TB Modelling and Analysis Consortium

TB MAC/WHO/GHCC Meeting

18th to 22nd September 2017

Victoria Hotel, Glion, Switzerland

BILL&MELINDA GATES *foundation*

World Health Organization

www.tb-mac.org

GHCC | Global Health Cost Consortium

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE
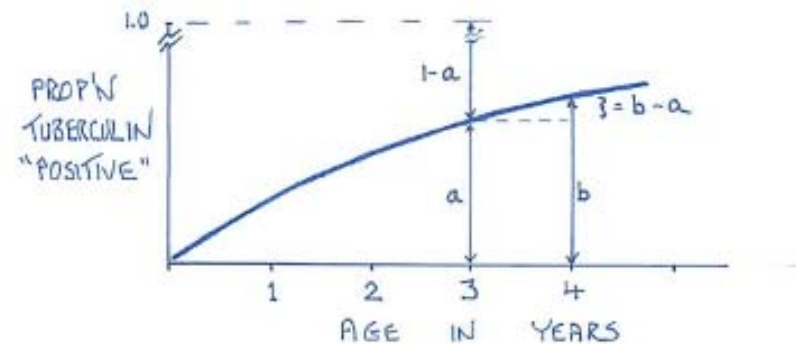
TB MAC background

- Complex natural history, range of interventions, variation in settings => global and country decision makers face great uncertainty

- Modelling can be used to compare strategies and quantify uncertainty

- But
  - Lack of co-ordination
  - Limited data, models and modellers
  - Decision makers & modellers uninformed
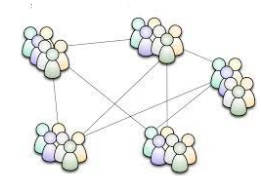
CALCULATION OF ANNUAL RISK OF INFECTION

PROP'N TUBERCULIN "POSITIVE"

AGE IN YEARS

SO:

ANNUAL RISK OF INFECTION $(x) = \dfrac{b-a}{1-a}$

OR:

$(1-x)^3 = 1-a$

$(1-x) = (1-a)^{1/3}$

$\therefore x = 1-(1-a)^{1/3}$

TB MAC impact 2012-16

- Helped foster a community of TB modelers
- Helped foster modeller <--> stakeholder links

- Provided evidence at numerous high level meetings
  - GFATM decision not to reduce the % of funds allocated to TB

- Influenced development of models/methods with impact at
  - Global level
    - WHO GTB methods for HIV+/- TB incidence and mortality
  - Country level
    - South Africa: 'Targets' work used for 1st TB&HIV investment case, first ringfenced TB grant & increased domestic funding
    - TB MAC influenced models supported NSP and GFATM submissions in increasing # countries

- Supported WHO Task Force for TB Impact and Measurement to include modelling in mandate

But much more to do...

KF

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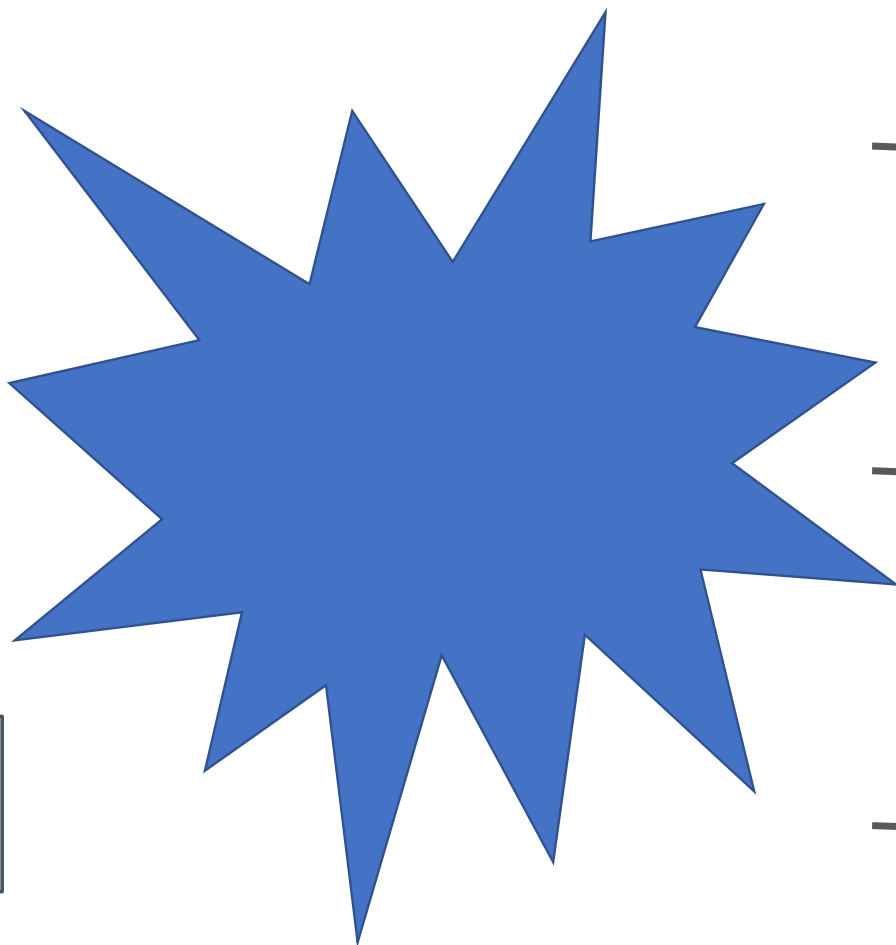
Activities and Outputs

