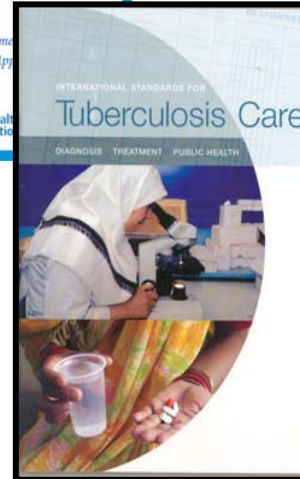
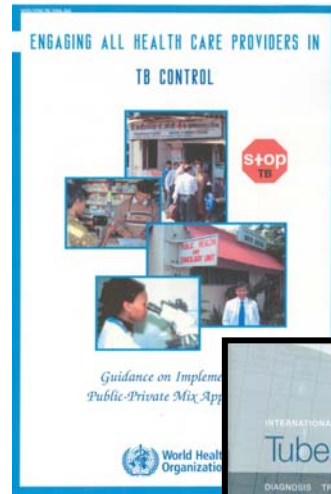


Examining the Challenges to Reach all TB patients : DOTS Expansion ?



Reaching all TB patients
Quality TB care for all

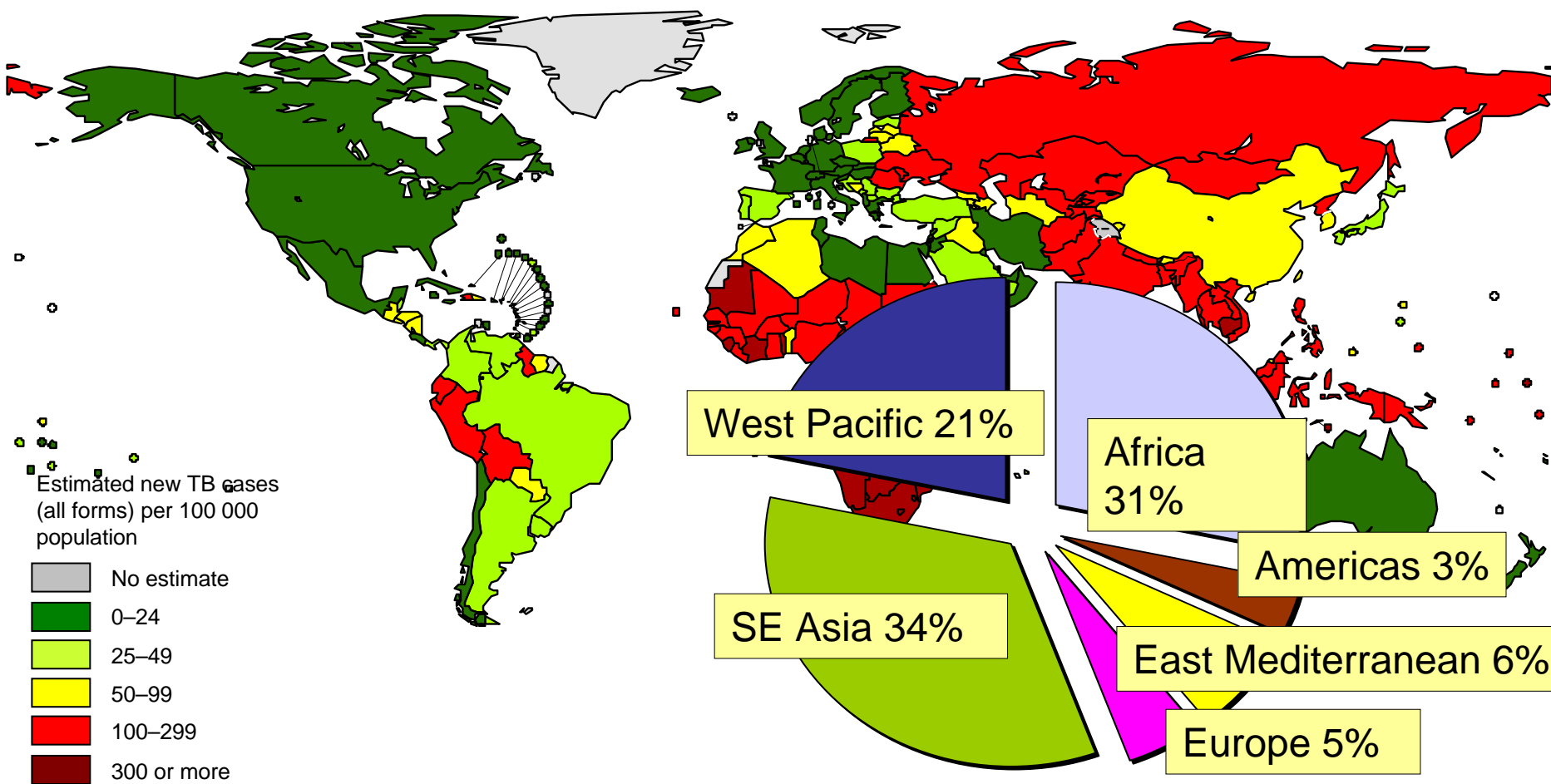


IUATLD

Vancouver 26 February 2009

Léopold BLANC WHO/STB/TBS

Estimated TB incidence rate, 2007



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.



Global TB Control Targets

Stop TB Partnership



THE
STOP TB
DEPARTMENT



2015: Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 8: to have halted by 2015 and begun to reverse the incidence...

