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TB CARE I

Roll-out of Xpert MTB/RIF

5th GLI Meeting
April 16th 2013, Annecy, France

Manuela Rehr

Program Management Unit TB CARE I
KNCV Tuberculosisfoundation
The Netherlands

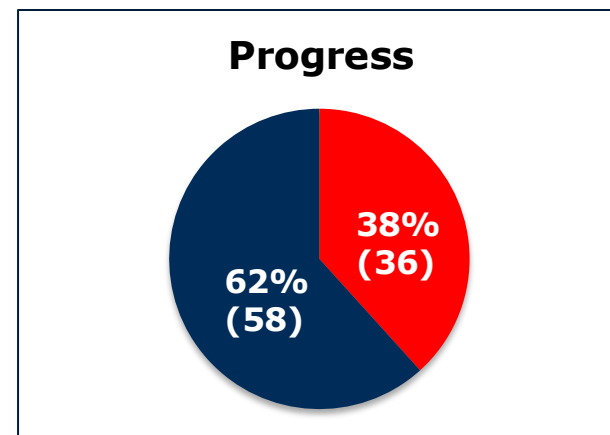
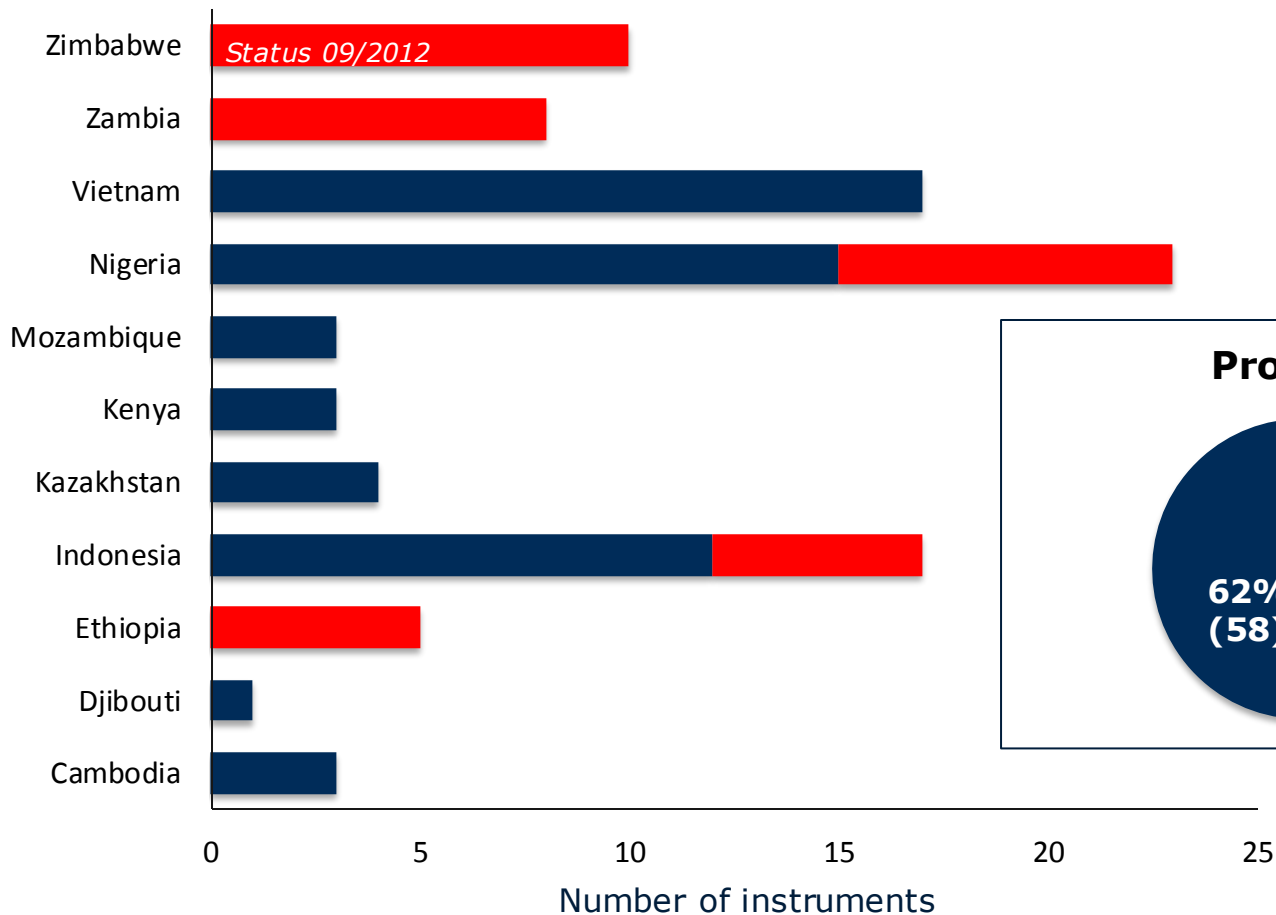
Implementation of Xpert MTB/RIF in routine diagnostic services



GeneXpert instruments

(March 2013)

■ Instruments in use for routine diagnostic services
 ■ Instruments planned



Xpert MTB/RIF Use & Outcomes

- Detection of RR TB in previously treated patients & other MDR TB suspects
- Detection of TB in new TB suspects (HIV+TB)

