

Hospital Engagement in TB Control: progress and the way forward

National Centre for TB Control and
Prevention, China CDC

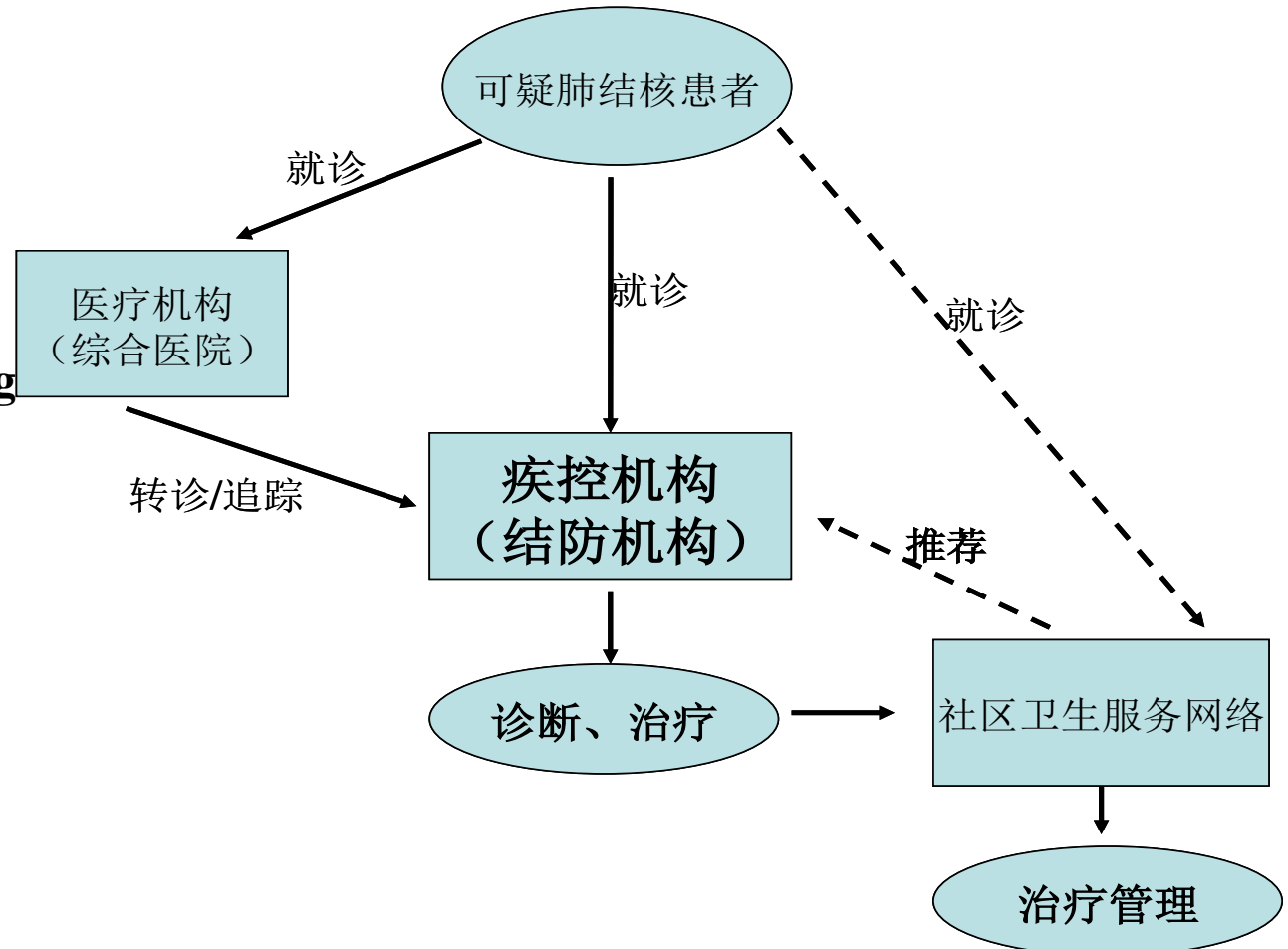
August, 2013

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- New model of hospital engagement for MDR-TB control
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TB service system for DOTS

- **Diagnosis and treatment by TB dispensaries**
- **Reporting/referring from hospitals**
- **Referring suspects and DOT by the community health center**

