



中国结核病防治  
CHINA TUBERCULOSIS CONTROL AND PREVENTION

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# **TB Control in China**

## **--Challenges and Opportunities**

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**NCTB, Chinese CDC**

**May, 2012    Shanghai**



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- Policy and strategy
- Achievement
- Challenge
- Look forward



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# Policy and strategy



# Strategy

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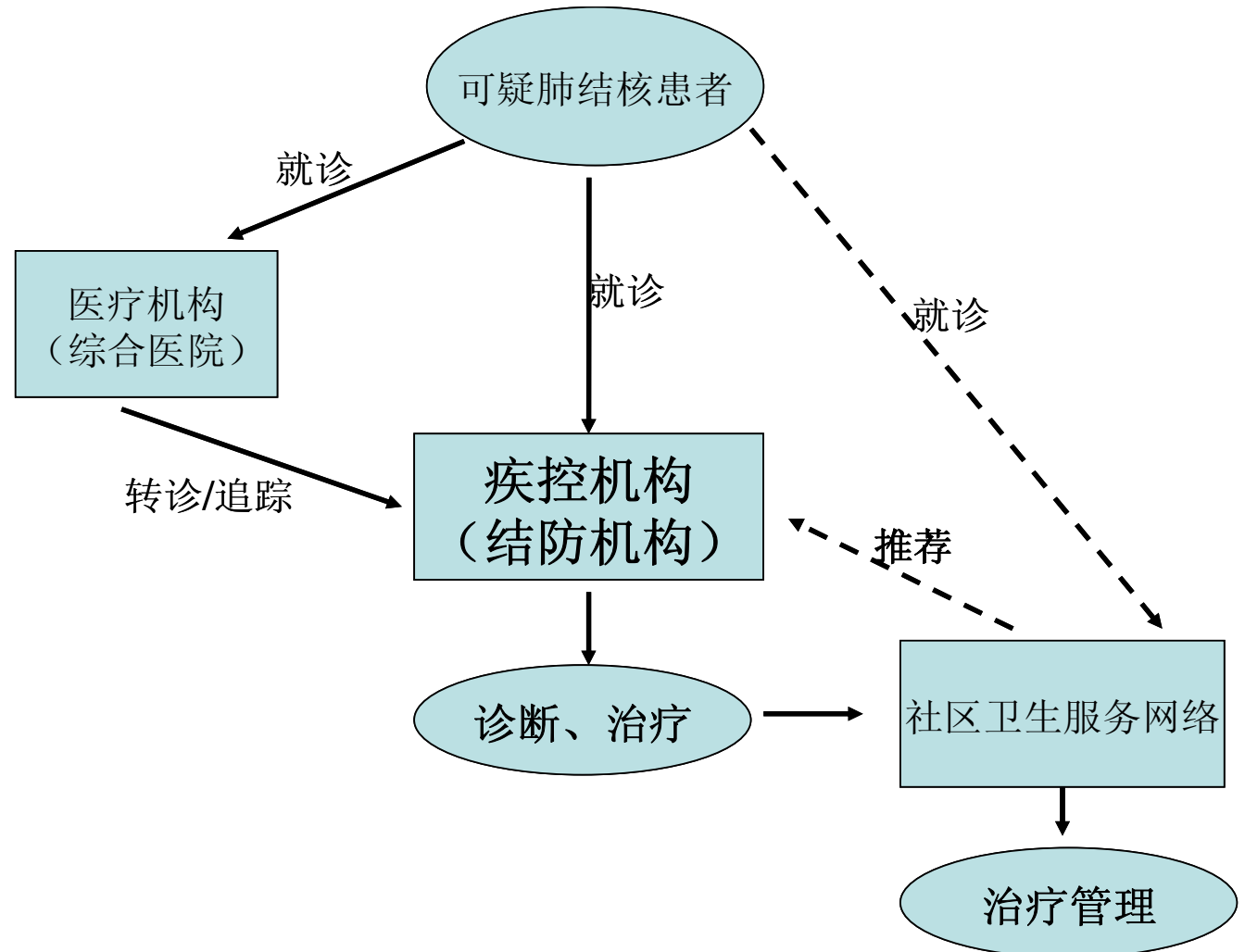
## Strategy: DOTS strategy

- Policy of patients centralized
  - Free diagnosis for TB: Microscopy and X-ray examination
  - Free anti-TB drug for treatment: first-line anti-TB drugs and DOT
- Piloting for addressing challenges
  - Vulnerable groups: floating population and prisoners
  - TB/HIV
  - MDR



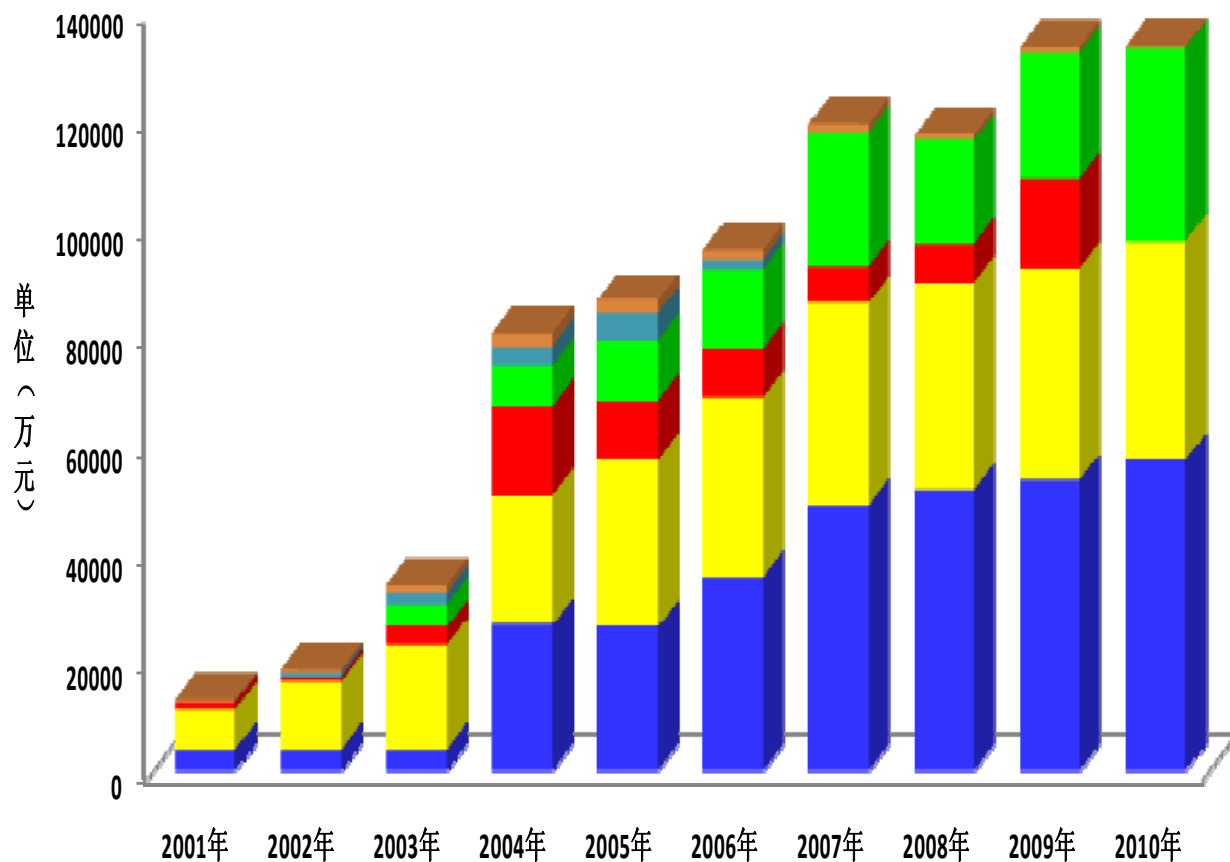
# TB service system

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





# Available Funds from 2001 to 2010



Central government increased funding from 40 million in 2001 to 0.58 billion in 2010

Funds (RMB) for TB control was increased from 0.13 billion in 2001 to 1.34 billion in 2010

■ 中央政府 ■ 地方政府 ■ 世行贷款 ■ 全球基金 ■ JICA ■ 其他



# Internet-based National TB Information System

中国疾病预防控制中心信息系统 - Windows Internet Explorer

http://1.202.129.170:81/SMP/logon.do?method=ACTION\_METHOD\_FLAG\_LIST&ticket=ST-11426-HrJkl0IvYe2

中国疾病预防控制中心信息系统

您好, 黄飞 修改个人信息 修改密码 退出

在线人数: 3949 / 44085

Function Menu

Search Area

Case list

结核病管理信息系统

报告卡管理

- 报告卡浏览

病案管理

- 患者病案登记
- 患者病案管理
- 耐多药可疑者
- 耐多药患者管理
- 患者转出管理
- 患者转入管理

项目管理

- 项目维护
- 项目启动情况统计表

季度录入报表

- 药品用量季度录入表
- 初诊患者检查情况
- 上季度结核病实验室工作情况
- 新登记涂阳患者家庭密切接触者
- 乡镇查痰点设置及患者发现情况
- 健康教育活动报表
- 督导访视情况

