

# WHO Global TB Programme finance/economic data sources



- Patient cost surveys
- National reports of budgets and expenditures
- Provider cost surveys (Value TB)



# Patient cost surveys - Basic design

- Facility-based patient survey
  - National sample of patients on treatment in NTP-linked facility
- Sample size: 500-1200 patients
- Cost ranges: \$50,000 - \$150,000
- Survey frequency: once every 5 years
- Cross sectional study with retrospective data collection and projections
- Estimated survey implementation time: 6 months
- Questionnaire (approximately 90 questions ; 40-60 mins long)
- All data owned by country and not publicly available

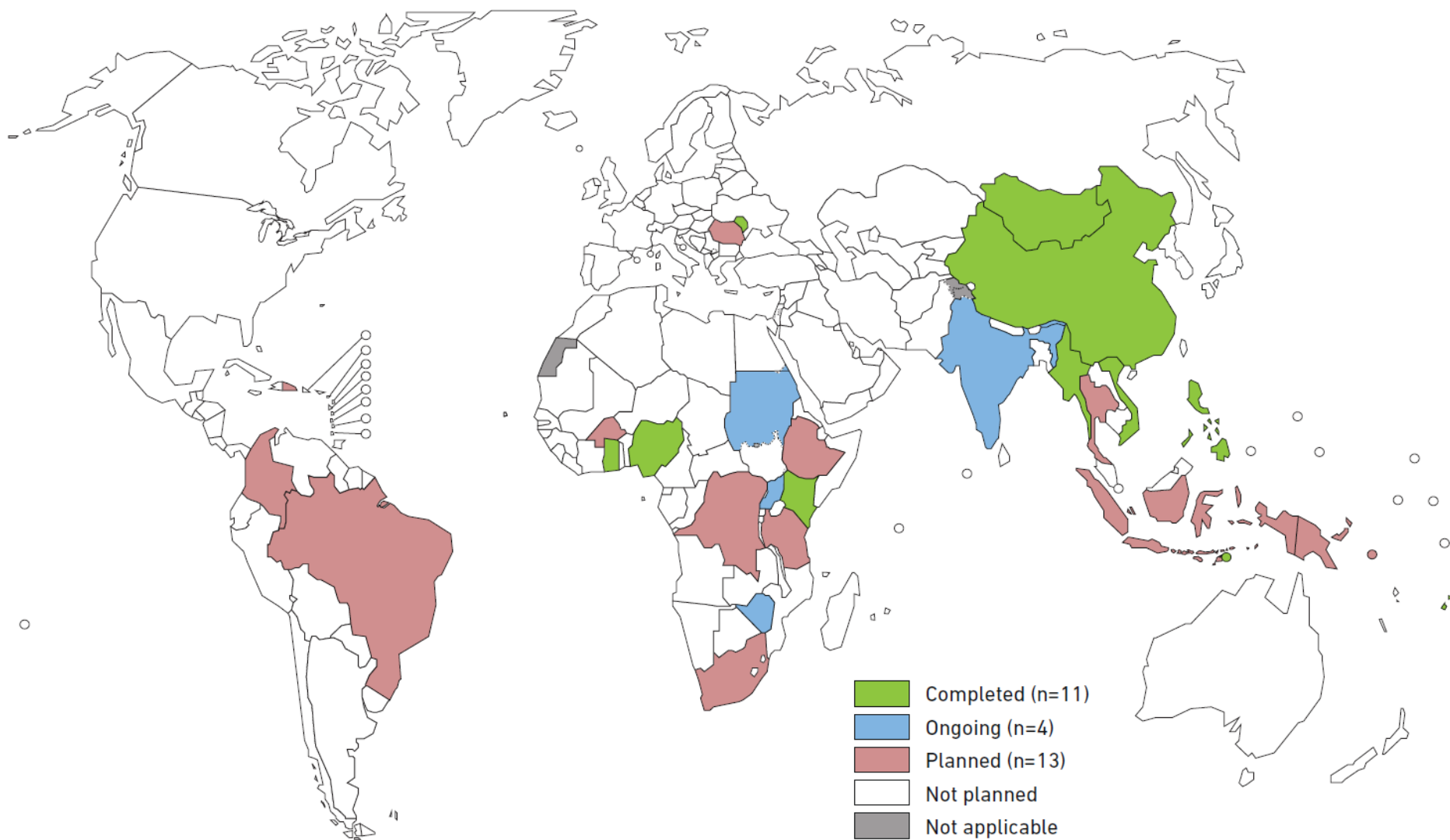