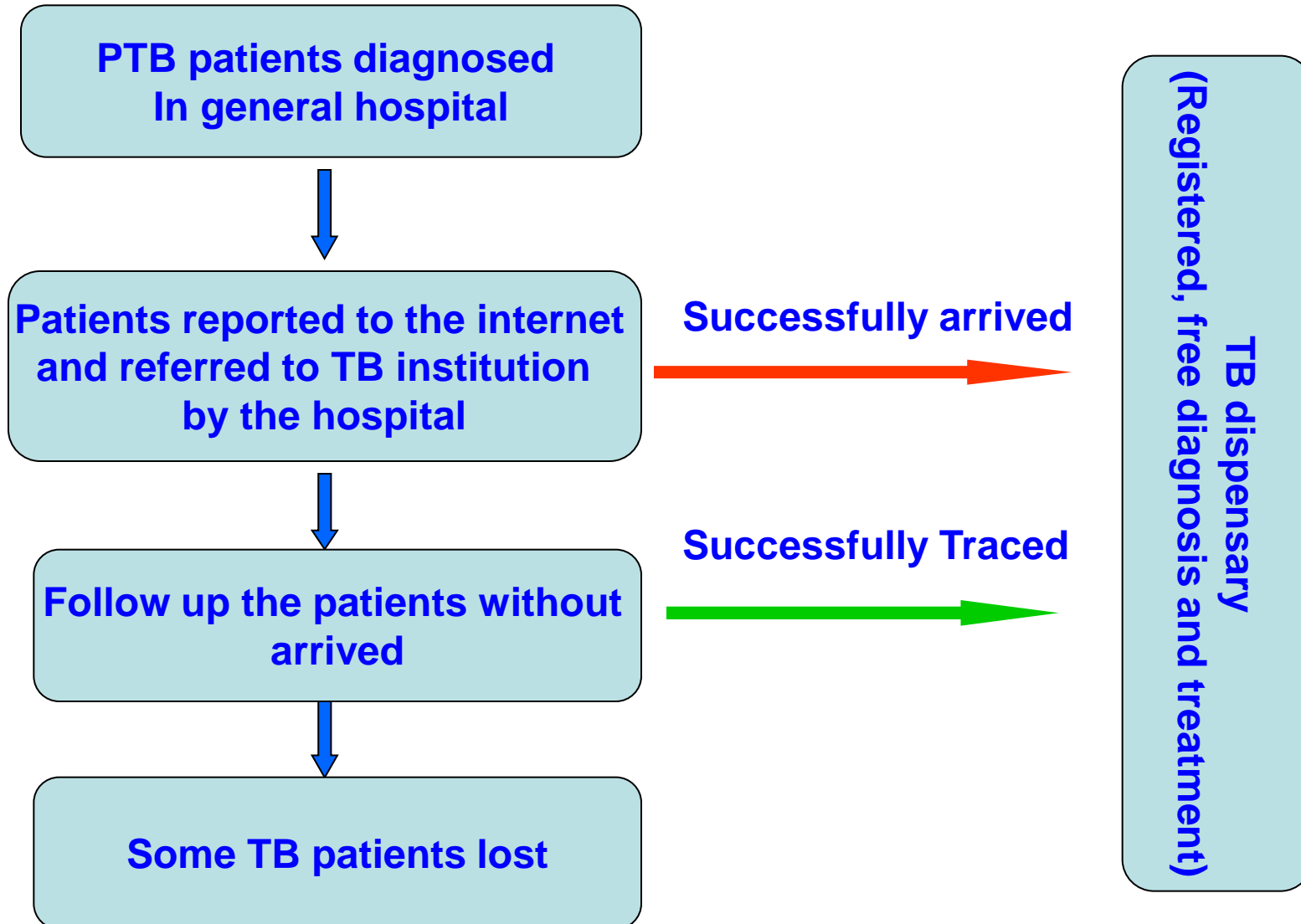


TB control service network for DOTS

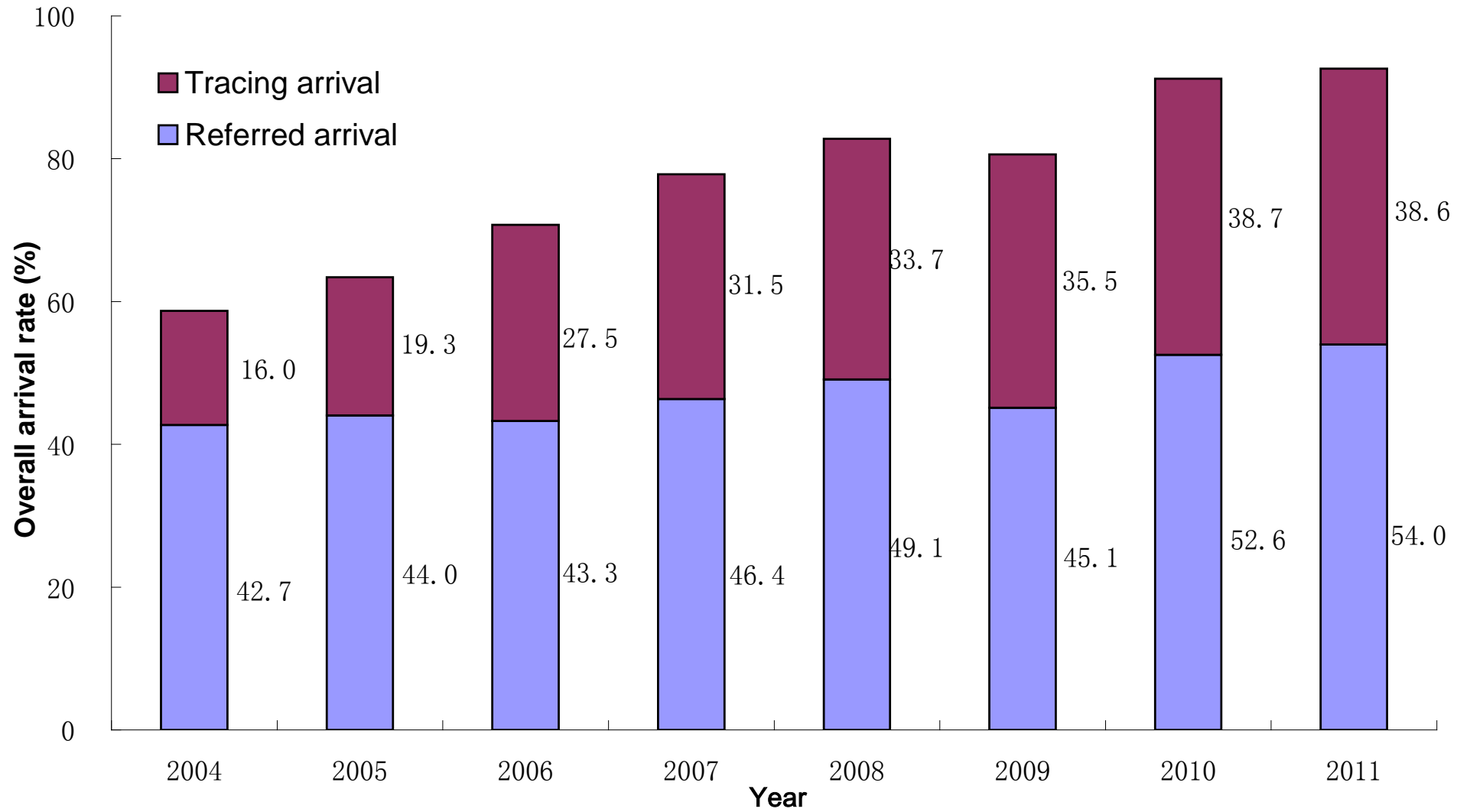
Task	CDC	General hospital	Community health service station and village clinic
Identify suspects	+	+	+
Sputum microscopy	+	+/-	
TB Diagnosis	+	+	
Prescribe treatment	+		
Supervise treatment			+
Maintain records	+		
Case notification	+		
Drugs and supplies	+		
Training, surveillance, health promotion, etc	+		

