



### USAID Cure Tuberculosis Project Year 2 Annual Results October 1, 2020 — September 30, 2021

Cure Tuberculosis is a five-year activity (2019-2024) implemented by JSI Research & Training Institute, Inc. (JSI) in partnership with University Research Co., LLC (URC) and United States Pharmacopeia (USP) which aims to strengthen the Kyrgyz government's ability to diagnose, treat, and cure people with drug-resistant tuberculosis (DR-TB).

Cure Tuberculosis works through four sub-grantee organizations, and in close collaboration with the Kyrgyz Republic's National Tuberculosis Program (NTP) under the Ministry of Health (MOH) and national partners.

# Increased DR-TB case detection

SUB-PURPOSE

2

More patients cured of DR-TB

SUB-PURPOSE

3
Prevention of DR-TB infections

SUB-PURPOSE

Improved enabling environment

# KEY FIGURES (2020 data)

**TB** notification rate: 53.4 per 100,000

**TB** mortality rate: 3.9 per 100,000

# SUB-GRANTEE ORGANIZATIONS

- National Red Crescent Society
- Association of Village Health Committees
- TB People in Kyrgyzstan
- · Hospital Association of the Kyrgyz Republic



#### **DIAGNOSIS & CASE DETECTION**

- Optimized TB laboratory networks and implemented Quality Management System (QMS) in Chui, Naryn, and Talas Oblasts
- Implemented FAST (Find Actively, Separate, and Treat) protocol in four general hospitals in Chui Oblast
- Expanded TB contact investigation model in Naryn and Batken Oblasts

#### TREATMENT & CLINICAL MANAGEMENT

- **Reformed DR-TB Concilium model** with cohort analysis piloted in Chui rolled-out in Naryn, Batken, and Talas Oblasts
- **TB** case management approach expanded in Naryn and Batken followed by primary health care (PHC) payment system

# **INFECTION PREVENTION** & CONTROL (IPC)

- TB IPC training module developed and IIO Oblast TB Center (OTC) specialists trained; IPC plans updated in Naryn, Batken, and Talas Oblasts
- IPC Monitoring & Evaluation (M&E) Guidelines for PHC organizations developed and approved

## COMMUNITY ENGAGEMENT & SOCIAL & BEHAVIOR CHANGE (SBC)

- Trained almost **9,000 community and religious leaders** countrywide on TB outreach, TB case detection and stigma
- About **1.5 million people reached** through TB information sessions and public awareness campaigns
- Almost 700 TB patients received psychosocial support, food and hygienic packages, and/or financial assistance through community mobilization; I79 completed treatment
- **SBC** approaches developed and implemented to change behavior of TB patients, priority groups, health care workers (HCWs) and communities to increase testing, treatment and social support to TB patients

#### **MEDICAL INFORMATION SYSTEMS (TB MIS)**

- Developed and strengthened key **TB MIS** to streamline TB care services:
  - Laboratory Data Management Information System (LDMIS) captures and shares laboratory results
  - Electronic Medical Record (EMR) stores patient medical history in hospitals
  - e-TB Register TB-01 Module centralizes TB case records
- TB MIS being **implemented nationwide** and HCW users trained

#### DISCLAIMER

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**USAID** Cure Tuberculosis Project

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Cure Tuberculosis Fact Sheet (USAID)
Cure Tuberculosis Project Page (JSI)



### Increased DR-TB case detection



#### KEY FIGURES (2020 data)



**67%** Bacteriological diagnosis coverage

77% GeneXpert coverage

#### **LABORATORIES & DIAGNOSTIC NETWORKS**

- **TB** laboratory network optimization plans developed and implemented in Naryn and Talas Oblasts
- All 177 QMS standard operating procedures (SOPs) adapted for TB laboratories at PHC in Chui Oblast
- Microscopy reporting module for LDMIS developed
- Turn-around time (TAT) for drug susceptibility tests (DST) decreased: Xpert and phenotypic DST (3 times) and HAIN (6 times), thanks to clear routing, updated procedures, and switch from paper referrals to LDMIS (Fig. I)

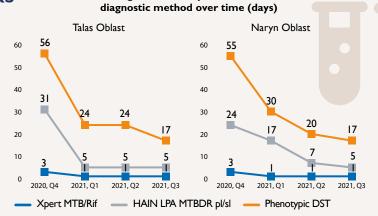


Figure 1. TAT by Oblast and

(Source: LDMIS)