Outcomes

Impact

Strengthening networks

Creating solutions

Empowering decision makers

1 Strong and effective links between decision makers and modelers & economists
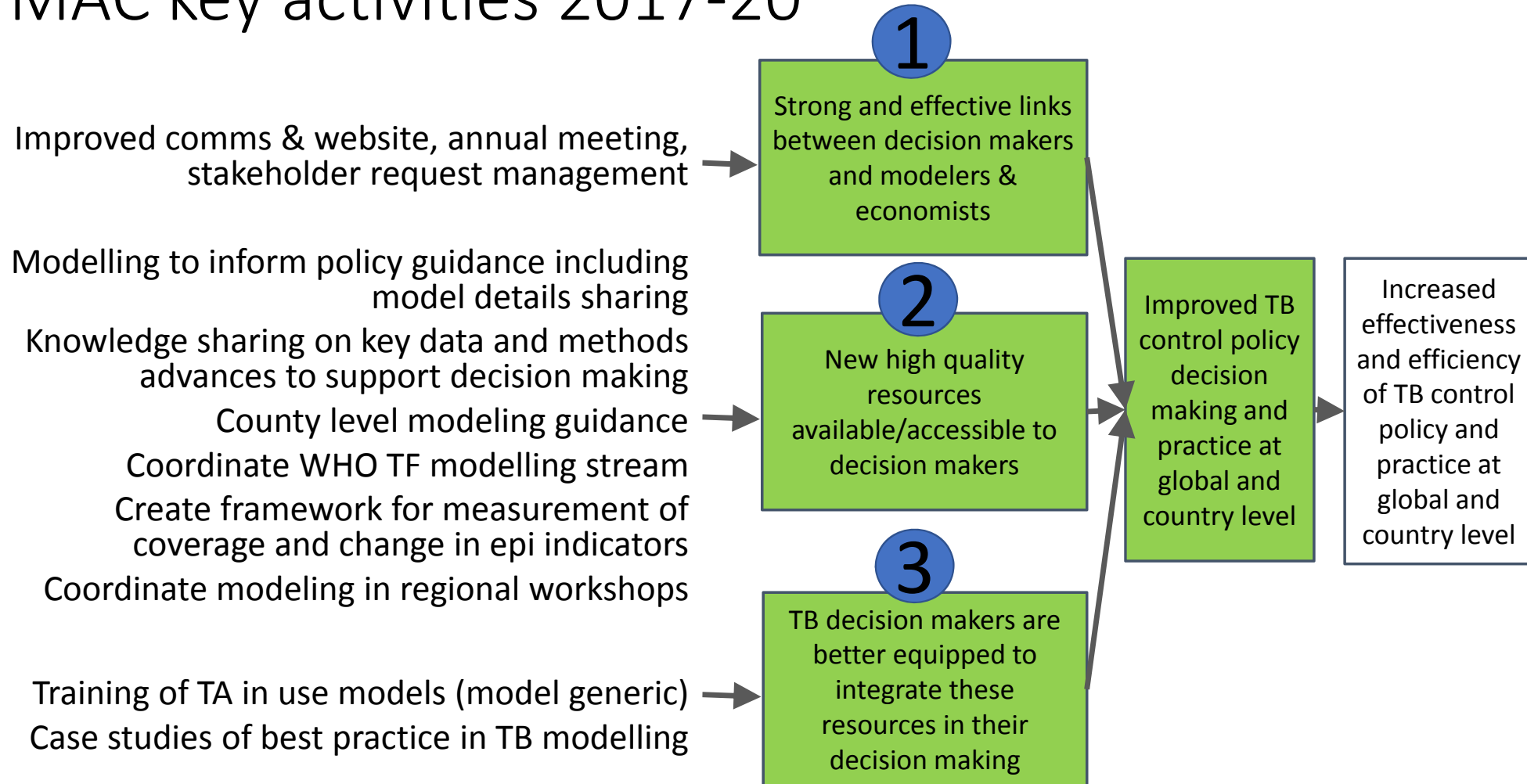
2 New high quality resources available/accessible to decision makers

