

→ MDR-TB

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PMDT IN CHINESE TAIPEI ECONOMY

EMBIYAX SU



Nai-Ming Ou

1958- 2007



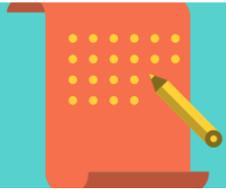
Former Chief Secretary Dr. Ou Nai-Ming (pictured above) devoted himself to communicable disease control. One of his most important contributions was the establishment of the Taiwan MDR-TB Consortium (TMTC) in 2007.

In Memory of Nai-Ming Ou 1958- 2007



This picture, taken on Sep 21st 2007, shows Director Steve Kuo, Minister Sheng-Mao Hou, Dr. Peter Cegielski and Dr. Nai-Ming Ou, during a performance review of the TMTC. That afternoon, Dr. Ou was admitted to the ICU to treat the deterioration of his pre-existing disease.

Programmatic Management of Drug-resistant TB



Epidemiology and Policy

- Transition of epidemiology
- Policy for detection and prevention



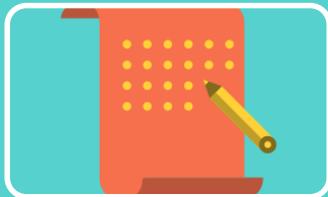
Care System

- Patient-centered
- Effective delivery



Challenges

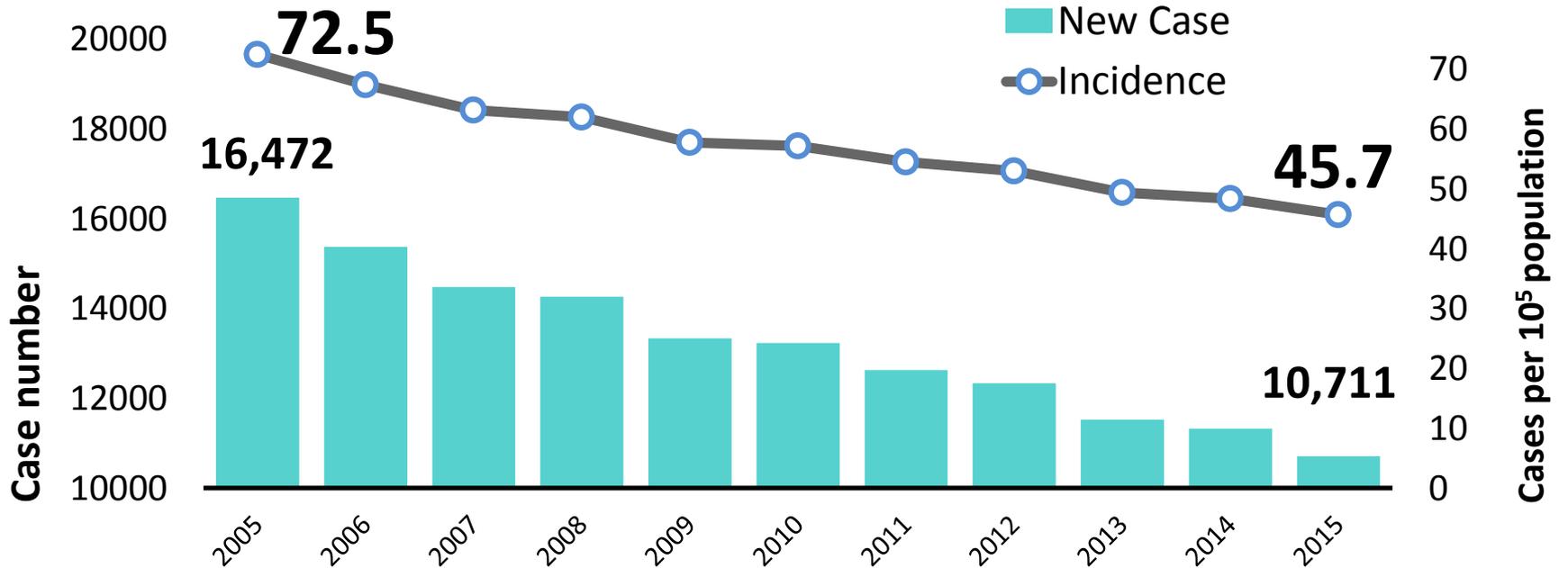
- Domestic issues
- International collaboration



