Field visit report
Bangkok Team
JMM Thailand NTP
2013

The Team

- Dr Angkhana Chaiprasert
- Dr Yutthichai Kasetjaroen
- Dr Pyathida Smutraprapoot
- Mrs Wannapen Jitwiwat
- Mr Narongsak Phothong
- Mrs Khemakorn Thiangtangtam
- Mrs Ranjuan Sukkavee
- Dr Jessada Thanakitjaroenkul
- Dr Paul Nunn
- (Ms Liesbeth Oey)
- Dr Mukta Sharma

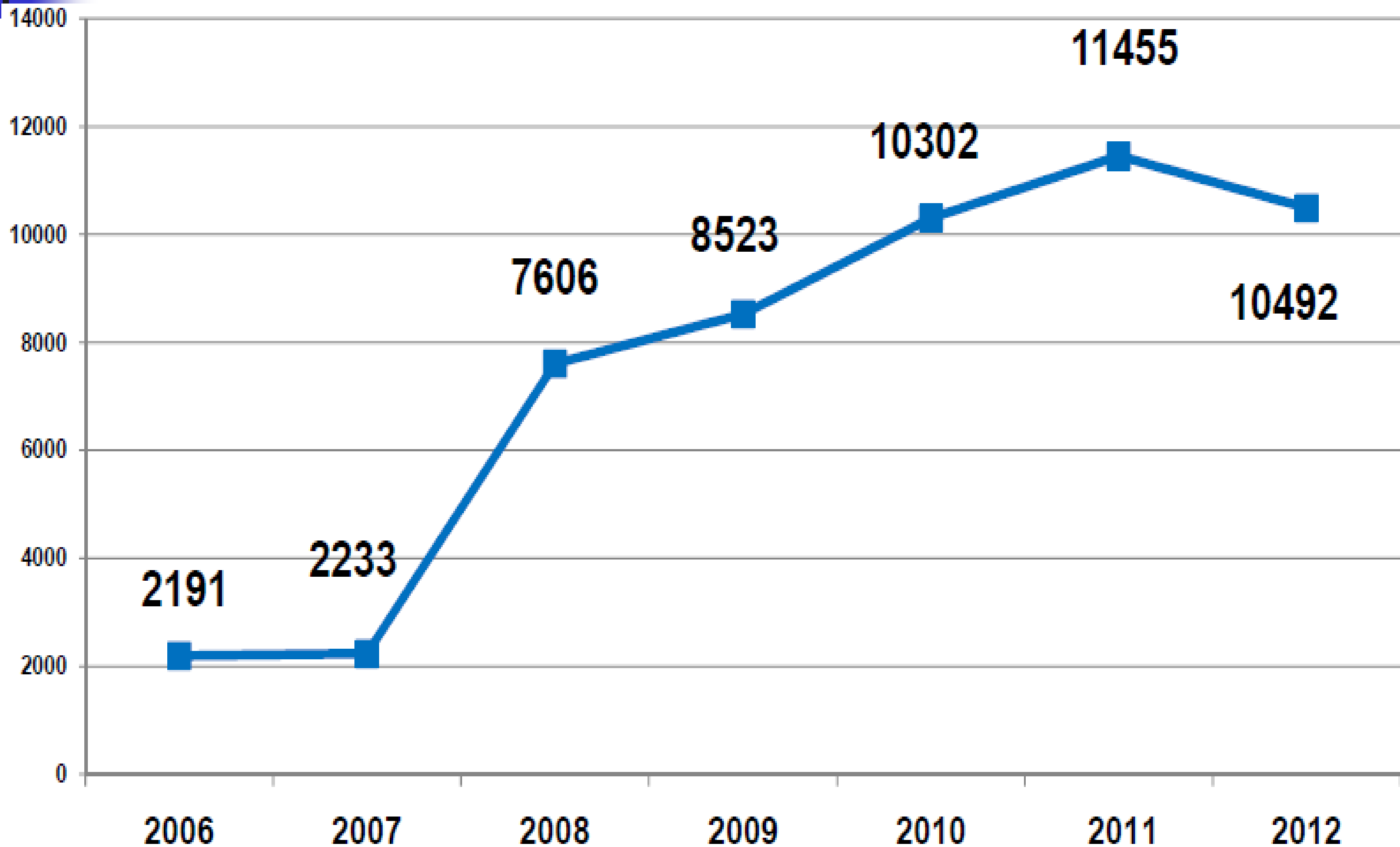
Background

- 8.3 million (12.6% total national population)
  - 685,000 documented and undocumented foreign migrant workers
- 50 districts