Use IDRS to improve case detection in NTP

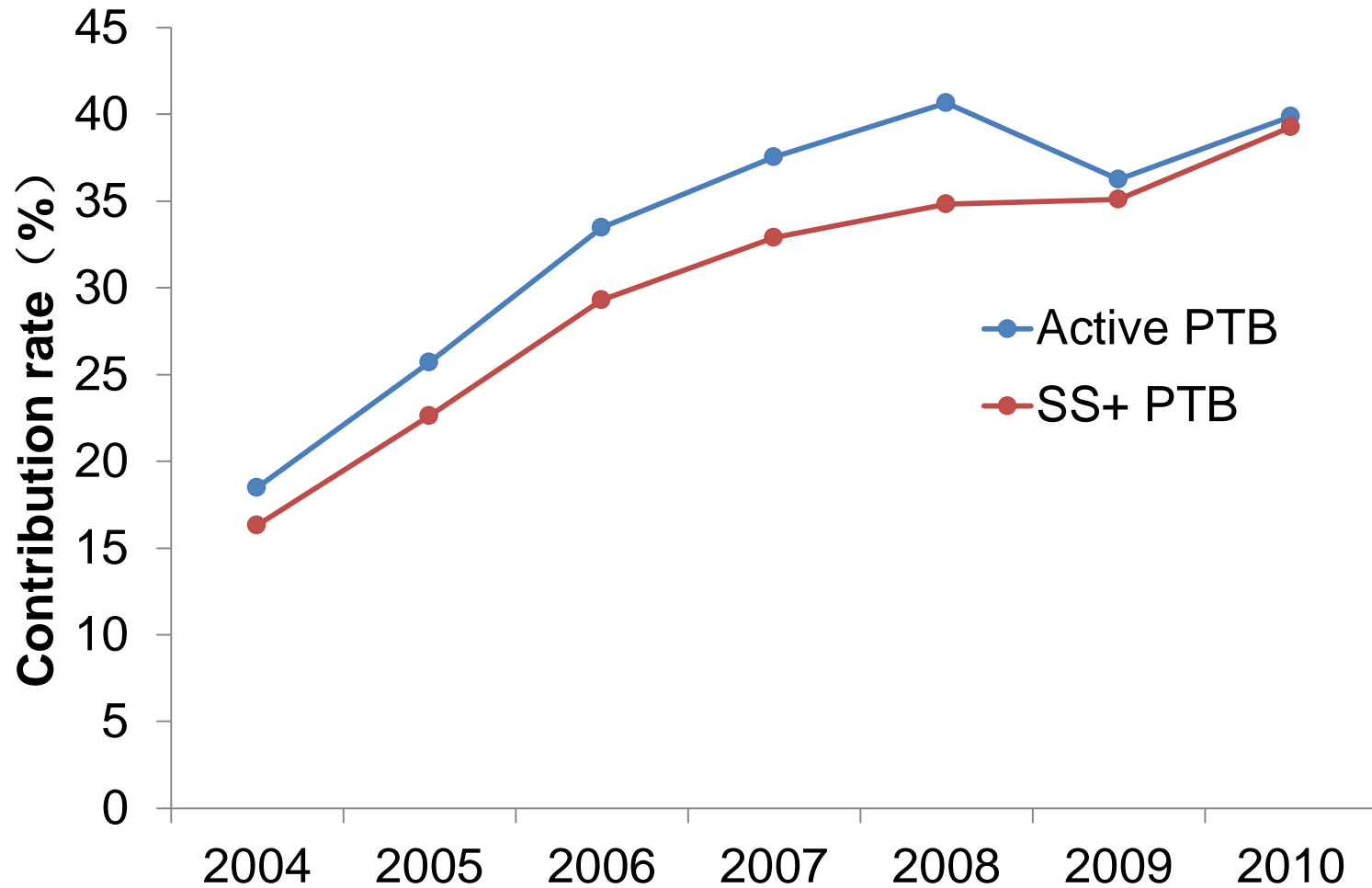
IDRS: Infectious Disease Reporting System



Contribution to total arrival rate, 2004-2011



Contribution to notified TB cases (2004-10)

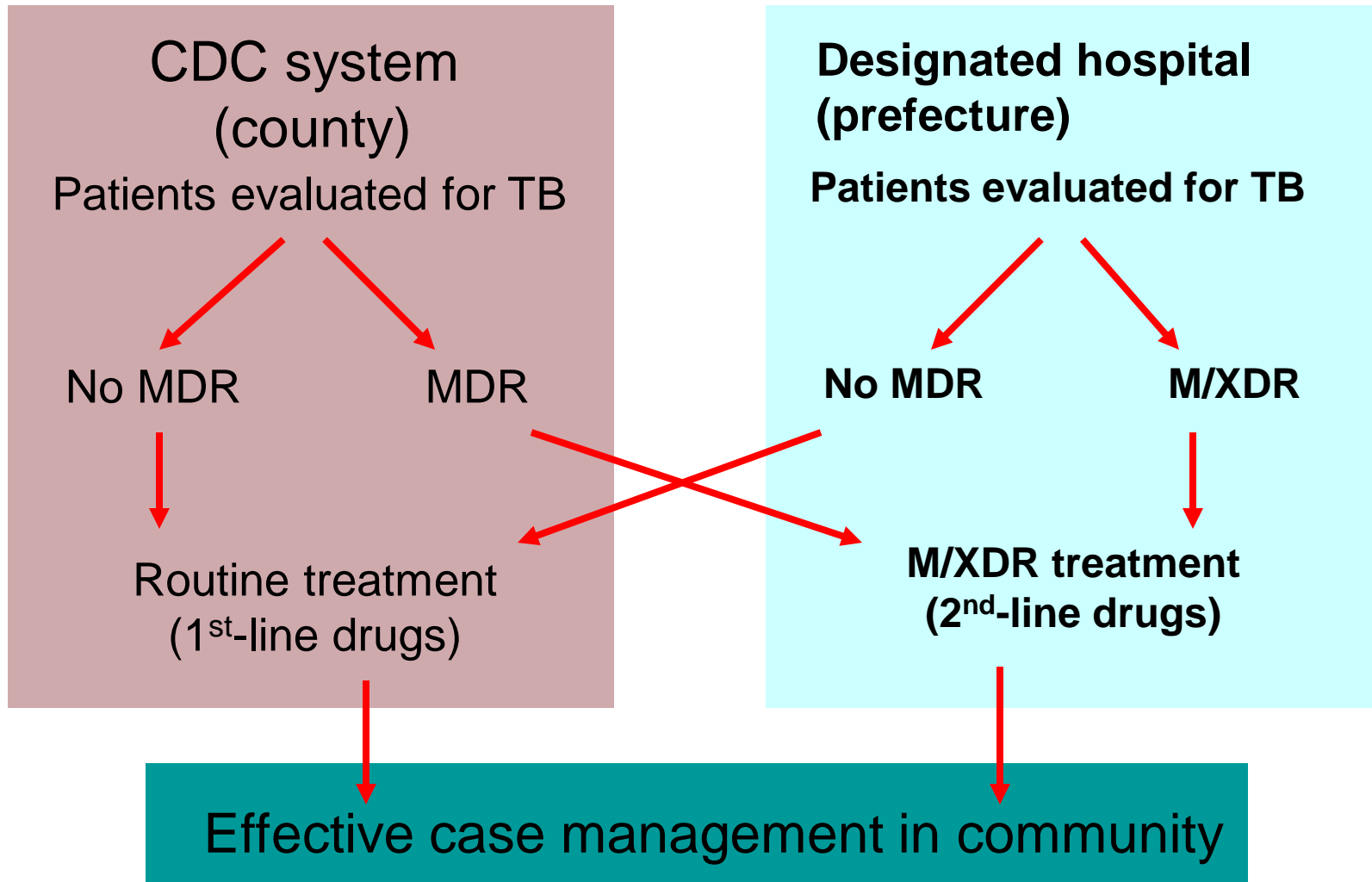


New model of hospital engagement for MDR-TB control

MDR-TB control service system

- Prefectural designated TB hospital
 - diagnosis, treatment and management of MDR-TB
- Prefectural CDC
 - Patient management, recording & reporting, supervision, training other health facilities' staff, ACSM
- County-level CDC
 - Specimen and/or strain transportation, management after patients discharged from hospital
 - Community level: Health education, social support, ADR reporting , DOT