3 TB decision makers are better equipped to integrate these resources in their decision making

Improved TB control policy decision making and practice at global and country level

Increased effectiveness and efficiency of TB control policy and practice at global and country level

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TB MAC key activities 2017-20

Improved comms & website, annual meeting, stakeholder request management

→ **1** Strong and effective links between decision makers and modelers & economists

Modelling to inform policy guidance including model details sharing

Knowledge sharing on key data and methods advances to support decision making

County level modeling guidance

Coordinate WHO TF modelling stream

Create framework for measurement of coverage and change in epi indicators

Coordinate modeling in regional workshops

→ **2** New high quality resources available/accessible to decision makers

Training of TA in use models (model generic)

Case studies of best practice in TB modelling

→ **3** TB decision makers are better equipped to integrate these resources in their decision making

Improved TB control policy decision making and practice at global and country level

Increased effectiveness and efficiency of TB control policy and practice at global and country level

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TB MAC who's who

Committee

Current

- Katherine Floyd - WHO
- Anna Vassall - LSHTM
- Ted Cohen - Yale
- David Dowdy – JHU
- Michael Kimerling – AIGHD
- Philip Welkhoff - IDM
- David Wilson – Gates
- Nick Menzies – Harvard
- James Trauer – Monash

Future

- Frank Cobelens - AIGHD
- Hsien-Ho Lin –Taiwan University
- Jason Madan –Warwick

Core Advisory Panel

- Ibrahim Abubakar – UCL
- Sevim Ahmedov – USAID
- Liz Corbett - LSHTM
- Philippe Glaziou - WHO
- Johannes Hunger – Global Fund

Secretariat

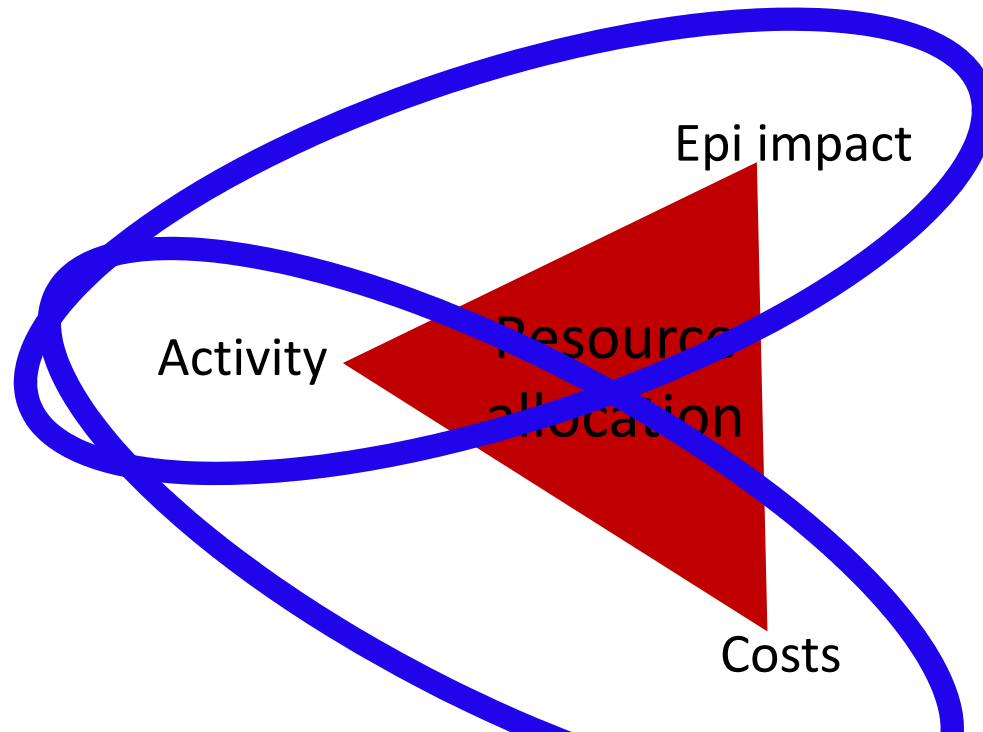- Christina Albertsen
- Finn McQuaid
- Rein Houben
- Richard White