诊断单位浏览

录入时间: 2011-04-18 至 2011-04-18

登记分类: --请选择--

患者姓名: [输入框]

病案状态: --请选择--

诊断结果: --请选择--

治疗分类:  初治  复治  全部

转诊状态: --请选择--

户籍类型: --请选择--

耐药情况: --请选择--

HIV检查: --请选择--

添加

患者病案管理

显示登记本 查重

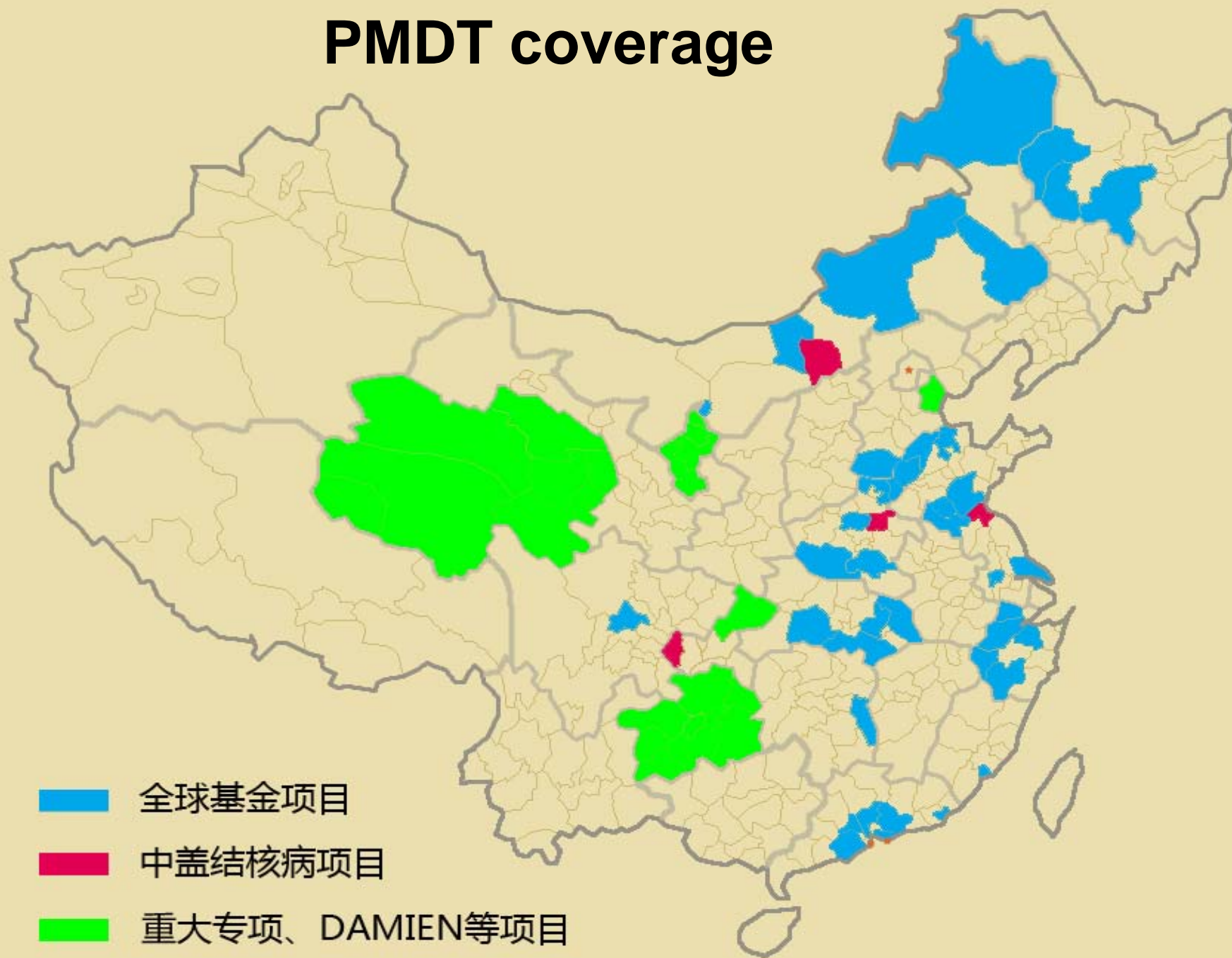
审核标记	登记号	首诊断单位	姓名	性别	年龄	登记日期	登记分类	诊断结果	2月末痰检结果	重新登记病案号	病案来源	治疗状态	转诊状态	操作
<input type="checkbox"/>	2211-00256	顺德区慢性病防治中心	王家军	男	36	2011-04-18	新患者	涂阴患者			收治	在治		查看
<input type="checkbox"/>	2211-00255	顺德区慢性病防治中心	张利民	男	22	2011-04-18	新患者	涂阴患者			新生成	在治		查看
<input type="checkbox"/>	2211-00254	顺德区慢性病防治中心	陈水养	男	42	2011-04-18	新患者	涂阴患者			收治	在治		查看
<input type="checkbox"/>	2211-00253	顺德区慢性病防治中心	郭照溢	男	48	2011-04-18	新患者	涂阴患者			收治	在治		查看
<input type="checkbox"/>	2211-00252	顺德区慢性病防治中心	闭华勇	男	33	2011-04-18	新患者	涂阴患者			收治	在治		查看
<input type="checkbox"/>	2211-00251	顺德区慢性病防治中心	袁志春	男	45	2011-04-18	新患者	涂阴患者			新生成	在治		查看
<input type="checkbox"/>	2211-00250	顺德区慢性病防治中心	段召林	男	26	2011-04-18	新患者	涂阴患者			新生成	在治		查看