Building up hospital-CDC collaboration address M/XDR TB



Pilot program

- **Objectives**

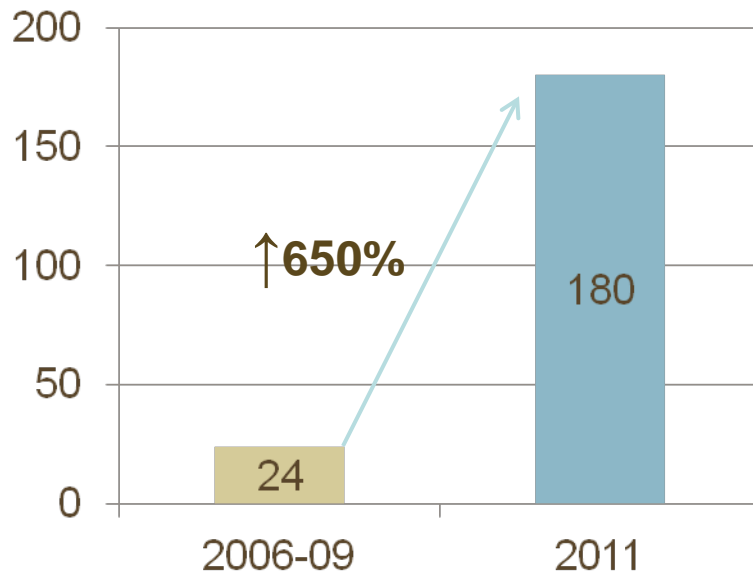
- Ensure all TB patients have access to rapid, quality testing for MDRTB
- Utilize standard clinical pathway for MDR-TB care
- Build collaboration between CDC and hospital systems to ensure continuity of care from diagnosis to treatment completion
- Reduce financial barriers to MDRTB treatment by increasing insurance reimbursement and providing subsidies for treatment

- **Study population and period**

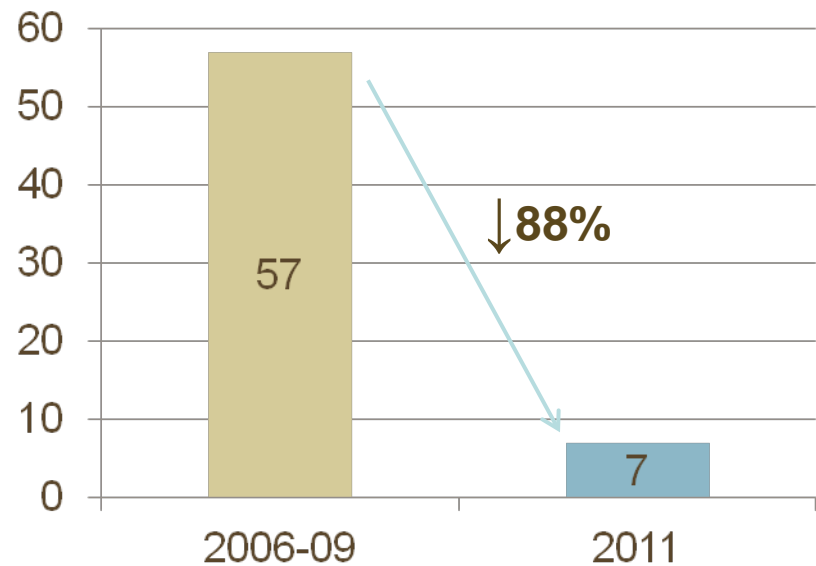
- 4 cities , total population: 21 million
- Baseline assessment (retrospective): Jan 2006-Oct 2009
- Intervention period (prospective): Pt recruitment in 2011; then follow-up

Increased case-finding and more rapid diagnosis of drug-resistant TB

MDRTB patients diagnosed per year



Time to diagnosis of MDR or rifampin-resistance (days)



Availability of resistance testing (2006-09)

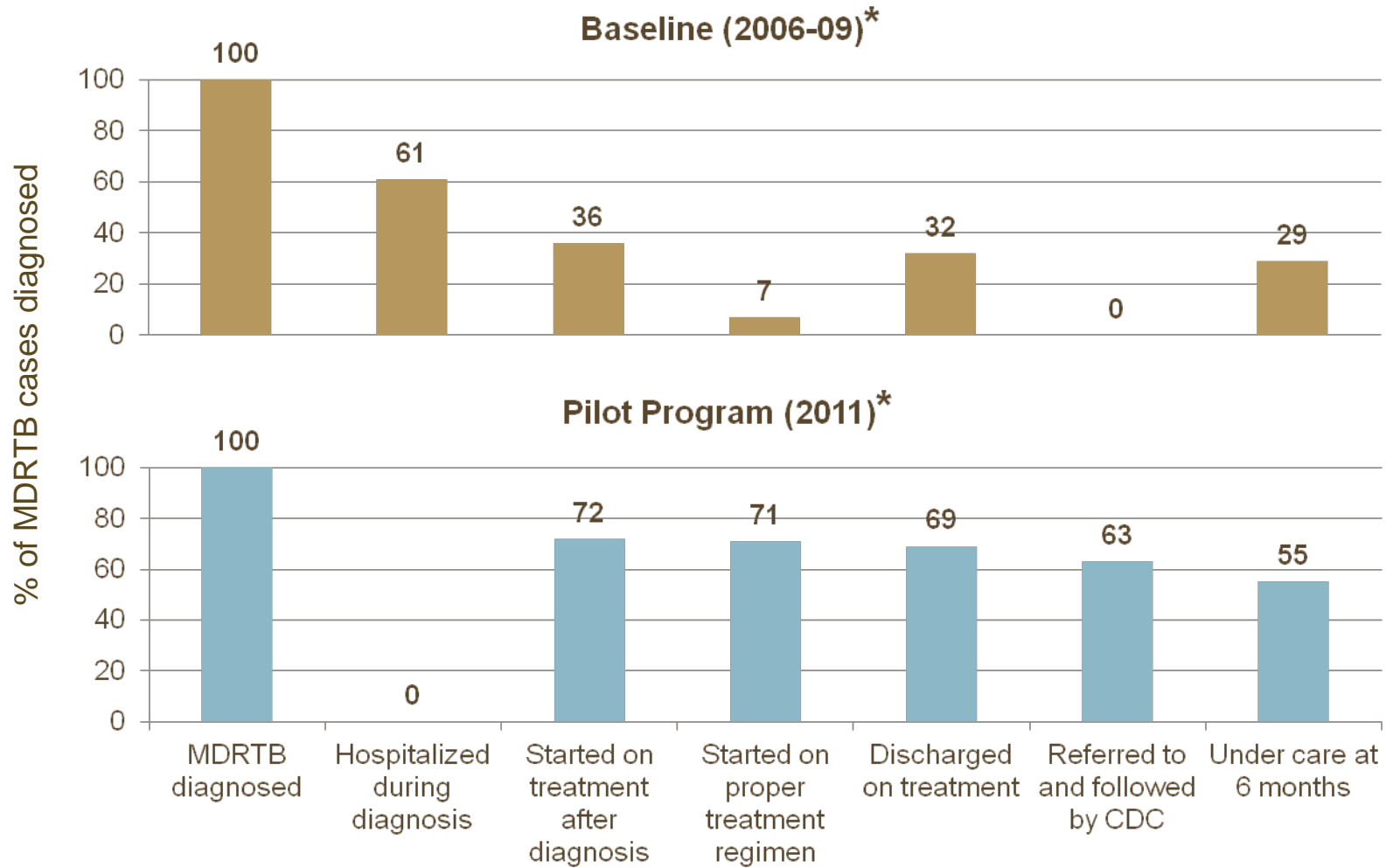
- No testing in CDC's
- Limited testing in hospitals
- Used conventional methods
- Only 3 cities had testing