#### **MEDICAL INFORMATION SYSTEMS**

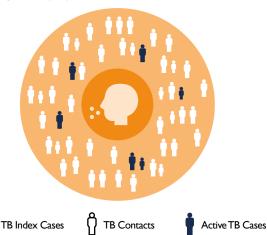
- **LDMIS** installed in 79 new health facilities reaching a total of 103 facilities nationwide
  - Covered all rayon-level PHC facilities in Chui, Naryn, and Talas Oblasts, which accelerated TAT
- Over 1,250,000 records (of which more than 360,000, or 29% were for TB) entered in LDMIS; 597 HCWs across the country, with 395 new users
- Developed Transportation of Biomaterials software, integrated in LDMIS and operationalized in the NRL and TB laboratories in Naryn and Talas Oblasts

#### COMMUNITY-BASED CASE DETECTION

- 8,694 community and religious leaders countrywide trained on disseminating TB information, identifying presumptive cases and reducing stigma
- About **1.5 million people reached** with TB information through information sessions and public awareness campaigns
- 57 people with presumptive TB identified and referred for testing; six TB cases confirmed (10%) with the help of screening tools developed for priority groups

### FACILITY-BASED CASE DETECTION & CONTACT INVESTIGATION

- FAST protocol for general hospitals adapted, instruction and algorithm for active TB case finding developed and implemented in four in-patient facilities in Chui Oblast
- Expanded TB contact investigation pilot model in Batken and Naryn Oblasts
  - Conducted contact investigation for 122 index cases; identified 535 TB contacts and 23 active TB cases among them (4%)



- <u>USAID Interventions Reduce Laboratory</u>
  Turn-around Time for Faster Diagnosis of Tuberculosis
- ► Cooperation of National Red Crescent Society and Social Shelters for the Homeless in Chui Oblast (Russian)
- ► Village Health Committee Leader on the Importance of Supporting a TB Patient within the Family (Kyrgyz)
- ► The Importance of Starting TB Treatment on Time, featuring an elderly TB patient (Kyrgyz)

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### More patients cured of DR-TB



**KEY FIGURES** (2020 data)

99% RR/MDR-TB cases enrolled on treatment

80%

Treatment success rates:

62% RR/MDR

**52%** 

#### **DR-TB CLINICAL MANAGEMENT**

- Reformed DR-TB Concilium model rolled-out in Naryn, Batken, and Talas Oblasts, phased implementation of cohort analysis started (Fig.2) and all 36 DR-TB Concilium members completed modular training for DR-TB management (72 credit hours)
- Developed standards for TB case management (CM) in PHC organizations, approved by MOH and expanded in Naryn, Batken, and Leninsky district of Bishkek
- 2,827 HCWs from PHC organizations in Naryn, Batken and Chui Oblasts, and Bishkek trained on TB CM tools
- DR-TB management clinical protocol finalized

#### Figure 2. Cohort analysis implementation phases

### First stage (2-3 months)

- Introductory training for Concilium members
- Familiarization with indicators
- Instruction on methodology for calculating indicators
- Individual work: calculation of rayon indicators

### Second stage (6 months)

 Assessment of individual work: reconciliation of indicators with data from TB 02 and 02/DR; comparison of indicators between rayons

#### Third stage

 Independent routine calculation of indicators against the approved indicators for cohort analysis – quarterly, annually

# DRUG MANAGEMENT & ACTIVE DRUG SAFETY MONITORING (aDSM)

- Developed and approved Practice Guidelines for TB Drug Management; 30 regional coordinators and drug management specialists trained
- Developed a training module on aDSM with the Kyrgyz State Medical Institute of Post-Graduate Training & Continuous Education (KSMIPT&CE) (40 credit hours); 153
   TB doctors from all regions trained

### COMMUNITY-BASED TREATMENT SUPPORT

- Sub-grantees trained on **TB CM tools**
- Provided social support to 419 TB patients at risk of treatment interruption – 179 completed TB treatment
- 361 patients in need received food and hygienic packages worth 1.5 million soms
- Mobilized 360,370 soms for 263 vulnerable TB patients through community advocacy
- **154 TB patient support groups** conducted with group counseling

#### **MEDICAL INFORMATION SYSTEMS**

- Installed e-TB Register TB-01 Module in 81 PHC organizations; 191 new users trained and 5,675 TB-01 patient treatment cards in the system
- Implemented the **EMR** in 19 TB hospitals; 594 users and data on 15,608 patient records
- Verification of successfully treated TB cases for payment shifted from the Mandatory Health Insurance Fund (MHIF) to OTCs facilitated by the connection of e-TB Register TB-01 Module to Treated TB Case at PHC software in Chui, Talas, Naryn, Osh, Batken, and Jalal-Abad
- Implemented Pharmacy information system in five TB facilities in Bishkek and Chui Oblast
- Developed a connector for X-ray visualization software to quickly transfer and store X-ray images

