

The role of Riders for Health's managed-transport systems in the fight against Tuberculosis (TB)

86% of health workers mobilised by Riders for Health contribute to the fight against TB in their day-to-day roles. Please find below a summary of the cycle of care, with specific focus on where Riders' managed transport systems can contribute towards the fight against TB.

Education

♦ **Health education:** Health education supports the early identification and recognition of symptoms by a patient, together with an understanding of disease transmission and progression. This means that people know when - and why - to seek medical help, and understand the importance of disease containment in order to protect public health. Health education also addresses the myths/stigma that surround diseases like TB and, as such, education gives community members the information they need to take control of their well-being.

Riders' influence: *Our vehicle management systems provide outreach health workers with functioning transportation to regularly reach their target communities in order to host health education meetings/gatherings. In Lesotho, community health education takes place in village, school and church-based locations. Outreach health workers mobilised on Riders-managed motorcycles are able to conduct over three times more health education meetings each week compared to before.*

Disease surveillance

♦ **Recognition and referral:** Early identification is key to the containment and prevention of TB. If left untreated, the average carrier will infect another 10-15 people every year, according to the WHO. It is therefore essential that outreach health workers monitor outbreaks of the disease, and are alert to symptoms that may not have been recognised by the carrier. The immediate referral of individuals with suspected TB to their local health centre for testing / treatment will prevent the further spread of the disease within the local community.

Riders' influence: *Reliable transportation means that outreach health workers, such as TB officers, can spend more time in the community and are better placed to monitor the disease environment, identify new cases and make referrals to health centres for diagnosis and treatment. For example, health workers in Zimbabwe with Riders-managed motorcycles can now spend four days every week in their communities, compared to just two before. This means each outreach health worker can reach an average of 50 people every week - over three times the number than without reliable transport.*

Diagnosis

♦ **Recognition:** Health centre staff play a pivotal role in the recognition of symptoms and the referral of patients and/or samples for testing.

♦ **Testing:** Effective patient care starts with a timely diagnosis, and all patients with suspected TB need two to three sputum specimens submitted, sometimes to a referral laboratory, for microscopic examination. It is also necessary to establish the HIV status of the patient, which will impact on the course of treatment.

Riders' influence: *Riders Sample Transport (ST) programme is a motorcycle courier system specifically designed to improve primary level access to laboratory diagnosis and monitoring, and reduce the time-delay in diagnosing diseases like TB. Since the introduction of ST in Zimbabwe, the average turnaround time from sample collection to receipt of laboratory test results by the health centre has reduced from eight days to three. This allows for quicker diagnosis of individual patients.*

Treatment

♦ **Adherence counselling:** Treatment of a TB-positive patient can last from six months to one year. Failure to complete a full course of medication is common, and can lead to the development of Multi-Drug Resistant TB (MDR-TB). Adherence counselling prepares patients for the medical commitment of the treatment programme and can be highly effective in promoting patient adherence.

◆ **Treatment initiation:** Following the receipt of results by the health centre, efficient patient follow-up, and identification of the most appropriate course of medication is core to the successful treatment of the disease. This also helps to contain the spread of the disease, and improves the health of the patient due to earlier treatment initiation.

***Riders' influence:** An efficient ST programme means that health centre staff know when to expect delivery of results so that they can confidently arrange follow-up appointments with their patients. This reduces the waiting time for patients to receive their results. According to health centre staff, before the Riders ST program began in Lesotho, only 3% of health centres managed to give patients their laboratory-tested results back within a week of results being received at the health centre. Thanks to Riders reliable and consistent ST program, 98% of health centres now give patients their results back within a week of them being received at the health centre. This allows for more rapid follow-up of individual patients and initiation of treatment, if necessary.*

◆ **Drugs and medication:** A successful programme of TB treatment is also dependent on the appropriate medication being available to treat patients.

***Riders' influence:** Riders can manage the transportation and logistics of drugs for treatment, as well as reagents for laboratory testing and other consumables linked to the diagnosis and treatment of TB.*

Monitoring and follow-up

◆ **Follow-up care:** Patients need regular follow-up care and support to assess their response to treatment, and to manage any adverse reactions. Regular follow-up care also enables health workers to assess patient adherence and facilitates treatment completion.

◆ **Defaulter tracing:** TB-positive members of a community can put the rest of the community at risk of infection. It is vital that outreach health workers can immediately trace patients if they miss scheduled appointments, which can prevent the loss of a patient to follow-up – supporting patient adherence and minimising the conditions that can lead to MDR-TB.

***Riders' influence:** Reliable transport means that health workers have the capacity to provide reliable and consistent follow-up care and defaulter tracing. In Lesotho, the mobilisation of outreach health workers has led to 60% more health workers providing follow-up care at least every six weeks.*

◆ **Patient monitoring:** It is recommended that follow-up testing of TB-positive patients should be performed at prescribed intervals throughout the treatment programme, and upon course completion. This allows health care professionals to recognise and respond to treatment success, failure, and the emergence of MDR-TB.