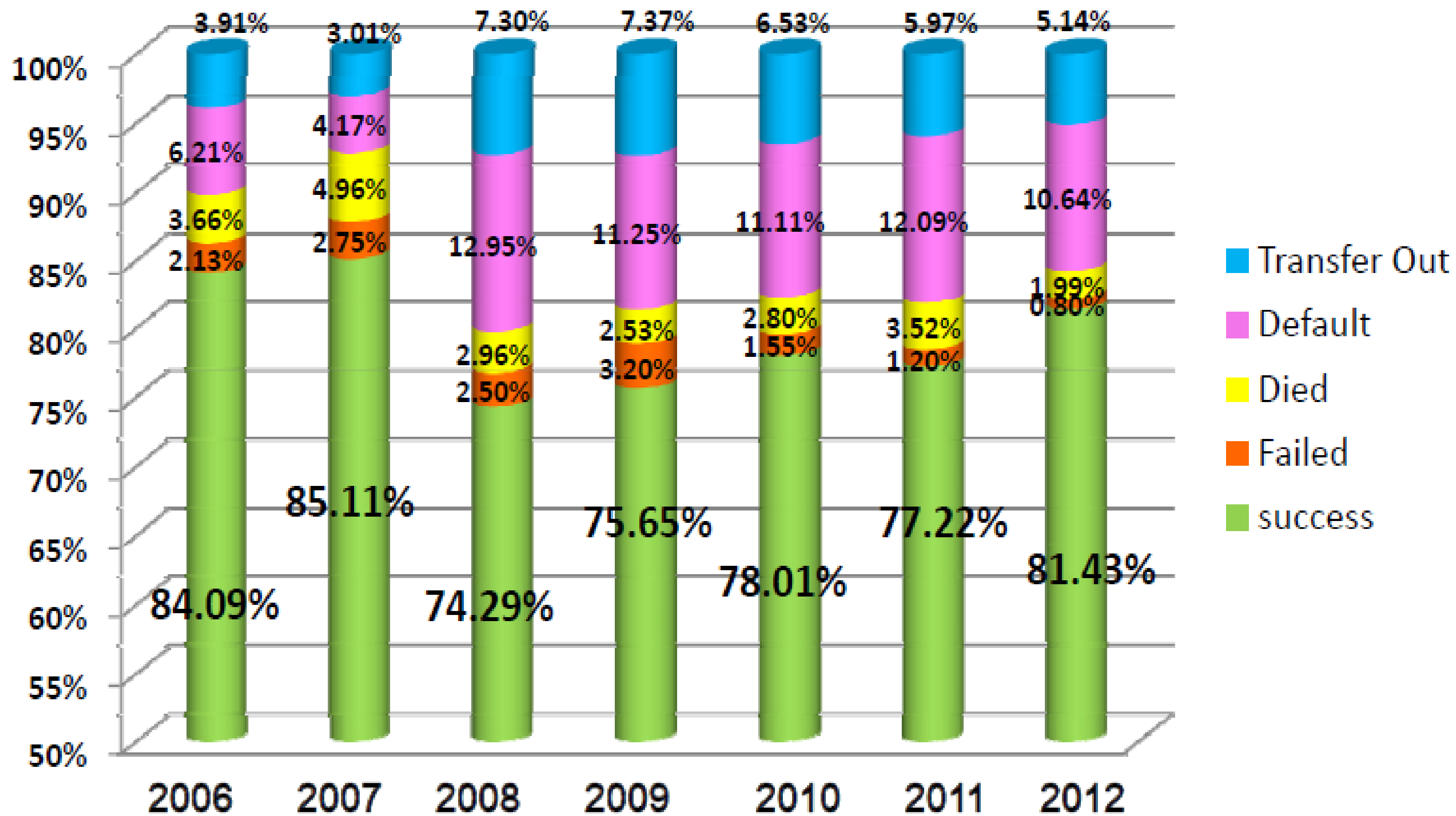
Authority	Hospitals	Report
BMA	8	8
MoPH	8	3
Military	5	1
Police	1	0
Universities	4	0
Corrections Dept	1	1
Private	70	8
Total	97	21