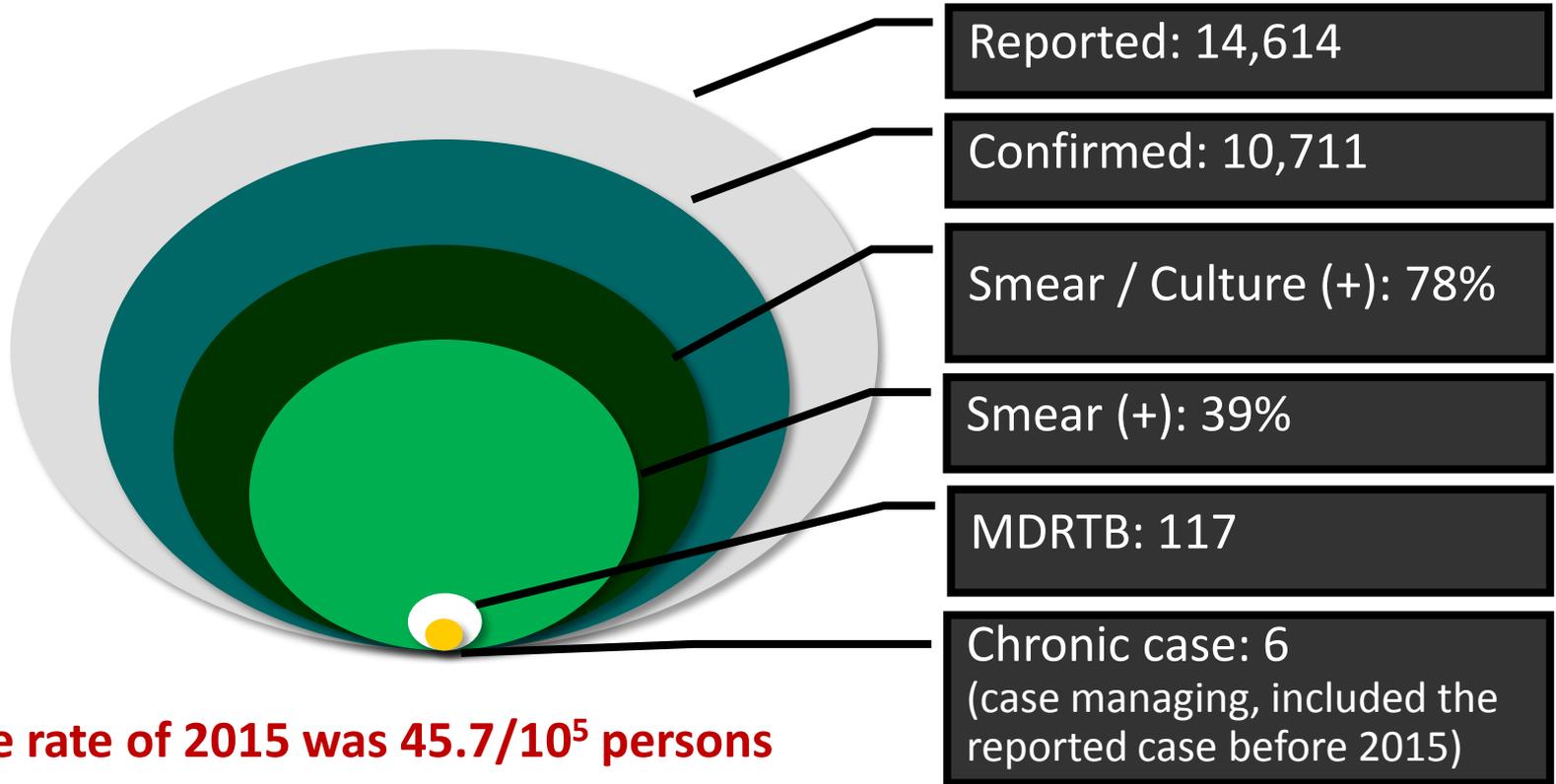
Epidemiology and Policy

- Transition of epidemiology
- Policy for detection and prevention

TB Incidence (2005-2015)