Availability of resistance testing (2011)

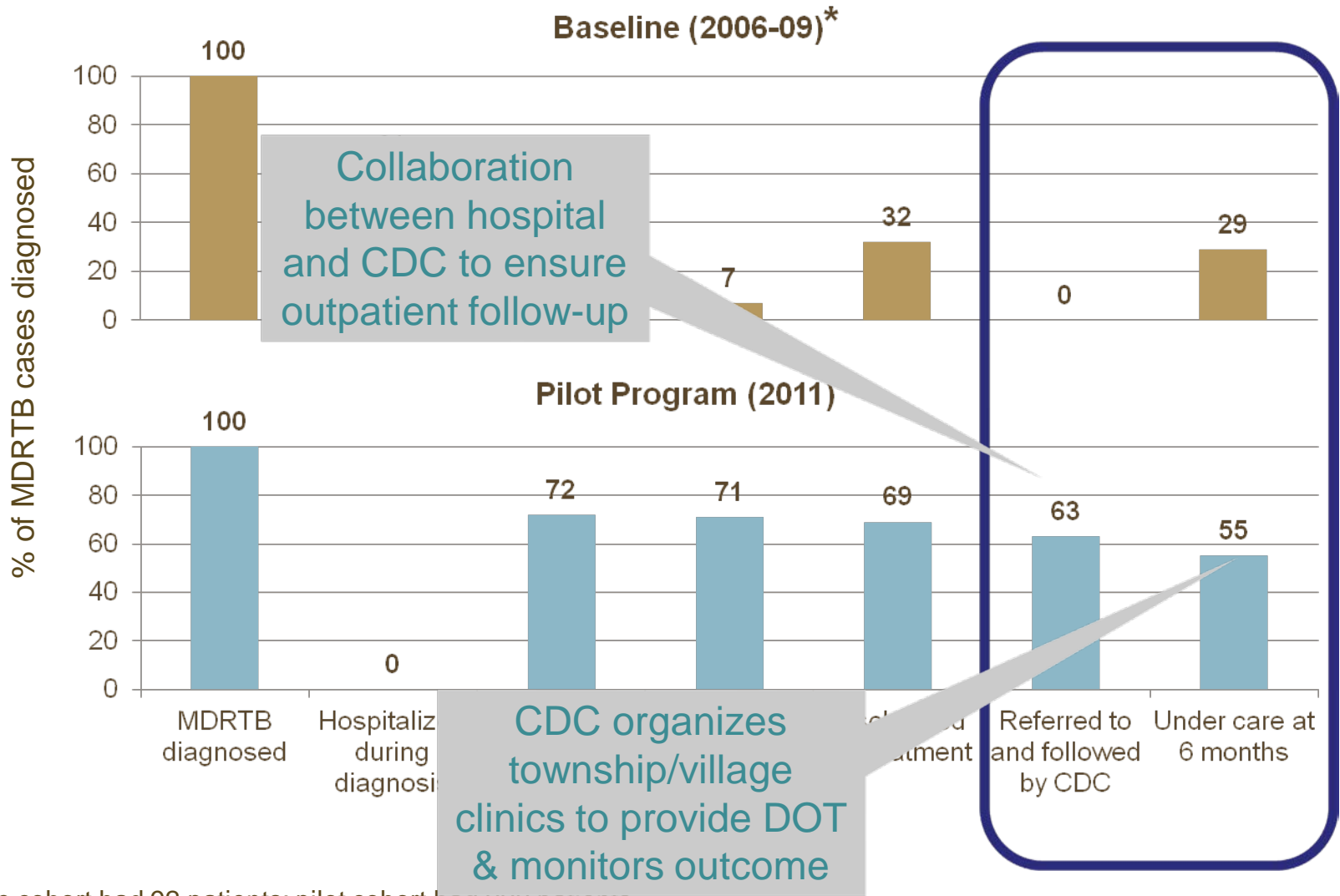
- Universal testing for CDC patients (CDC sent specimens to hosp)
- Universal testing in hospitals
- Uses rapid molecular methods
- All 4 cities has testing