- Depts of Health and Medical Services, Bangkok Metropolitan Administration
- Health Centre 21, Sukhumvit (BMA)
- Klang Hospital (BMA)
- Navamin Hospital (Private)
- Government Pharmaceutical Organization
- Queen Sirikit National Institute of Child Health (MoPH)
- Chulalongkorn Hospital (University)
- Siriraj Hospital (University)
- Central Correctional Institution for Drug Dependents
- National Health Security Office
- DDC

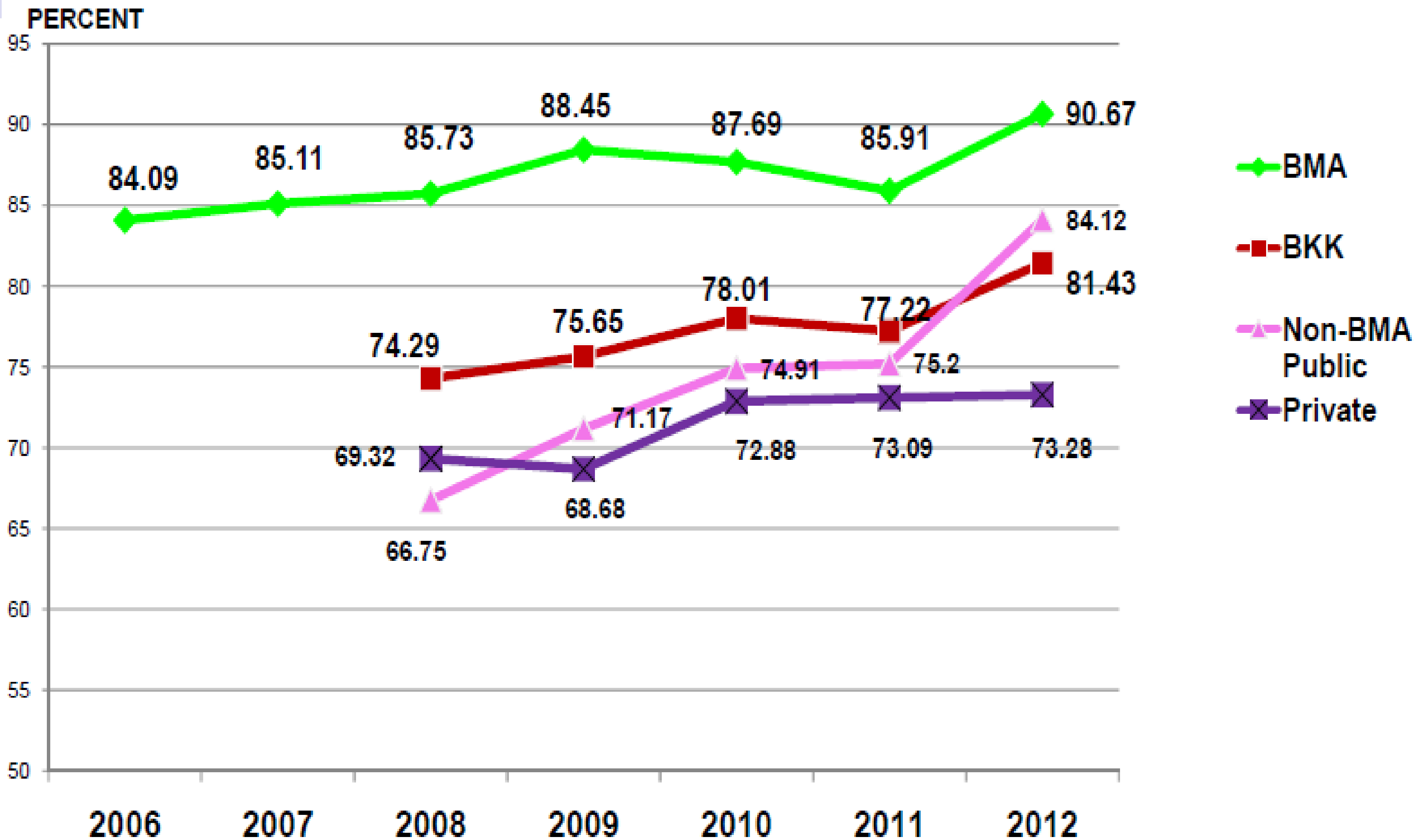
All forms notified per year to BMA



New Sm +ve, treatment outcome by year, Bangkok facilities



Treatment success (Sm +ve) Institution by year



Case finding

- Situation
  - Five-fold increase in case finding, 2007-2011
  - Default, transfer out and death rates all reduced. Not evaluated?
  - No TB suspect registers seen – patients treated "temporarily", maybe recorded in OPD card
- Issues
  - Notification rate 125/100k population – but denominator uncertain
  - Access high - except for undocumented foreign workers
  - Many cases not reported - eg Chulalongkorn Hosp 88% of 729 in 2012
- Recommendations
  - Improve notification – see later for options