#### **Social support includes:**

- · food and hygiene packages
- · patient support groups
- individual counseling on TB treatment and IPC measures
- directly-observed treatment (DOT)

#### **Priority groups:**

- migrants
- former prisoners
- homeless people
- people living with HIV
- disadvantaged groups

- USAID Supports People from Vulnerable Groups to Complete Treatment for Tuberculosis
- ► An Individual is Responsible for Their Health! (Russian)
- ► Support of People with TB by Kyzyl-Oktyabr Local Government, Kemin Rayon of Chui Oblast (Russian)
- ► The Role of Community-Based Treatment Supporters in TB

  Treatment A Village Medical Worker (Russian)

### Prevention of DR-TB infections



KEY FIGURES (2020 data)

TB incidence rate among HCWs



#### **INFECTION PREVENTION & CONTROL**

Completed the second stage of the TB IPC cycle (Fig. 3) in three OTCs:

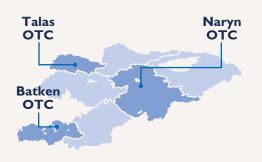
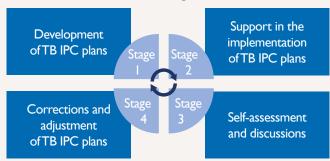


Figure 3. TB IPC improvement cycle in health care organizations





TB IPC Training Module developed (24 credit hours)



**OTC** specialists from Naryn, Talas, Batken, Chui trained as trainers on TB IPC



OTC HCWs were trained by OTC trainers on TB IPC



Developed and approved **IPC M&E Guidelines** for PHC organizations

#### **SOCIAL & BEHAVIOR CHANGE**



#### **GUIDELINES**

Developed guidelines for **SBC approaches** with TB patients, priority groups, and the general population



#### **STRATEGIES**

Developed multiplicative dissemination strategy through mass media and social media using behavioral journalism approach



#### **TRAINING**

Developed **SBC** training materials for **HCWs** to improve counselling and interpersonal communication skills, included in the TB CM training program



- real stories of TB patients, their families, HCWs, and communities
- encouraged behaviour around testing, treatment and support of TB patients
- advocacy of local celebrities around key TB messaging

- <u>USAID Builds Multiplicative Approach for Social and Behavior Change Communication</u>
- ► TB Treatment Must Be Completed! (Kyrgyz)
- ► For People with TB, Support from Others is Important! An Elderly Woman's Story (Kyrgyz/Russian)
- ► Community Support for People with TB, featuring the Naryn OTC Director (Russian)
- ► A Responsive Health Care Worker is Key for Treatment Success! (Kyrgyz/Russian)
- How Can We Make TB Treatment More Patient-Friendly? (Russian)



### Improved enabling environment

**KEY FIGURES** Financing resources committed to TB services at PHC level (2020 data):





2,690 individuals trained in components of the WHO End TB Strategy

#### FINANCING FOR TB SERVICES

- PHC payment system for successfully treated TB cases expanded in Naryn and Batken Oblasts
- Facilitated the **transfer of financing** of the transportation system in Naryn Oblast to the state budget
- Revised base prices for lab tests required for DR-TB cases in public health facilities to enable private lab contracting

■ January - September 2021





transported through the transportation system in Chui and Talas Oblasts, and four rayons of Naryn Oblast

• Around 400,000 soms paid from MHIF budget for these services

#### **DATA FOR DECISION-MAKING**

- Achieved 99.6% accessibility of TB MIS systems in Year 2 through maintenance support to the NTP
- Procured 82 sets of allin-one computers and multifunctional devices for 63 facilities nationwide to facilitate TB MIS implementation



#### **POLICIES**

- Led the development of **National Program Tuberculosis-VI** for 2022-2026
- Regulations of the Batken, Osh, Talas, and Chui OTCs updated with expanded functions and tasks
- Shared the experience and achievements of the NTP in TB financing and introducing the TB CM approach at PHC at the 5th International Conference on Integrated Control of Tuberculosis in Central Asia
  - 60 participants from Kyrgyzstan and 150 participants from other countries
- Strengthened national M&E systems in cooperation with TB DIAH by revising M&E guidelines and tools and revising NTP recording and reporting forms