2015 TB Notification



Incidence rate of 2015 was 45.7/10⁵ persons

Passive Case Finding

Notifications for MDRTB Patients

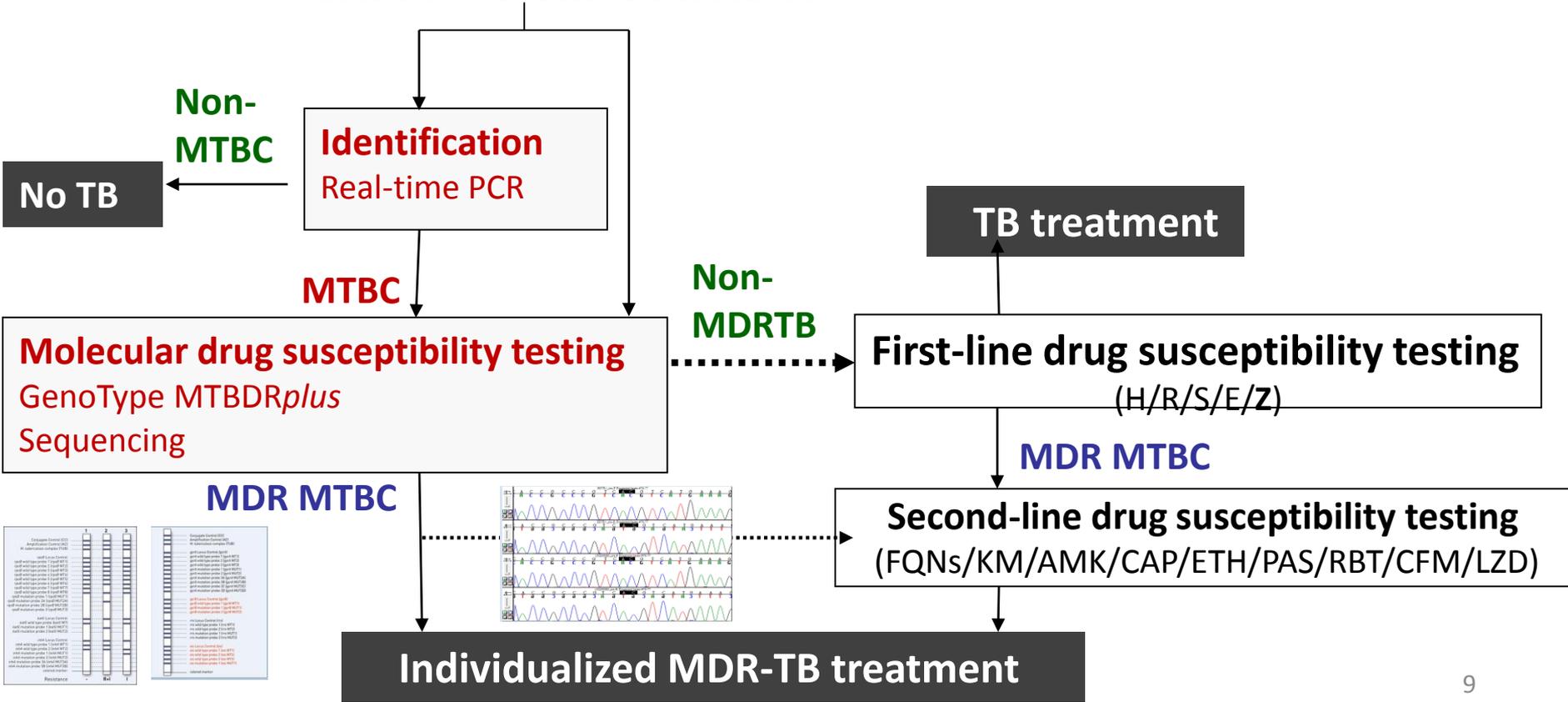
Every TB isolate
for first-line DST

Enforced by
Communicable
Disease
Prevention Act

Confirmed by
National
Mycobacteria
Lab

MDR-TB Confirmation

Clinical MDR MTBC isolates



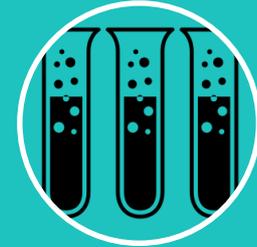
Policy for Detection and Prevention



High coverage of
DOTS since 2006



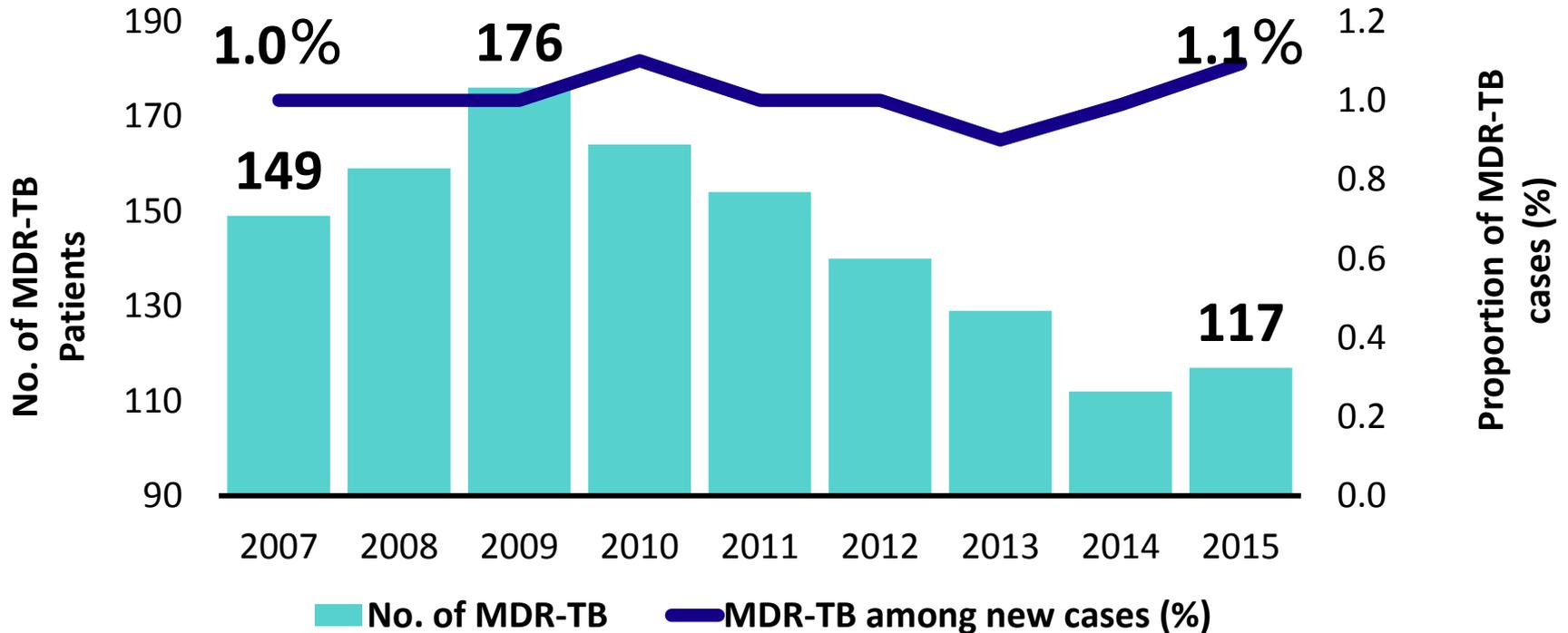
Restriction of
fluoroquinolone
usage among TB
patients



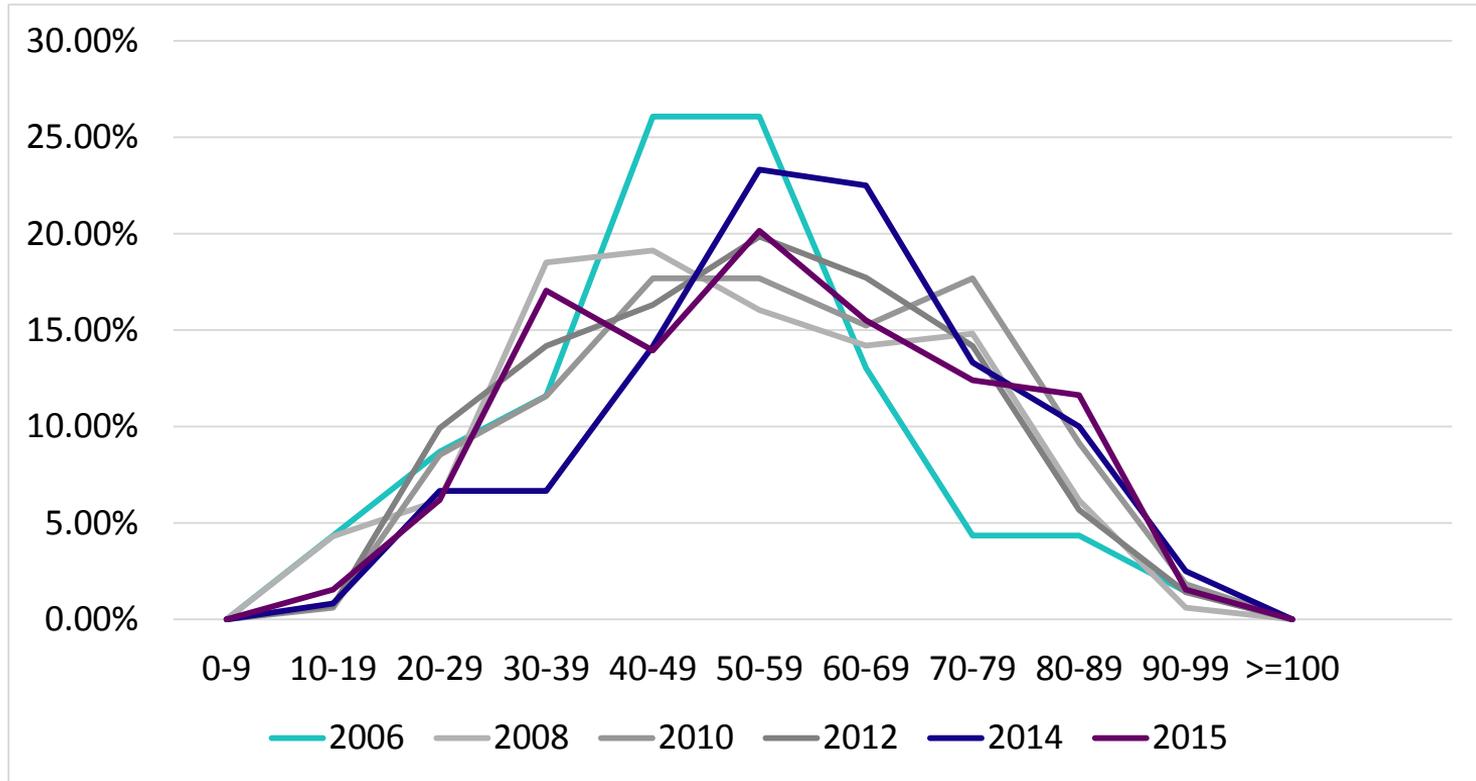
Rapid diagnosis for
MDR-TB among high
risk populations