Laboratory diagnosis

- Situation/progress
  - Highest tech facilities available, LED commonly used
  - No stock out of reagents reported
  - QA system with NTRL and acceptable results in facilities visited
- Issues
  - Reports of long turn-around time
  - Data management chaotic
    - Entering data separately into 2 computerised systems
    - Plus 2 paper systems, and TB register often a printout
    - Initial defaulters impossible to determine
    - Some facilities provide routine C&S, others not.
- Recommendations
  - Rationalise data collection – see R&R

Treatment

- Situation/progress
  - Generally good, correct regimens, no stock-outs
  - No sign of systematic use of fluoroquinolones in FLD regimen
- Issues
  - New treatment guidelines overdue
  - Category II still in use as empirical treatment while awaiting DST
  - Decision to continue Initial Phase relies on CXR progress, not smear
- Recommendations
  - Finalize and distribute new treatment guidelines urgently
  - Replace Category II with empirical treatment based on DRS
  - Use smear (and weight, etc) to assess need for extension of IP

Patient support, observation of treatment

- Situation/progress
  - Mostly DOT by health staff (for patients in BMA HCs), 32-42% family DOTS, 2009-2012 in BMA facilities
  - Increase in Health Volunteer DOTS associated with improved outcomes
  - Enablers for disadvantaged patients to attend clinic (amounts unclear)
- Issues
  - Neither staff nor patients convinced by DOT – result is failure to supervise patients
- Recommendations
  - Commit to 100% patient follow up, make requisite organizational and staff changes, eg monitoring unit in BMA

Management of anti-TB medicines and supplies

- Situation/progress
  - No stock outs reported
- Issues
  - FDCs not always used and said to have more side effects
  - CSMBS and SSS pay for drugs procured by hospitals, case by case, and thus expensive
- Recommendations
  - Increase use of FDCs (discuss with NHSO and GPO)
  - Single procurement system for all insurances

Recording and reporting, surveillance

- Situation/progress
  - Most institutions visited reporting to both BMA and BTB
- Issues
  - Computerized database for BTB (TBCM), plus separate database for institution (private hospital)
  - Plus paper system – lab register and TB register (sometimes a print-out of TBCM)
  - Unclear role of ODPC 1
- Recommendations:
  - Single nationwide, electronic, case-based system for R&R (perhaps with double entry for increased reliability)

Supervision of institutions and staff

- Situation/progress
  - Tertiary facilities very lightly supervised – probably appropriate
  - HC not aware of any supervision plan
- Issues
  - TB notification mandatory, but not always done, and no sanctions
  - Neither BMA nor BTB nor ODPC1 is in authority over non-BMA facilities
- Recommendations
  - Establish/strengthen regulatory systems for non-BMA facilities
  - Once case-based electronic database in operation, supervision can be reduced in well-performing units, intensified to poor performers

Childhood TB

- Situation/progress
  - 2008-2013, 0-14 year olds were 0.1-0.5% of total BMA cases, trending down
  - Highest quality tertiary care available
  - Ethambutol in regimen at $\leq$20mg/kg
  - Contacts investigated in HC but much less in tertiary care facilities
- Issues
  - Under notification
  - Probable under diagnosis, and under treatment
- Recommendations
  - Improve notification, and thus contact tracing

TB/HIV

- Situation/progress
  - ~95% testing in BMA facilities (PITC), peak of 21.6% HIV +ve in 2009, 14% in 2012
  - ART 10-66%, 2006-2012
  - TB screening in HIV patients ~95% for facilities visited
- Issues
  - CPT - no data
  - VCT rather than PITC in some non-BMA facilities
- Recommendations
  - PITC 100%
  - ART for all HIV+ TB patients, irrespective of CD4 count and CPT at least until CD4 in normal range