Governance documents in TB were developed and adopted

#### **STIGMA & DISCRIMINATION**

- Developed a joint workplan for SBC communication for 2021 in collaboration with the Republican Health Promotion Center (RHPC), NTP, and other stakeholders to harmonize TB information and reduce stigma and discrimination
- Distributed TB information through 285 TV, radio, online and print materials
- Helped with the NTP website, YouTube channel and social media content management
- Increased reach through 10 social media pages of NTP, MOH, and sub-grantees: 2,225 posts on Facebook, Instagram







- ► Transfer of Hospital Beds from Project C.U.R.E. and Cure Tuberculosis to the NTP (Russian/English)
- ► Payment System at PHC Based on TB CM Approach (Russian)
- Financing of TB Hospitals Based on the Treated Case: Example of Kara-Balta TB Hospital (Russian)
- ▶ Women on Treatment Need Stronger Family Support! (Kyrgyz/Russian)

### Cross-cutting issues

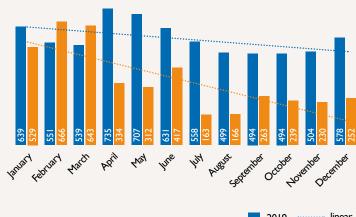
#### COVID-19 & TUBERCULOSIS

- COVID-19 epidemic continued to affect all aspects of Project work, TB services and the health system
- **TB** notification rate decreased by 32% in 2020 due to COVID-19 (Fig.4)
- Remote treatment adherence support strategies implemented in response to COVID-19 now institutionalized through TB CM approach: take-home drug supply, expanded community-based treatment support (CBTS), video observed treatment (VOT)
- COVID-19 module developed as part of QTSA (below) measured impact of COVID-19 on TB services. Results show:
  - Significant disruption across all areas: case detection, treatment, infection control and health system resources diverted, but also
  - Nationwide uptake of remote treatment adherence support, which mitigated impact on TB services and made services more patient-oriented
- LDMIS/COVID-19 module developed to capture COVID-19 results recognized by government as major contribution to national COVID-19 response
- Combined diagnostic algorithm for COVID-19 and TB piloted as emergency response to decreased detection of TB cases; 152 people with presumptive TB detected with 13 TB cases confirmed (9%)

#### COVID-19 cases (through October 1, 2021):

- 178,608 total cases
- 6,833 cases among HCWs
- 173,305 people recovered
- 2,067 deaths

Figure 4. TB notifications (all cases) in 2019 and 2020



2019 ----- linear 2020 ----- linear

(Source: NTP)

### STRATEGIC INFORMATION & MONITORING & EVALUATION

- Conducted large-scale Quality of TB Services Assessment (QTSA) in 27 rayons in all seven oblasts
- Conducted operational research on the payment system for successfully treated TB cases at PHC
- Realigned Project M&E plan to USAID performance-based monitoring and evaluation framework, and strengthened M&E capacity of Project sub-grantees
- Four presentations accepted at 52nd Union World Conference on Lung Health on impact of COVID-19 on TB services, COVID-19 programmatic interventions, and SBC formative research results

### SUSTAINABILITY

- **TB** financing methods developed in Year 1 institutionalized through MHIF budget law and preserved despite COVID-19 financial demands
  - TB transportation system and PHC payment system becoming more sustainable through state financing and expanding to more oblasts
- Gradual nationwide roll-out of reformed OTCs and DR-TB Concilia to improve effectiveness of TB services and case management
- Institutionalized national training curricula through KSMIPT&CE
- Continued to **roll-out nationwide TB MIS** critical for evidence-based use of data

#### **GENDER**

- 13,198 people participated in Project trainings and workshops from health facilities, civil society and communities; six times more women participants than men
- Gender-based approach embedded in SBC, targeted case finding and case management strategies

#### **CHALLENGES & SOLUTIONS**

- **Structural reforms in government** and leadership changes in key partner organizations required relationship building efforts
- National law inventory initiative threatens TB regulations; requires Project advocacy to preserve key provisions

- USAID Builds Information Systems to Assist the Kyrgyz
  Government's Response to COVID-19
- ▼ Four Reasons Why the Kyrgyz TB Information System Worked for COVID-19
- Using COVID to Spur TB Program Innovations in the Kyrgyz Republic: Ainura Ibraimova shares her reflections
- ── How Has the COVID-19 Pandemic Affected the TB

  Situation in Kyrgyzstan? (Russian)
- ▲ Patient's Story of TB Treatment Experience during COVID-19 Lockdown (Kyrgyz/English)