Reason for testing

Cases detected

TB RR-TB



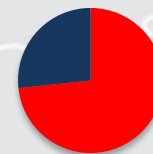
Nigeria
3847 tests
122 months



27

434

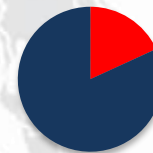
Kazakhstan
2151 tests
22 months



103

470

Cambodia
2392 tests
39 months



76

508

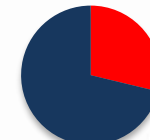
Vietnam
2793 tests
92 months



53

22

Kenya
1084 tests
35 months



189

555

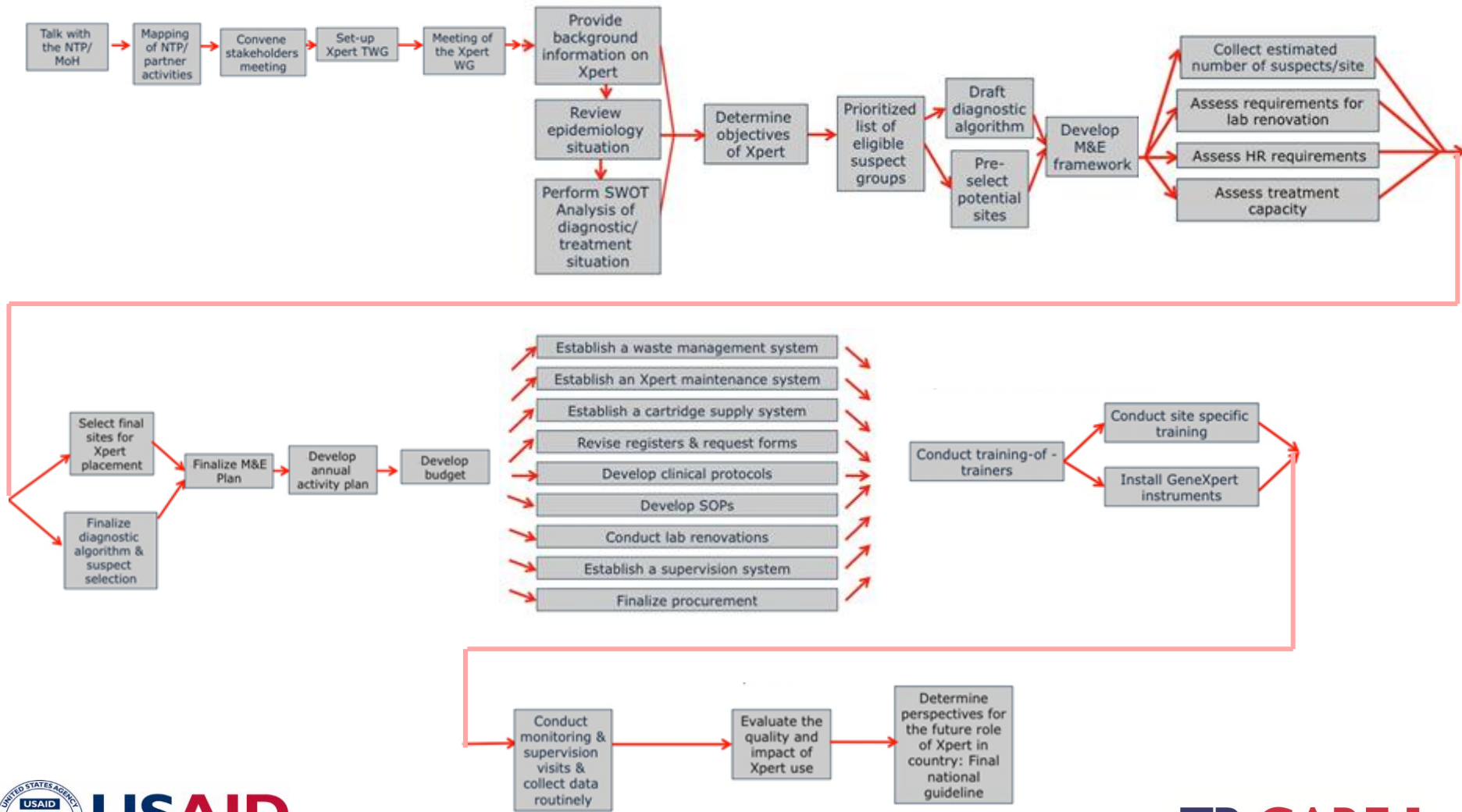
Indonesia
2350 tests
77 months

A light gray world map with white outlines of continents and countries, serving as a background for the text.

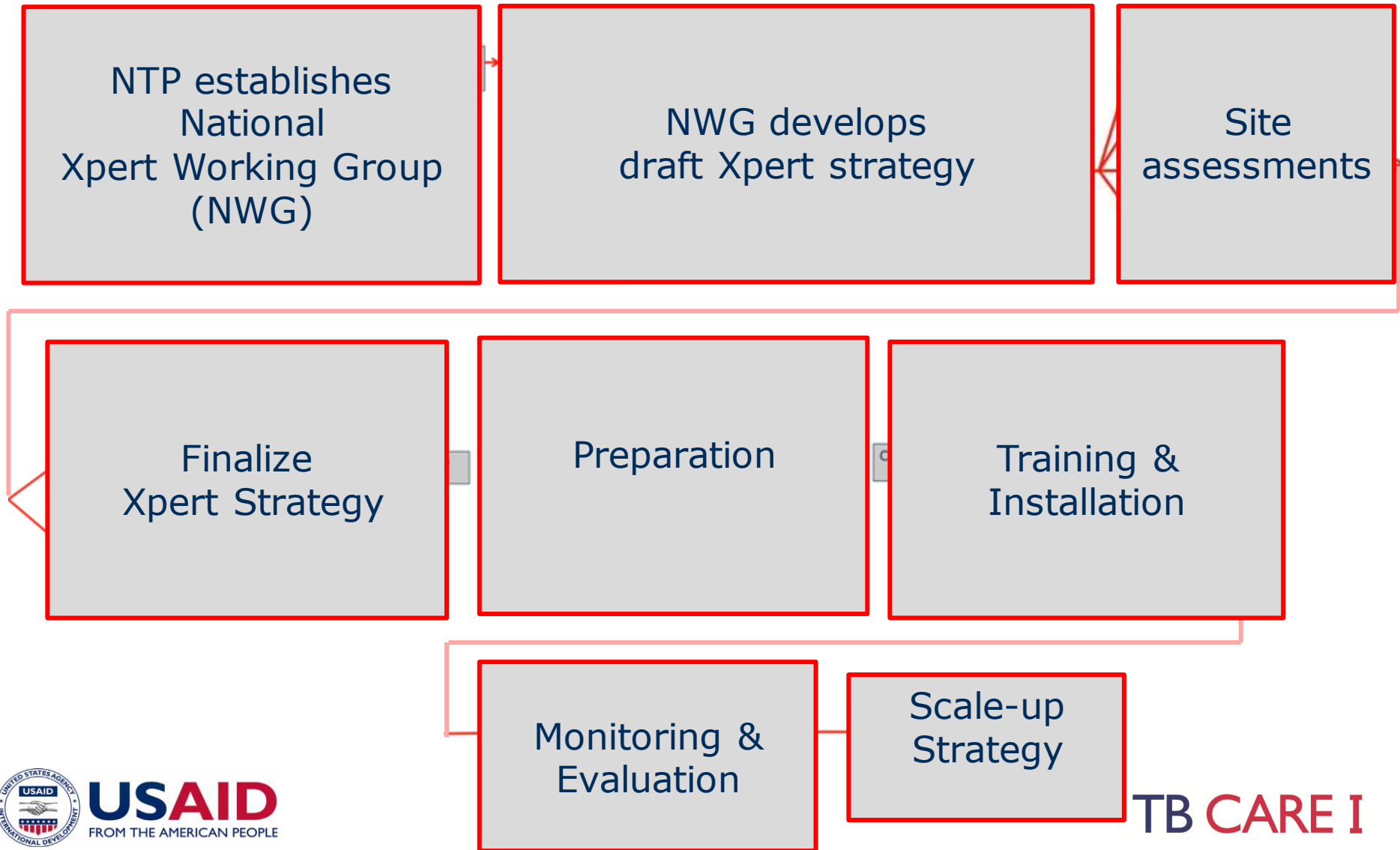
Strategic Approaches for Xpert MTB/RIF Implementation

- The critical pathway -

Critical pathway to Xpert implementation



Critical pathway to Xpert implementation





Xpert MTB/RIF Implementation in Kazakhstan

Developing the National Strategy

Epidemiology & SWOT Analysis

- 4 GeneXpert instruments with full cartridge supply
- % MDR TB - new cases 30%
- % MDR TB - retreatment cases 51%

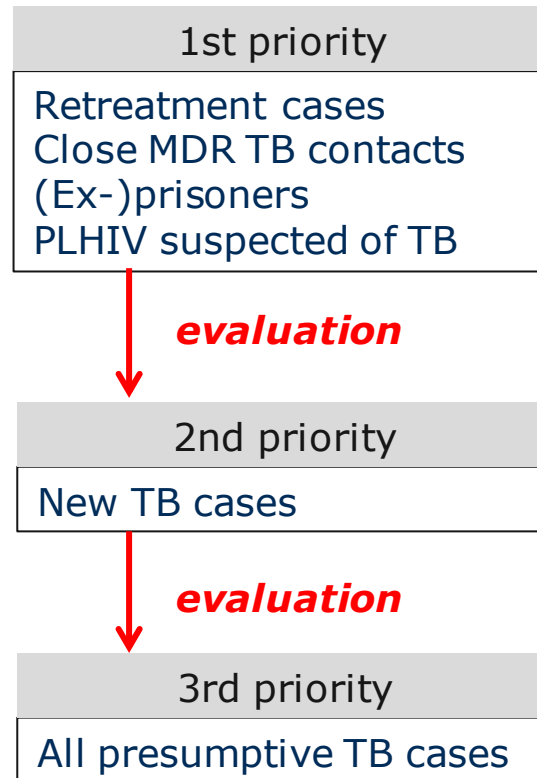
- Coverage C/DST high
- Case detection 87%
- Selected regions lower coverage
- Access to culture diagnosis in prisons limited

