGHT Consortium Optimising Gendered Pathways in Africa

Stakeholders during the LIGHT Consortium Participatory Action Research study dissemination forum in Nairobi, Kenya.

By Edel Sakwa - Light Consortium

Tuberculosis (TB) remains the world's deadliest infectious disease, killing 1.25 million people in 2023 alone. Though treatable and curable, TB continues to thrive, especially in Africa, which accounts for 24% of global TB cases. Of the 10.8 million people affected in 2023, 55% were men, 33% women, and 12% children, highlighting clear gender disparities. Yet, though national data in many high-burden countries have sex disaggregated notification data, it often lacks sex and age-disaggregated outcomes, hindering targeted, gender-responsive policies and equitable access to care.

Recognising the urgent need to address gender disparities in TB, the Leaving no-one behind: Transforming Gendered Pathways to Health for TB (LIGHT) consortium - a six-year UK-aid funded global health research programme led by the Liverpool School of Tropical Medicine (LSTM), works with partners in Kenya, Malawi, Nigeria, Uganda and the UK to support policy and practice for transforming gendered pathways to health for people affected by TB in urban settings. In this newsletter, we aim to share highlights on the LIGHT consortium's goal, research areas, and implementation countries. LIGHT is on its final implementation year. In the subsequent newsletter, we will share the research findings and key policy implications at global, regional, and national levels.

Our Goal

The LIGHT Consortium aims to contribute to real-world change through generating new evidence to inform policies that are gender-responsive and effectively actioned to improve male access to quality TB care; to reduce the number of people with TB-related ill health and deaths; to reduce transmission to the wider community, including to women and girls; and to reduce devastating associated costs for those with TB and their families.

What is LIGHT doing?

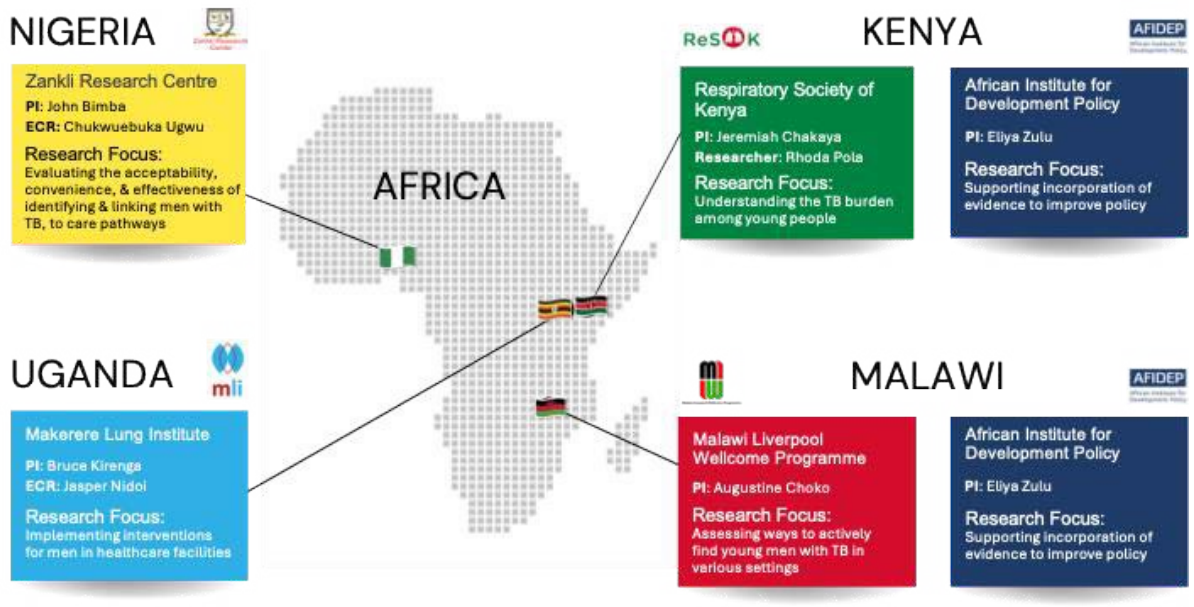
Innovative Research: Generating new evidence to inform gender-responsive TB policies and practice, enhancing access to TB prevention, diagnosis, and care for all.

Strategic Engagement: Collaborating with key stakeholders at national, regional, and global levels to ensure our research is informed, relevant, effectively communicated, and timely for maximum impact.

Capacity Strengthening: Strengthening the capacity of individuals, institutions, and multiple stakeholders in LIGHT countries to generate, adapt, translate, and utilise evidence, as well as managing research.