MDR-TB

- Situation/progress
  - 12-29 cases, 2006-2012
  - Many facilities doing routine C&S
  - Ofloxacin routine
- Issues
  - Guidelines urgently needed
  - Transition to levofloxacin beginning
  - ?Outcomes of MDR-TB
- Recommendations
  - Finalise guidelines urgently
  - Ensure ofloxacin phased out as soon as possible

Involvement of all care providers

- Situation/progress
  - Minority of private and non-BMA institutions reporting well
- Issues
  - 62/70 private hospitals and 10/15 public ones out of control, unsupervised, unregulated, quantity, quality and outcomes of treatment unknown
  - DOT not well accepted by private clientele, and probably by most of middle-class Bangkok
  - Patients get 1 month supply from private hospital – & avoid DOT
- Recommendations
  - See previous recommendations on notification and DOT

Migration: Internal and Cross-border

- Situation/progress
  - Health care and insurance officially obtainable, but only 1/3 of documented FMWs do so – why?
- Issues
  - Small numbers of foreign migrant workers reported
  - "Since the introduction of the **complex** [and] costly … **nationality verification system**, **statistics** show communicable diseases among migrant workers have increased **significantly**" – Deputy PS, MoPH, Bangkok Post, 3 May 2013
  - High default rates among migrants
- Recommendations
  - Migrant health is a big issue. AEC is coming. Barriers to care need to be rapidly reduced for FMWs with TB. TB authorities should be engaged in this debate, with TB data

Planning, Budgeting, Financing

- Situation/progress
  - Major progress in social and health protection with almost all population covered, foreign migrants the one big exception
  - NHSO greatly contributing to diagnosis and treatment costs, reimbursing private facilities
  - BMA TB control costs, without salary costs:

	BMA	Non-BMA
Costs 2012 (Baht)	29,272,548	6,528,734

- Issues:
  - 3 insurance schemes, planning and strategy development process unclear
- Recommendations
  - True costs of TB control need further analysis

Contributing to Health Systems Strengthening

- Situation
  - Notification system broken
  - NGOs and Stop TB Partnership pretty invisible
  - TB/DM becoming a recognized issue
- Issues
  - Data needed on TB/DM interaction
- Recommendations
  - TB authorities should help strengthen notification system
  - Follow up system needs complete overhaul – NGOs should play a role
  - TB "voice" should be heard in discussions on migrant health
  - Operational research studies on burden of TB in DM, and v.v.

Infection control

- Situation/progress
  - 1 hospital recording TB in staff (2-3x background rate) and making infrastructural changes
  - Respirators generally available
- Issues
  - Generally, no systematic approach to infection control
  - Generally, insufficient ventilation, especially one clinic room
  - Sometimes staff use surgical masks
- Recommendations
  - Systematic approach to airborne infection control (eg WHO guidelines)
  - Regular collection of data on TB in HCWs (?using 13 digit ID no.)

Conclusions

Progress on 2009 recommendations (indicator for political commitment)

- BMA has worked hard to address 2009 review recommendations and improved case finding (5X!) and outcomes in those patients reported to them
- BUT –
  - No unified system of TB management across Bangkok – no overall coordinator
  - Treatment outcomes still unsatisfactory
  - Still under-reporting, and likely significant
  - DOT continues not well accepted, and not enforced
  - Unclear role of Bangkok TB Committee
- Accountability unclear

Major challenges in 2013

- Under-reporting and under notification
  - Especially among children
- DOT often not performed
- No institution taking responsibility for unifying TB control in the city
  - Lack of assertiveness in BMA (and BTB)

Recommendations 2013

- The target should be notification of all TB cases
  - Through repair of notification system by central government until mandatory reporting of all cases, with enforced sanctions for non-reporters
  - (Re-) Establishment of clear regulatory control over non-BMA facilities by national government or BMA

Recommendations 2013

- Ensure 100% follow up. DOT is the only system recommended by WHO and certainly should be applied to all difficult cases.
  - Monitoring centre to be set up in BMA, before ASEAN EC come into force, to take responsibility for following up cases, with dedicated staff, outreach workers and adequate budget

Recommendations 2013

- Central government should establish a single nationwide, case-based, electronic, web-based recording and reporting system for all facilities

Annexes – for background and illustration

- Maps
- Organizational charts
- Tables, graphs, figures
- ACS materials
- Samples of various areas of work
- Pictures (digital)
- List of places visited, people met