Indicator 23: incidence, prevalence and deaths associated with TB

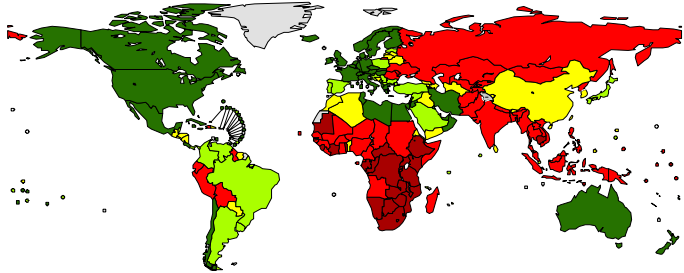
Indicator 24: proportion of TB cases detected and cured under DOTS

Stop TB Partnership

2015: 50% reduction in TB prevalence and deaths by 2015

2050: elimination (<1 case per million population)

Latest global TB estimates and notification - 2007



Estimated
number of
cases

Cases
reported
DOTS

All forms of TB

Greatest number of cases in Asia;
greatest rates per capita in Africa

9.27 million
(139 per 100,000)

5.6 million
(80 per 100,000)

New Smear positive

4.1 million

2.6 million
(63%)

Multidrug-resistant TB (MDR-TB)

500,000

30,000

HIV-associated TB

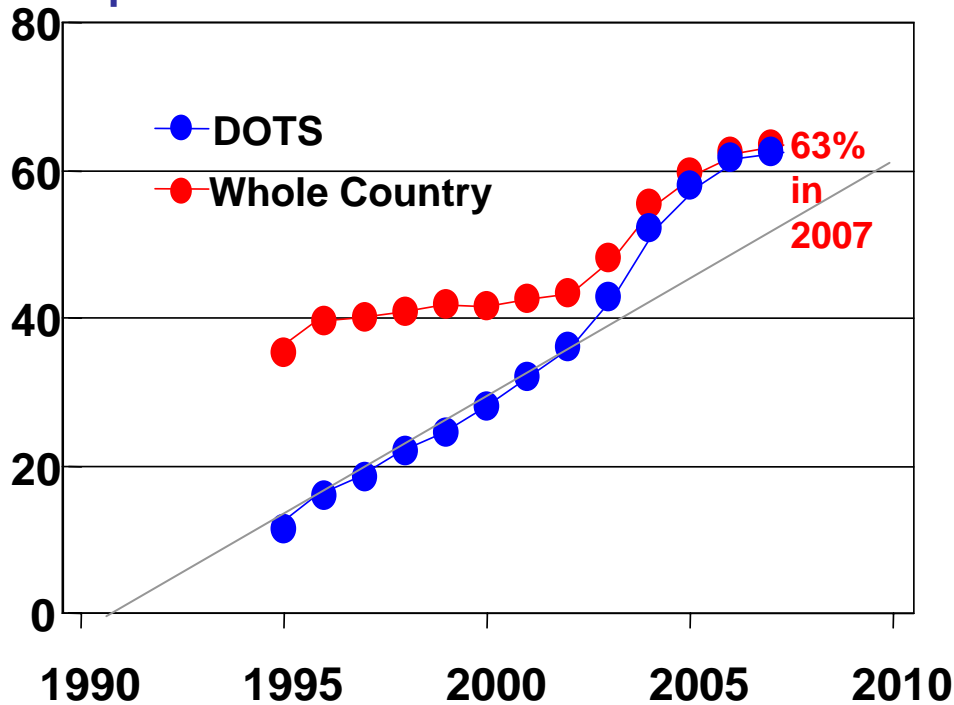
1.4 (15%)

300,000

Treatment success on target (>85%), case detection stalling after years of expansion