Cont'd on pg 39

Where we work

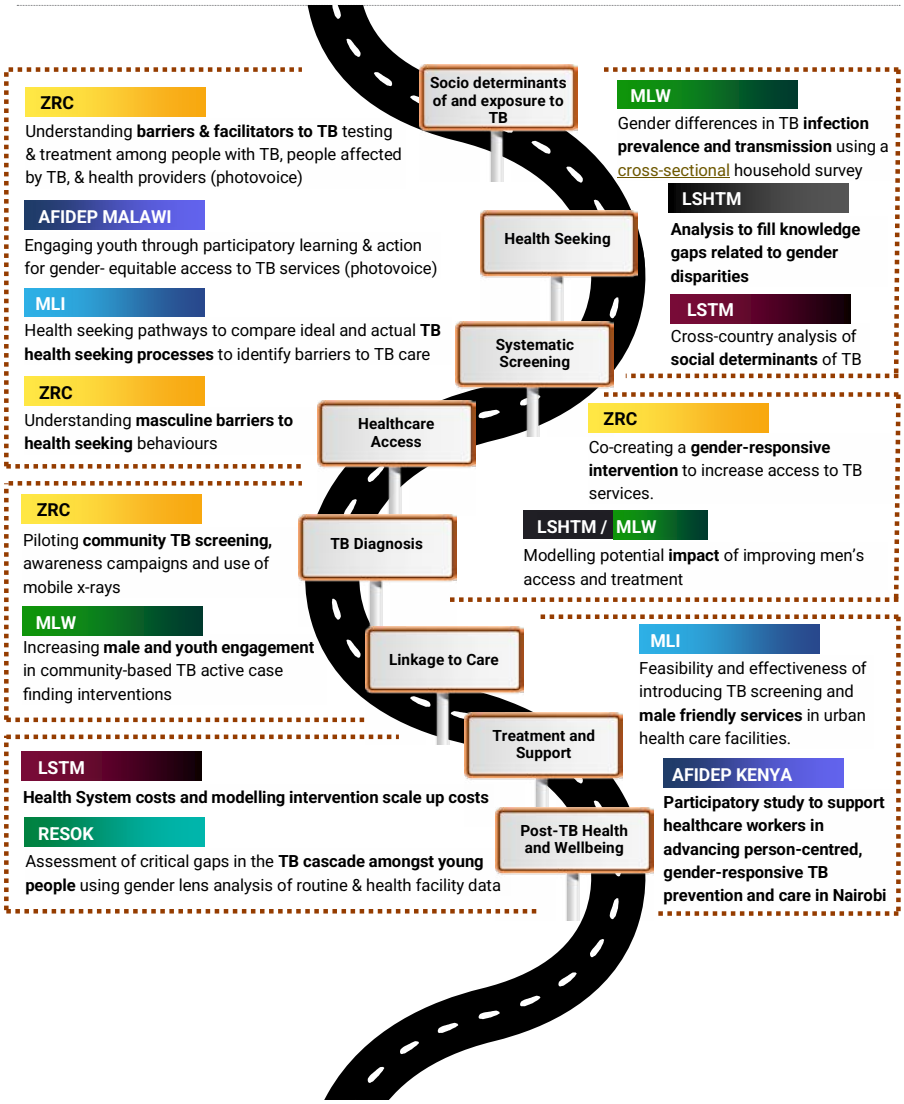


Cont'd on from 38

To maximise impact, LIGHT engages key national, regional, and global stakeholders, including National TB Programmes, donors, and partners, as it conducts its research. This ensures its research remains relevant, timely, and usable in policy and practice. By bringing evidence into policy discussions, LIGHT shows how gender-responsive policies can improve access to TB prevention, diagnosis, and care. The LIGHT research areas are mapped along the health care pathway as shown in the figure (right). ■

Though treatable and curable, TB continues to thrive, especially in Africa, which accounts for 24% of global TB cases. Of the 10.8 million people affected in 2023, 55% were men, 33% women, and 12% children, highlighting clear gender disparities.

Mapping LIGHT Research along the Healthcare Pathway



Champions of Hope: The Human Faces Fighting Tuberculosis in Kitengela

By NTP Team

In Kitengela, Kajiado County, a quiet revolution is unfolding, not with banners or parades, but through the unwavering courage of ordinary people who have faced tuberculosis and emerged as champions of hope for their community.

From Pain to Purpose: Mary's Journey

At 26, Mary Ngige leads with heart, inspiring others at Kitengela Sub County Hospital. Her journey began in childhood, marked by persistent coughs and whispers of stigma. "I was isolated, even forced to leave school twice," Mary recalls, her voice steady but reflective. "People didn't want to hear that TB could happen to them. Even in church, I was singled out."

