

## RESEARCH

## for **Tuberculosis Elimination**

## THE IMPORTANCE OF RESEARCH IN THE FIGHT AGAINST TB

- With 9.6 million new cases and 1.5 million deaths worldwide in 2014, TB imposes a high burden of human suffering and loss, overwhelmingly borne by poor and vulnerable people living in low and middle income countries.
- Over 3 million people who developed TB in 2014 were missed by national systems.
- Only a quarter of the 480 000 cases of multidrugresistant TB (MDR-TB) estimated to have occurred in 2014 were detected and reported.
- The MDG objective of reversing incidence of TB by 2015 has been reached, but TB incidence is declining far too slowly, by 1.5% per year.
- At this pace, the end of the TB epidemic will not be reached by 2030, given the tools available for TB prevention, care and control are of limited efficacy and are still not readily accessible in some settings.

## RESEARCH – A CRITICAL PILLAR IN THE END TB STRATEGY

- The WHO End TB Strategy, serves as a blueprint for countries to reduce TB incidence by 80% and TB deaths by 90% and to eliminate catastrophic costs for TB-affected households by 2030.
- Research is critical to break the trajectory of the epidemic and reach the global targets to end TB.
- Intensified research and innovation is the third Pillar of the End TB Strategy. It is needed to increase the effectiveness of existing tools and develop revolutionary new technologies to transform the way TB is diagnosed, treated and prevented.

### RESEARCH PILLAR IN THE END TB STRATEGY

PILLAR 1 Integrated, patient-centered TB care and prevention









### WHAT RESEARCH IS REQUIRED TO END TB?

A radical transformation in the way TB is diagnosed, treated and prevented is needed. This requires an intensification of efforts along the **full spectrum of research** by:

- Improving the understanding of basic science to fuel the discovery and development of new diagnostics, drugs and vaccines.
- Amplifying and integrating research and development efforts for testing and validating new diagnostics, treatments and vaccines.
- Bringing together all streams of research towards innovative strategic approaches for TB prevention and care adapted to specific country needs.
- Building better comprehension of socio-behavioral factors influencing health-related practices of TB patients, peers, caregivers and health care workers.
- Transforming the larger policy and health system environment, through research towards universal health coverage, social protection, and whole-ofgovernment actions on social determinants of the disease.

SPECTRUM OF TB RESEARCH



FUNDAMENTAL



TRANSLATIONAL







CLINICAL STUDIES/TRIAL DEPLOYMENT AND SCALE L IMPLEMENTATION / OPERATIONAL RESEARCH

## GLOBAL ACTION FRAMEWORK FOR TB RESEARCH

www.who.int/tb/publications/global-framework-research

WHO has developed a Global Action Framework for TB Research, to foster high-quality national and global TB research over the next 10 years to 2025. The framework sets the principles for action on TB research and recommends the roles, responsibilities and deliverables for major stakeholders, both global and national. It is designed for use by a wide range of groups and individuals including ministries of health and their national TB programmes, ministries of science and technology, national research institutes, academia, researchers, international and national donors and technical agencies, NGOs and civil society.

The Framework has two fundamental objectives:

- ① To promote, enhance and intensify TB research and innovation at *country* level, with a focus on low- and middle-income countries, through the development of country-specific TB research plans and strong research capacity.
- 2 To promote, enhance and catalyze TB research at *global* level through advocacy, sharing innovations, discussion of global priorities in TB research and development of regional and international networks for research and capacity building.

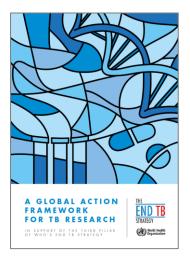
The Framework is composed of three parts:

Part I: Strengthening TB research in low and middle-income countries

most affected by TB

Part II: Supporting and facilitating research at global level

Part III: The role of WHO



## **GLOBAL ACTION FRAMEWORK: MILESTONES AND DELIVERABLES AT A GLANCE**

# Countries

Global

### 2020

## All countries with high TB burden will have:

- Established a national TB research network;
- Integrated TB research within the National TB Strategic Plan;
- Developed a list of national TB research priorities;
- Initiated in-country research training.

### It is expected that:

- At least three new crossnational TB research networks will be established;
- At least three large multicentre and cross-cutting collaborative studies will be initiated;
- At least two new innovative financing mechanisms will be implemented;
- Full funding of TB research will be ensured at least in the BRICS countries.

### 2025

## All countries with high TB burden will have:

- Developed and implemented a national TB research plan;
- Established sustained mechanisms for national TB research funding;
- Created a strong TB research capacity;
- Empowered a strong and self-sustained TB research community.

### It is expected that:

- High-income countries will have enhanced their commitment and investments in Research and Development (R&D) for TB;
- Mechanisms will be in place for global networking on TB R&D;
- Novel funding mechanisms will be implemented to enhance TB R&D;
- At least five large scale, multicentre, crosscutting collaborative research projects will be conducted.

For more information please access <a href="https://www.who.int/tb">www.who.int/tb</a>