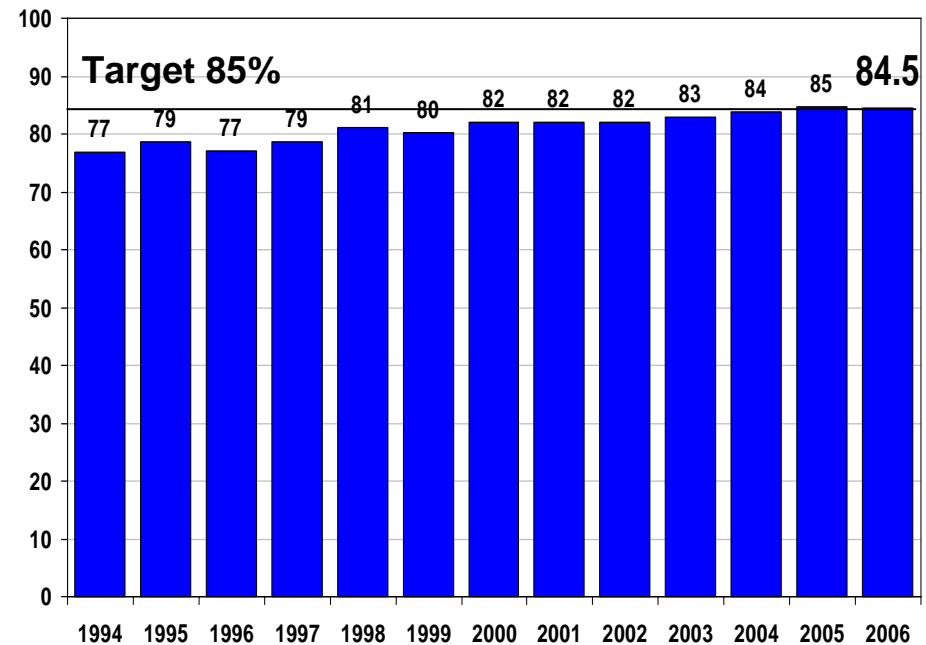


Estimated case detection (%) of sputum smear + cases



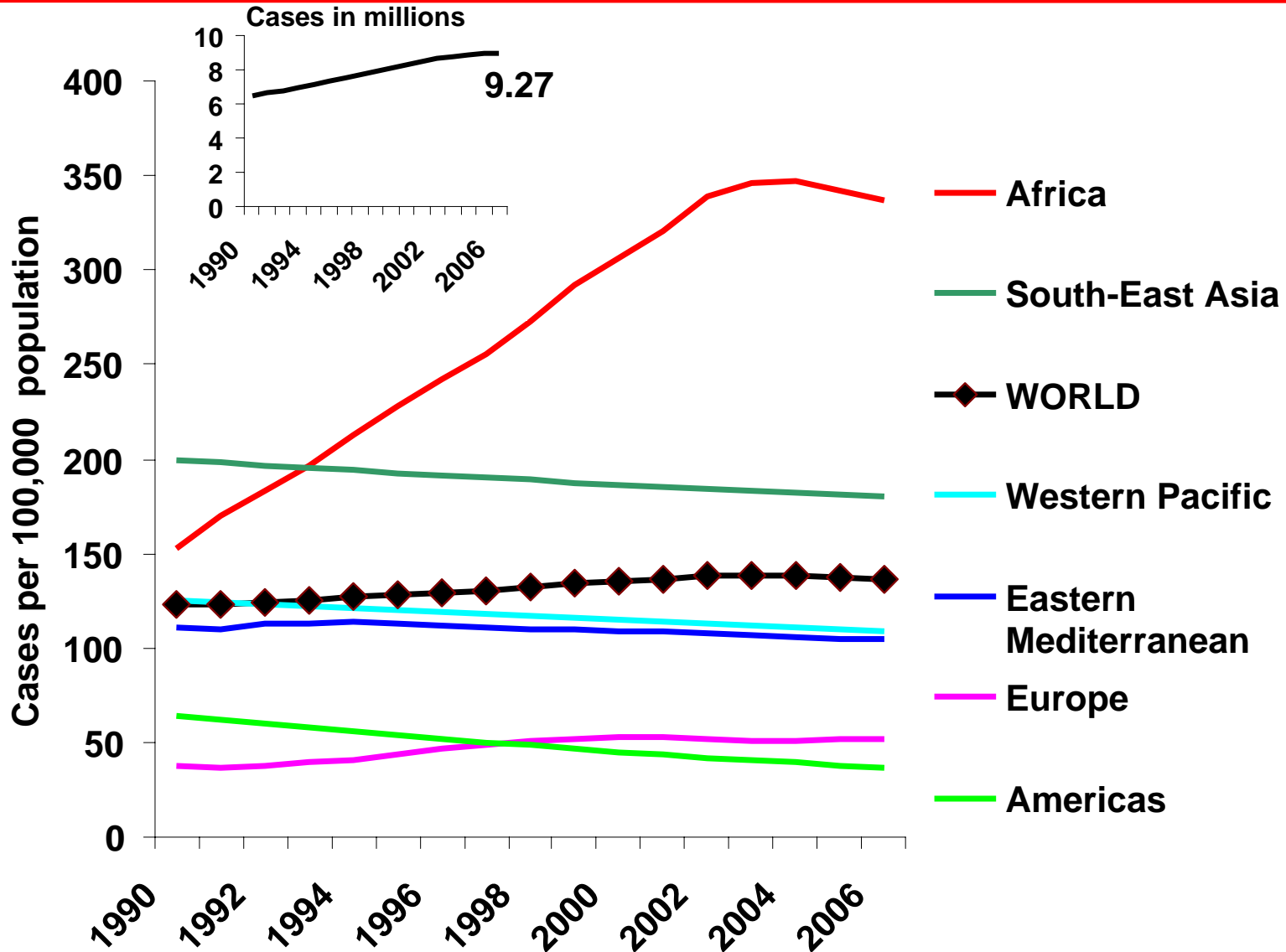
Africa: 47%; Europe 51%; East. Med: 60%

Treatment success (%) among sputum smear+ cases



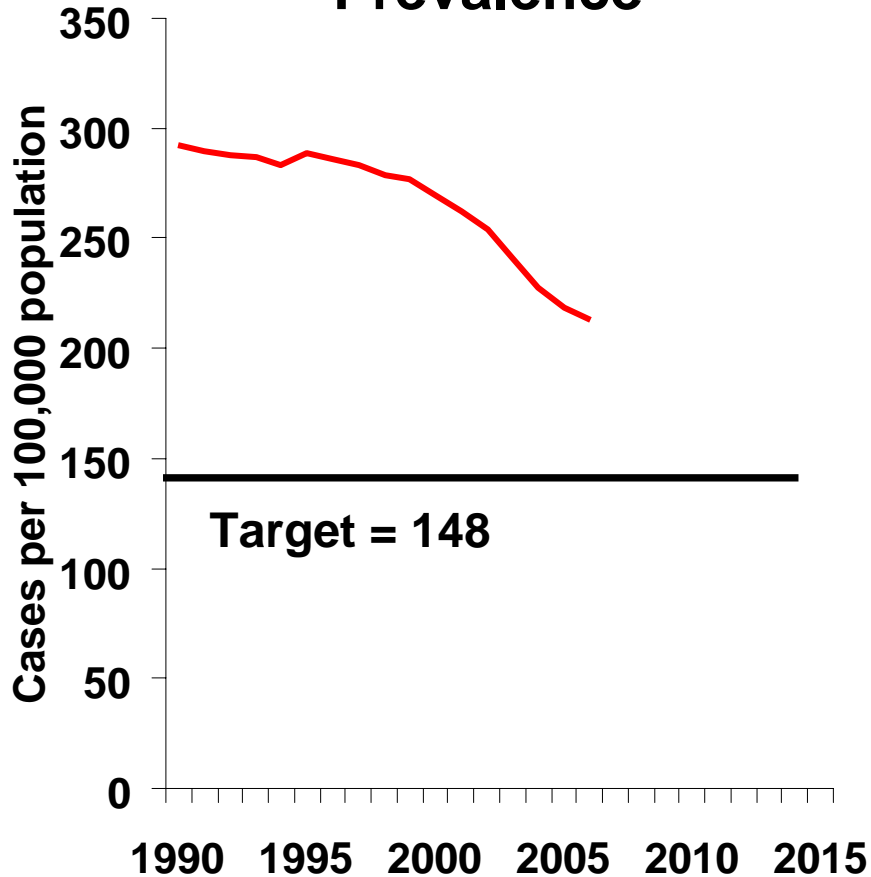
Europe: 70%, Africa: 75%, Americas: 75%

Incidence rates stable or falling slowly

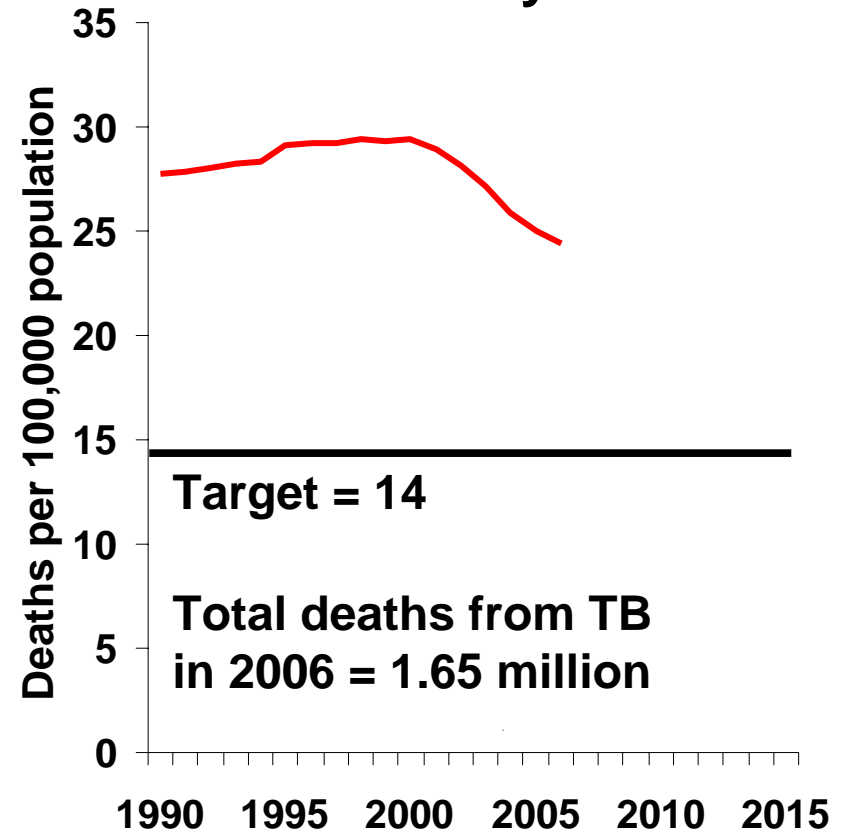


TB prevalence and mortality

Prevalence



Mortality



Falling... but need to fall faster to reach targets

Key issues

- Most countries implement DOTS in public health facilities
- $\geq 85\%$ success rate obtained in many DOTS countries
- 70% case detection target **not yet met** in many settings
- **Epidemiological impact less** than expected even in settings where the 70/85 has been met

The **STOP TB** Strategy – 2009



- 1. Pursue high-quality DOTS expansion and enhancement**
 - a. Political commitment with adequate and sustained financing
 - b. Early detection, and diagnosis through quality-assured bacteriology
 - c. Standardised treatment with supervision, and patient support
 - d. Effective drug supply and management
 - e. Monitoring & evaluation, including impact measurement

- 2. Address TB-HIV, MDR-TB, and the needs of the poor and vulnerable**
 - a. Scale-up collaborative TB/HIV activities
 - b. Scale-up prevention and management of multidrug-resistant TB
 - c. Address the needs of TB contacts, the poor & vulnerable: women, children, prisoners, refugees, migrants & minorities

- 3. Contribute to health system strengthening based on primary health care**
 - a. Help improve health policies, workforce development, financing, supplies, service delivery, and information