完成

Internet | 保护模式: 启用

100%

# PMDT coverage

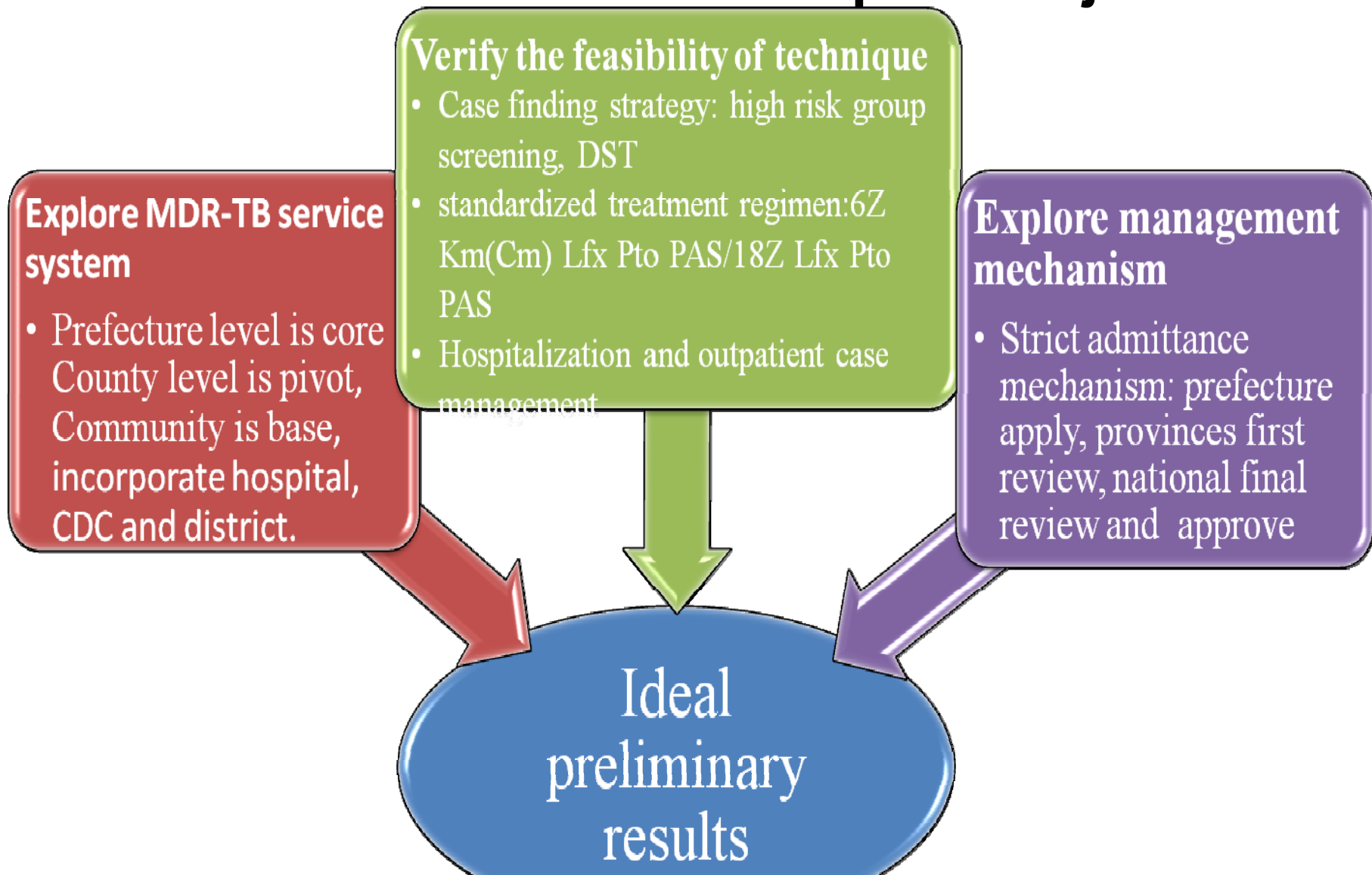






# Progress on MDR-TB control

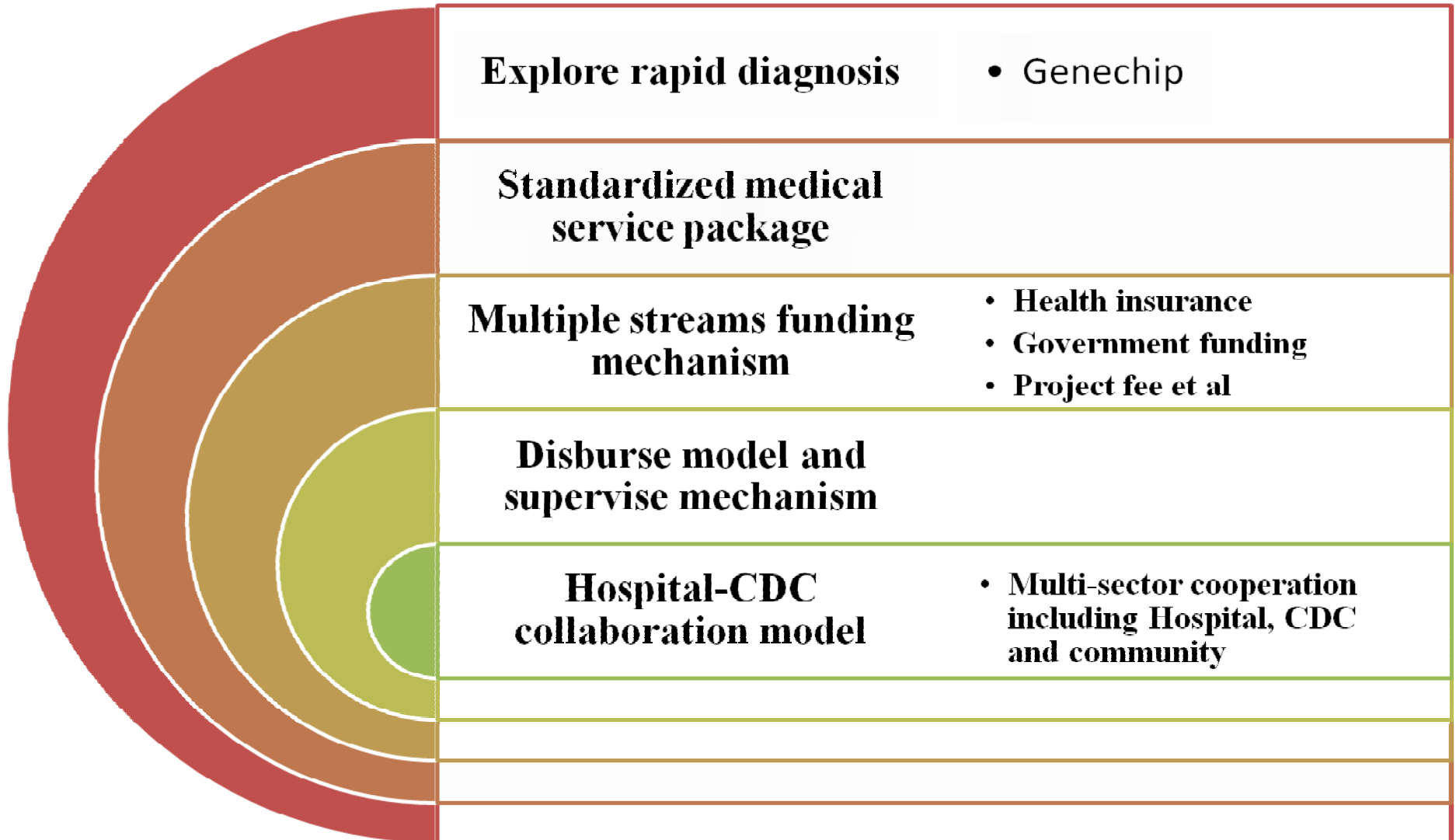
## --GF pilot Project





# Progress on MDR-TB control

## -- Gates MDR-TB Project





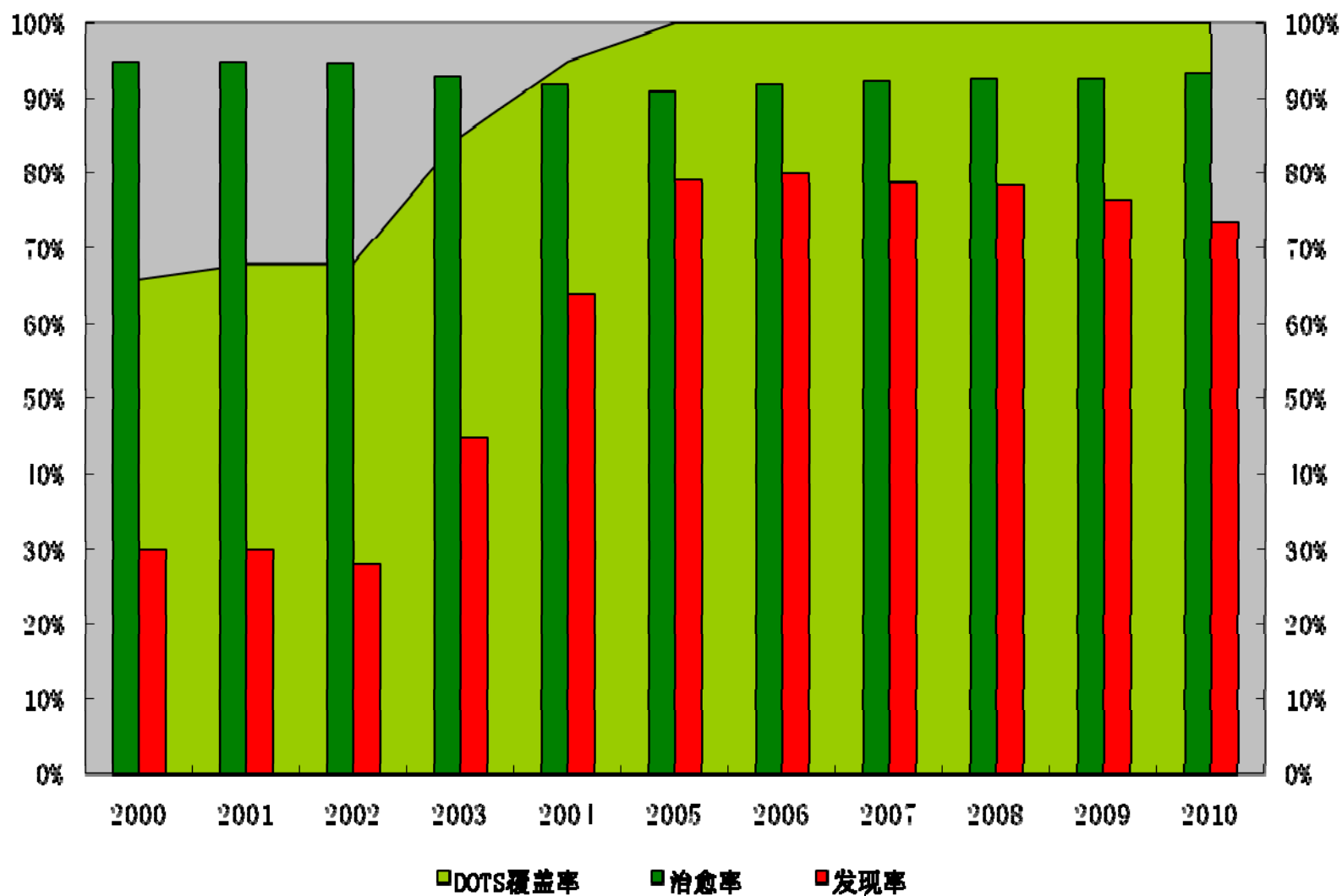
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# Achievement of TB control