Analysis of MDRTB patient cohort



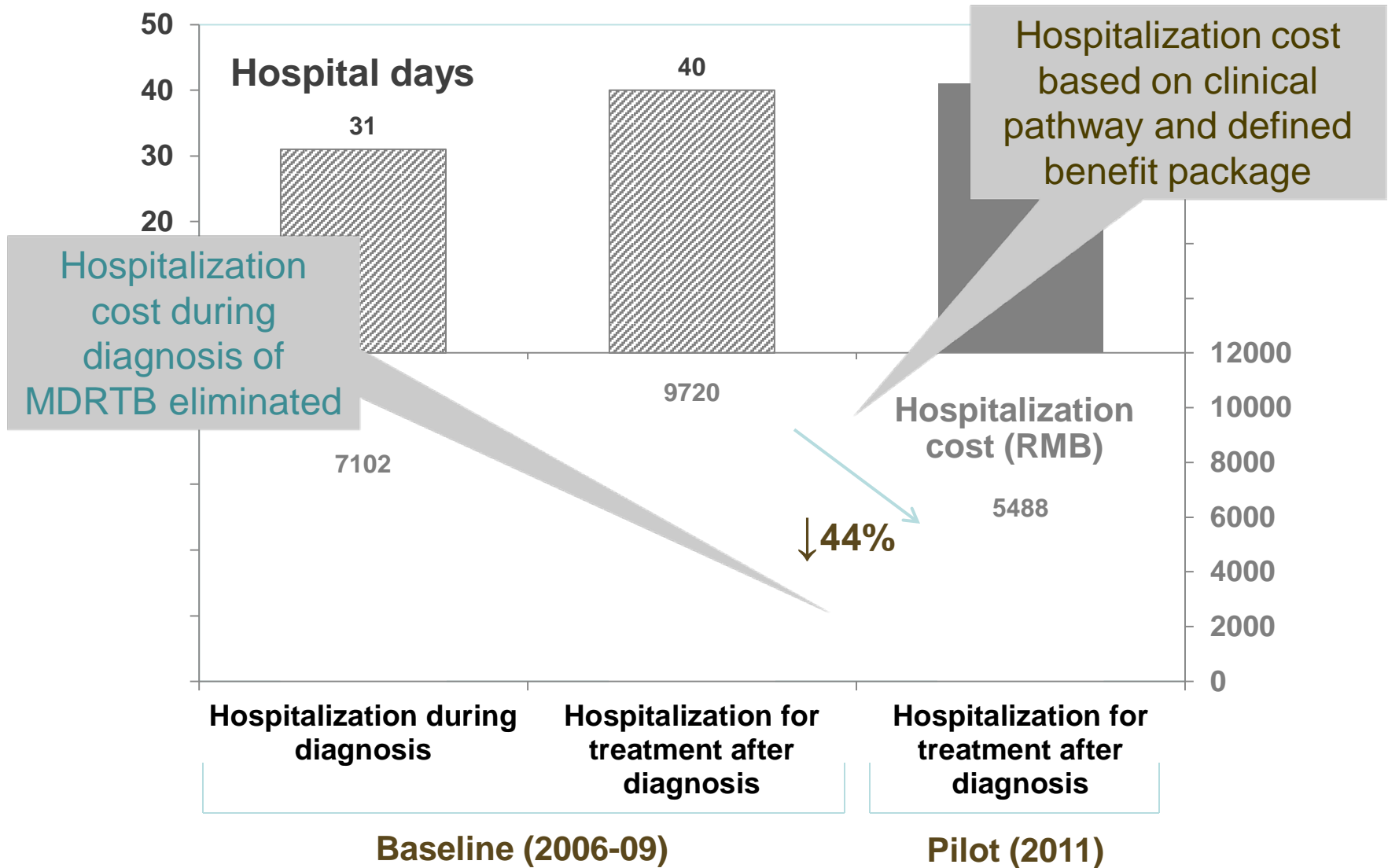
* Baseline cohort had 92 patients; pilot cohort had 220 patients