 - b. Strengthen infection control in health services, other congregate settings, and households
 - c. Upgrade laboratory networks, and implement the Practical Approach to Lung Health (PAL)
 - d. Adapt successful approaches from other fields and sectors, and foster action on the social determinants of health

- 4. Engage all care providers**
 - a. Involve all public, voluntary, corporate and private providers through Public-Private Mix (PPM) approaches
 - b. Promote use of the International Standards for TB Care (ISTC)

- 5. Empower people with TB, and communities through partnership**
 - a. Pursue advocacy, communication, and social mobilization
 - b. Foster community participation in TB care
 - c. Promote use of the Patients' Charter for TB Care

- 6. Enable and promote research**
 - a. Conduct programme-based operational research, and introduce new tools into practice
 - b. Advocate, and participate in research to develop new diagnostics, drugs and vaccines

The Stop TB strategy in a framework

Political commitment with increased and sustained financing

2. TB-HIV, TB contacts, prisoners, refugees, vulnerable groups, special situations

1. High quality DOTS (ISTC) Susceptible or resistant (MDR-XDR) adult or children

- Case detection through quality assured bacteriology
- Effective (std) treatment, with supervision and patient support
- Effective drug supply and management system
- Monitoring & evaluation system, impact measurement

3. Contribute to HSS
HR , Financing, PAL,
Laboratory, IC etc...

5. Empower people with TB, communities
ACSM, CTBC,
Patient charter

4. Engage all care providers
(PPM)

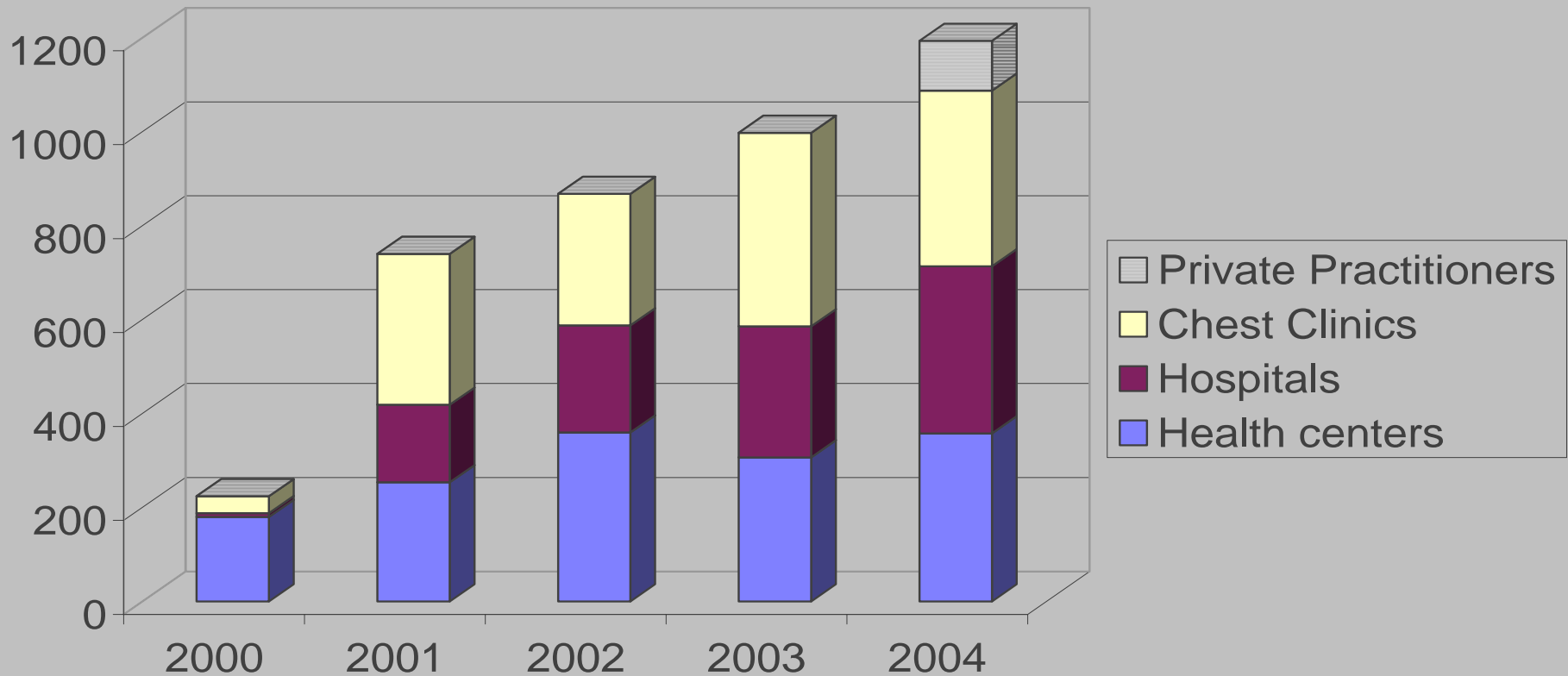
6. Enable and promote research
New diagnostics, drugs, vaccines
Re-tooling, OR