# Three main targets



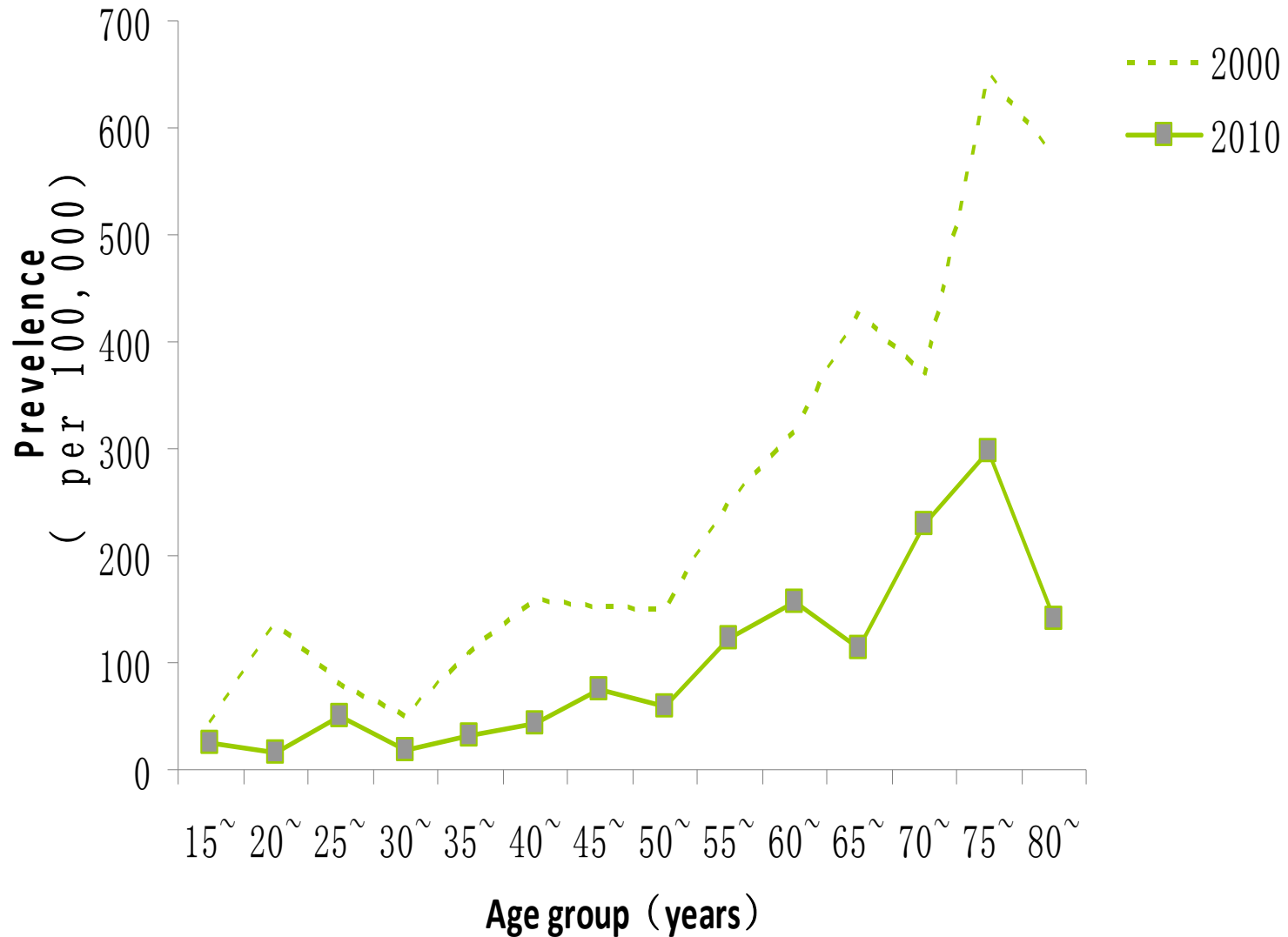


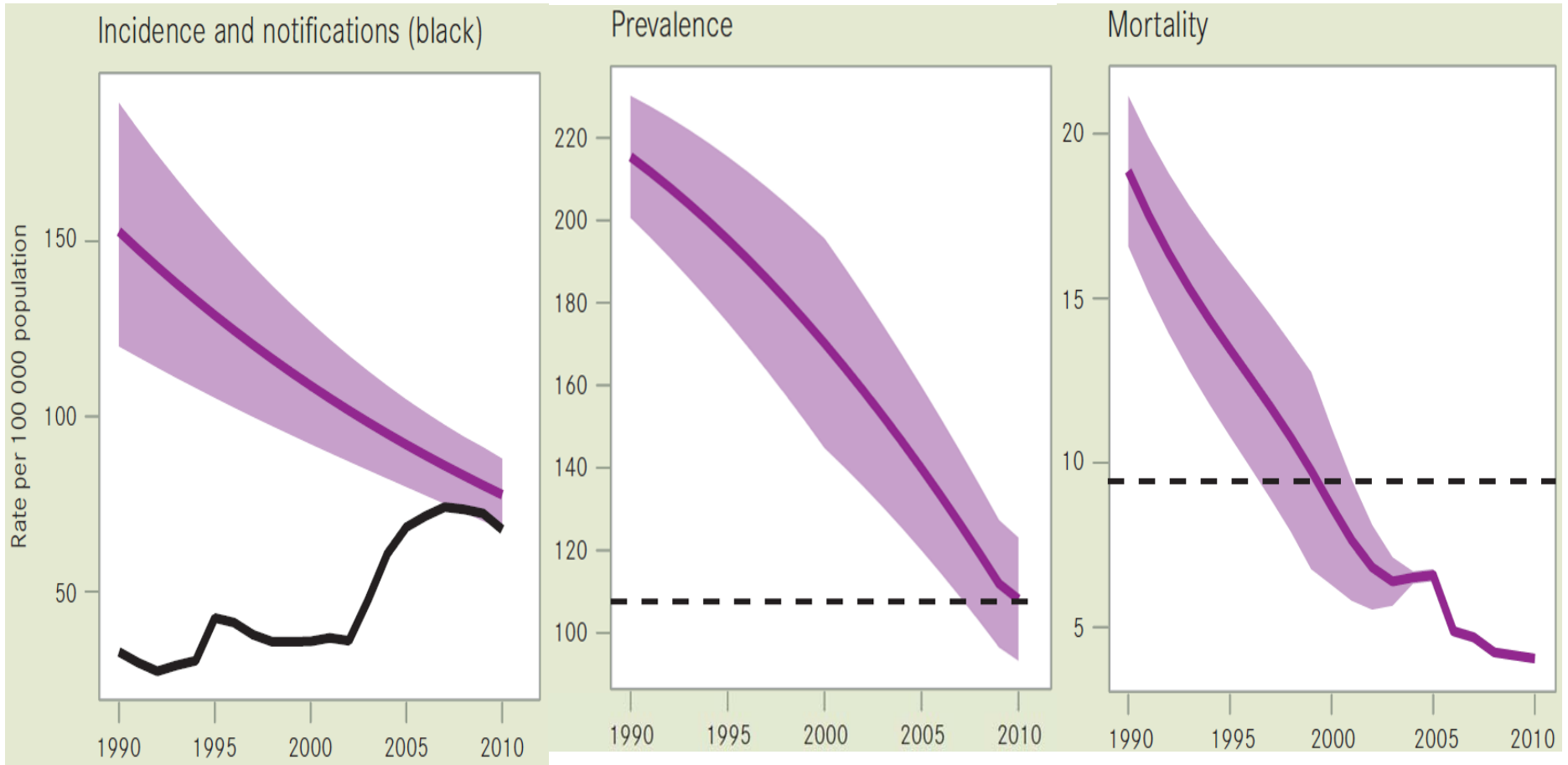
## TB prevalence of groups $\geq 15$

	Prevalence (1/100,000)		Decline (%)	Annual decline (%)
	2000	2010		
Active PTB	<b>466</b>	<b>459</b>	<b>1.5</b>	<b>0.2</b>
SS+	<b>169</b>	<b>66</b>	<b>60.9</b>	<b>9.0</b>
C+	<b>216</b>	<b>119</b>	<b>44.9</b>	<b>5.8</b>



# Prevalence of SS+ patients







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Epidemiological  
trend picture of  
China showed on  
the cover page of  
WHO Global  
Tuberculosis Control  
report 2011