Higher % followed by CDC in community and under care at 6 months

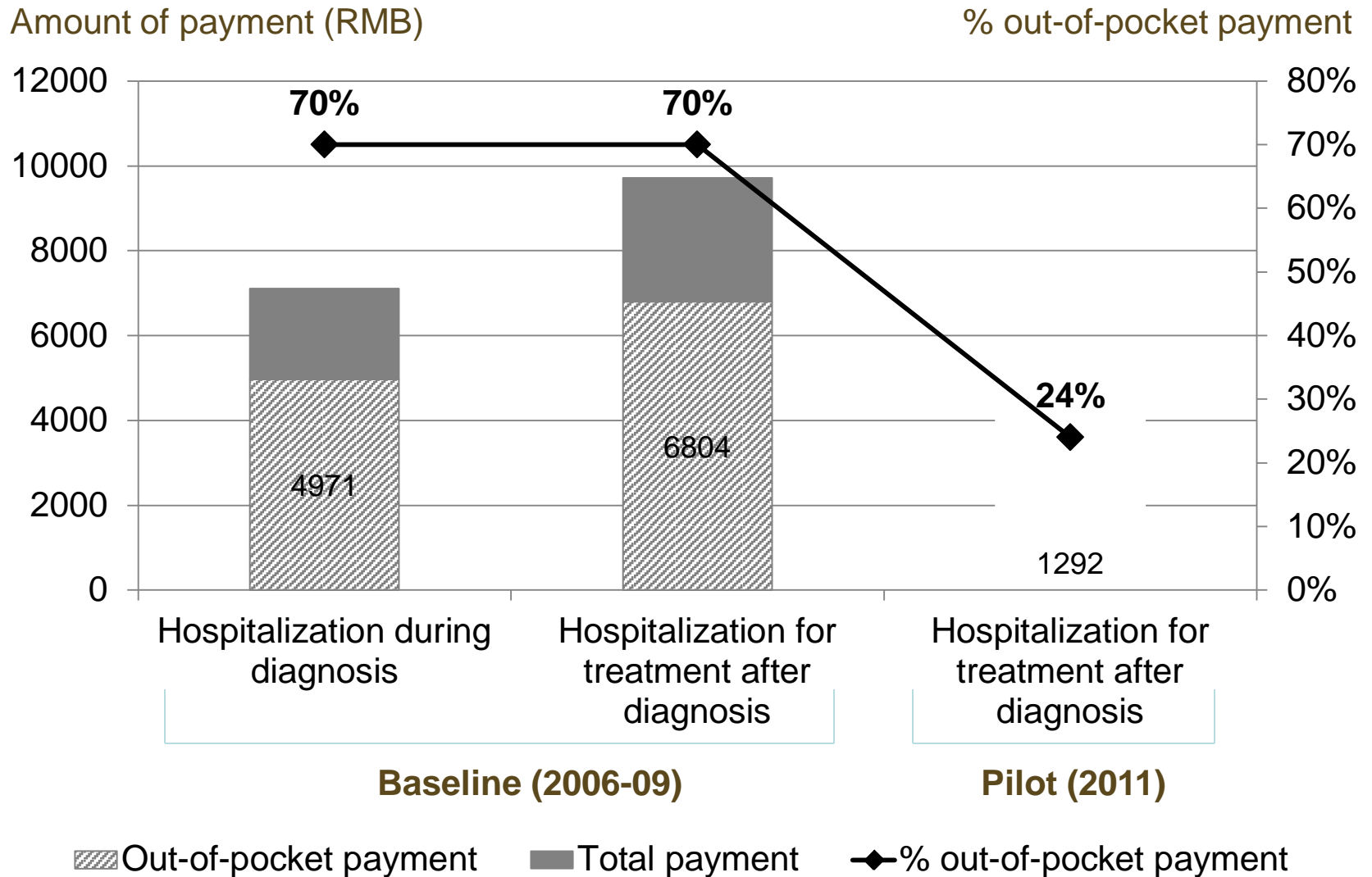


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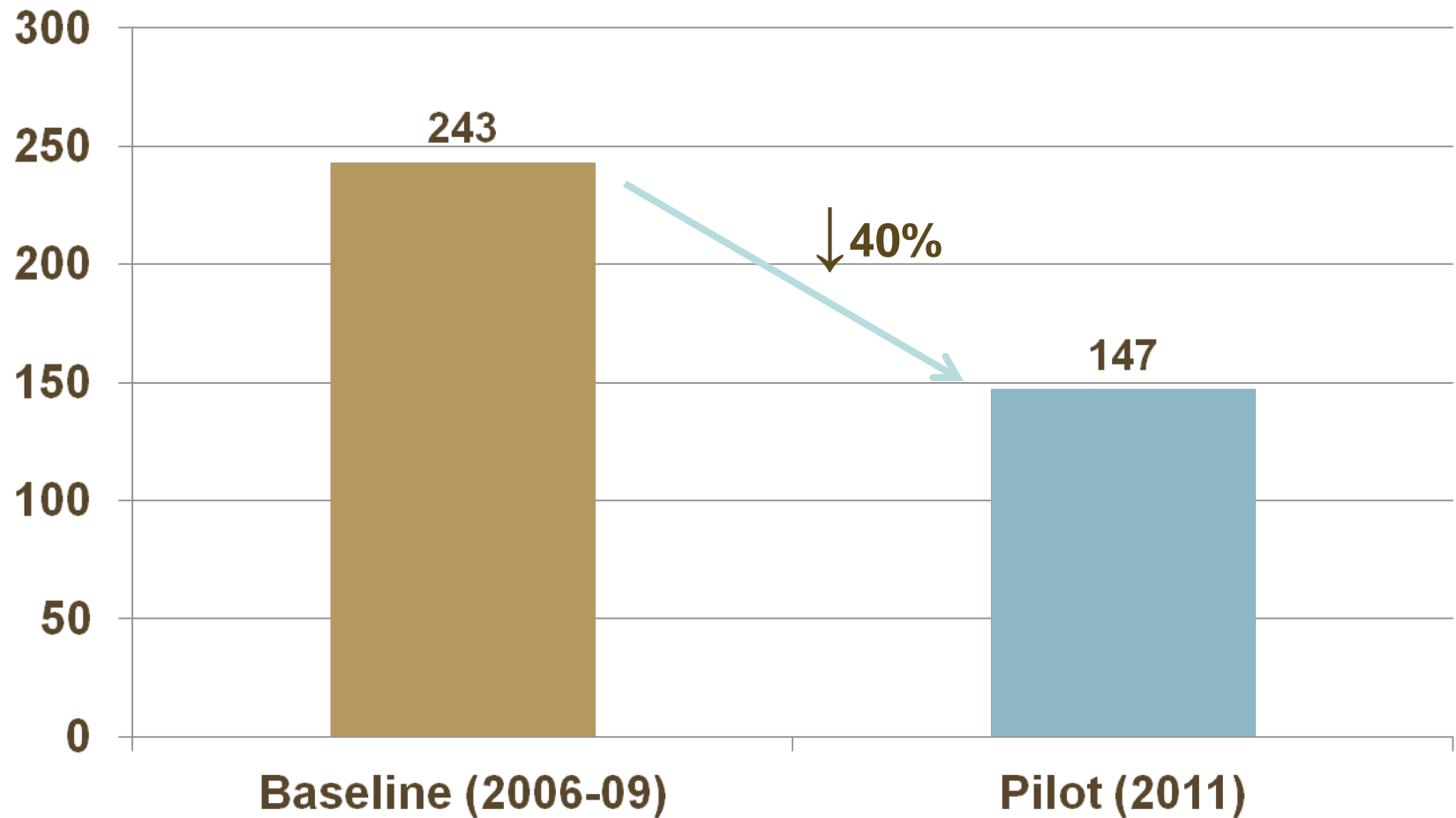
Reduced cost of hospitalization