Objectives

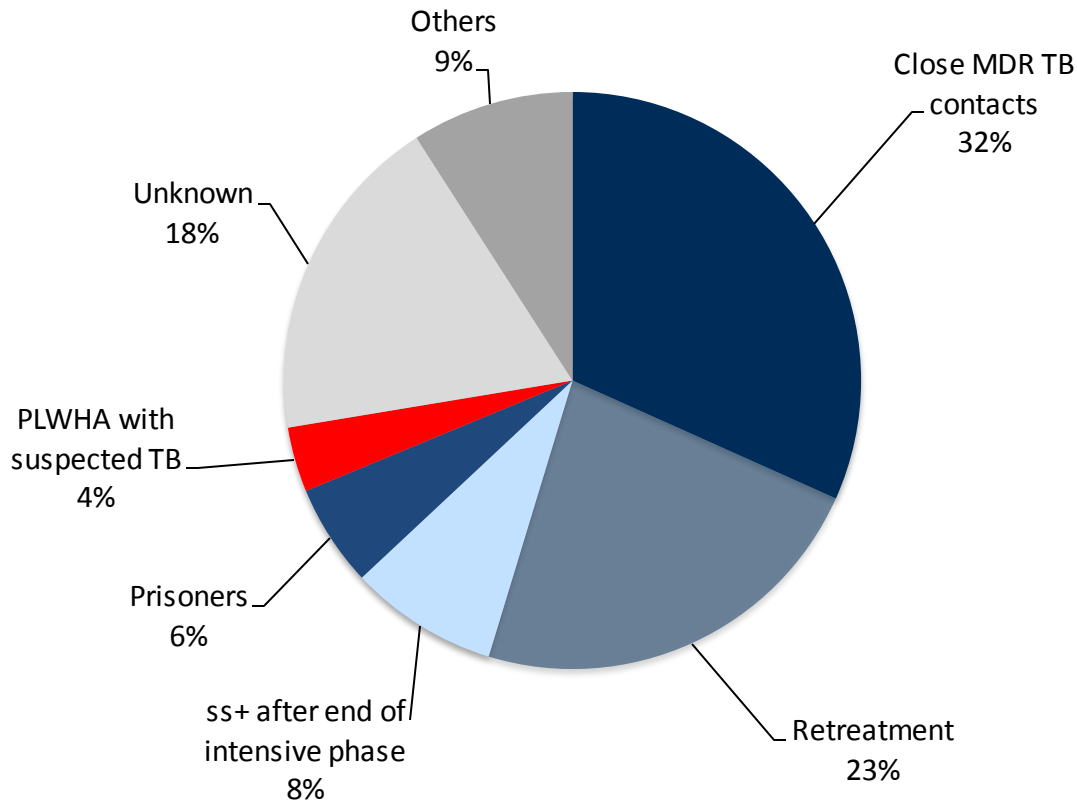
- To reduce time to MDR TB diagnosis & treatment (4 sites)
- To increase MDR TB case detection (1 site)
 - Increase access in prisons (4 sites)

Developing a National Strategy

Phased implementation: Eligible suspects



Xpert MTB/RIF Use



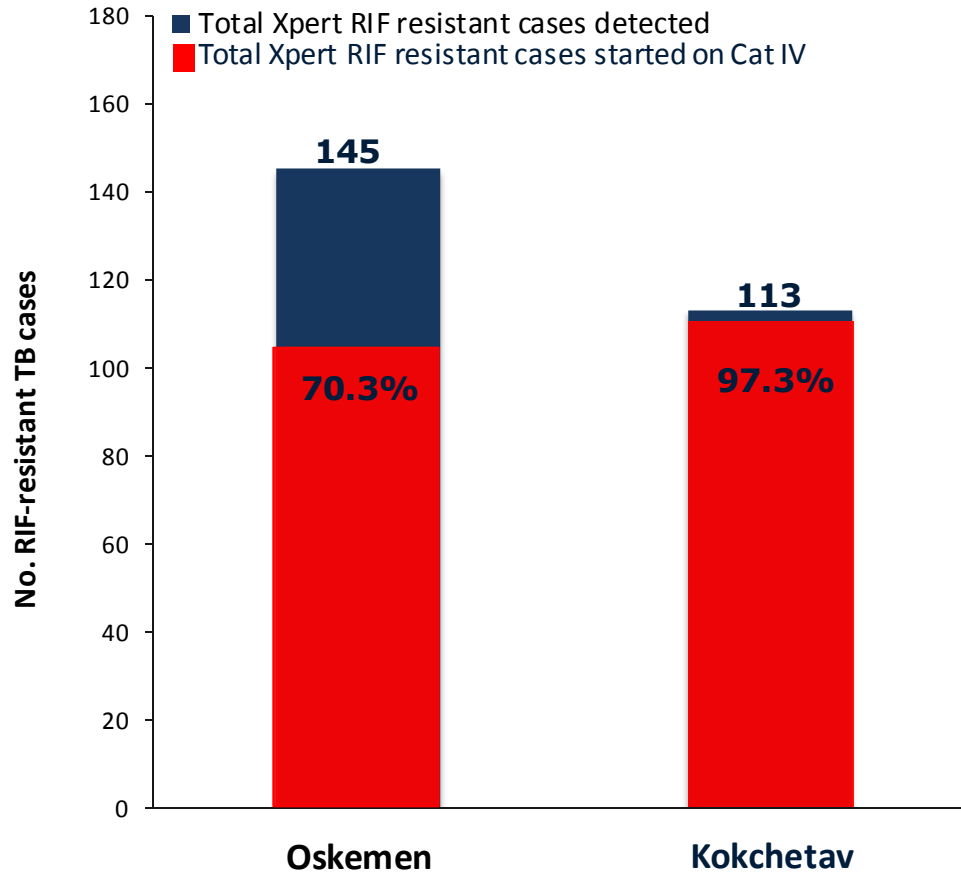
- Strengthen link with prisons
- No. samples/months approx. 50% of machine capacity with increasing tendency