## Nationwide TB patient cost survey in South Africa

### ▼ Part I. Patient information to be obtained from TB treatment card before interview

PATIENT REGISTRATION NUMBER IN FACILITY TB REGISTER		DATE OF INTERVIEW yyyy-mm-dd 	
PROVINCE <div>none selected ▼</div>		NAME OF DISTRICT <div>none selected ▼</div>	
PLACE OF INTERVIEW (FACILITY NAME)		INTERVIEWER NAME	
CATEGORY OF TREATING FACILITY <div>none selected ▼</div>			
NAME OF PATIENT			
SEX <div><input type="radio"/> Male <input type="radio"/> Female</div>	AGE (IN YEARS)		DATE OF DIAGNOSIS yyyy-mm-dd 

# Patient cost surveys - Global progress



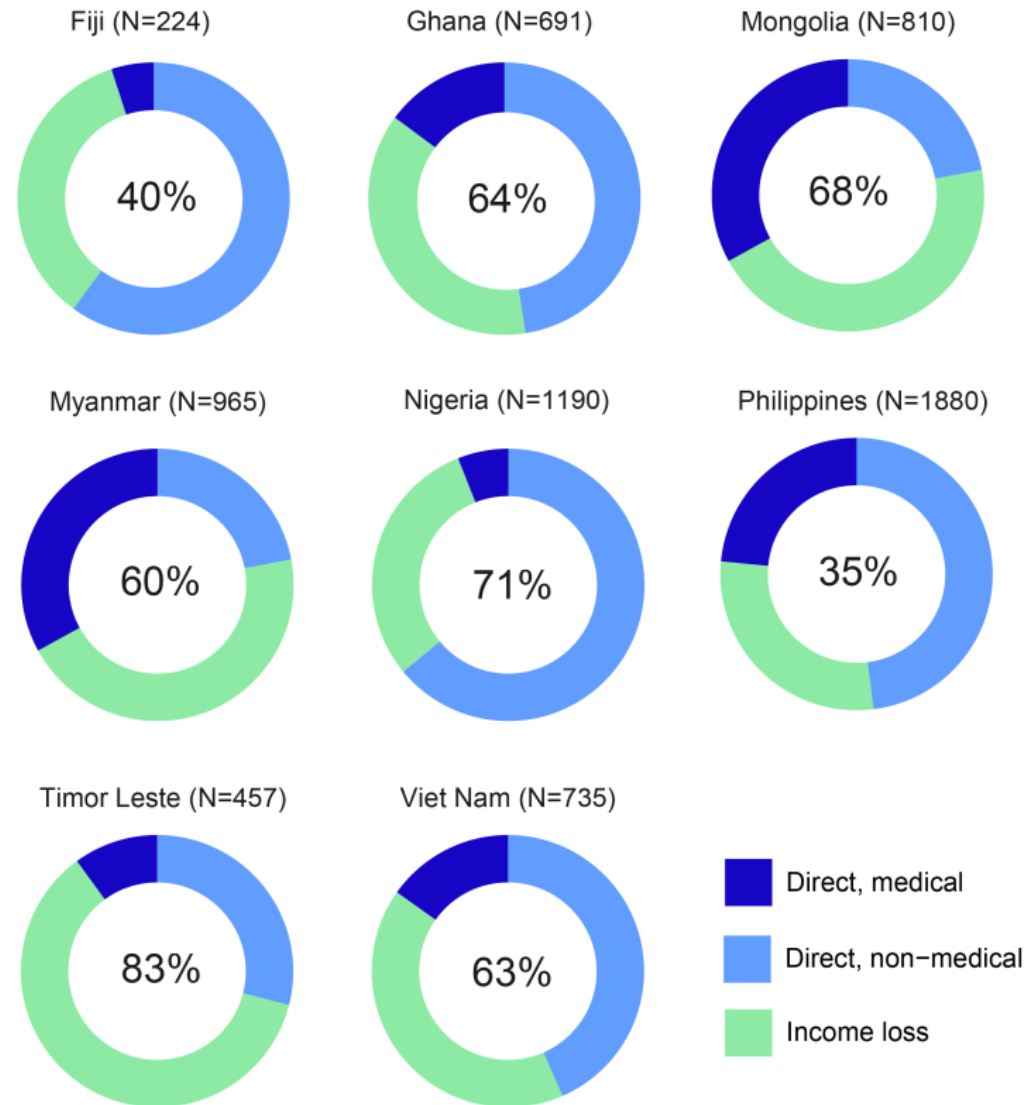
# Results of selected national patient cost surveys (preliminary)