**Global Tuberculosis  
Control 2011**





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# Challenges



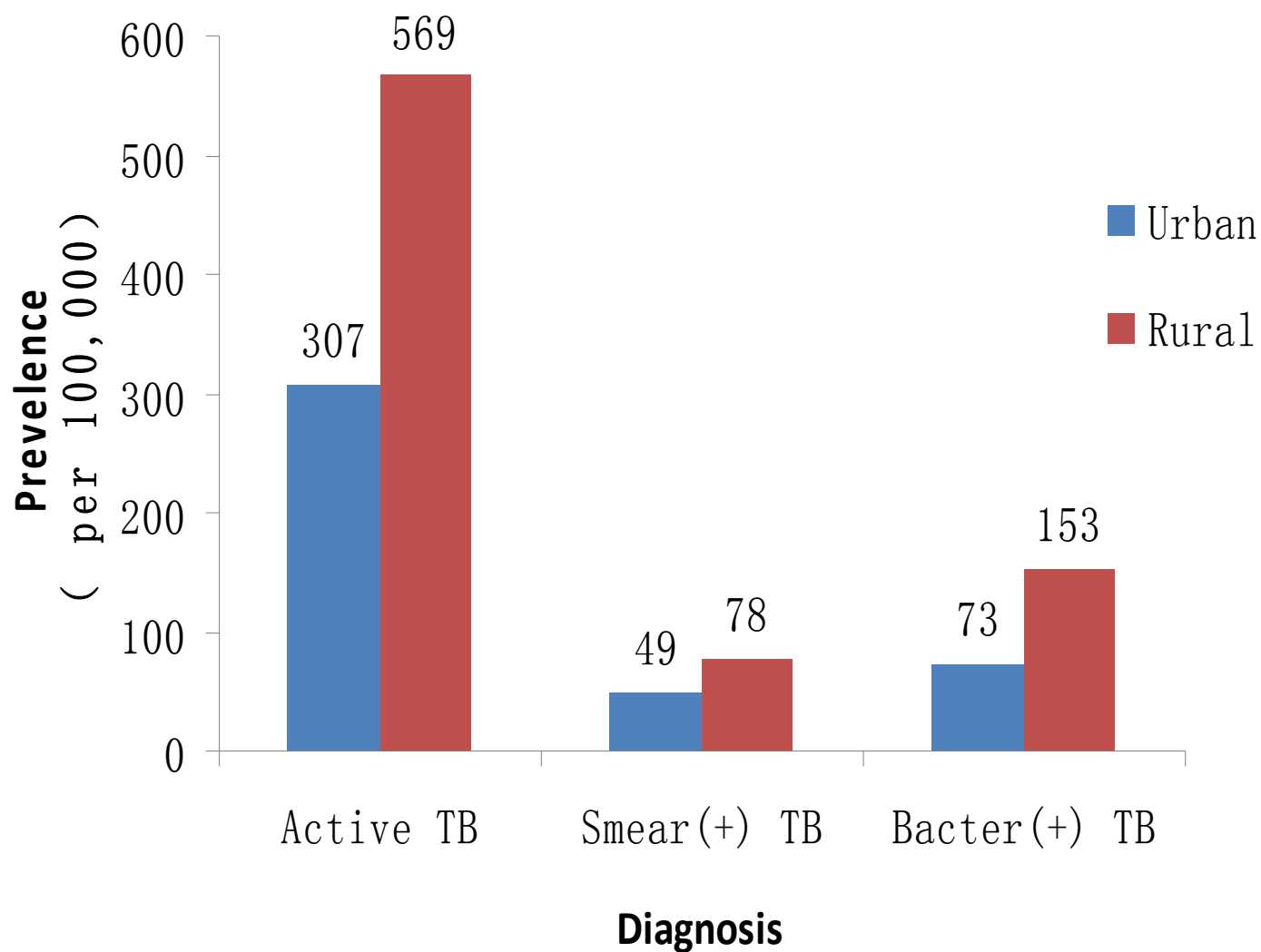
# TB epidemic is still serious

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- China ranks second among the 22 high burden countries, 1 million new TB patients estimated by WHO
- The reported TB incidence was TOP 1 or 2
- The results of 5<sup>th</sup> TB epidemic survey shows:
  - Estimated 5 million active PTB
  - TB prevalence are uneven in different areas
  - The proportion of patients without any symptom is high

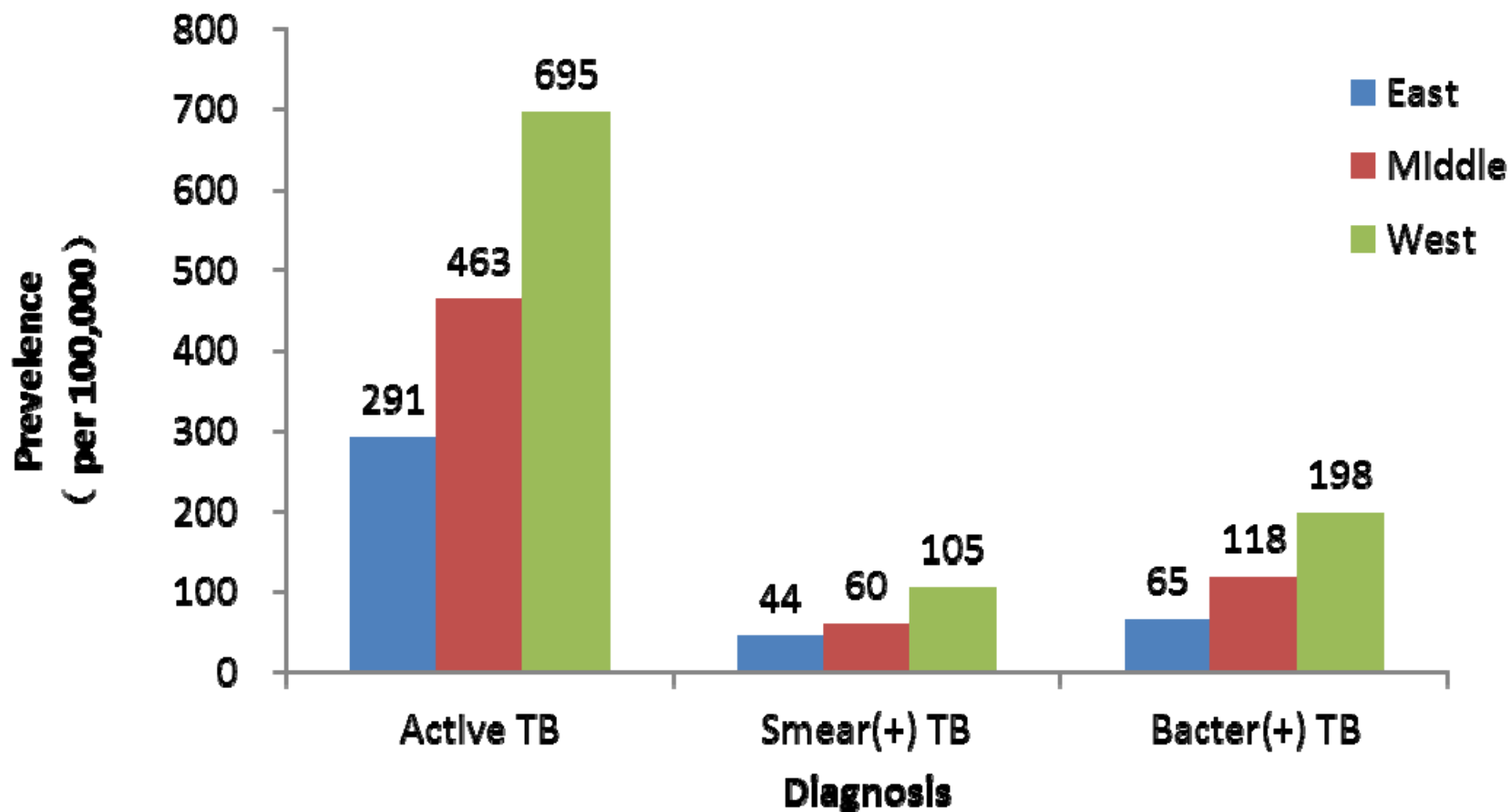


# Prevalence in different area



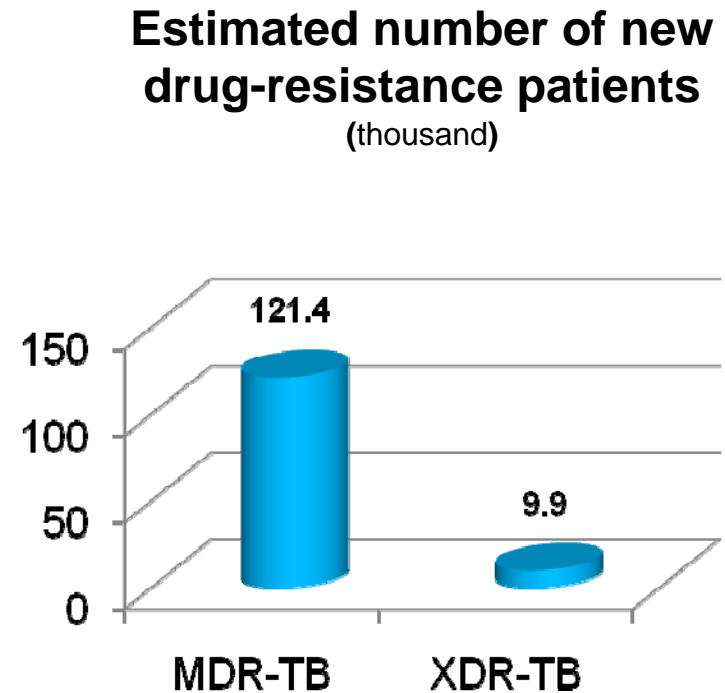
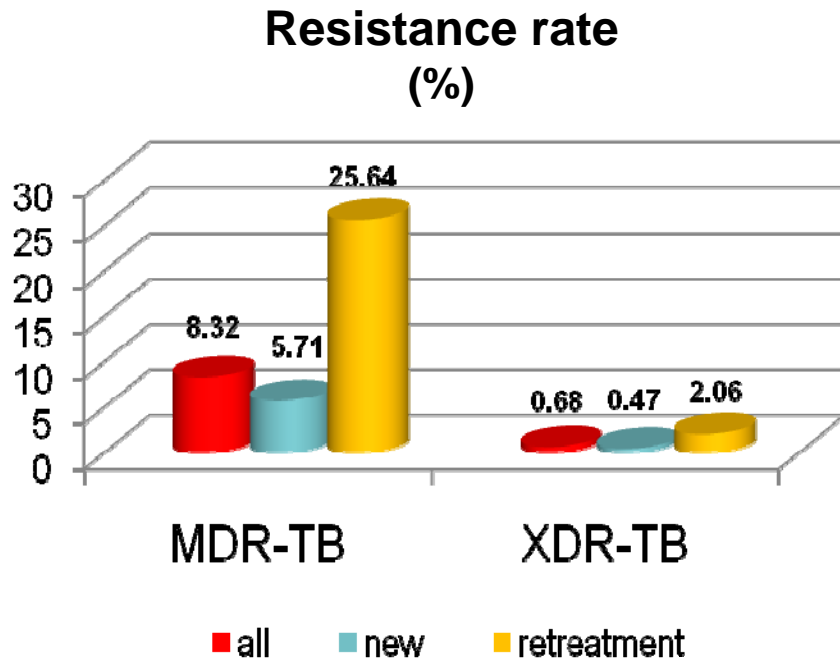