2640 tests

3 sites: Kokchetav, Almaty City, Oskemen

Treatment Initiation

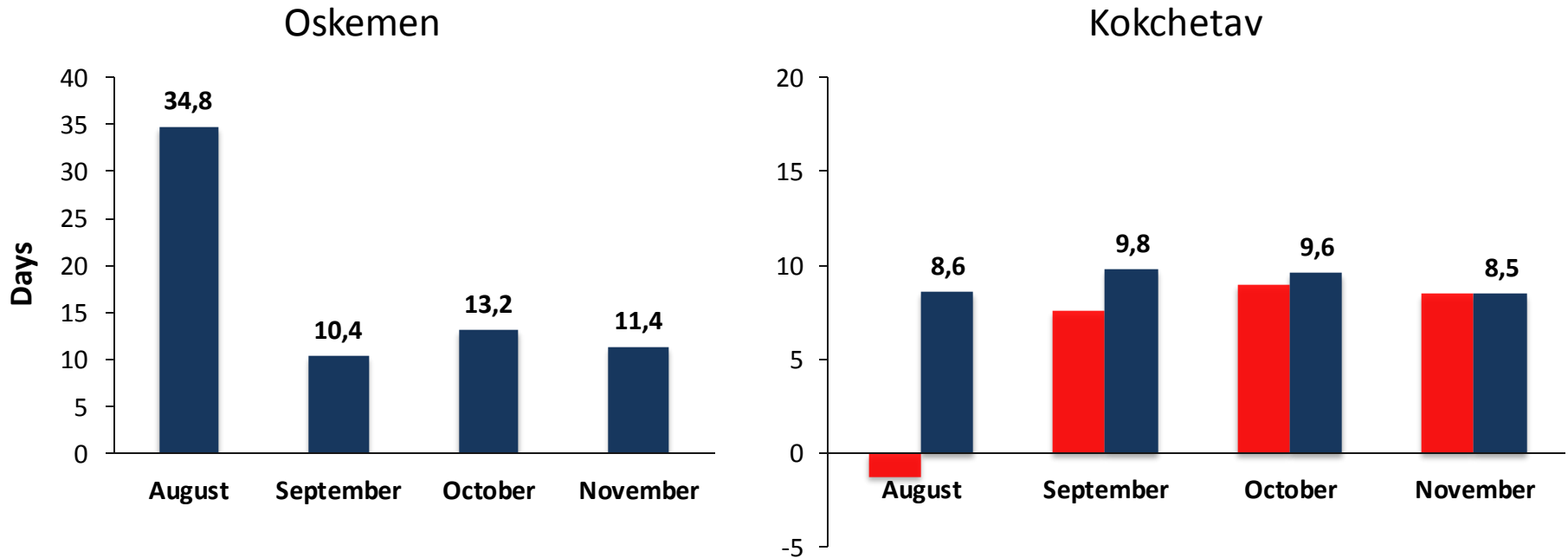
Proportion of Xpert RIF resistant cases started on Cat IV



Time: August-mid December

Time to treatment

Average days btw. sputum collection & start of Cat IV treatment
(Xpert RIF res. cases)

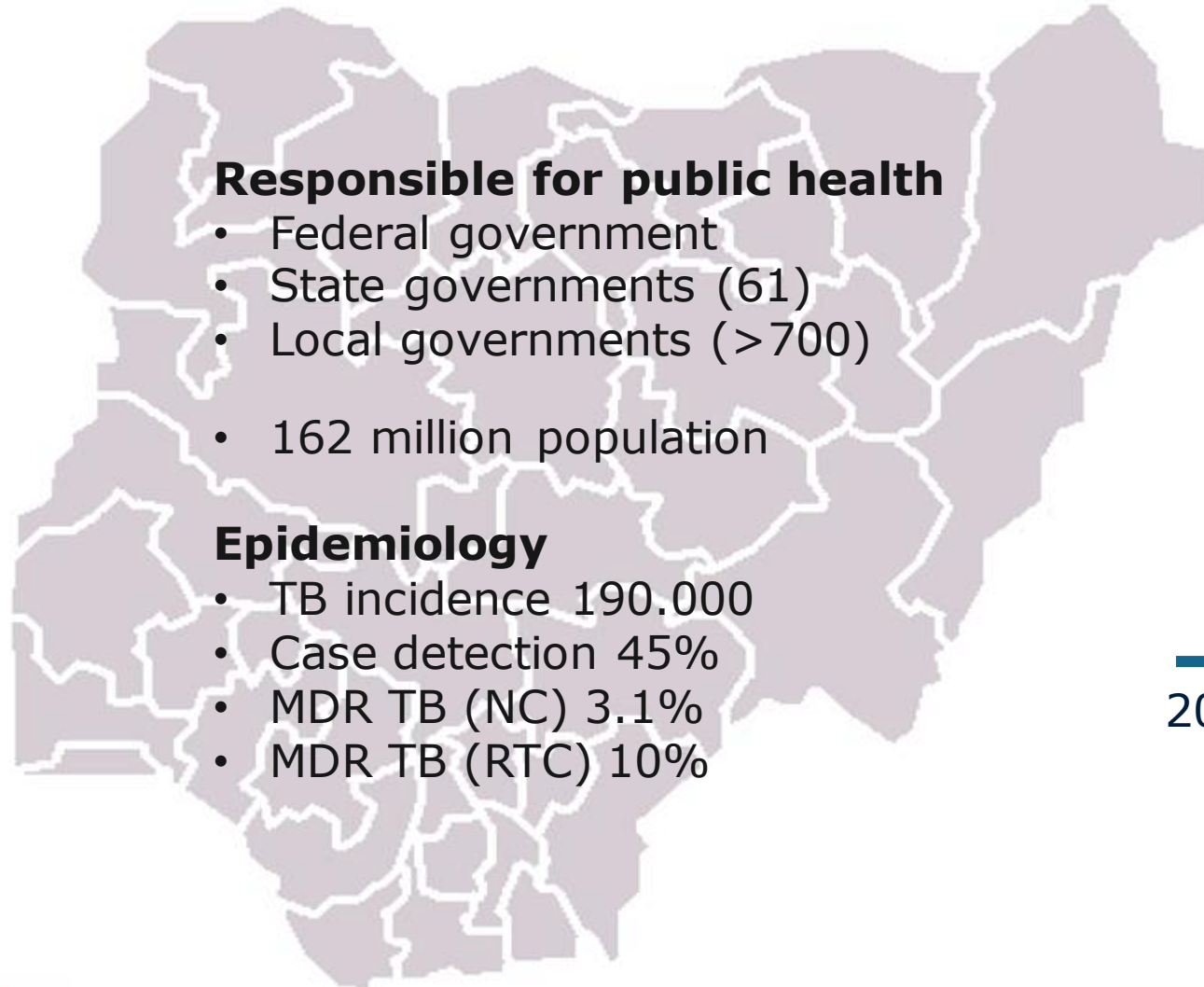


Average time from sputum collection to result release: 1 - 1.5 days

Xpert MTB / RIF Implementation in Nigeria



Background Information



Responsible for public health

- Federal government
- State governments (61)
- Local governments (>700)
- 162 million population