% households facing catastrophic cost:  
**35% to 83%**

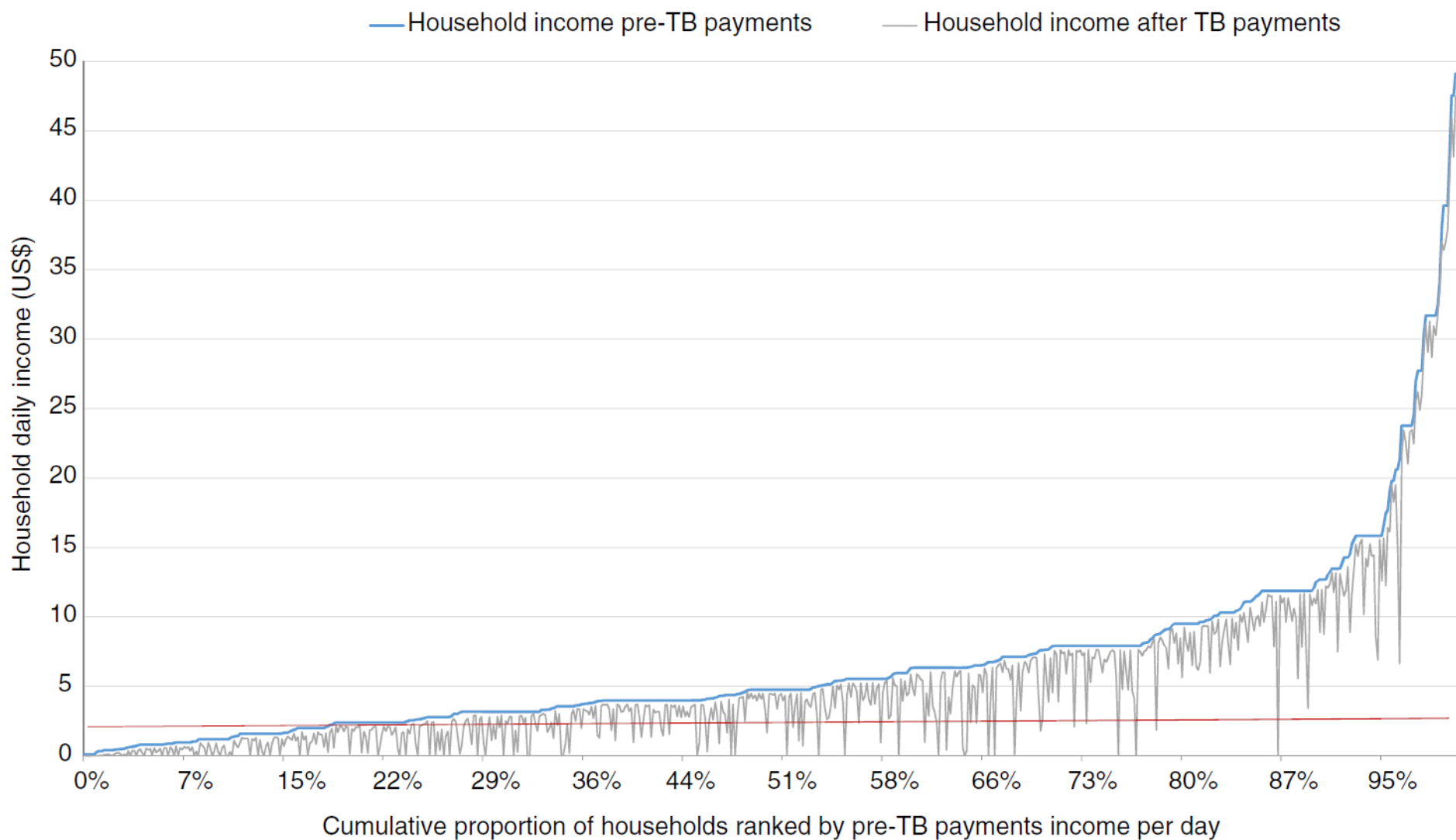
Cost drivers vary yielding different policy implications