# Prevalence in different areas





# Epidemic of MDR-TB



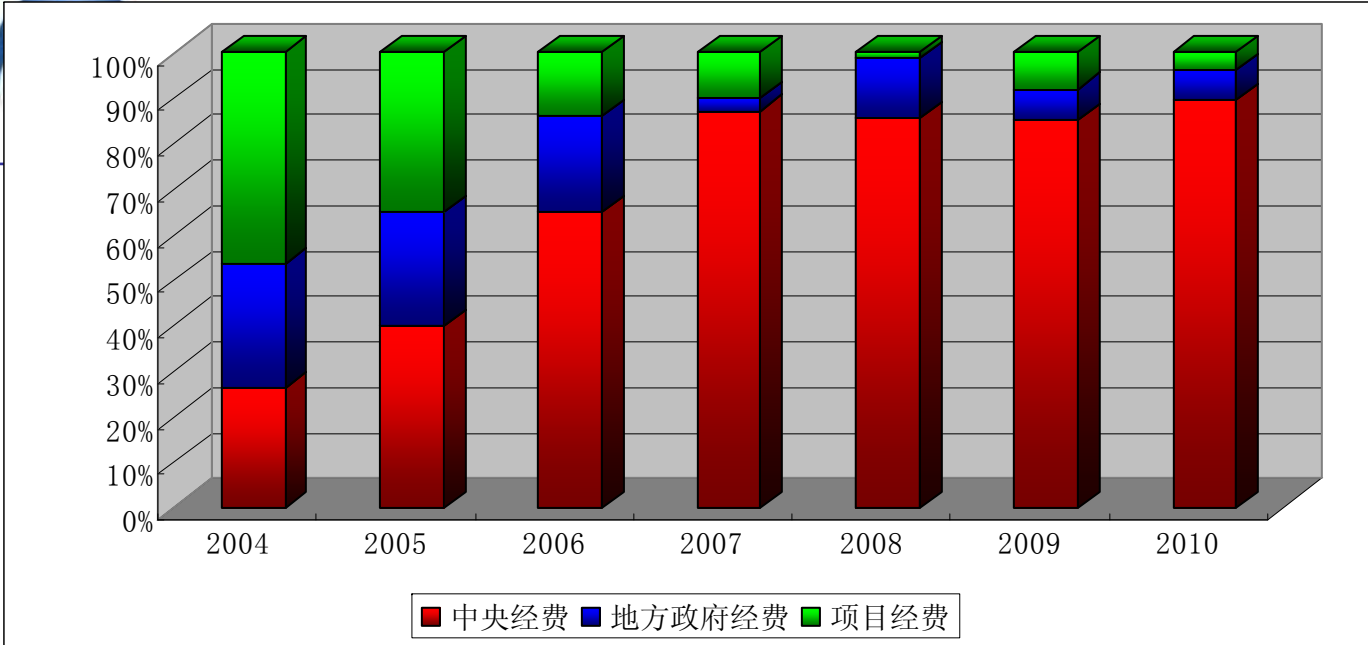
Source: National Baseline Survey on Drug-resistant Tuberculosis Report 2007-2008



# Insufficient funds of TB control

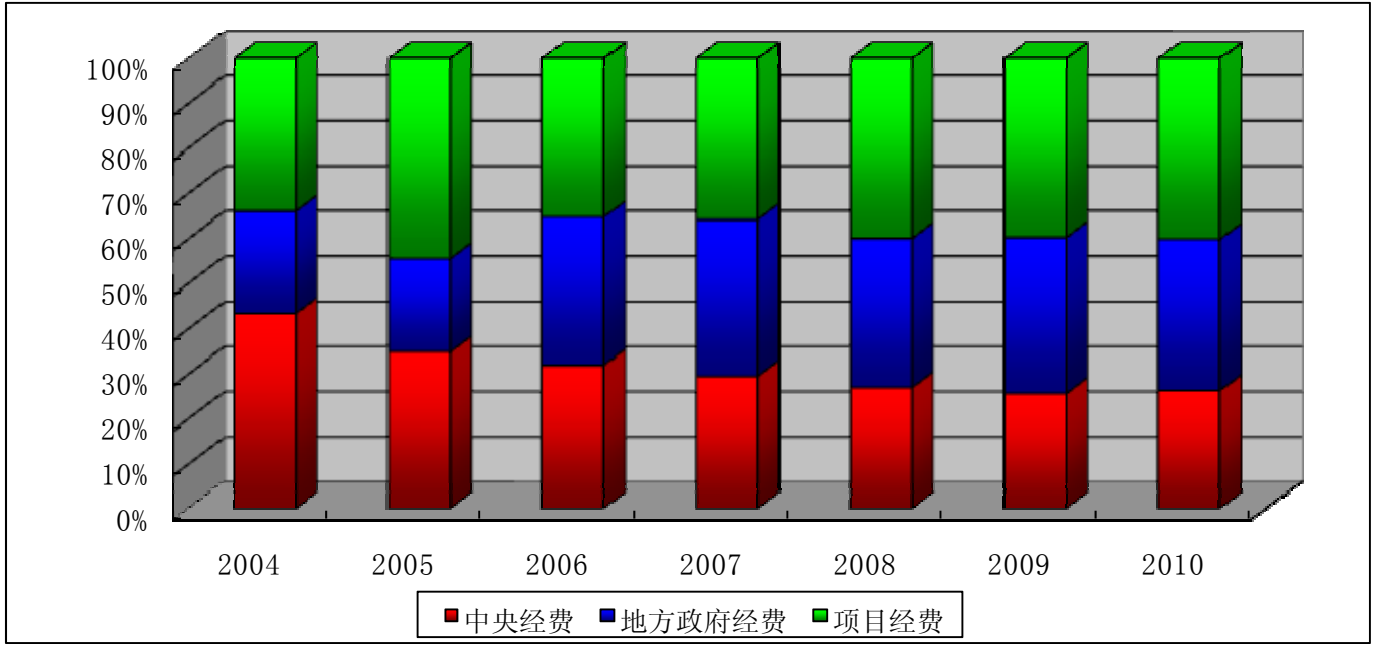
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- **There are still a financial gap for the basic services**
  - **Patient related package is very basic**
  - **Provider related funding (training, supervision, health promotion) rely on external funds in some areas**
- **More funding needed for increasing services level**