Epidemiology

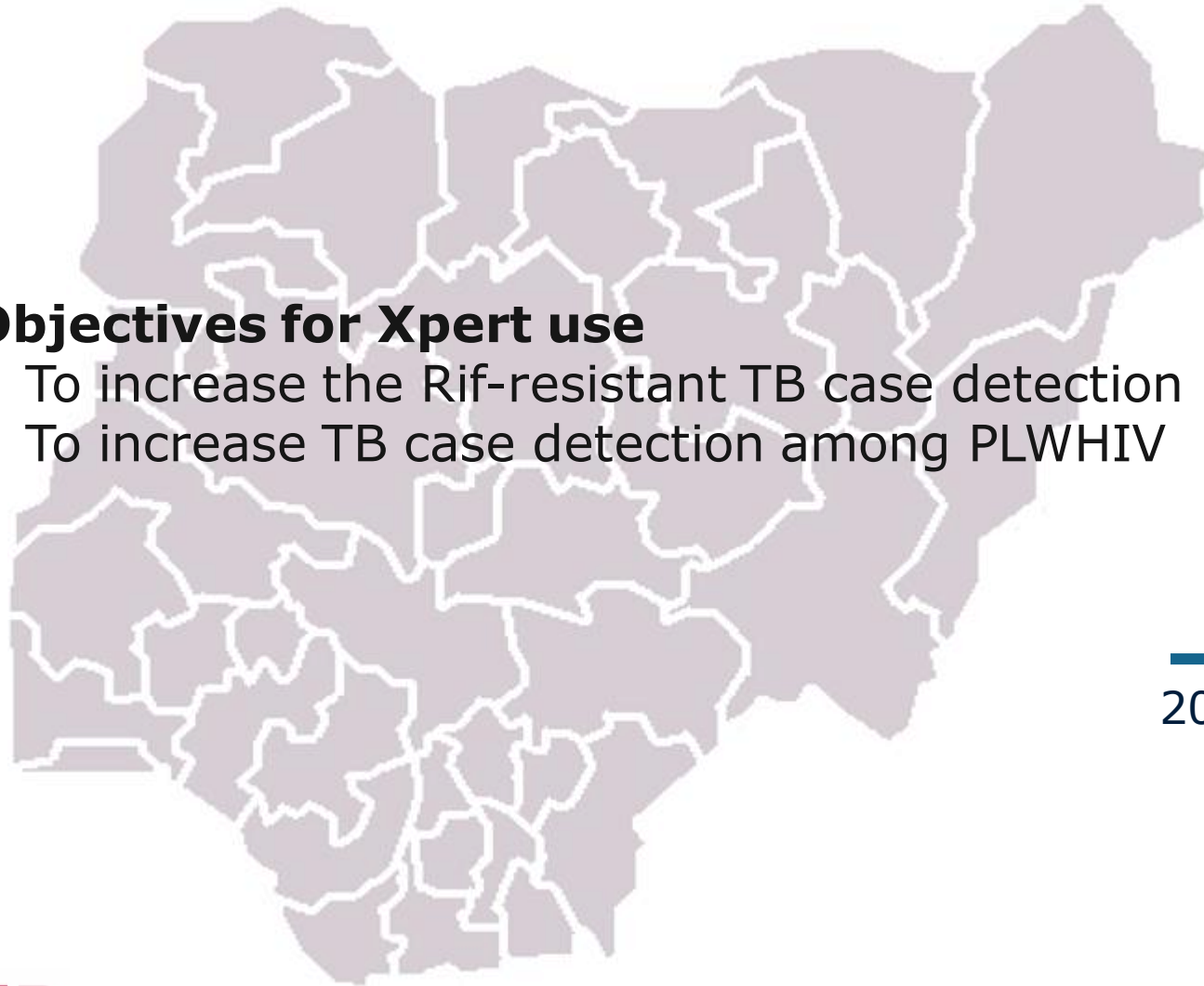
- TB incidence 190.000
- Case detection 45%
- MDR TB (NC) 3.1%
- MDR TB (RTC) 10%

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200km

Background Information

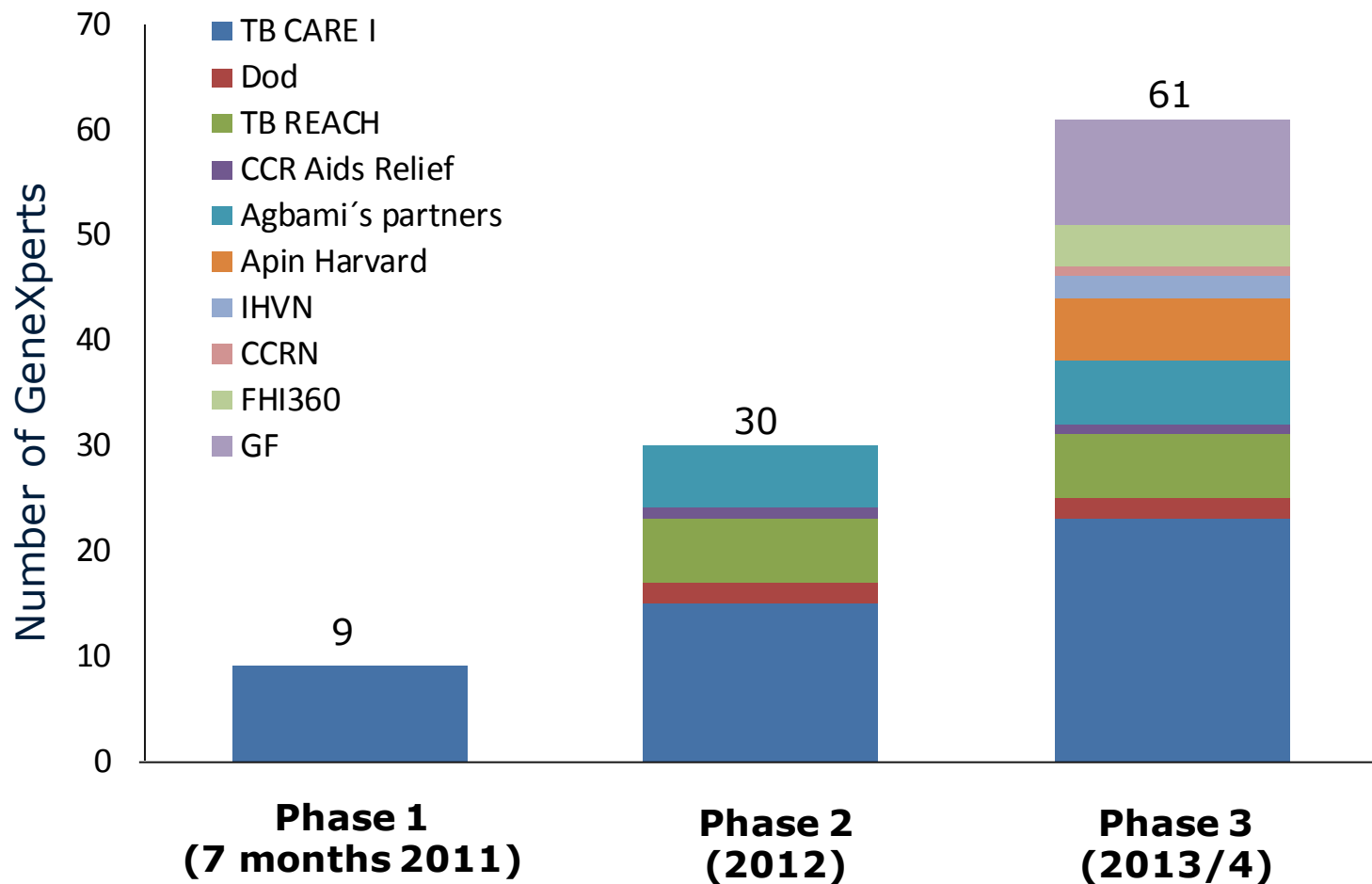
Objectives for Xpert use

- To increase the Rif-resistant TB case detection
- To increase TB case detection among PLWHIV



