SP-61-C9:
Making informed and smart choices: evidence-based optimisation of national strategies to end TB

# Maximising impact with limited resources: optimisation versus prioritisation

Kathy Fiekert

50TH WORLD CONFERENCE ON LUNG HEALTH

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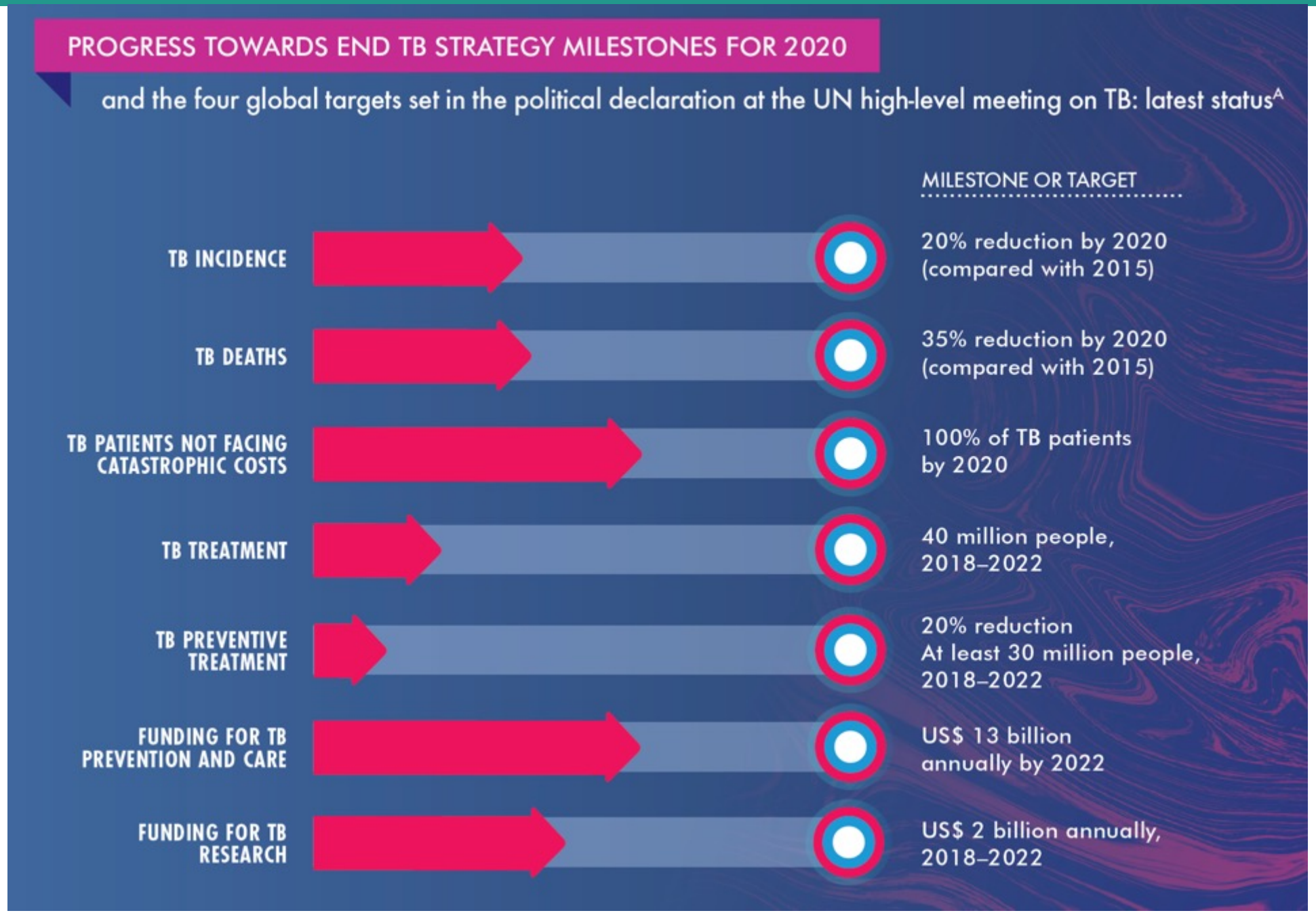


Source: WHO Global Tuberculosis Report 2019

[A] End of 2018 except for funding for TB prevention and care (2019) and funding for TB research (2017).