Overview of this meeting

Monday/ Tuesday

Wednesday

Thursday/ Friday

Epi impact

Activity

Resource allocation

Costs

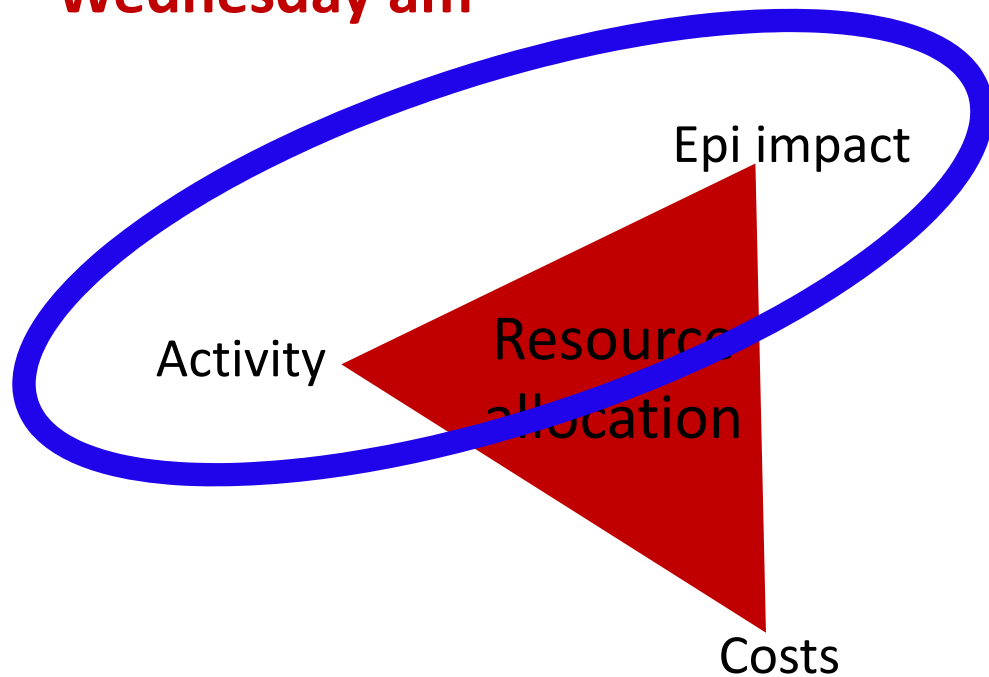# What we hope to have by end of meeting...

Monday/ Tuesday

- Feedback/ comments and achieved consensus on the guidance document

- Feedback/ comments and achieved consensus on the model catalogue

- Agreed path towards adoption and dissemination of the guidance and catalogue
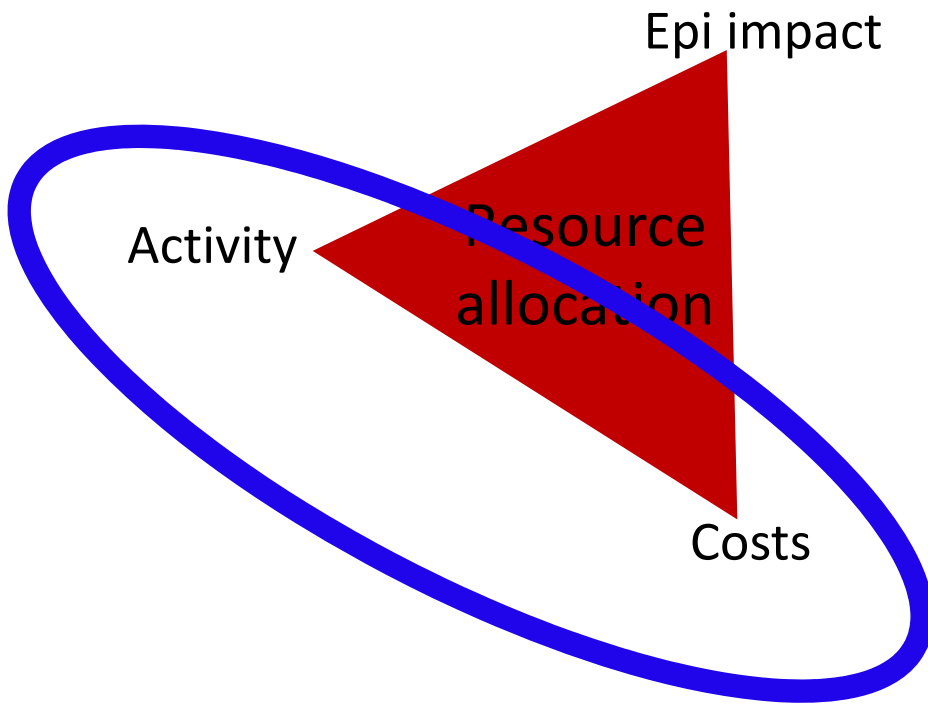
What we hope to have by end of meeting…