***Riders' influence:** The efficient turnaround of test results is vital to patient monitoring. Riders' ST programme supports efficient testing of patient samples and enables effective monitoring of TB patients.*

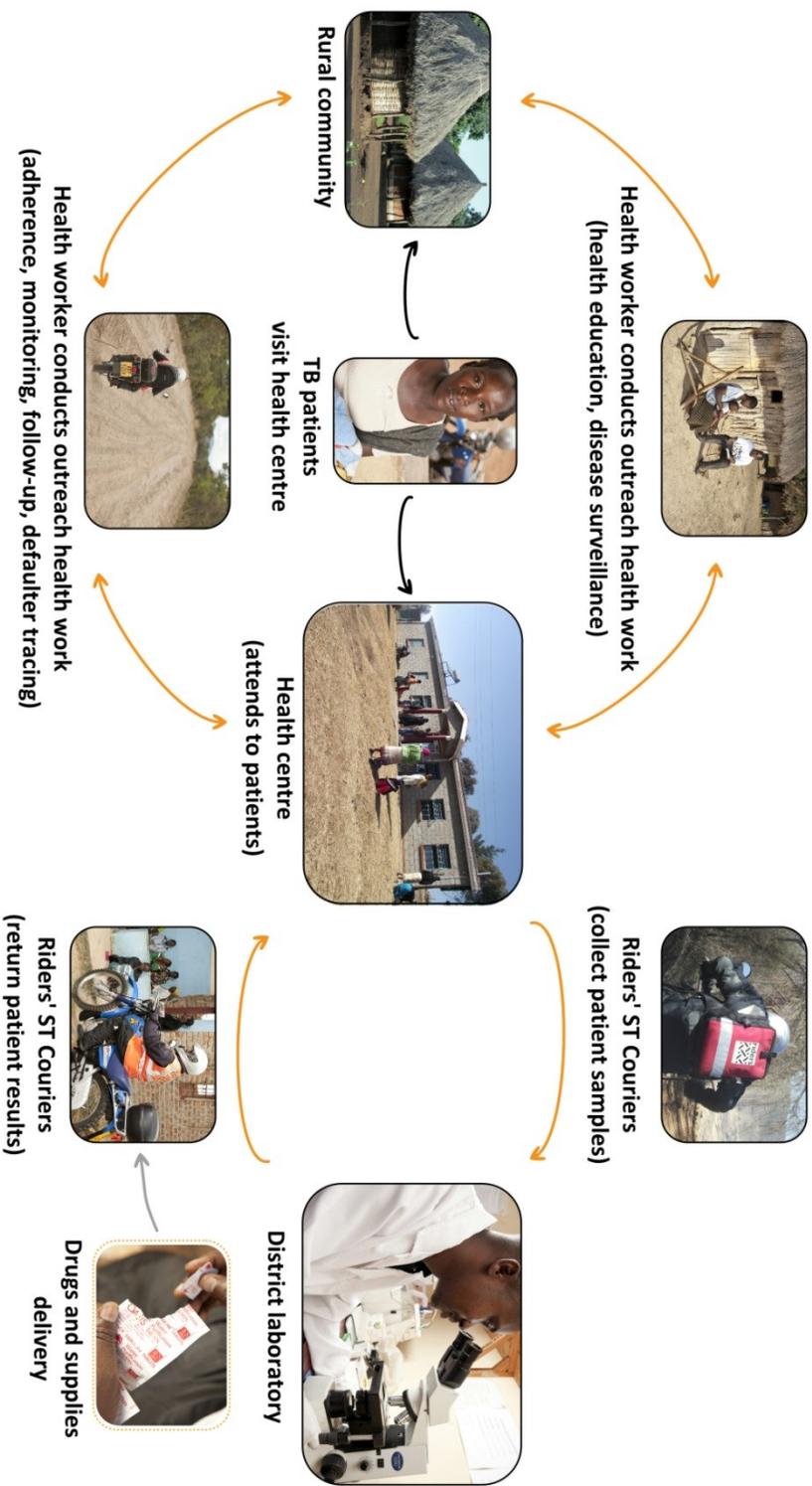
Health-seeking behaviour and trust in the health system

◆ **Health education:** An understanding of the importance of healthy living, hygiene and basic sanitation is vital in the development of positive health-seeking behaviour [please see the section entitled: 'Education'].

◆ **Patient motivation:** Health care systems can often be undermined by irregular and inconsistent services, which can lead to a decrease in positive health-seeking behaviour.

***Riders' influence:** Reliable transportation ensures the regular provision of health care services, including the efficient turnaround of diagnostic samples and results, and reliable follow-up care. This builds patient trust in the health care system and increases public demand for medical services. Since the ST programme began in Zambia, there has been a 50% increase in samples / results being transported to the laboratory and a 14% increase in patient attendance at health centres in the district.*

Riders' potential role in the TB cycle of care



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