Catalyzing Pediatric Tuberculosis Innovation (CaP TB) in Lesotho

The Tuberculosis Epidemic

Globally, an estimated one million children are in need of treatment for tuberculosis (TB), yet only 39% are diagnosed and reported to national TB programs. Little has been done to expand access to case identification, innovative diagnostic tools or child-friendly treatments that are now available.

TB is the second leading cause of all deaths in Lesotho, following HIV and AIDS. Although the National TB and Leprosy Program (NTLP) recognizes the high prevalence of this epidemic and children as a priority population, diagnosis and management of pediatric TB remains a significant challenge. In 2016, only 46% of all TB-infected clients (adult and children) received a confirmed diagnosis and, of those, 3% were pediatric TB cases - much lower than the expected 10-15% for a high TB incidence country such as Lesotho.

The Ministry of Health (MOH) is currently procuring GeneXpert platforms for TB diagnosis and new dispersible pediatric fixed dose treatment (FDTs) to enable greater access to diagnosis and faster linkage to treatment among children. However, additional support is needed to roll out these innovations, including ensuring increased demand for and appropriate stock supply of first-line FDTs and ordering not-yet-in-market dispersible single formulations for treatment of both active and latent TB.

CaP TB

CaP TB is a four-year project funded and supported by Unitaid, which aims to contribute to the reduction in pediatric TB morbidity and mortality in nine sub-Saharan African countries (Cameroon, Côte d’Ivoire, DRC, Kenya, Lesotho, Malawi, Tanzania, Uganda, and Zimbabwe) and India.

EGPAF has supported the scale-up of prevention of mother-to-child transmission (PMTCT), HIV diagnosis, care and treatment, and integrated HIV/TB services and has been a key health service implementing partner to the MOH in Lesotho since 2004. With over 800 highly-trained staff working to support 165 sites across all 10 districts, EGPAF is currently implementing two five-year, PEPFAR-funded comprehensive HIV and TB care and treatment projects and has been a key implementer of Unitaid’s point-of-care early infant diagnosis (POC EID) project. Due to its close and comprehensive work with the MOH, EGPAF is well-positioned to bring innovative solutions through CaP TB to tackle childhood TB, and will use the network built through the expansion of pediatric HIV testing and diagnosis to optimize access to vulnerable and high-risk populations. Building on existing project work and partnerships with the government and local organizations, EGPAF will ensure increased coverage of new pediatric first-line FDTs and promote the introduction of innovative tools and service delivery models for pediatric TB. This work will be focused in 40 high-TB burden sites across five districts.

CaP TB hopes to result in an increase in pediatric TB case detection by two-fold, 102,427 years of life saved and $36 million in cost savings and efficiencies, globally. In Lesotho targets include:

- Diagnosis of approximately 1,100 children with TB
- Treatment of approximately 1,000 children with TB
- Initiation of over 7,000 children on preventive TB treatment
CaP TB Outputs by Objective:

**Objective 1: Create an enabling policy and regulatory environment at the global and national level**

EGPAF will work within Lesotho’s existing national technical working group on TB to enhance implementation of innovative TB diagnosis and treatment guidelines and innovation.

**Objective 2: Increase demand for pediatric TB treatments through improved detection**

EGPAF will work with supported sites to train clinicians and village health workers on the use of these revised guidelines and enhanced TB detection, as well as use of innovative diagnostics and provision of quality TB care. We will work with the Lesotho Network of People Living with HIV/AIDS (LENEPHWA) to train TB screening clerks at each project site and village health workers to strengthen TB identification within communities. To further scale-up TB case detection, CaP TB will work to integrate TB with other health services, such as nutrition, maternal and child health and HIV-related services, to ensure all accessing those services are able to also access TB-specific care.

TB contact tracing will strengthen identification of latent and active TB cases. To enhance contact tracing, EGPAF will collaborate with the NTLP to develop and introduce a household contact-mapping tool for use by LENEPHWA lay workers in home visits of index TB patients, and we will train all TB contact tracers on appropriate counseling messages and TB testing services provided through home visits.

Without a swift turnaround time of sample collection to initiation on treatment (if needed), improved case detection can only go so far. EGPAF will work hand-in-hand with the MOH to develop safe and swift sample transport mechanisms for lower-level facilities and create greater opportunities for quick results turnaround through SMS technology.

**Objective 3: Increase uptake of and access to improved pediatric TB treatments for active and latent TB**

EGPAF’s TB coordinators will ensure that site-level staff are prescribing newly-introduced formulations according to updated guidelines and SOPs. This support will be informed by program and site-level monitoring of staff and patient outcomes. Clinicians will be trained both on and off-site (centers of excellence will be identified for learning opportunities); and clinician job aids on pediatric TB identification, diagnosis, and treatment will be circulated to all supported sites. Support will also be provided to strengthen the treatment of latent TB infection, including through the rapid uptake of improved formulations for latent TB treatment.

**Objective 4: Generate novel evidence and cost-effectiveness data**

EGPAF will establish strong monitoring and evaluation (M&E) systems to capture appropriate CaP TB project data, leveraging its existing M&E system for its PEPFAR and Unitaid POC EID projects, which include routine site-level data collection. Cost effectiveness systems will be incorporated to inform program refinement and recommendations for further scale-up.

**Objective 5: Effectively transition this work to management by national entities, thereby ensuring sustainability**

EGPAF will advocate with the NTLP and other stakeholders to incorporate CaP TB project activities into annual work plans and budgets and will collaborate with civil society organizations to create demand for quality TB care to ensure project sustainability.

This project is made possible thanks to Unitaid’s support. Unitaid accelerates access to innovation so that critical health products can reach the people who most need them.