2004-2010年需方经费的来源构成比，中央经费占80%

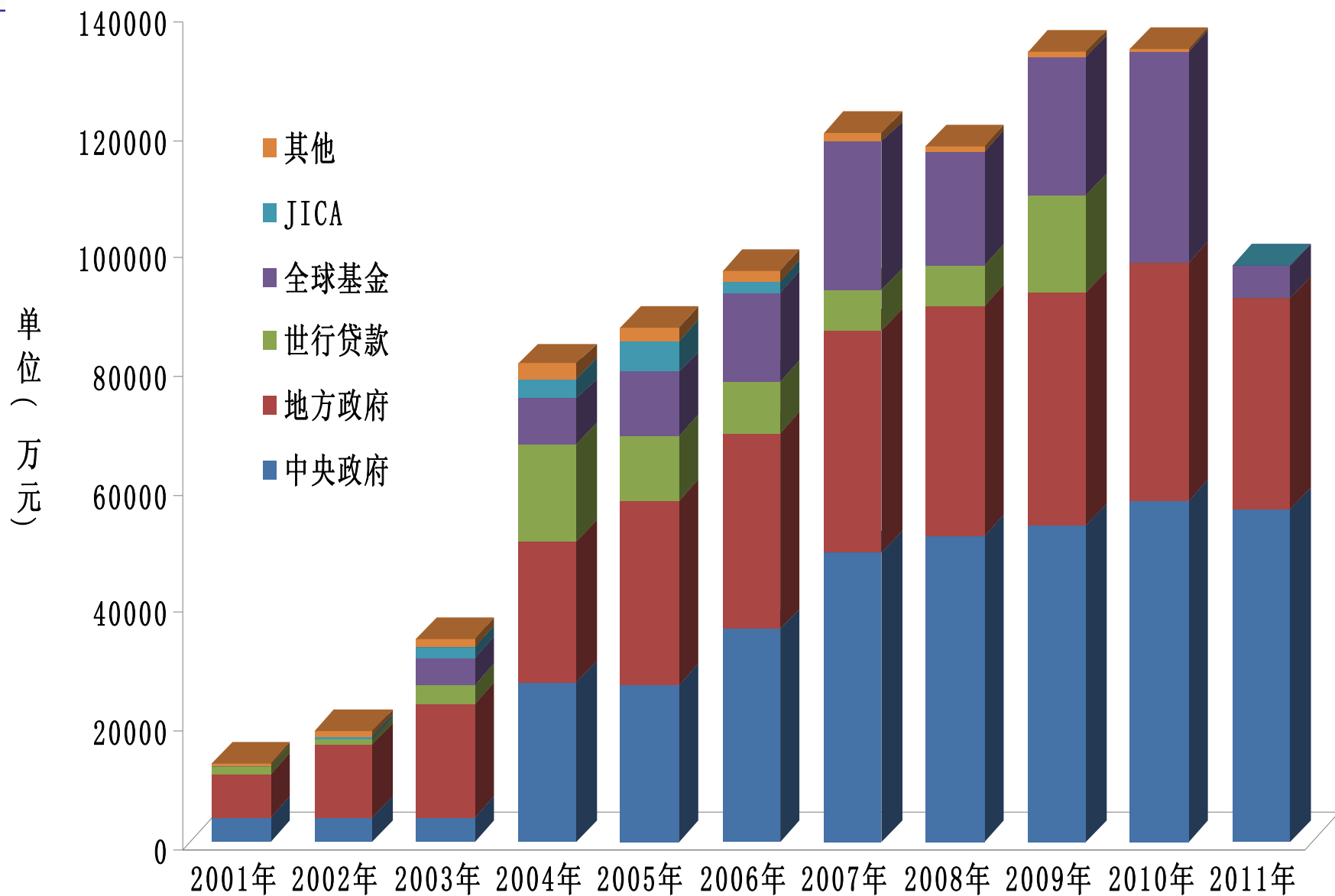
2004-2010年供方经费的来源构成比，项目投入占50%





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## **Service system need to be perfected**

- **DOTS implementation units are based at county TB dispensary**
  - **provide very basic TB control services**
- **Hardware of Lab and Ward**
- **Lack of IC**
- **HR problem (Quantity and Quality)**



## Others

- **PMDT is limited in project areas**
- **Drugs issue**
- **TB/HIV cooperation need to be strengthened**
- **More intervention need to be taken in high risk groups**
- **Awareness is lower (57%)**
- **Research issue**



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**Look forward**



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0008023

## 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

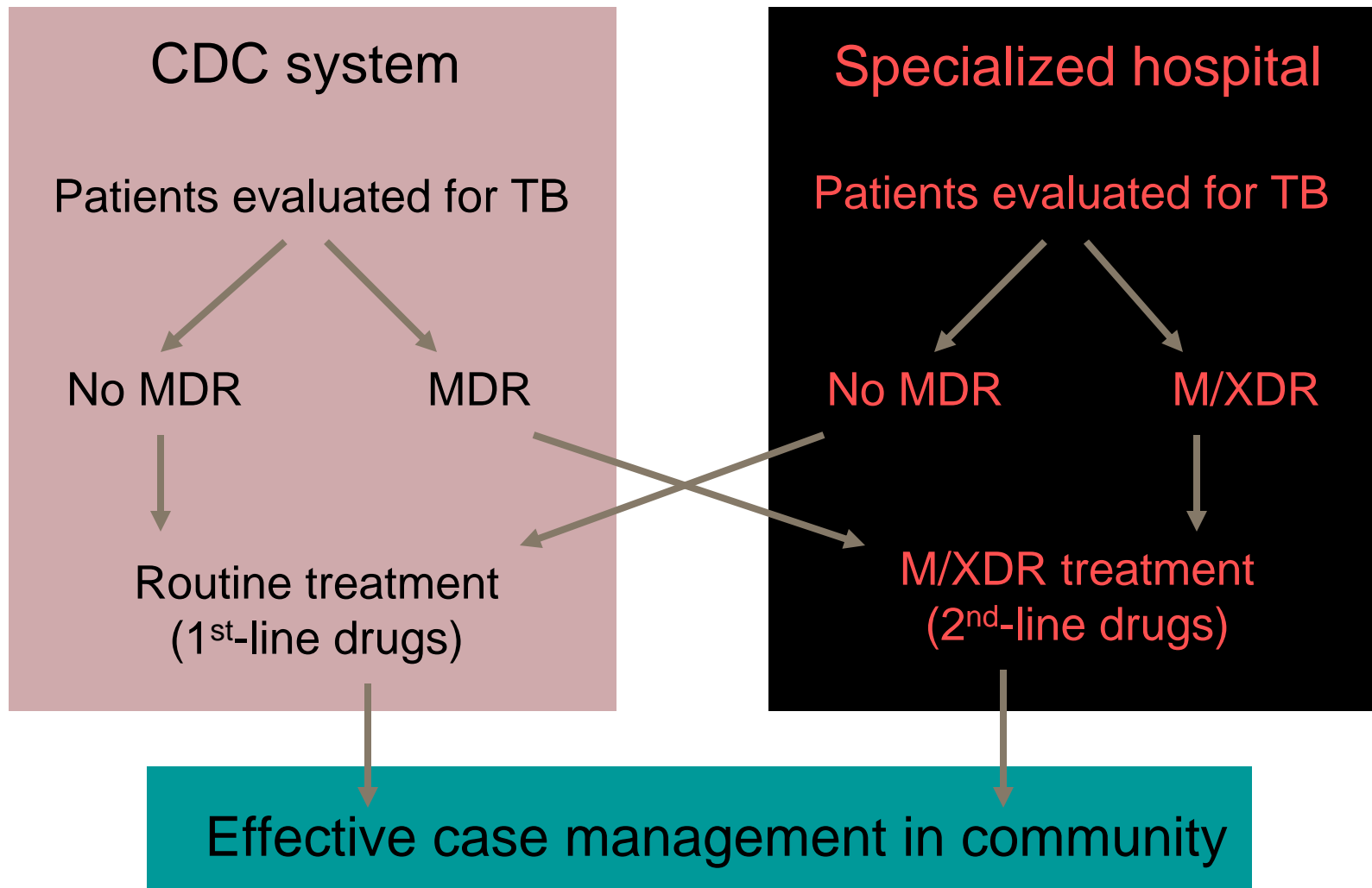
**National TB control plan  
2011 – 2015 issued by  
the State council**