What are the key challenges to increasing case detection?

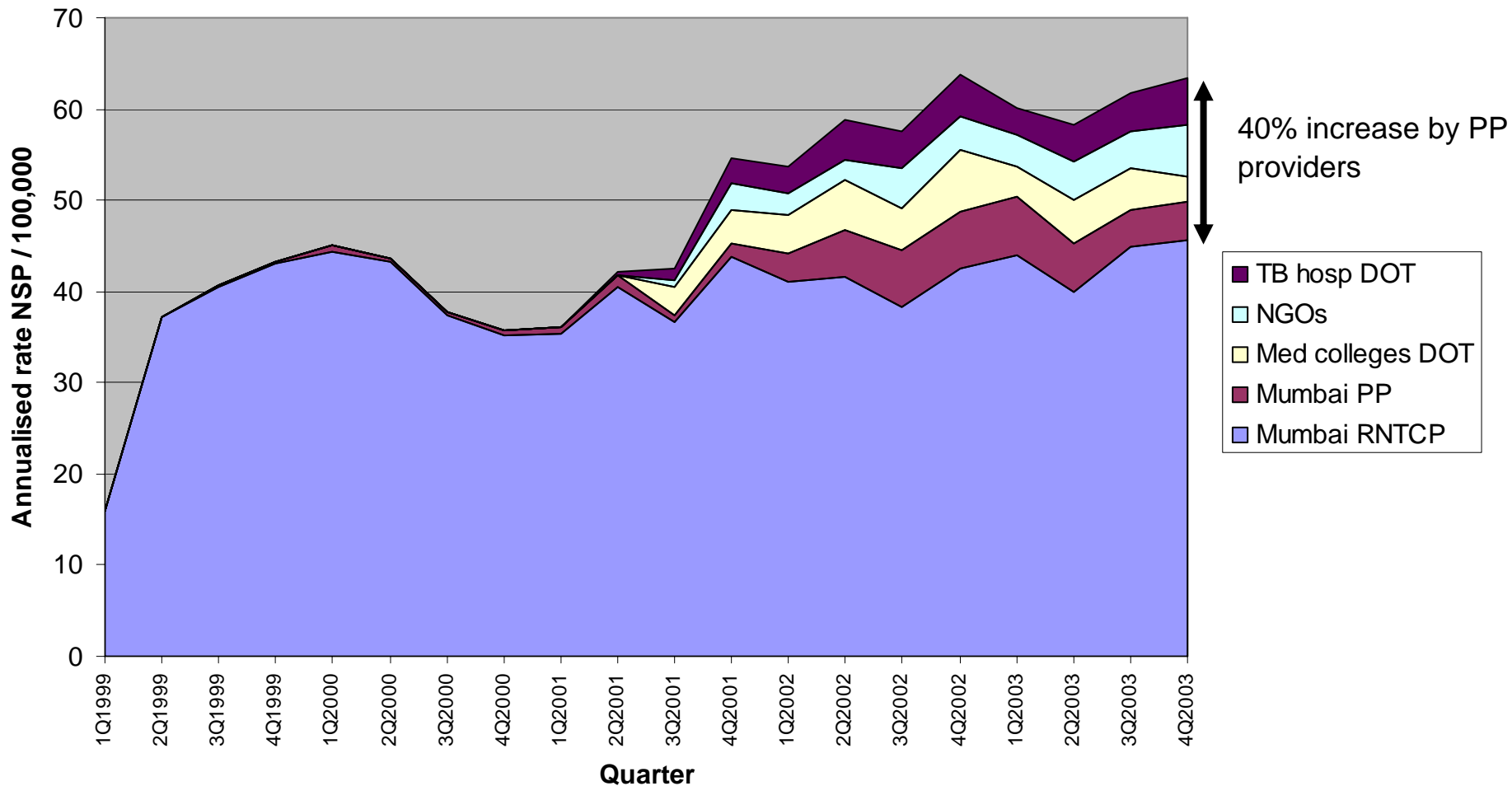
- About 40% (3 – 5.6 M) of estimated cases are not notified (and not diagnosed?)
- Are the cases not notified or not identified?
 - Identified but not notified: in health sector but not in DOTS providers
 - Not notified because not identified : informal care providers, home, etc....