Twice she suffered from TB, once as a child in primary school and then again as a teenager. Each time, she endured not just the disease but the loneliness it brings. Yet, Mary's story didn't end in silence. "When I finished school, I felt called to help TB patients," she says. Now, as a TB champion, she tirelessly guides the sick toward free treatment and, just as importantly, acceptance. "Seeing people I help return to their lives, cured, overwhelms me with happiness. TB is not a curse, and stigma must end."

Pastor Agnes: Healing Beyond the Pulpit

Pastor Agnes Wambua, another TB champion, knows the weight of the disease all too well. Misdiagnosed for years, she suffered in silence, thinking her persistent cough was mere pneumonia. The truth came as a shock. "When I learned it was TB, I thought my life was over," she confides. But with support from her family and a determined clinician, she finished her treatment, found healing, and a new calling.

"I said to myself, no one should die from TB if I can help. Even in church, if someone coughs, I don't keep quiet, I guide them to get tested." For Agnes, being a champion is a mission: "I walk with them, I carry their burden until they finish treatment."

Her compassion stretches to the most vulnerable—those without shelter, money, or family. "Some patients sleep outside clubs, some are thrown out of their homes. I help however I can, even with a little money for food. TB can be cured, but only if we reach out and support each other."

Margret's Resilience: Battling the Silent Threat

For Margret Wavinya, the path to becoming a TB champion was personal and painful. Misdiagnosed for months, her illness was eventually traced to her kidneys, TB hiding where no one thought to look. "I lost my left kidney to TB," she explains, "but I'm alive, and I want others to know the signs and seek help early."

Margret's work is grounded in experience and empathy. She volunteers at clinics, educates in marketplaces and bus stops, and supports others through treatment. "Information is power. If I can help even one person avoid my fate, it's worth it."

Pastor Caleb: A Story of Loss and Giving Back

For Pastor Caleb Onyango, TB's cost was devastating. "My wife and child died from TB. I was left alone, thinking I was cursed," he recounts with quiet grief. But when he survived his own battle with TB and HIV, he chose to give back. "I saw so much suffering in my community. Now, I pay rent for patients, buy food, and ensure they finish their treatment."

Caleb's mission is clear: to break the chains of stigma and poverty that make TB deadly. "TB is an airborne disease; anyone can get it. But with medication, and compassion, we can be cured."

Pastor Agnes Wambua during the interview at Kitengela Sub County Hospital.

Cont'd on pg 41

Cont'd from pg 40

Agnes Thenya: Turning Grief into Community Action

Agnes Thenya Sigano's journey as a TB champion began with her own family's suffering, then witnessing the loss of a mother in her neighborhood. "If only she'd known what TB was, she might have lived," Agnes reflects. "Now, I help educate and follow up with patients until they are cured. I do it for the young child that mother left behind."

The Clinician's Perspective: Ester Wanza

Behind these champions stands a committed healthcare system. Ester Wanza, a clinician coordinating TB services in Kajiado East, has watched case numbers rise—not from worsening disease, but from better detection and community trust. She credits TB champions for reducing stigma and improving treatment completion. "They walk with patients, even those without homes. Their work saves lives."

A Community of Champions

The stories of Mary, Agnes, Margret, Pastor Caleb, and others intertwine to form a tapestry of resilience. Each has suffered. Each has lost. Yet each has chosen to fight, not just for themselves but for their neighbors.

Their message is clear and urgent: TB is curable, treatment is free in public health facilities, and no one should suffer in silence. They urge the government for more resources including stipends, food support, and transport for the most vulnerable. They are grateful for the support of Amref Health Africa in Kenya in serving communities in Kitengela. But above all, they ask for understanding and solidarity.

As the sun sets over Kitengela, these champions continue their rounds. In their hands, stigma gives way to hope, and despair is replaced by healing. Through their stories, a community learns that TB is not a curse, it is a disease, one that can be beaten when people come together with compassion, courage, and knowledge.

"Get tested for TB, get treated, live well", their voices echo, a promise and a call to action for us all. ■

Margaret Wavinya,CHP, engaging a client outside the TB clinic.

Pastor Caleb Onyango. Right, Mary Ngige in consultation with a client at the facility.

Esther Wanza, SCTLC, Kitengela during the interview.

REPUBLIC OF KENYA

MINISTRY OF HEALTH

Division of Tuberculosis and other Lung Diseases,

Afya House Annex 1st Floor | Kenyatta National Hospital Grounds
P.O. Box 20781-00202 Nairobi, Kenya |
Website: www.nltp.co.ke | **Facebook:** NTLDKenya | **Twitter:** @NTLDKenya | info@nltp.co.ke