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200km

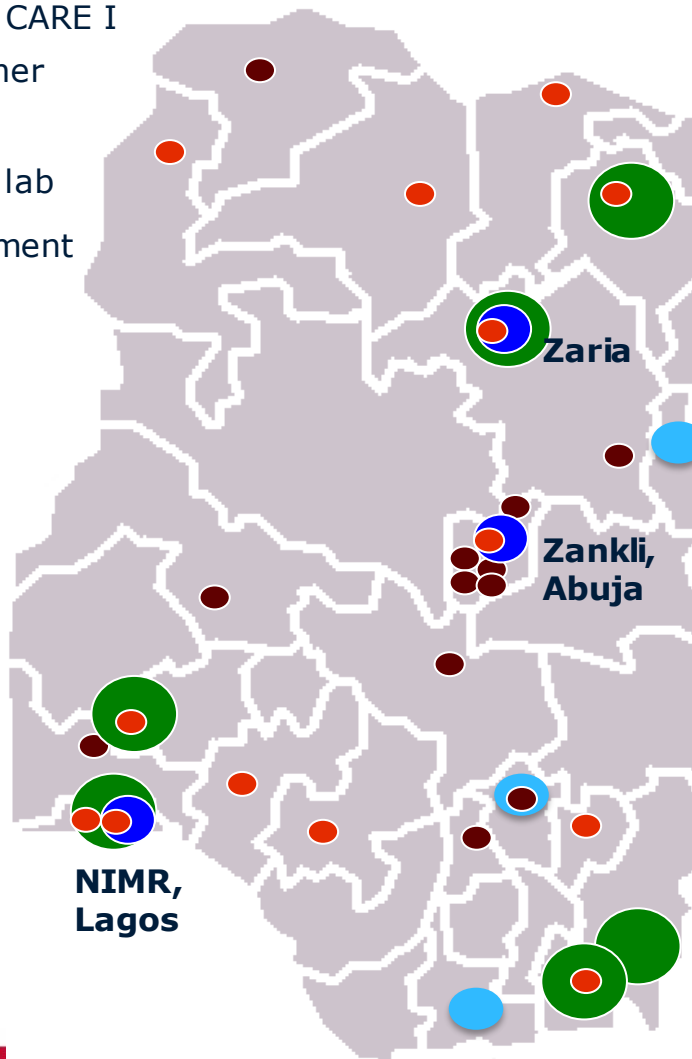
The Implementation Plan



GeneXpert Locations

- GeneXpert TB CARE I
- GeneXpert other
- C/DST lab
- Future C/DST lab
- MDR TB treatment Centres (8)

200km



- Strengthen linkages for sample/patient referral
- Partner coordination
- Coordination of state/local government
- Scaling up treatment capacity

Take home messages

- **Xpert implementation is more than buying the machine**
 - There are >37 critical activities
- **A programmatic approach is essential**
- **Leadership of NTP is key: National Working Group**
- **A National Xpert Strategy is crucial**
 - integrated in National TB Lab Strategy & Program Strategy
 - There is no one-size-fits-all solution for an Xpert strategy
- **M&E essential to show impact & develop policy**



The Team

Manuela Rehr (KNCV)
Sanne van Kampen (KNCV)
Maarten van Cleeff (KNCV)

National TB Programms
National TB Reference Labs
TB CARE I country teams

www.tbcare1.org

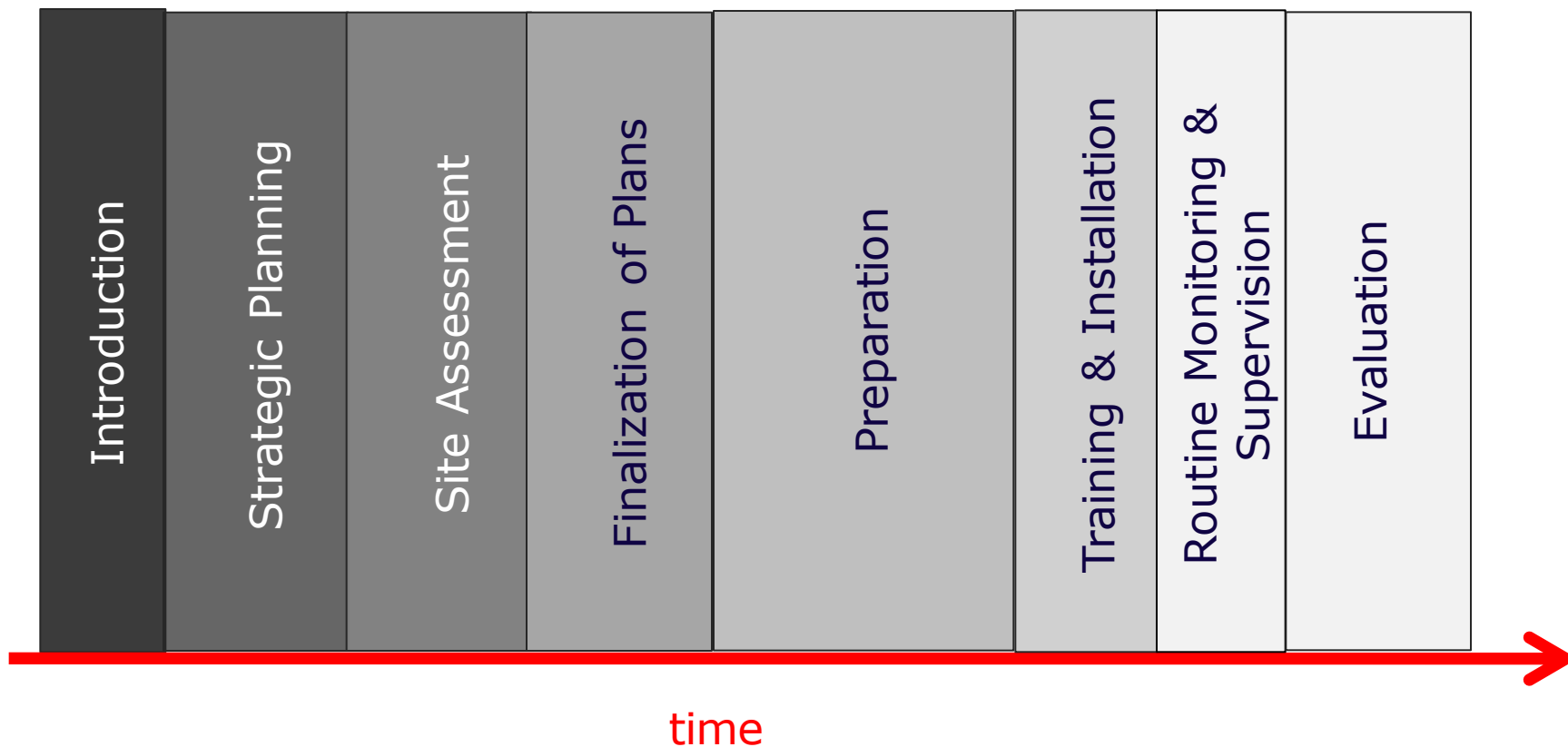
The TB CARE I Lab Group

Bela Kim (KNCV)
Alaine Nyaruhirira (MSH)
Obert Kachuwaire (KNCV)
Wayne v Gemert (WHO)
Catherine Mundy (MSH)
Jerod Scholten (KNCV)
Valentina Anisimova (KNCV)
Murat Gumusboga (Union)
Grace Kahenya (MSH)
Satoshi Mitarai (JATA)
Robertson Chibumbya (FHI)
Roni Chandra (KNCV)
Jose Almeida (FHI)
Mony Chey (JATA)
An Nguyen (KNCV)
Ernest Ruttoh (MSH)
Nguyen, Giang Hoai (MSH)
Gladys Anyo (MSH)