Contribution of case recovery into the NTP by different care providers, Yogyakarta, 2000-2004

New Smear Positive TB cases Notified, DI Yogyakarta 2000-2004

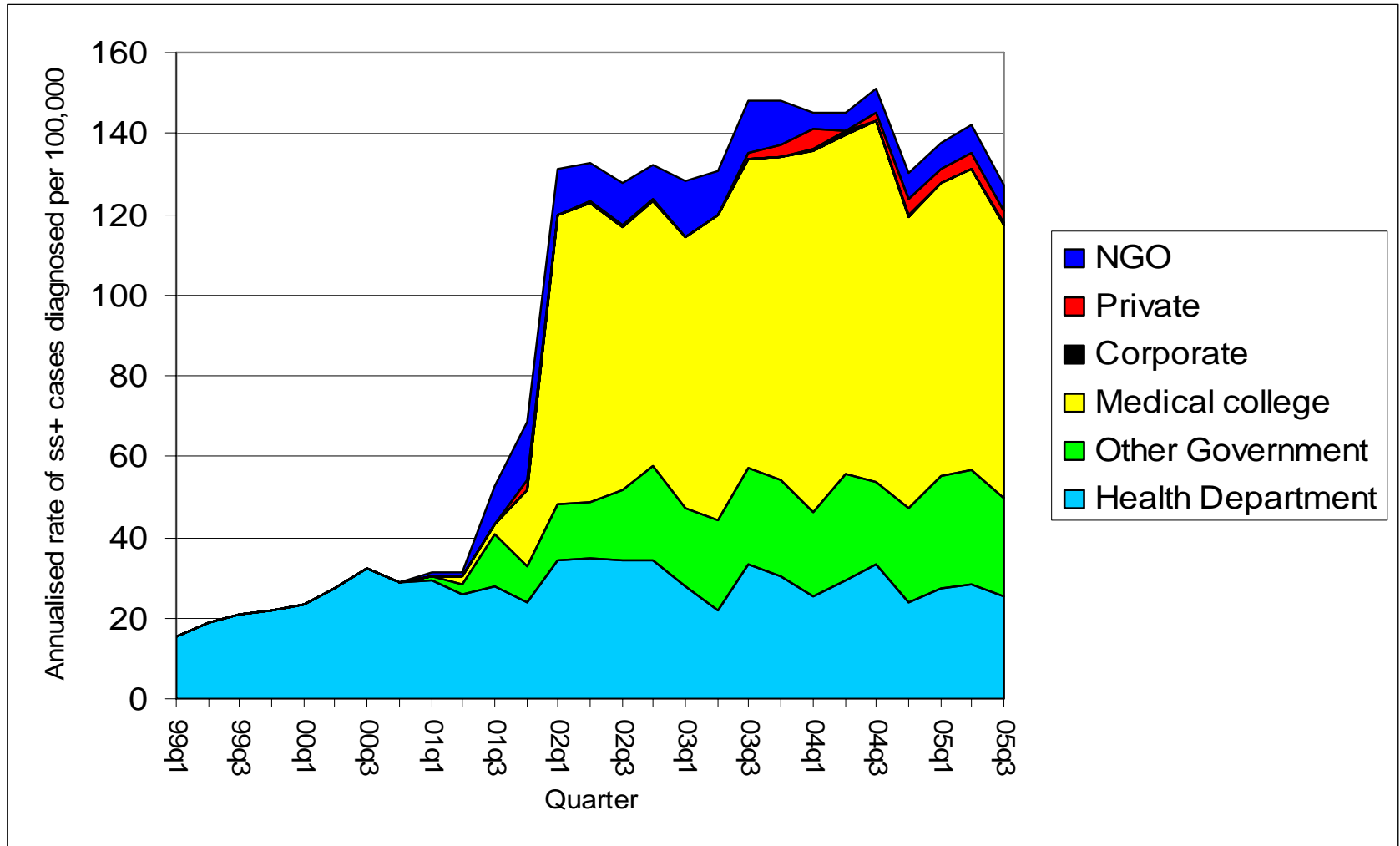


Contribution of case recovery into the NTP by different care providers, Mumbai, 1999-2003



Source: RNTCP, Mumbai, India

Contribution of case recovery into the NTP by different care providers, Bangalore, 1999-2005



•Public and private medical colleges (yellow) diagnose a huge number of cases, but many of them are from outside the city and need to be referred for treatment elsewhere.

•The increase in diagnosed cases represents increased **notification** after medical colleges and other providers started to report to NTP in a standardised way

The stop TB strategy not broadly implemented



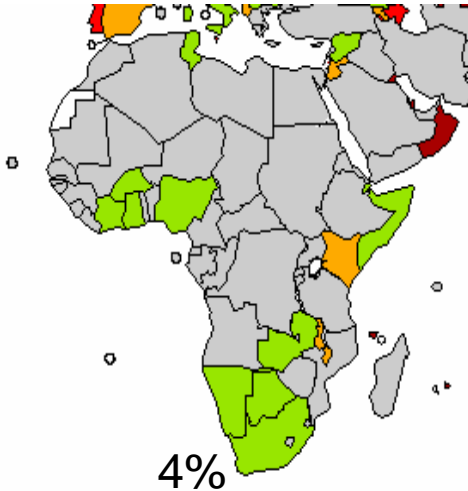
- TB/HIV: systematic provision of HIV test not yet widely implemented in areas with high HIV prevalence
- MDR-TB management limited to small projects except in few countries
- Involvement of non public health care providers in TB control still limited (scaling-up PPM in only few countries)
- Human resources crisis in Africa in particular
- Community involvement still timid in many countries. Patients groups just starting
- Patient charter available in very limited number of countries

African Region:

Testing Tuberculosis Patients for HIV :