- Food/Nutritional support
- Medical
- Transportation
- Income loss



# Additional findings and analyses

- DR-TB incur much higher cost in general
  - Primarily due to longer treatment regimen
- Risk factors for experiencing catastrophic costs
  - Often comorbidities, lower household income, primary earner
- Impact / intensity of current social support interventions
  - How much? How often?
- Impoverishment measures
  - Proportion that started below national/international poverty line
  - Proportion that fall below national/international poverty line
  - Depth of poverty



# PCS: Data available for modellers

## Costs from patient perspective

Pre-diagnosis costs

Medical costs (X-ray, lab tests, medicines, etc.)

Non-medical costs (transportation, accommodation, food and nutritional supplements)

Time lost / income lost

## Patient pathway

Diagnostic delay

Frequency of DOT visits

Frequency of drug pickups

Frequency of follow-up visits

Travel time to facilities

## Household characteristics

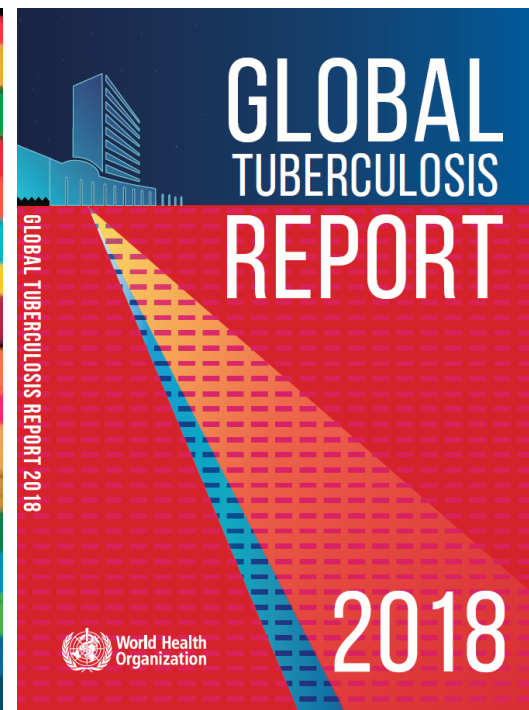
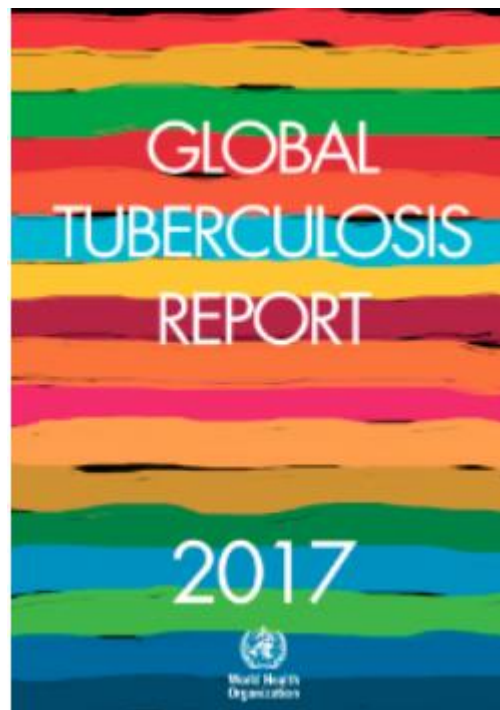
Household size