Wednesday am

Epi impact

Activity

Resource allocation

Costs

- Described critical epi data gaps reducing utility of models for country-level TB resource allocation

- Described proposal for closing data gaps

- Obtained feedback and direction for future work

What we hope to have by end of meeting…

Wednesday <u>pm</u>

Epi impact

Activity

Resource allocation

Costs

- Described current cost data availability for modelling, including ongoing initiatives

- Introduced the Global Health Cost Consortium

- Obtained feedback on current and future work to improve availability, accessibility and use of cost data

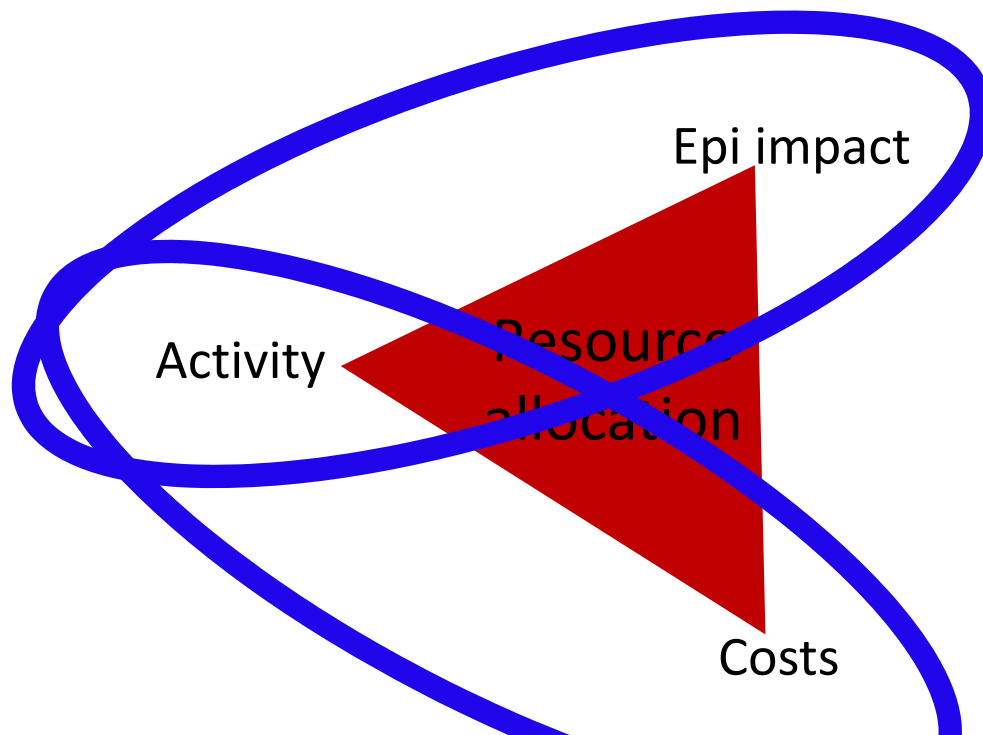# What we hope to have by end of meeting…

Thursday/ Friday

- Created a forum on how to improve current epi and econ modeling efforts related to TB case detection

- (After meeting) fund one or two projects to improve the epi or econ modeling the TB case detection

Tour of this week's meeting

Monday/ Tuesday

Wednesday

Thursday/ Friday

Epi impact

Activity

Resource allocation

Costs

Let's get on with it...

Monday/ Tuesday

Country level modelling guidance...

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