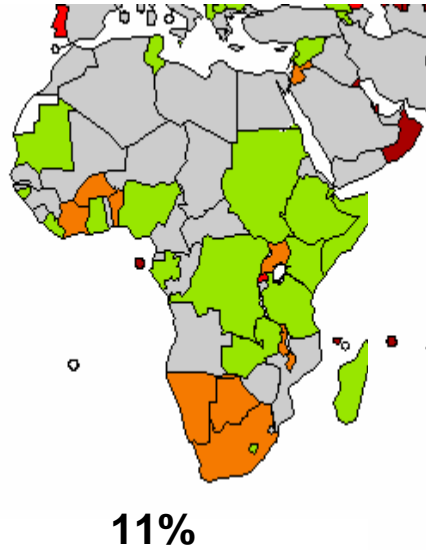
2004

12



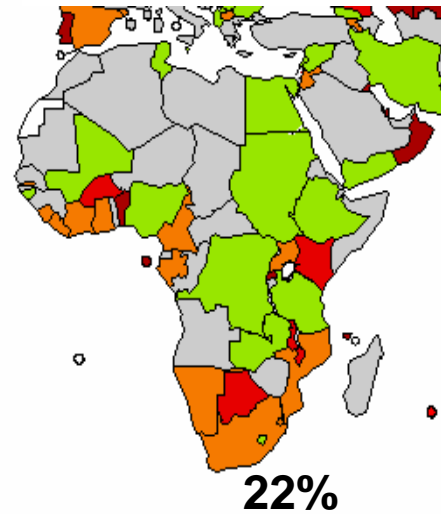
2005

26



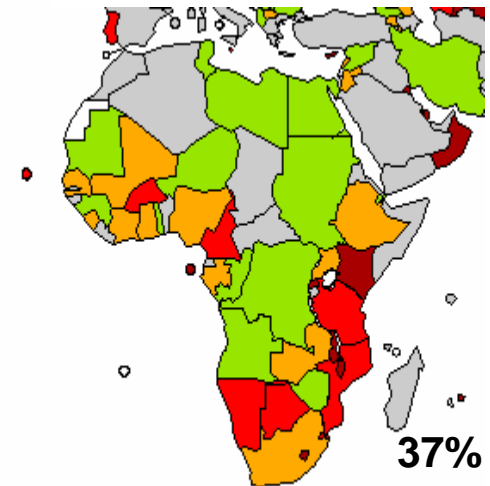
2006

30

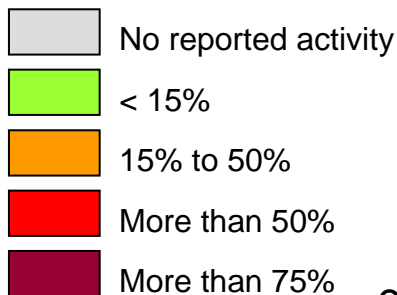


2007

33



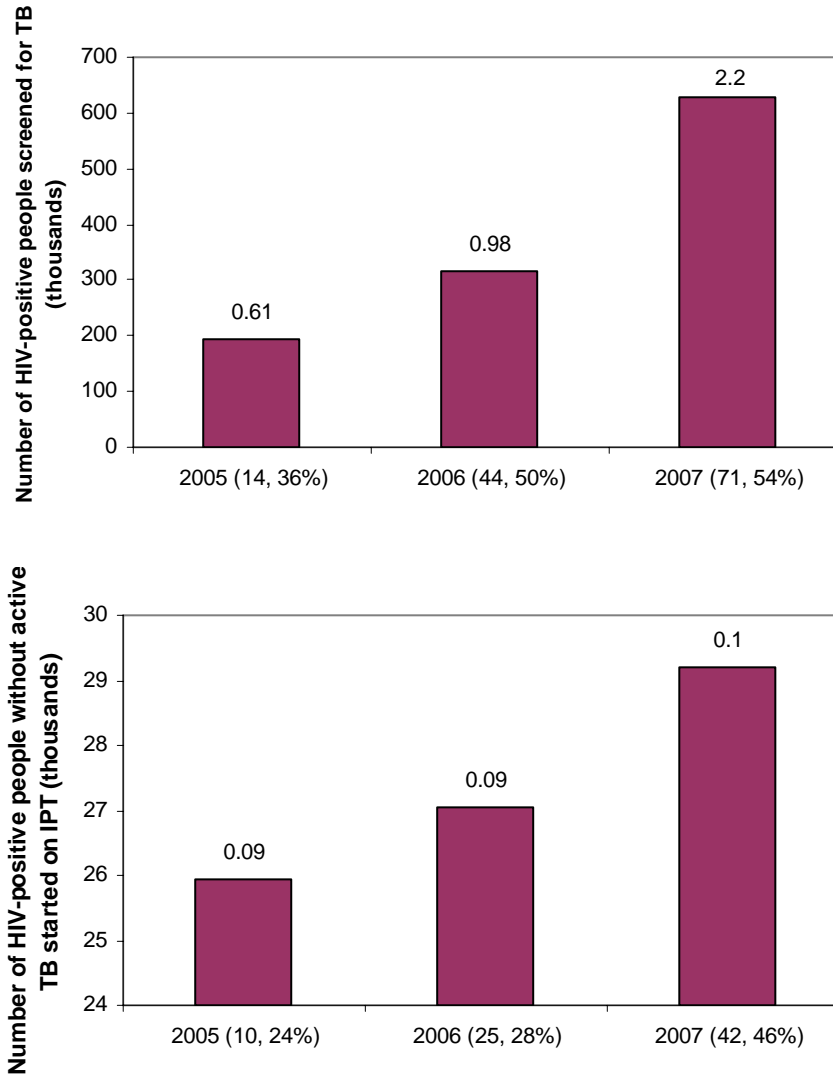
Proportion of TB patients
tested for HIV
Key



0.5 of 1.3 million notified TB patients were tested in AFRICA in 2007

Figure 2.10. Intensified TB case finding and IPT provision among HIV-positive people, 2007.

Numbers above bars show the proportion of estimated HIV-positive people screened for TB (graph a) and the proportion of HIV-positive people without TB started on IPT (graph b). Numbers under bars show the number of countries reporting data followed by the percentage of total estimated HIV-positive people (graph a) and HIV-positive people without active TB (graph b) accounted for by reporting countries.



Way forward to attain MDGs

- Need to accelerate efforts in TB control by:
 1. aiming at **more than 85% cure** (with new drugs?)
 2. aiming to **100% case detection** (universal access)
 3. **shorten diagnostic delay** (cut transmission, reduce suffering): *need indicator of delay in diagnostic*
- A proposed framework to identify required actions to improve case detection and reduce delays

Conceptual framework for improved and early case notification/detection

TB and Poverty

HSS/HR

ACSM

DOTS / MDR/HIV
Expansion

PPM

Paediat. TB
PAL

Community
engagement

Health
education

Minimize
access
barriers

Effective TB screening in
health services, on broader
indication

Improve
diagnostic
quality, new
tools

Lab
Strength

Patient delay

Patient
delay

Health system
delay

Short-cut

Active TB

Active case finding

Diagnosis

Improve
referral
and
notification
systems

Infected

Contact
investig
-Children
-Other risk
groups
-All household
-Workplace
-Wider

Clinical risk
groups
-HIV
-Previous TB
-Malnourished
-Smokers
-Diabetics
-Drug abusers