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# “TB patient journey” & the care continuum


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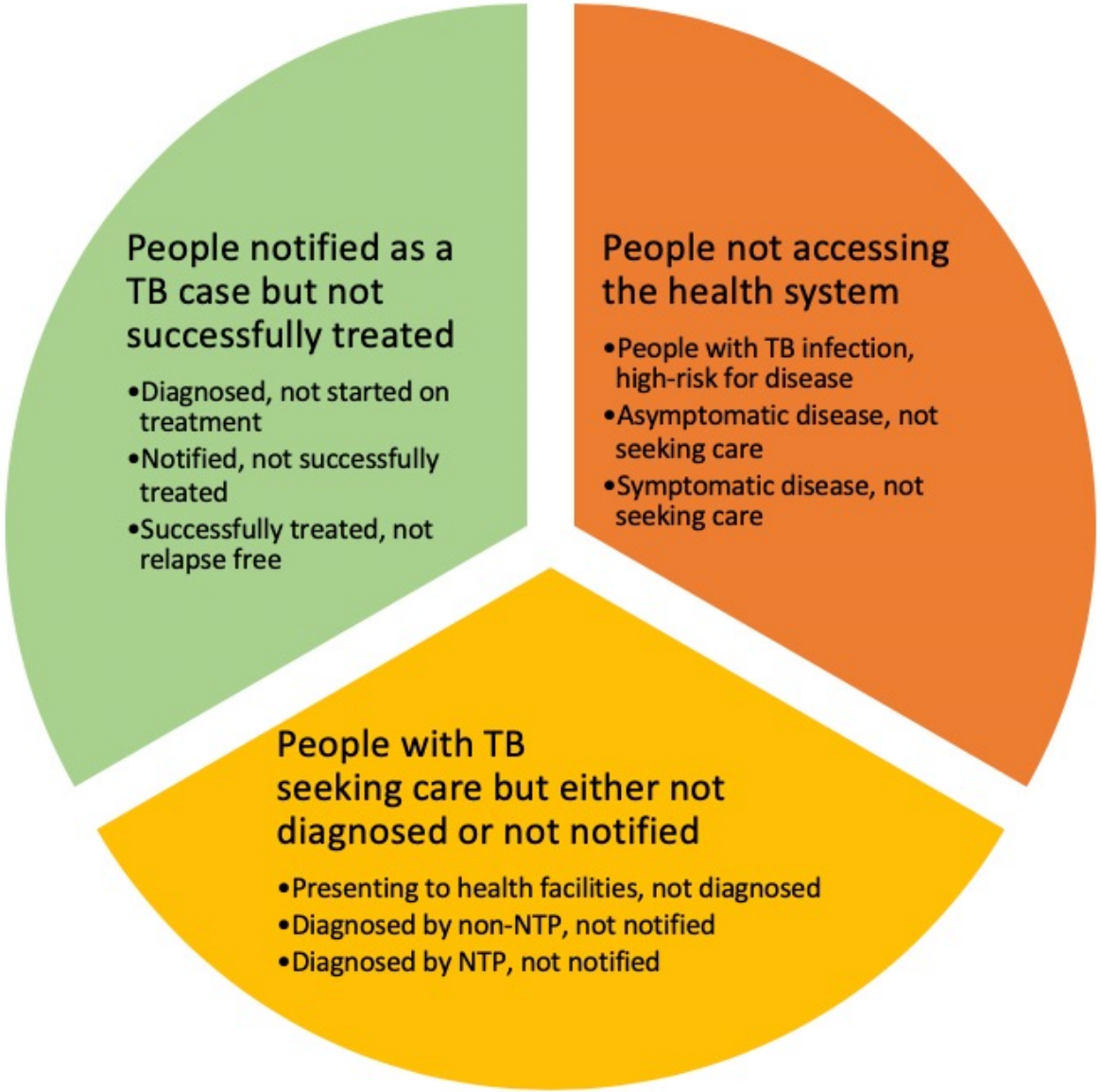
# “TB patient journey” & the care continuum