Household socioeconomic status

Social protection uptake



## GTB Finance database



# GTB Finance database

High quality data reported annually by National TB Programs from 2006 onwards

- Collected via online data collection platform

Reviewed by GTB to ensure data quality

Will be publicly available on website starting this fall ([www.who.int/tb/data](http://www.who.int/tb/data))

# GTB Finance database: Data available for modellers



Budgets (prospective year) and expenditures (previous year)

- Split into 10 broad categories

Sources of funding (Domestic, Global Fund, USAID, other)

Projected number of patients to be treated (prospective year)

Average cost of drug regimen

Average number of facility visits

Proportion of patients hospitalized and average length of stay

- Split by DS-TB and MDR-TB
- Used to estimate the health services component of the cost of providing TB care in each country

# Sample expenditure table

		Actual expenditure a?	Received funding b?
4.27	Laboratory infrastructure, equipment and supplies	14 685 562	18 359 644
4.28	National TB Programme staff (central unit staff and subnational TB staff)	20 969 958	22 469 678
4.29	Drug-susceptible TB: drugs	14 894 065	14 894 065
4.30	Drug-susceptible TB: programme costs	18 997 479	25 743 514
4.31	Drug-resistant TB: drugs	1 119 604	1 542 280
4.32	Drug-resistant TB: programme costs	6 745 392	6 745 392
4.33	Collaborative TB/HIV activities	1 110 825	2 263 667
4.34	Patient support	3 735 015	6 337 251
4.35	Operational research and surveys	1 282 127	1 484 485
4.36	All other budget lines for TB	1 544 976	1 731 265
<b>4.37</b>	<b>Total</b>	<b>85 085 003</b>	<b>101 571 241</b>

## Utilization of health services, 2017

		Patients starting first-line TB treatment	Patients starting MDR-TB / XDR-TB treatment
4.20	<p><b>Typical number of visits to a health facility after diagnosis</b></p> <p><i>The average number of visits per patient to any health facility during TB treatment, for example for observed treatment (DOT), collection of drugs, smear monitoring, etc. after the patient has been diagnosed with TB, in view of your treatment guidelines. For example, if a TB patient on first-line treatment receives directly observed treatment daily in the intensive phase at clinics and, in the continuation phase 4 visits are required (one per month for collection of drugs), the total would be 60+4=64.</i></p>	3	42
4.21	<p><b>Estimated percentage of cases that are hospitalized (%)</b></p> <p><i>If the actual percentage of hospitalisations is available from the basic management unit register, please report. If not, please report the approximate percentage of patients hospitalized for TB treatment (for any duration of stay), in view of your treatment guidelines. For example, if your policy or general practice is to admit all TB patients for 2 months, the figure will be 100%.</i></p>	20	10
4.22	<p><b>Estimated average duration of stay if hospitalized (days)</b></p> <p><i>If the actual duration of stay is available from the basic management unit register, please report. If not, please estimate the number of days a patient would spend in hospital "on average".</i></p>	3	15

4.23 If MDR-TB patients are hospitalized, in which type of facility are they most often treated?

- ☐ Primary-level hospital  
☐ Secondary-level hospital  
☒ Tertiary-level hospital  
☐ Not applicable

# Estimated cost per patient treated for drug-susceptible TB in 113 countries, 2017<sup>a</sup>