Risk
populations
-Prisons
-Urban slums
-Poor areas
-Migrants
-Workplace
-Elderly

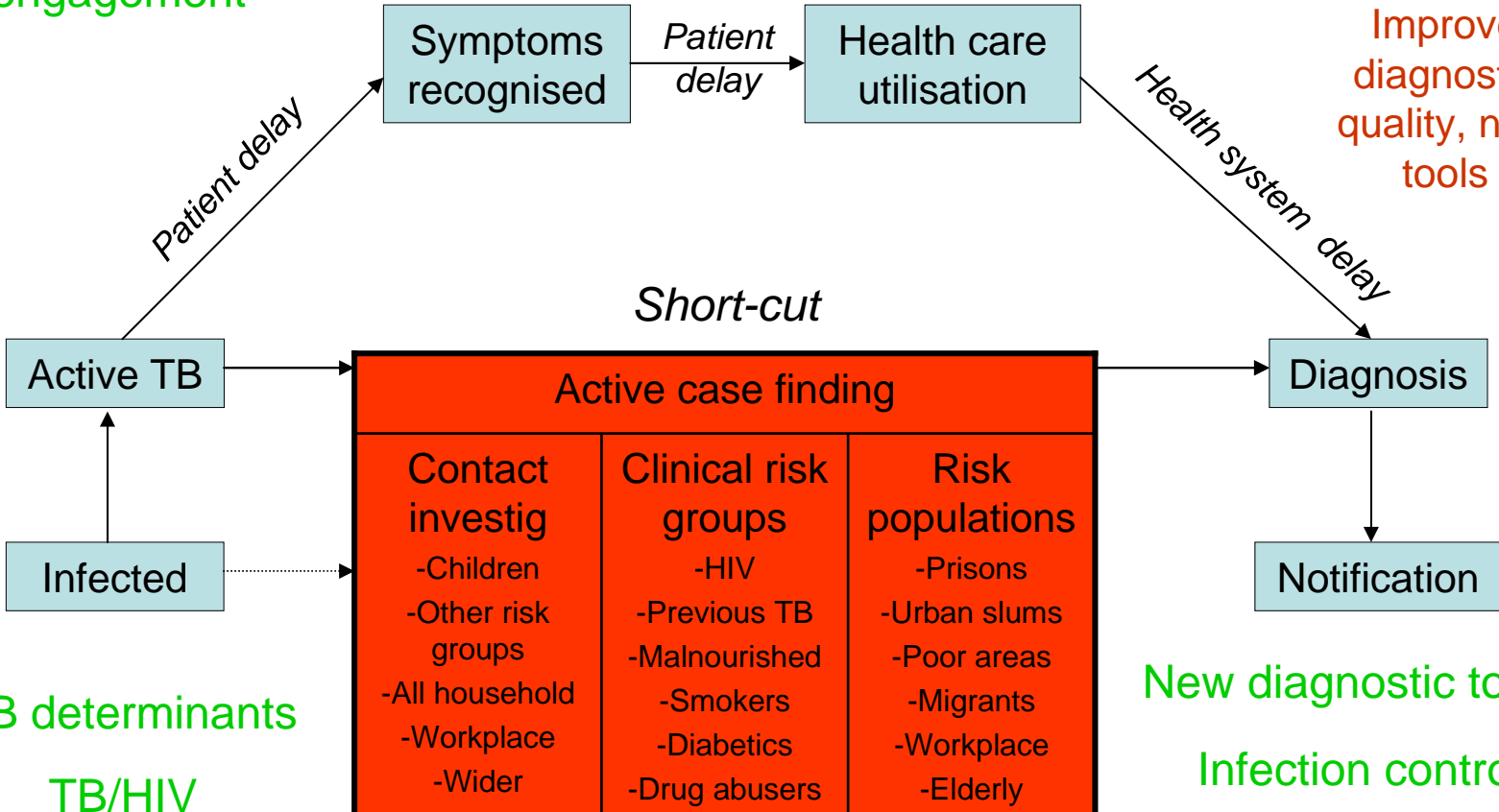
Notification

New diagnostic tools

Infection control

TB determinants

TB/HIV



Proposing a framework for priority setting (order of priority depending on local context)



1. Improve quality of and access to diagnosis (incl. TB/HIV, MDR-TB)
 - Address access barriers, decentralise services, simplify diagnostic procedures
 - Improve quality of existing tools
 - Implement new tools

2. Target cases already diagnosed but not notified under DOTS (incl. TB/HIV, MDR-TB)
 - Expand and intensify PPM, including improved referral and notification systems (NGO, FBO, traditional and informal health care providers)
 - Support stronger regulation and enforcement of notification

3. Improve health education and social mobilization to improve knowledge and rational health seeking

Proposing a framework for priority setting (order of priority depending on local context)



4. Fully implement existing policy for TB screening in health services, while considering broader indications for screening among people who attend health services (based on symptoms, signs and risk profile)

5. Reinforce current strategy for active case finding, and broaden it
 - Reinforce household contact investigation
 - Reinforce screening of all people with HIV
 - Broaden indication for screening of clinical risk groups and risk populations

OR needs in all countries: preparing for action

- Analysis of surveillance and survey data to identify case detection gaps, using improved M&E system (as discussed in the session on Impact Measurement Taskforce)
- Mapping of health seeking behaviour, access barriers, and TB knowledge/attitudes among TB patients and general population
- Assessment of diagnostic capacity and quality
- Study of TB screening routines in health facilities

OR needs in all countries: preparing for action, continued



- PPM situational assessment (optimal use of existing health care facilities?)
- Mapping and quantification of population risk groups: poor, slum-dwellers, migrants, minorities, prisoners, risky work environments, etc
- Assessment of size and distribution of clinical risk groups: HIV, malnutrition, smoking, diabetes, drug/alcohol abuse, etc
- Monitoring and evaluation of new initiatives to increase case detection, including disaggregation by type of approach that lead to case detection

Other research needs to inform global policy

- Impact of PPM, TB/HIV, ACSM, PAL and community TB care on case detection
- Re-assessment of the "TB symptomatic" definition: sensitivity, specificity, and positive predictive value of different constellations of symptoms, signs, and risk factors
- Research to strengthen evidence for the relative risk associated with different TB risk factors, and the understanding of interaction between risk factors
- Modelling of potential yield of different types of active case findings, for different target groups, in light of existing evidence on TB risk factors and risk groups as well as the sensitivity and specificity of different screening methods and approaches
- New analysis of the comparative effectiveness and cost-effectiveness of the different approaches, including active case finding