Reduced out-of-pocket payment



Reduced cost per hospital day (RMB) for MDRTB treatment after diagnosis



Experiences and challenges

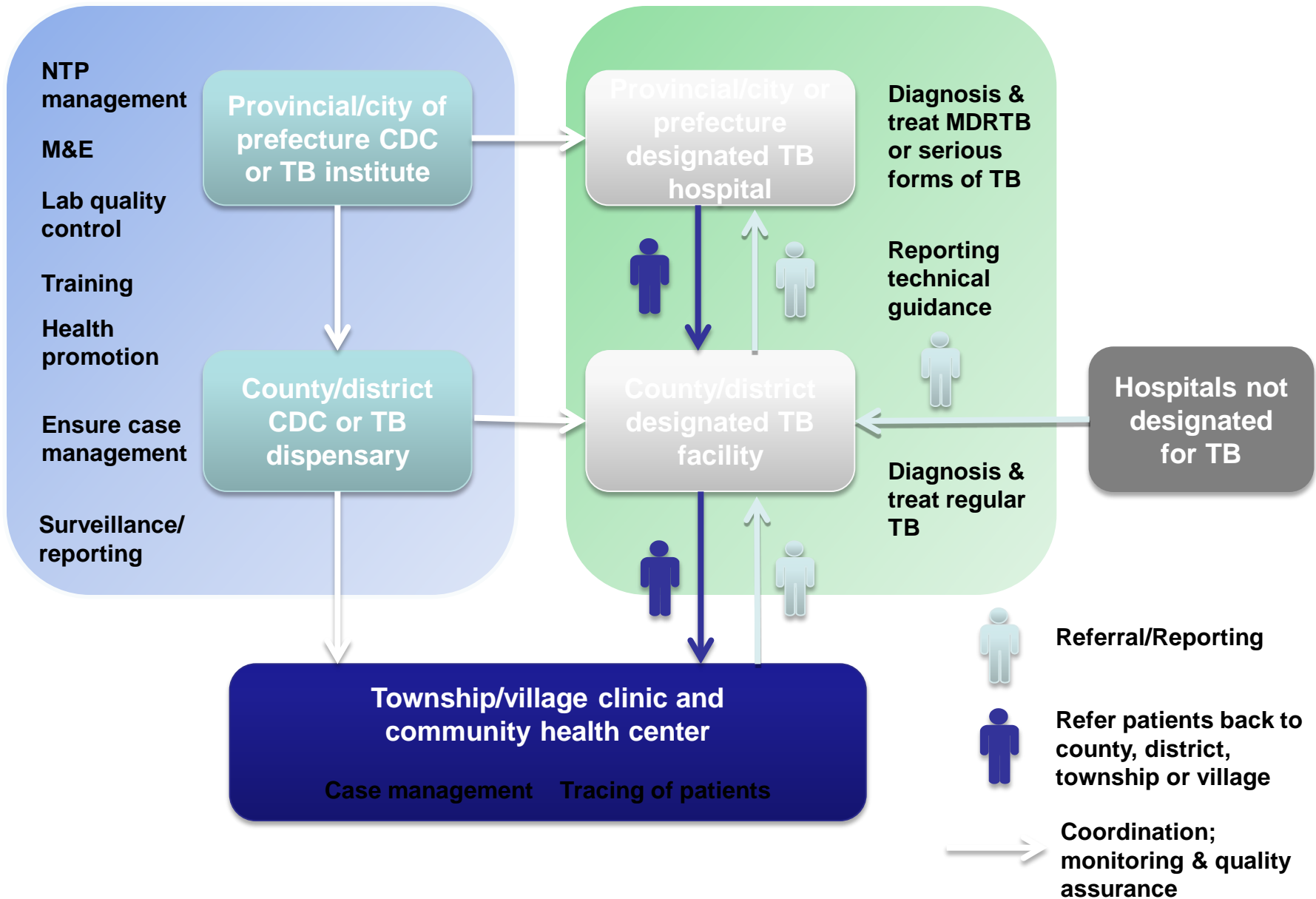
- **Experiences**

- Hospital engagement is the critical factor to the success of PMDRT
- The implementation in project sites is showing to be feasible

- **Challenges**

- Proper compensation mechanism to the hospital needs to be explored;
- Motivation and high-risk subsidy should be provided for TB staff;
- More training needed for designated hospital doctors, such as
 - R&R
 - standard regimen
 - health promotion
 - TB infection control

Future model & ongoing piloting



The responsibilities in new TB control model

Task	CDC	Designated hospital	Other hospital	Community health service
Identify suspects		+	+	+
Sputum examination		+	+/-	
Make a diagnosis		+	+	
Prescribe treatment		+		
Supervise treatment				+
Maintain records		+		
Case notification		+		
Drugs and supplies		+		
Planning, Training, surveillance, health promotion, monitoring, etc	+			

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国务院办公厅文件

国办发〔2011〕53号

国务院办公厅关于印发全国结核病防治规划(2011—2015年)的通知

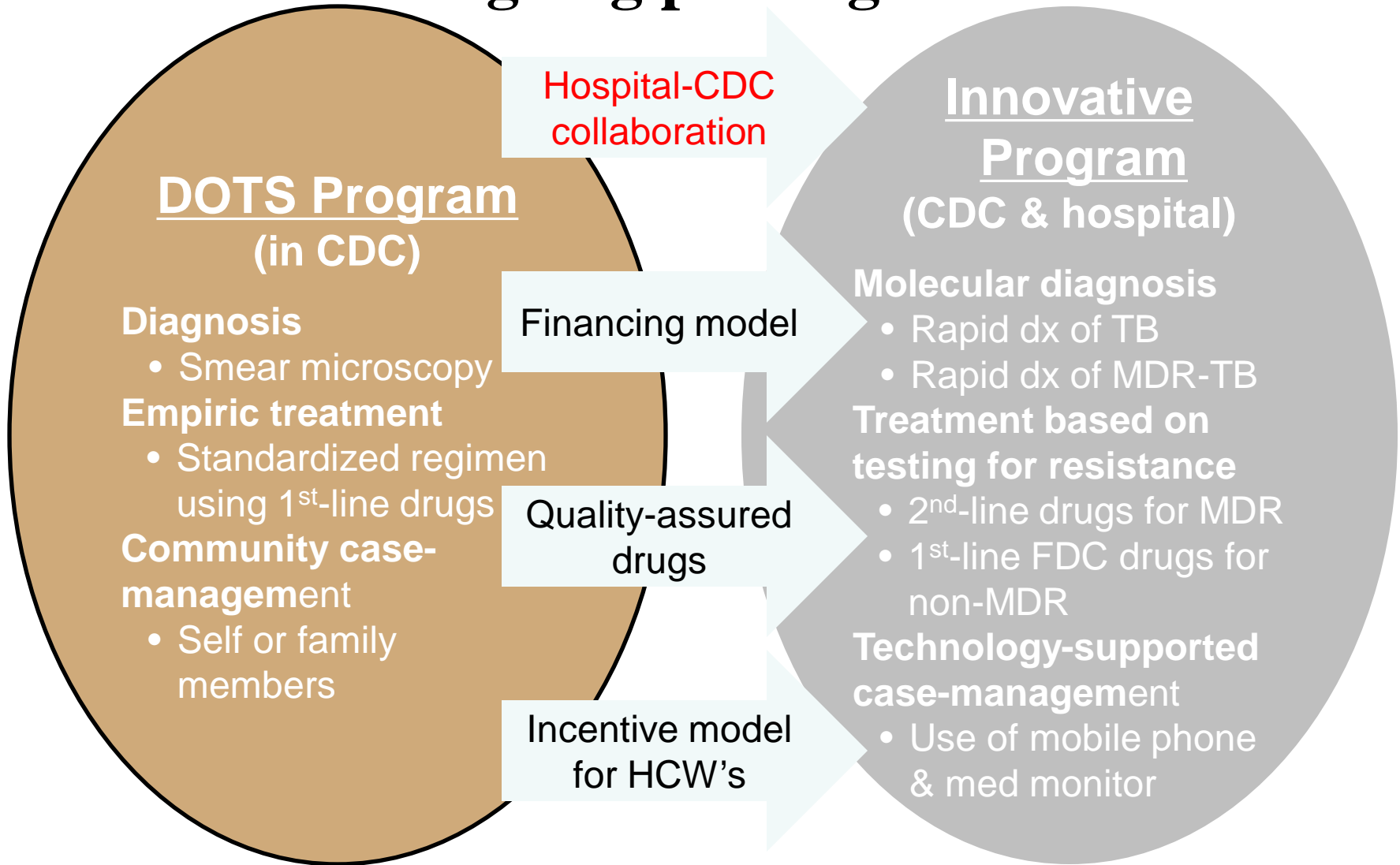
各省、自治区、直辖市人民政府，国务院各部委、各直属机构：

《全国结核病防治规划(2011—2015年)》已经国务院同意，现印发给你们，请认真贯彻执行。



二〇一一年十一月十七日

Ongoing piloting



TB control integrated with Health Reform

- For patient: Increasing reimbursement for in- and out-patient services
- For hospital
 - management: utilization of the clinical pathways and case-based payment
 - Link with public hospital reform
- For primary health care providers
 - Link with community health-care reform