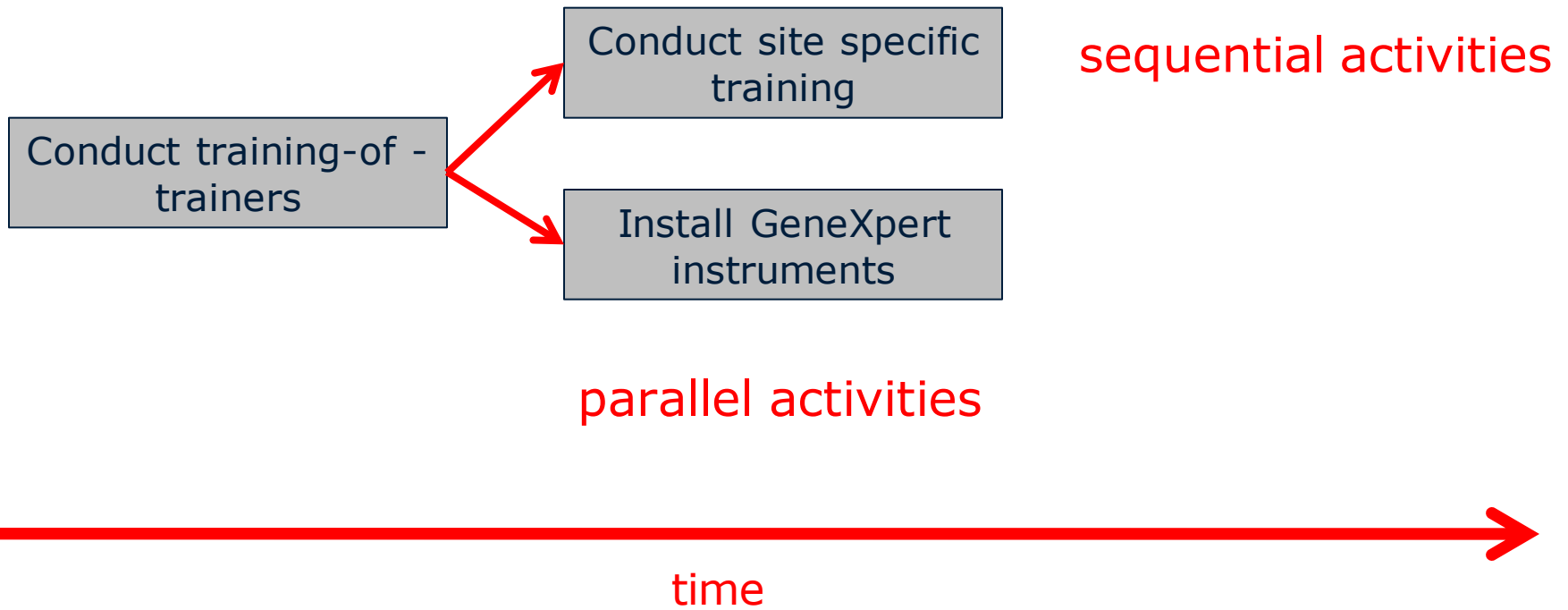
Annex:

**TB CARE I
Roadmap for Xpert MTB/RIF
Implementation
-The critical pathway-**

Phases of Xpert Implementation



PERT Model: Instructions



Phases of Xpert Implementation

Phase 1: Introduction

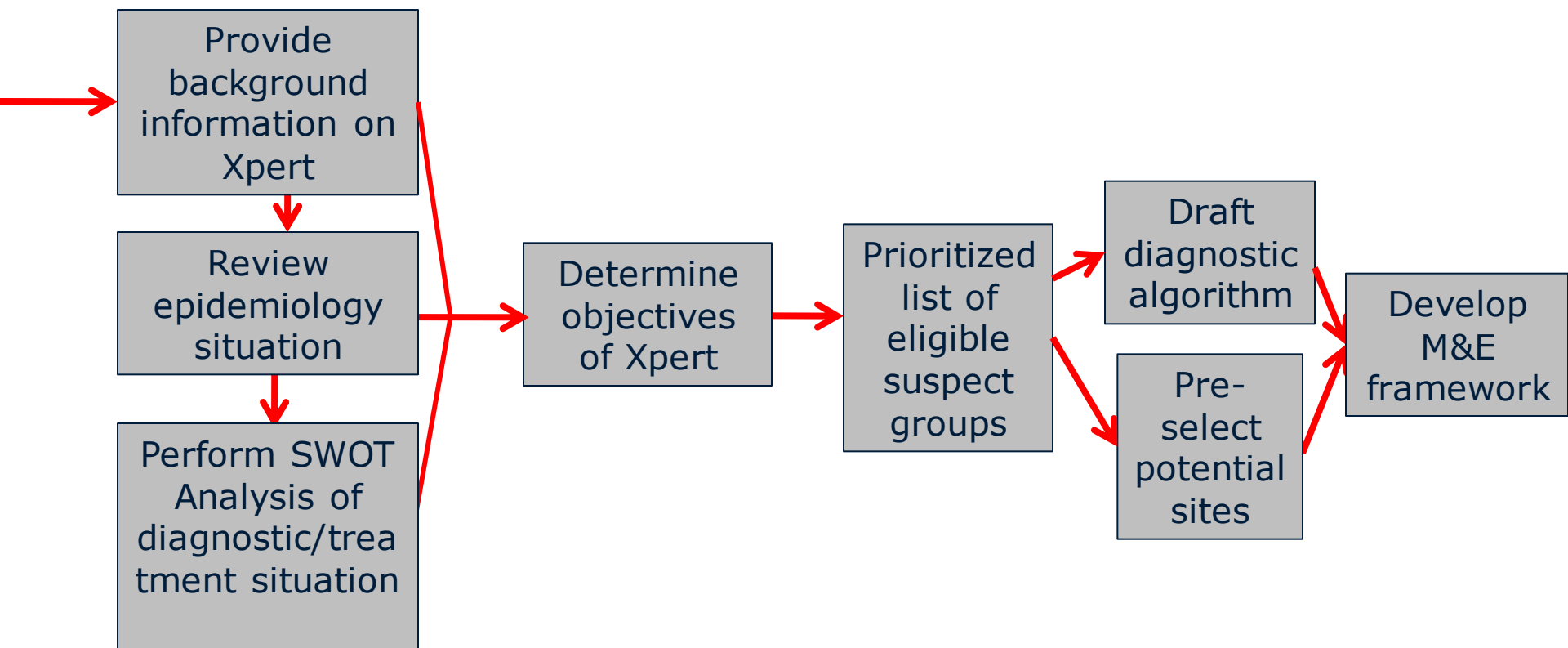
Expected outcome: National planning & coordination body established



Phases of Xpert Implementation

Phase 2: Strategic Planning

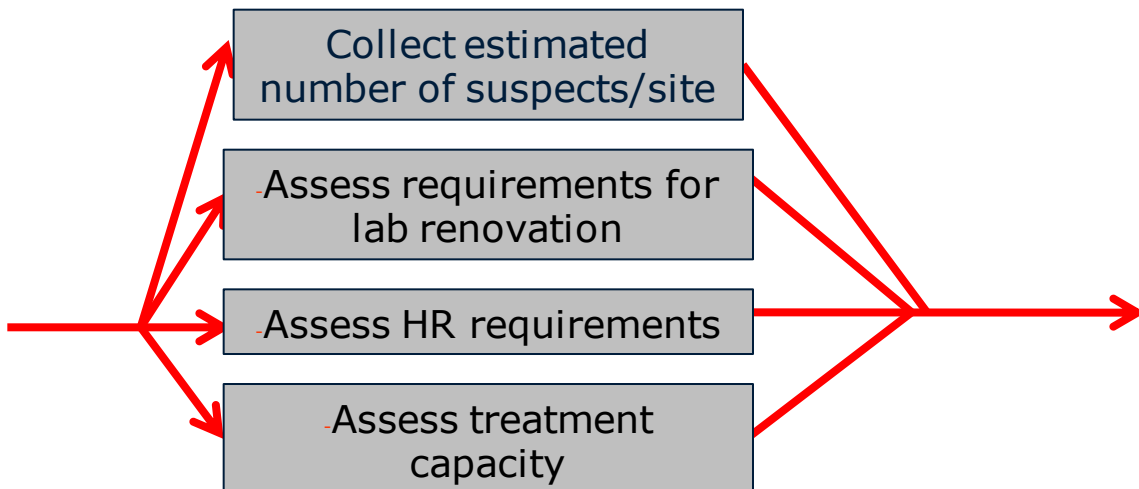
Expected outcome: Draft National Xpert strategic plan is developed