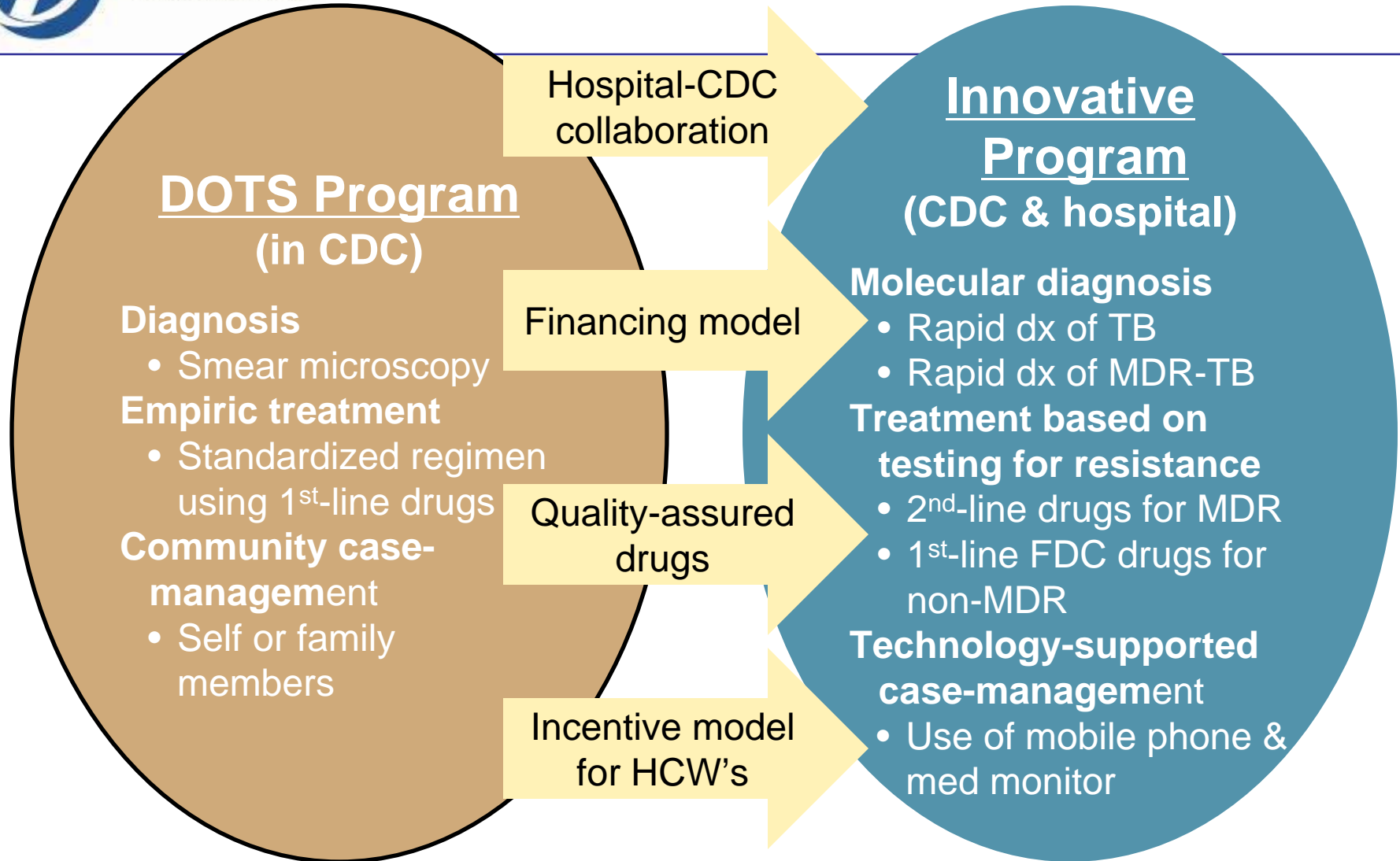
**10 indicators**

**15 approaches**



# Building hospital-CDC collaboration to prevent and treat M/XDR TB

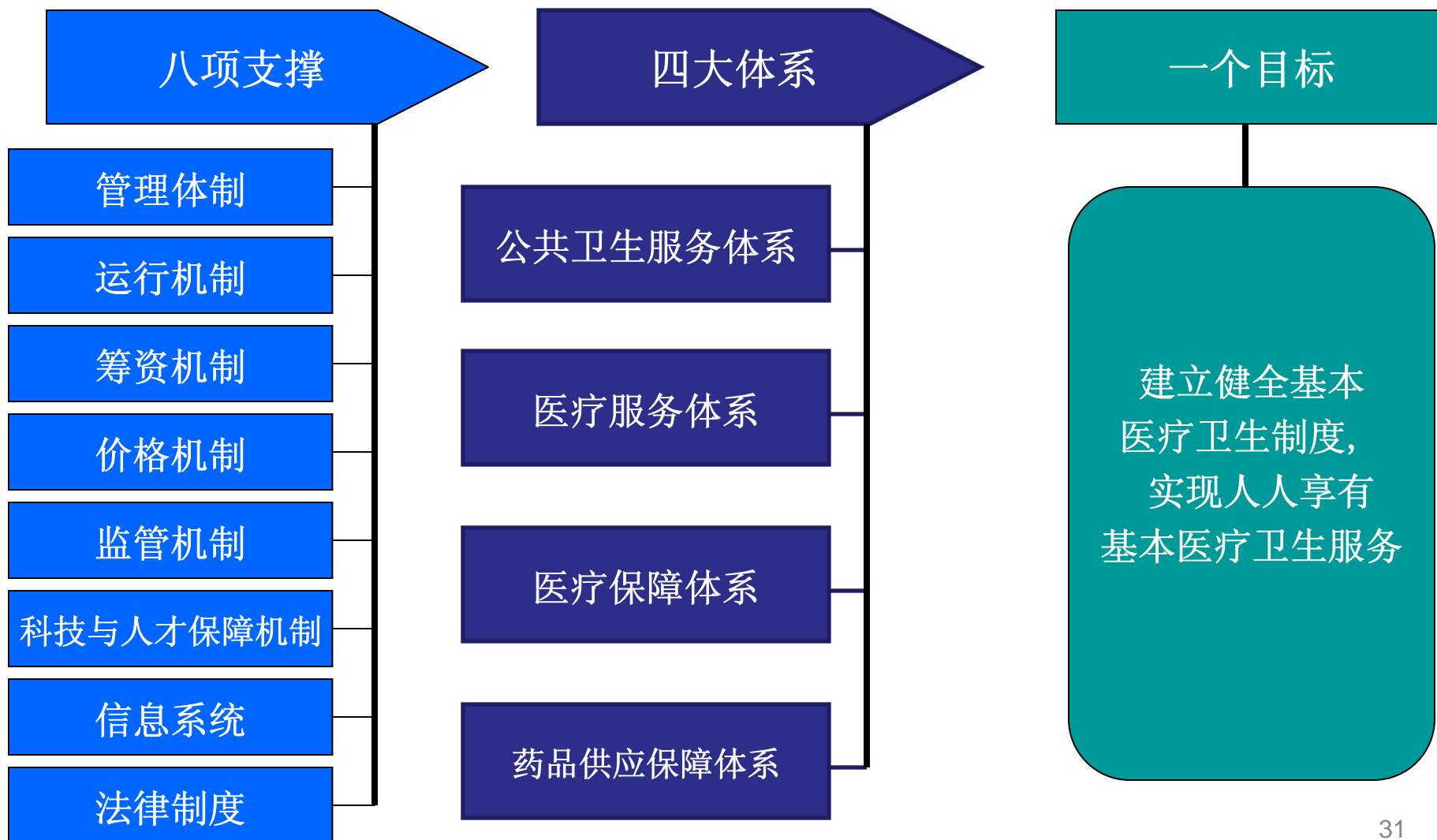






# Health system reforms

## Opportunity for sustainable TB control





# Summary

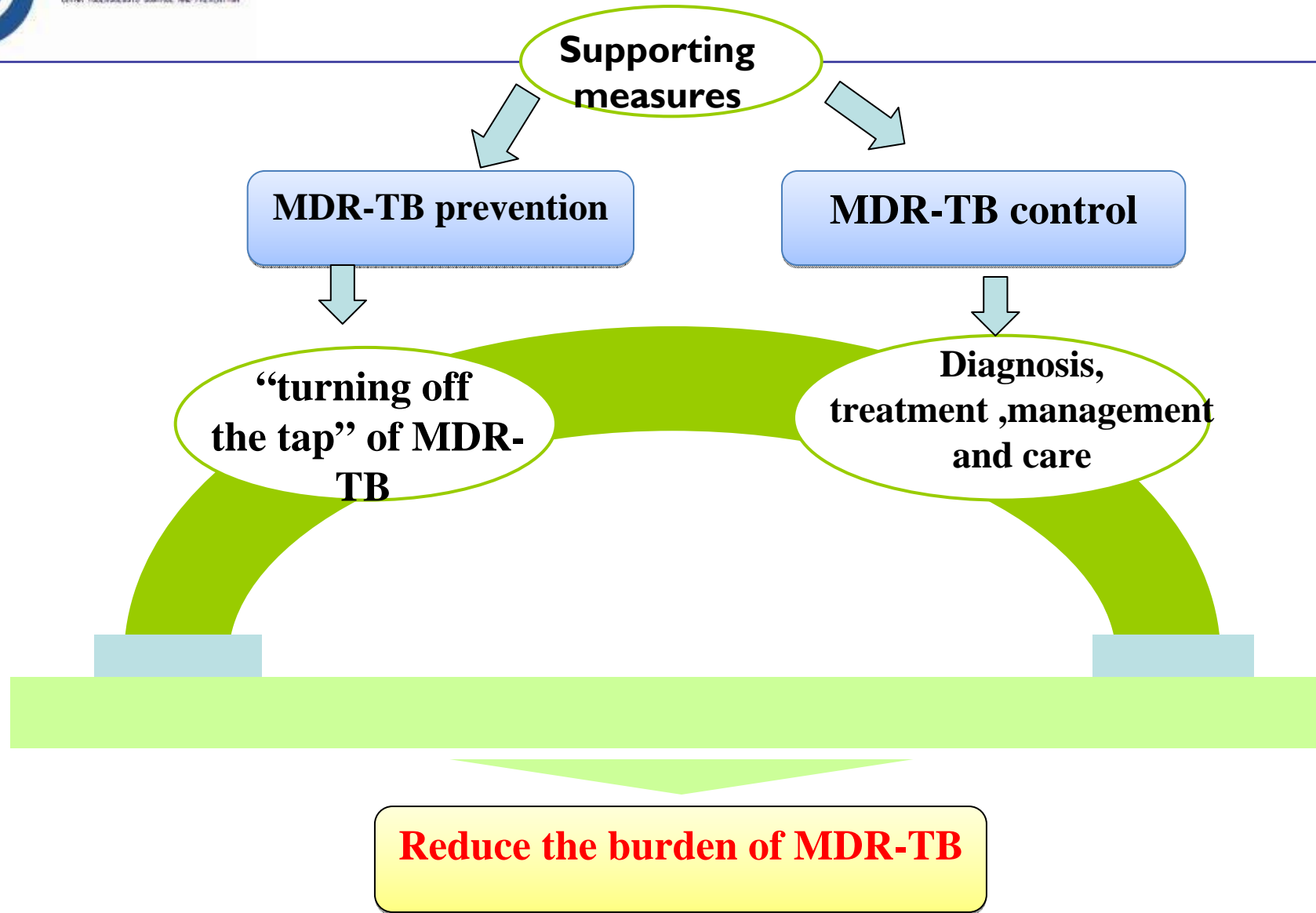
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## Patient-oriented TB control strategy Sustainable

- **Consolidate the achievement of TB control**
- **Improve the service accessibility**
  - **Improve the service system**
  - **Essential supports for patients and service providers**

**Integrate into Health System Reforms**







# Reduce the incidence and mortality of TB

Ensure Quality  
TB Service

Control of  
MDR-TB

Improving  
basic  
DOTS

PPM  
DOTS

TB control in  
vulnerable  
populations

Adopt new tools to enhance  
MDR-TB standardized  
treatment and management

Migrants

Re-  
education  
centers  
and  
prisons

TB/HIV

Laboratory  
capacity  
building

Case  
detection

Treatment

Management  
& care

Supporting  
systems

Infection  
control

Procurement  
and supply  
management

Human  
Resource  
development

Monitoring  
&  
Evaluation

Operational  
Research

ACSM,  
community  
care



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**Thanks for your attention**