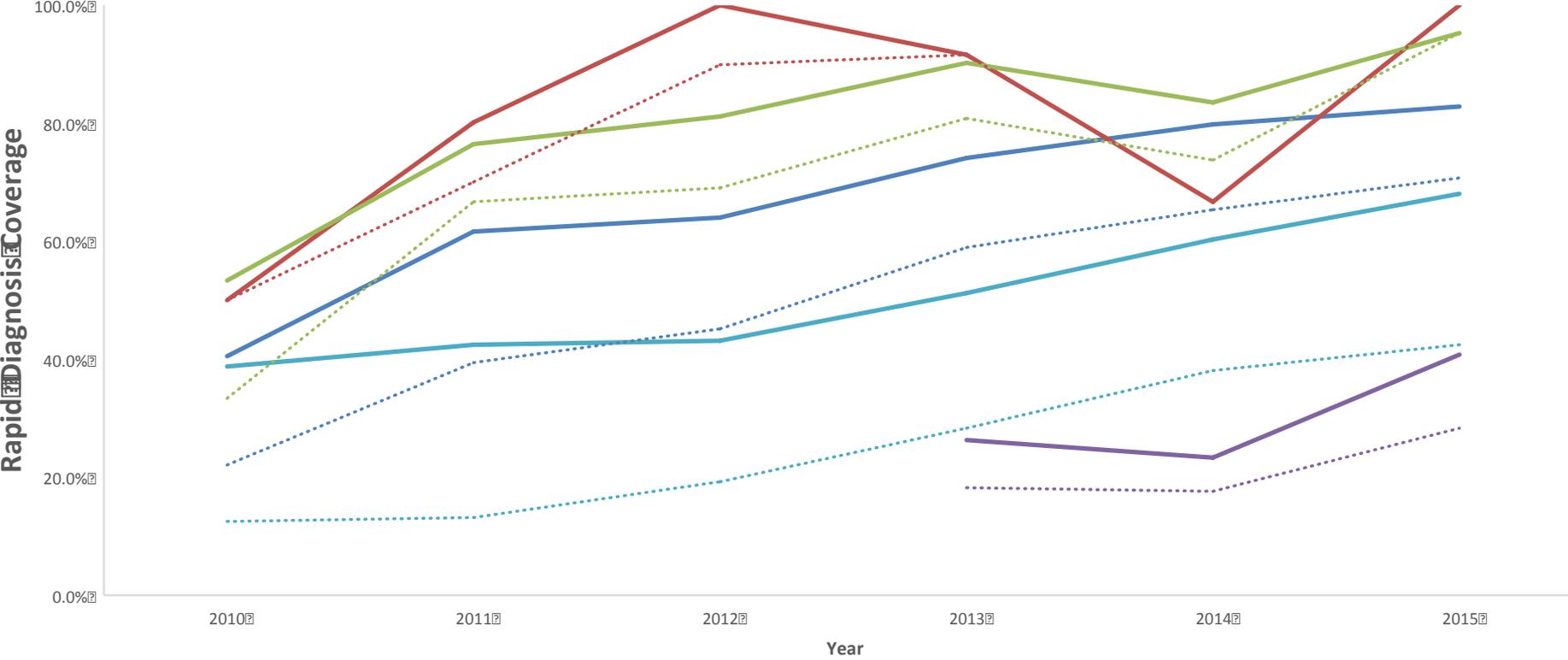
MDR-TB among New Patients



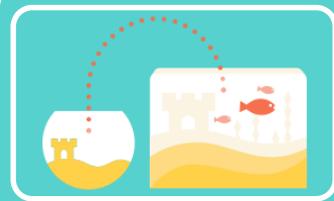
Age Distribution of MDR-TB Patients



The Progression of Rapid Diagnosis Uptake



Relapse MDRTB contacts High MDRTB prevalent areas High MDRTB Countries Treatment failure



