



QMS IMPLEMENTATION IN THE TB LABORATORY NETWORK IN UZBEKISTAN

PHASE I



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BACKGROUND AND CHALLENGES

UZBEKISTAN IS ONE OF 18 COUNTRIES IN THE WHO EUROPE REGION WHERE THE PRIORITY IS GIVEN TO ACTIVITIES FOR TB CONTROL STRENGTHENING. IN ACCORDANCE WITH THE END TB STRATEGY RECOMMENDATIONS TO STRENGTHEN THE QUALITY OF TB LABORATORY SERVICES, THE NATIONAL TB PROGRAM (NTP) WITH SUPPORT FROM THE USAID TB CONTROL PROGRAM HAS STARTED IMPLEMENTATION OF THE QUALITY MANAGEMENT SYSTEM (QMS) IN FOUR REGIONS: **BUKHARA, KASHKADARYA, KHOREZM, AND NAVOI.**

INTERVENTION OR RESPONSE

A QMS IMPLEMENTATION PLAN WAS DEVELOPED TO ADDRESS SPECIFIC STRUCTURAL CONDITIONS OF THE REGIONAL LABORATORY NETWORK, WHICH IS COMPRISED OF PERIPHERAL LEVEL SMEAR MICROSCOPY LABORATORIES AND INTERMEDIATE LEVEL CULTURE LABORATORIES. THE WHO-RECOMMENDED APPROACH FOR STEPWISE IMPLEMENTATION OF INTERNATIONALLY APPROVED QUALITY STANDARD **ISO 15189** WAS USED AS A BASIS FOR DEVELOPMENT OF A CUSTOMIZED QMS. FOLLOWING THE EXISTING STRUCTURE OF THE NATIONAL HEALTHCARE SYSTEM, THE ESTABLISHED QMS AND 12 QUALITY ESSENTIALS WERE INTEGRATED INTO SIX SECTIONS: ORGANIZATION AND STAFFING; INFRASTRUCTURE; EQUIPMENT AND SUPPLIES; BIOSAFETY; TECHNICAL PROCEDURES; AND QUALITY ASSURANCE. A SCORING SYSTEM WAS INTRODUCED TO EVALUATE EACH COMPONENT SEPARATELY AND TO GENERATE AN AVERAGE SCORE. A TARGET SCORE INDICATING SATISFACTORY IMPLEMENTATION WAS SET AT AN AVERAGE VALUE OF 75%. QUARTERLY MENTORING VISITS WERE ORGANIZED TO SUPPORT THE IMPLEMENTATION AND MEASURE THE PROGRESS.

RESULTS AND LESSONS LEARNED

A COMPARISON OF THE BASELINE SCORE AND THE SCORE AFTER ONE YEAR OF IMPLEMENTATION SHOWED IMPROVEMENT IN THE OVERALL QMS SCORE AT ALL 15 LABORATORIES. THE TARGET OF 75% WAS ACHIEVED IN 8 (53%) LABORATORIES. THE MAJOR IMPLEMENTATION CHALLENGES WERE BIOSAFETY STANDARDS AND EQUIPMENT MANAGEMENT WITH AVERAGE SCORES OF 40.3% AND 44.5%, RESPECTIVELY.

53% of TB Laboratories Successfully Implementing QMS in the First Implementation Phase



CONCLUSIONS AND KEY RECOMMENDATIONS

SUCCESSFUL IMPLEMENTATION OF QMS AT SPECIALIZED TB LABORATORIES REQUIRES IMPLEMENTATION OF **ISO 15189** STANDARDS THROUGH A STEPWISE APPROACH AND CAREFUL AND CUSTOMIZED PLANNING BASED ON SPECIFIC COUNTRY SETTINGS. EVALUATION OF EACH SEGMENT OF LABORATORY OPERATION ALLOWS IDENTIFICATION OF AREAS THAT REQUIRE SPECIAL ATTENTION, ADDRESSING THE WEAKNESSES TO RESPONSIBLE ENTITIES AND PLANNING CONCRETE REMEDIAL ACTIONS.