Phases of Xpert Implementation

Phase 3: Site Assessment

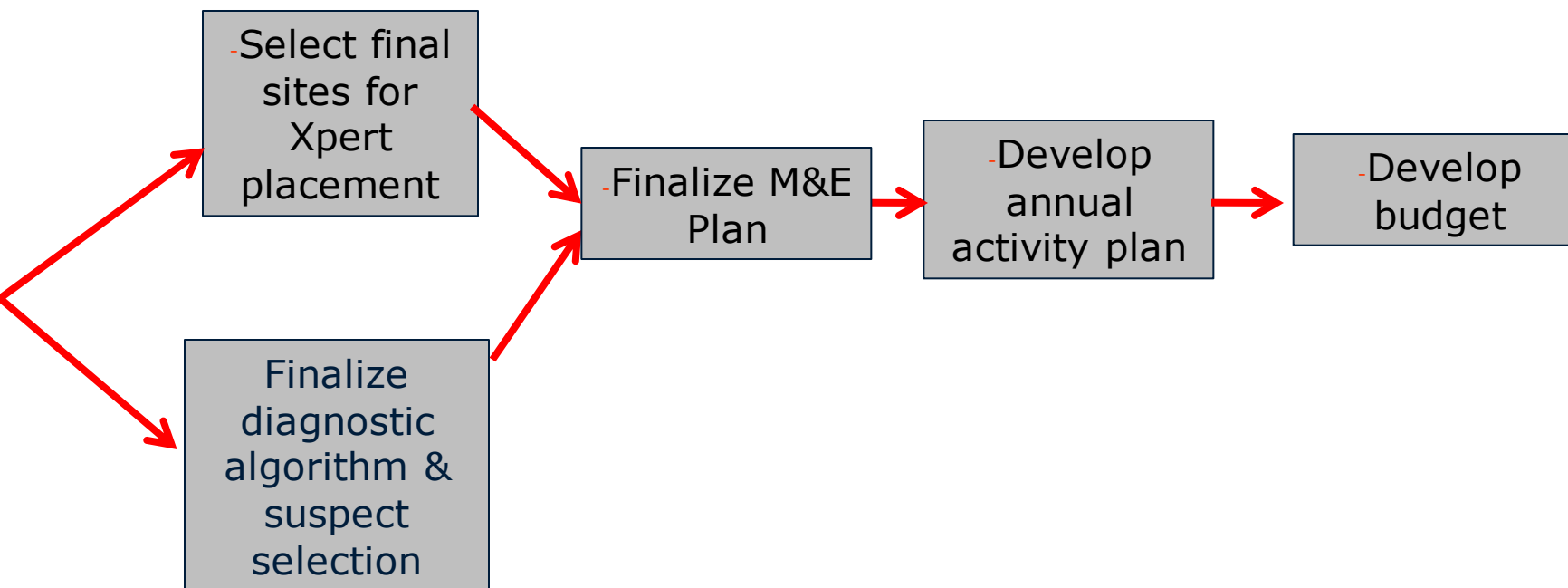
Expected outcome: All required information for finalization of the strategic plan and the annual activity plan are collected



Phases of Xpert Implementation

Phase 4: Finalization of Strategic Plan

Expected outcome: National Xpert strategic plan finalized



Phases of Xpert Implementation

Phase 5: Preparation

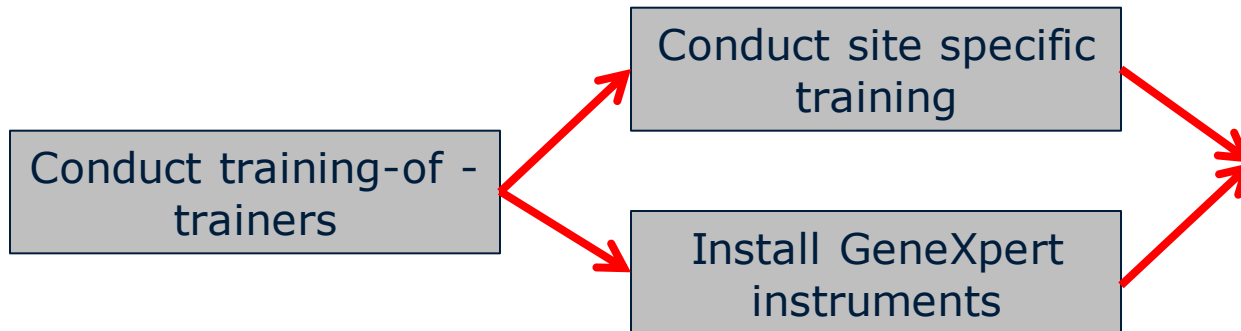
Expected outcome: Lab renovations completed, documents and lab support systems (maintenance, supervision etc) developed



Phases of Xpert Implementation

Phase 6: Training & Installation

Expected outcome: Routine use started



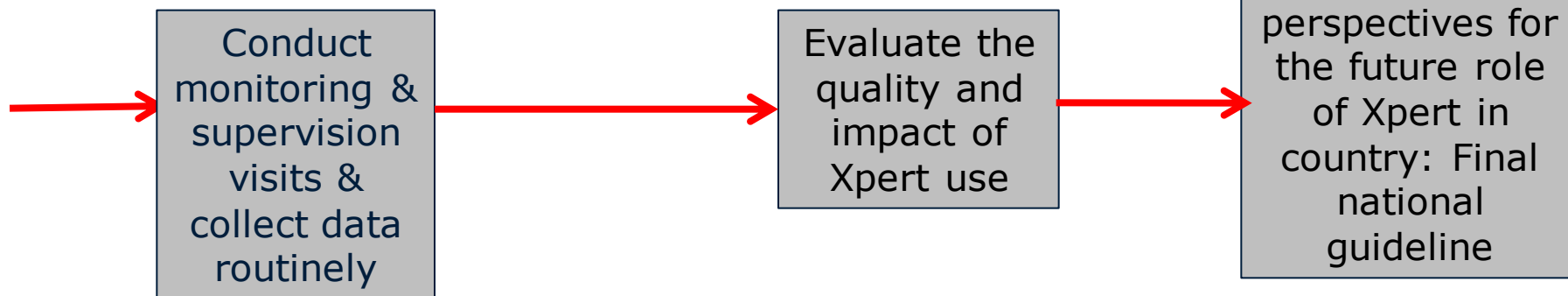
Phases of Xpert Implementation

Phase 7: Routine Monitoring & Supervision

Expected outcome: Quality of Xpert use ensured

Phase 8: Evaluation

Expected outcome: Collected evidence & experience informed national policy and practice



2nd Round: Scale-up phase