Care System

- Patient-centered
- Effective delivery

Patient-Centered MDR-TB Care System

Engagement & Partnership



Community

TB patients and their social determinants



Family



Social protection



MDR-TB Patient



Infected and become sick

Treatment and care



Health care organizations



Community health workers



Health care organizations



DOTS-plus



TMTc



Health system capacity



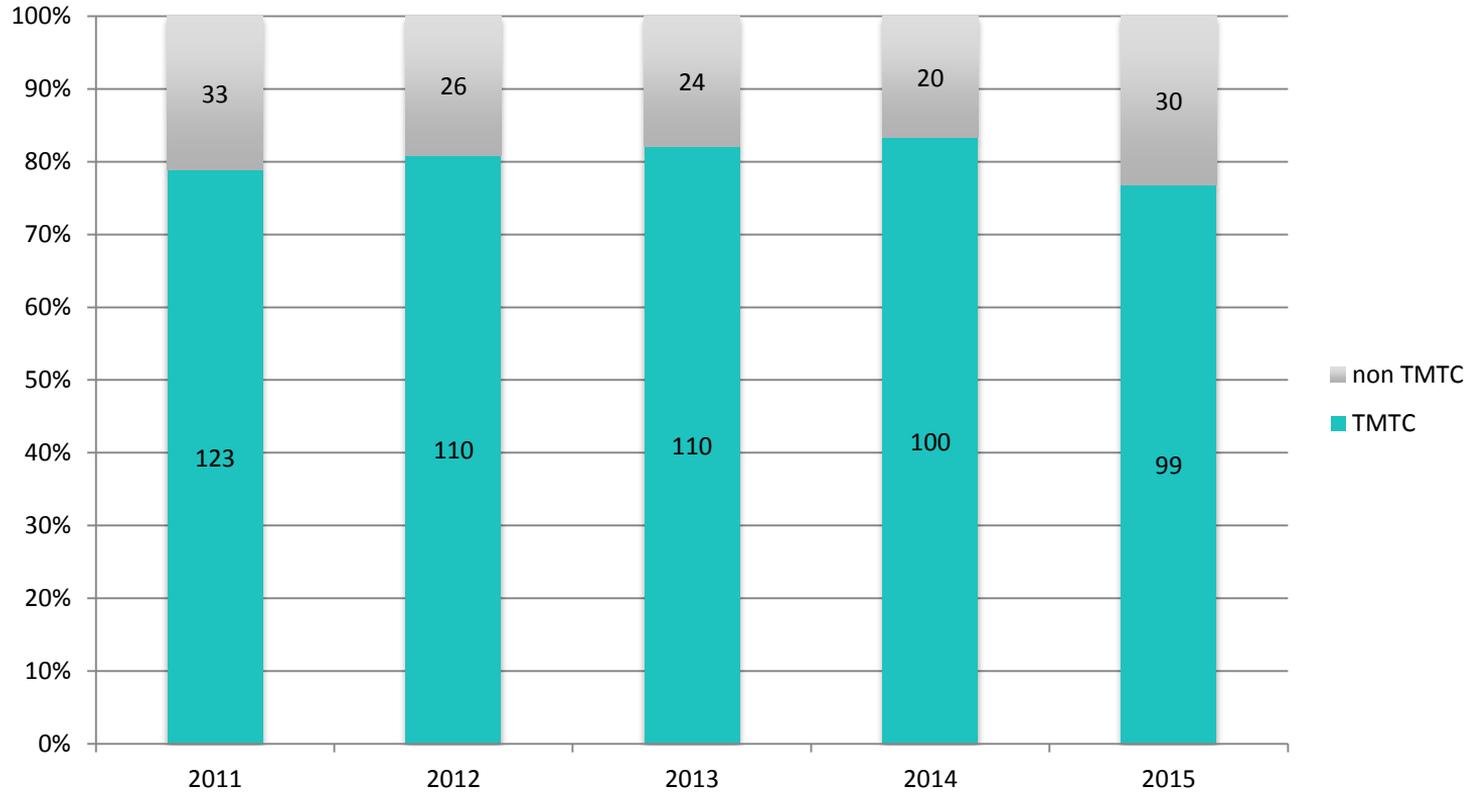
Laboratory network

Treatment and care for all

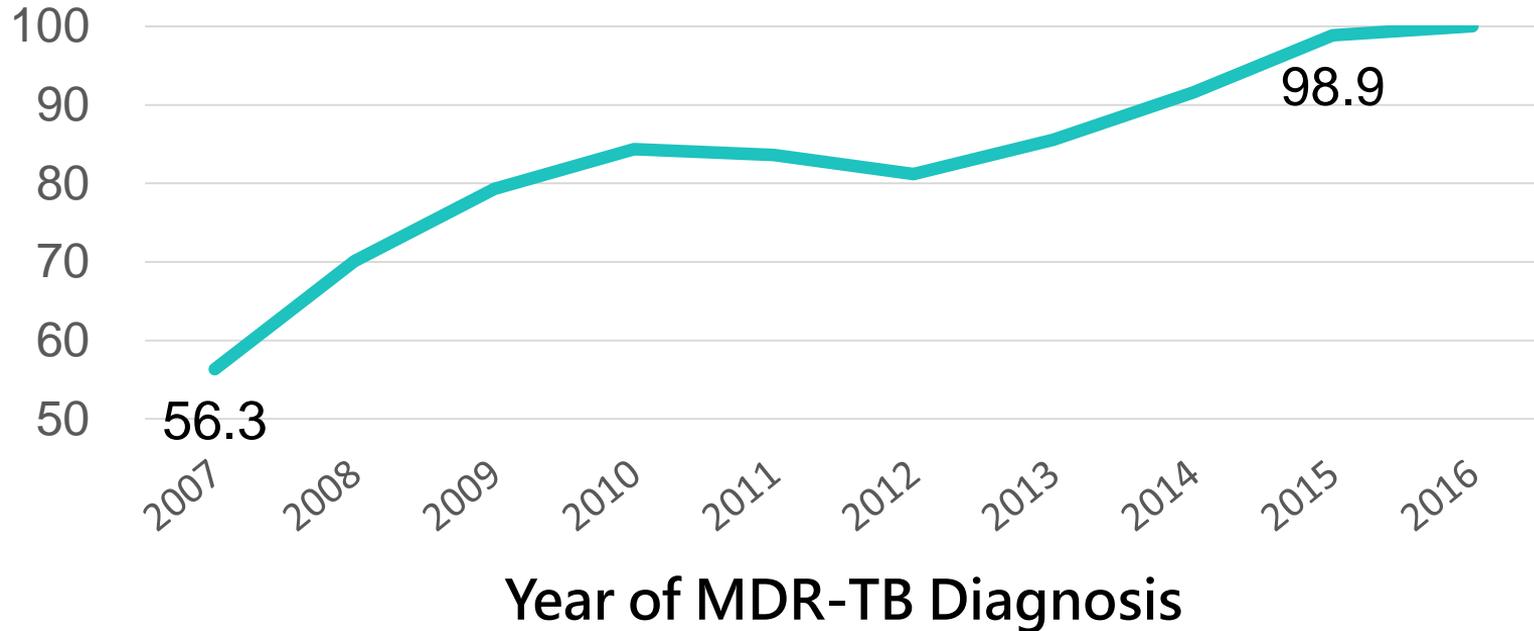
Governance and stewardship



Coverage of TMTC for MDR-TB Patients

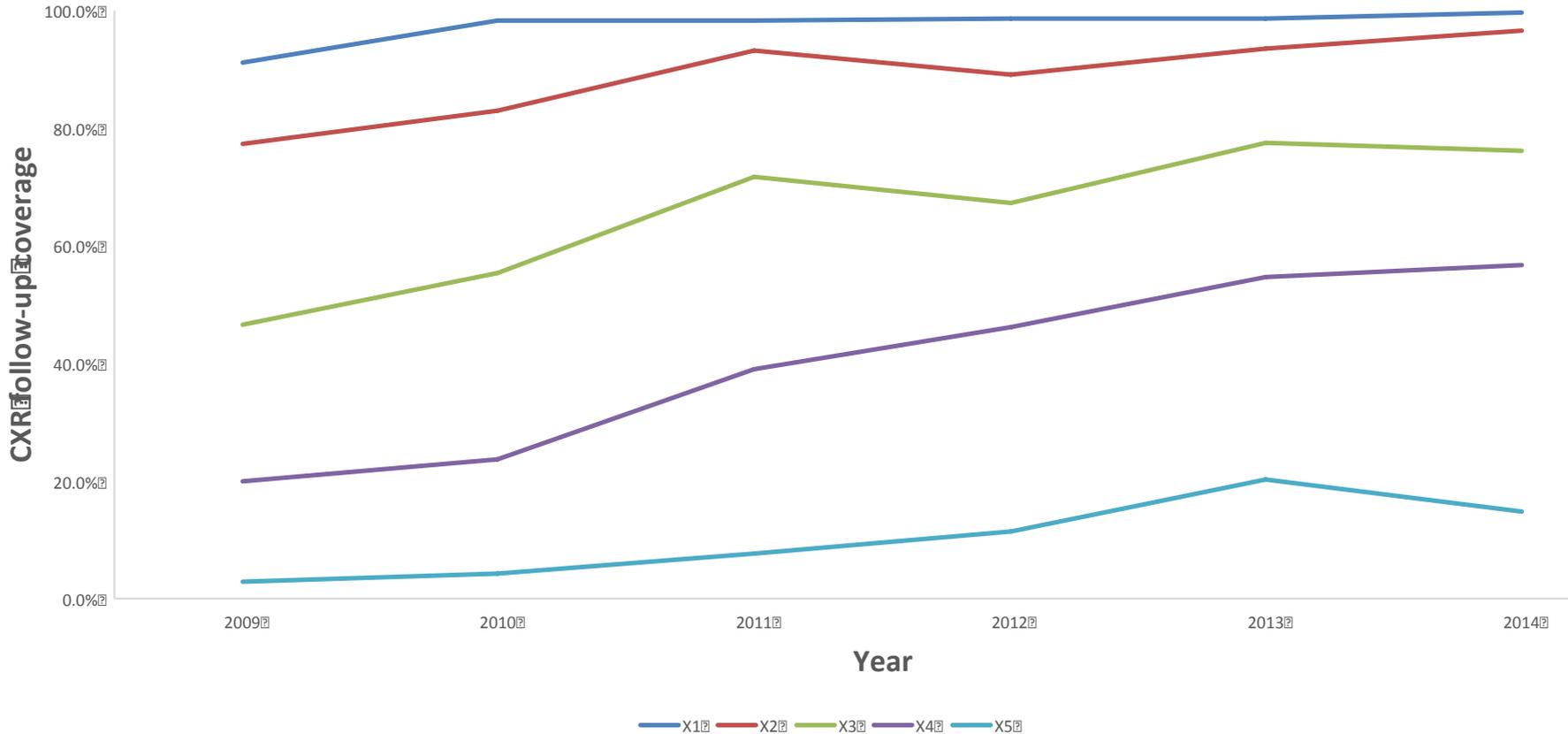


The Progress of Timeliness of Referral

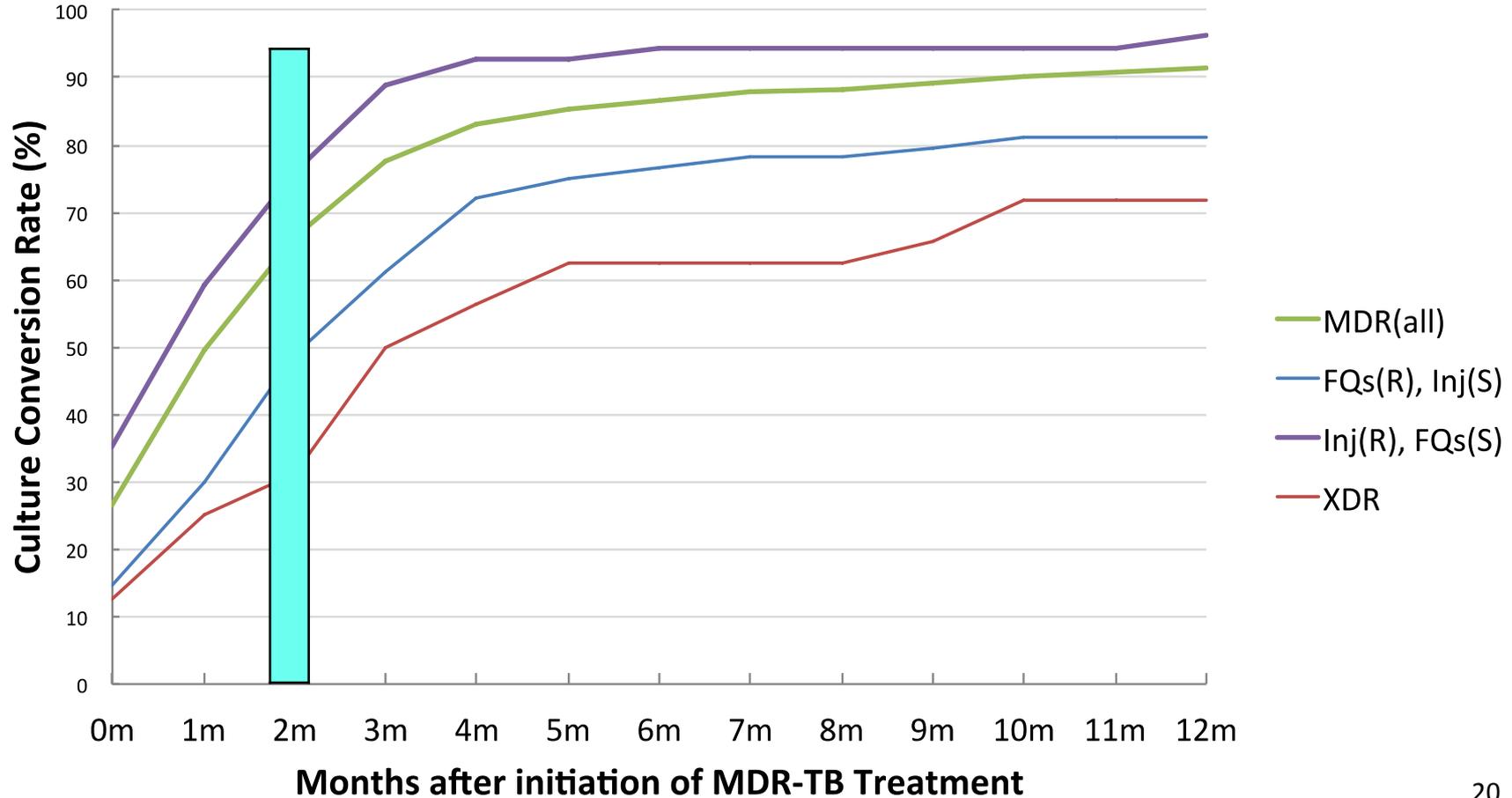


Definitions of timely referral : the interval between sputum collection for MDR-TB diagnosis & enrolled in the TMTCC < 4 months

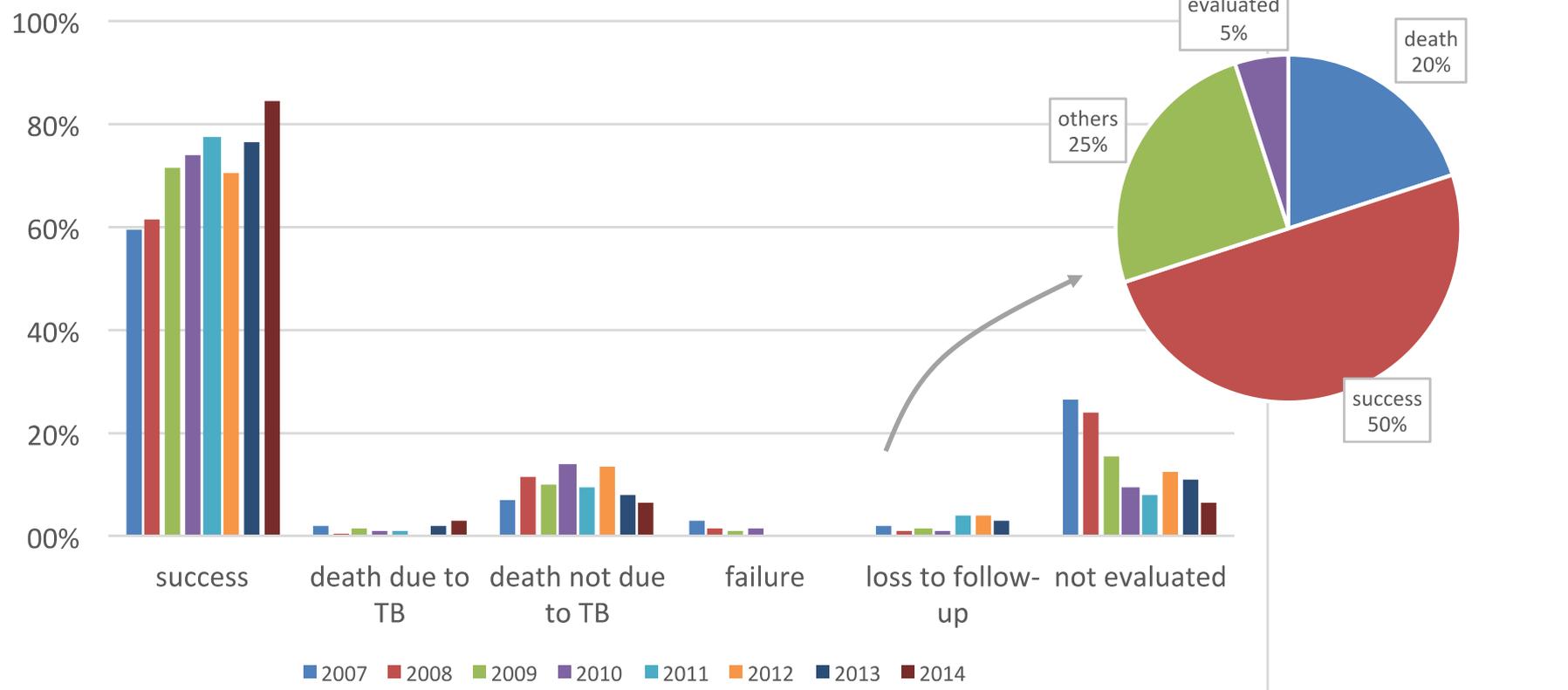
The Progress of Contact Surveillance



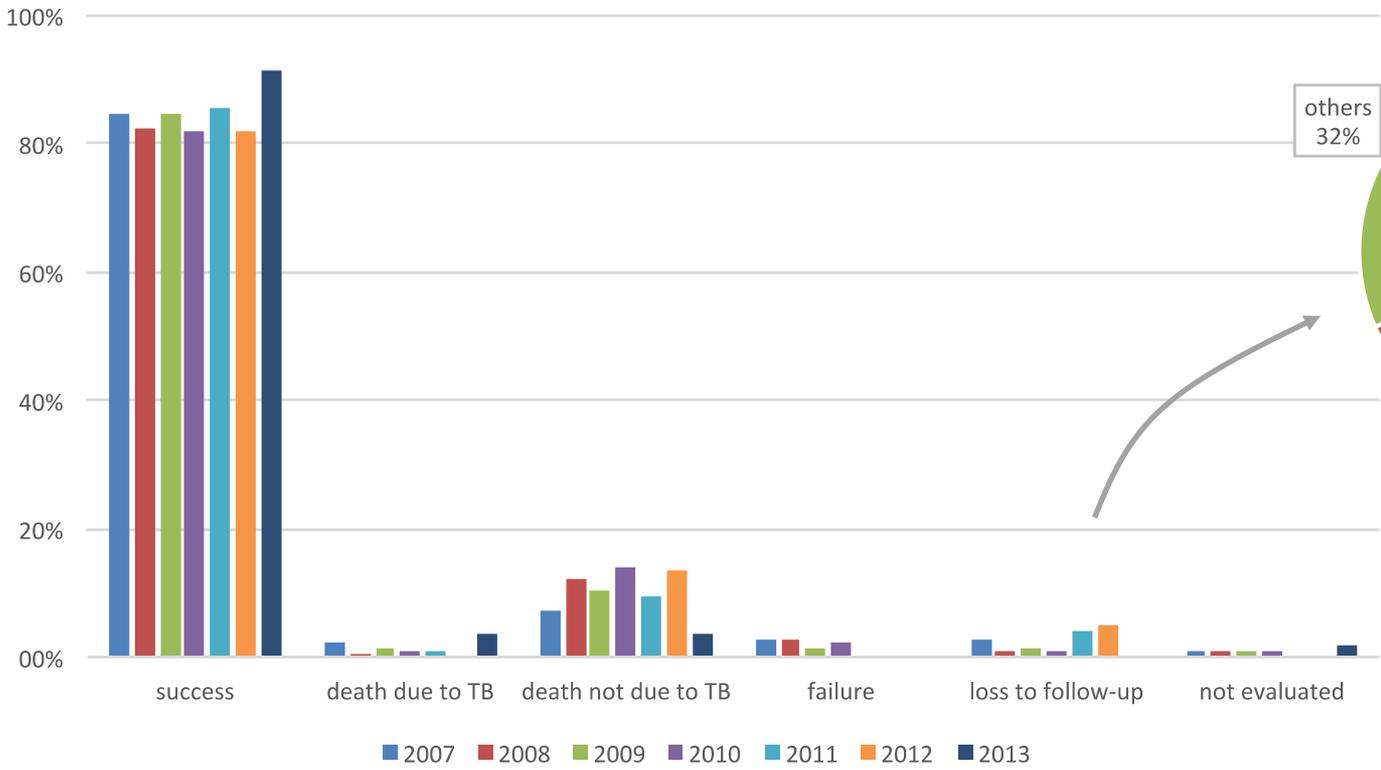
Accumulative Culture Conversion Rate



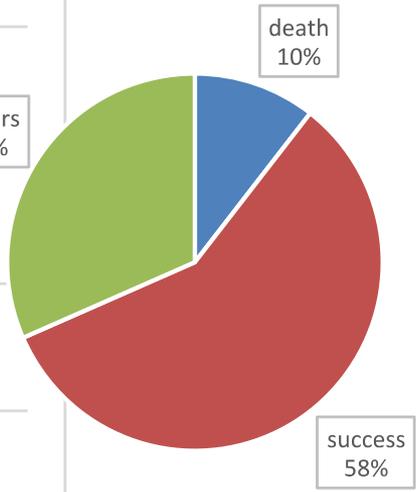
The 24-month Outcome after Second-line anti-TB Medications



The 36-month Outcome after Second-line anti-TB Medications



Final Outcome



Relapse Rates

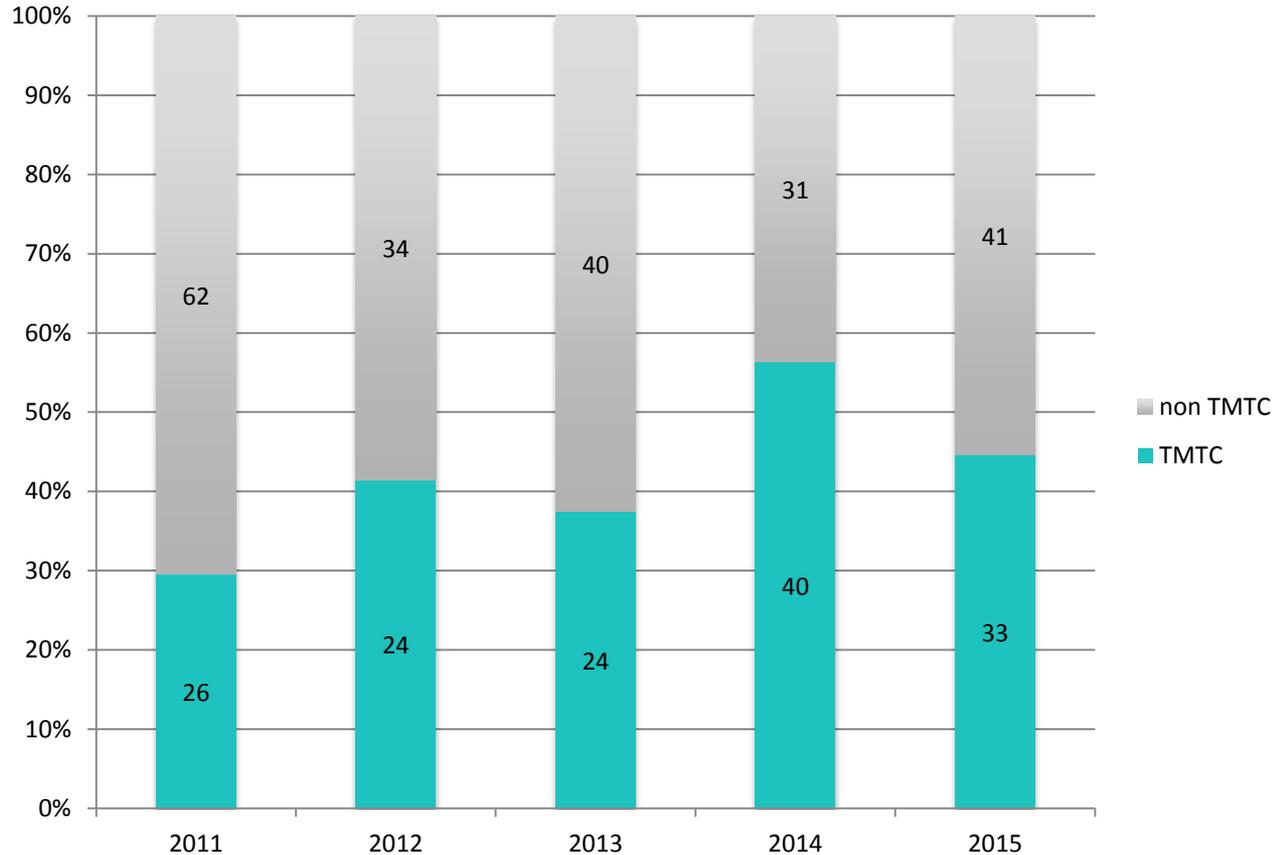
- Recurrence rates were analysed by time from treatment completion in 295 MDR-TB patients in a national cohort.
- Ten (3%) patients experienced MDR-TB recurrence during a median follow-up of 4.8 years (median time to recurrence: 2 years).
- The overall recurrence rate was 0.6 cases per 1000 person-months.
- MDR-TB patients with cavitary lesions and resistance patterns of XDR-TB or pre-XDR-TB are at the highest risk of recurrence.



Challenges

- Domestic issues
- International collaboration

TMTC Coverage for RMP Resistant-TB Patients



2016

The use of molecular line probe assays for the detection of resistance to second-line anti-tuberculosis drugs

Policy guidance

WHO treatment guidelines for drug- resistant tuberculosis

2016 update

Challenges



MDR-TB Patients from foreign countries



No preventive therapy for LTBI among
MDR-TB contacts



Funding gaps exist for the full coverage of new
diagnostic tools, medications and services

International Collaboration



Join PETTS study



Contribution of
Individual patient data
for pediatric and adult
MDR-TB



New Southbound Policy



Mhuway su balay