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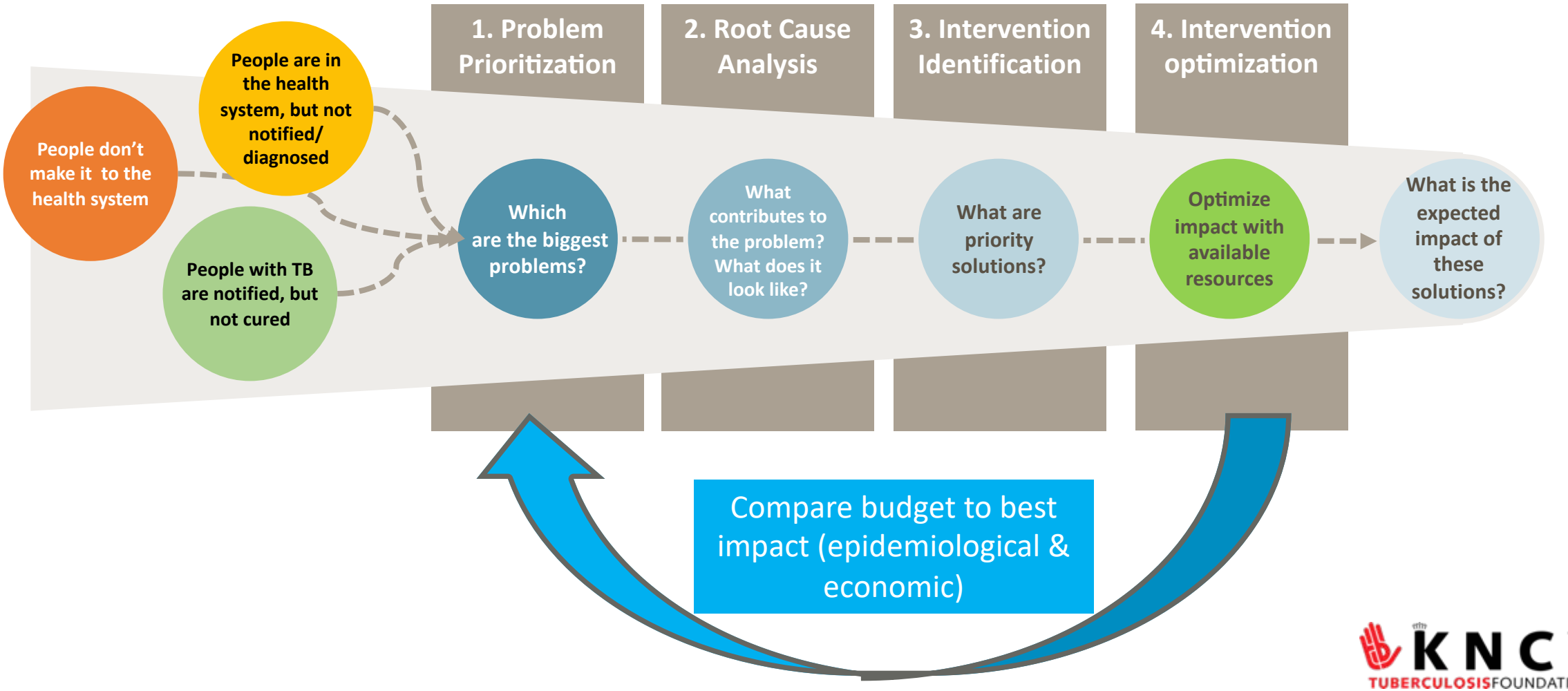
# Intervention optimization

**"What makes most sense?"**

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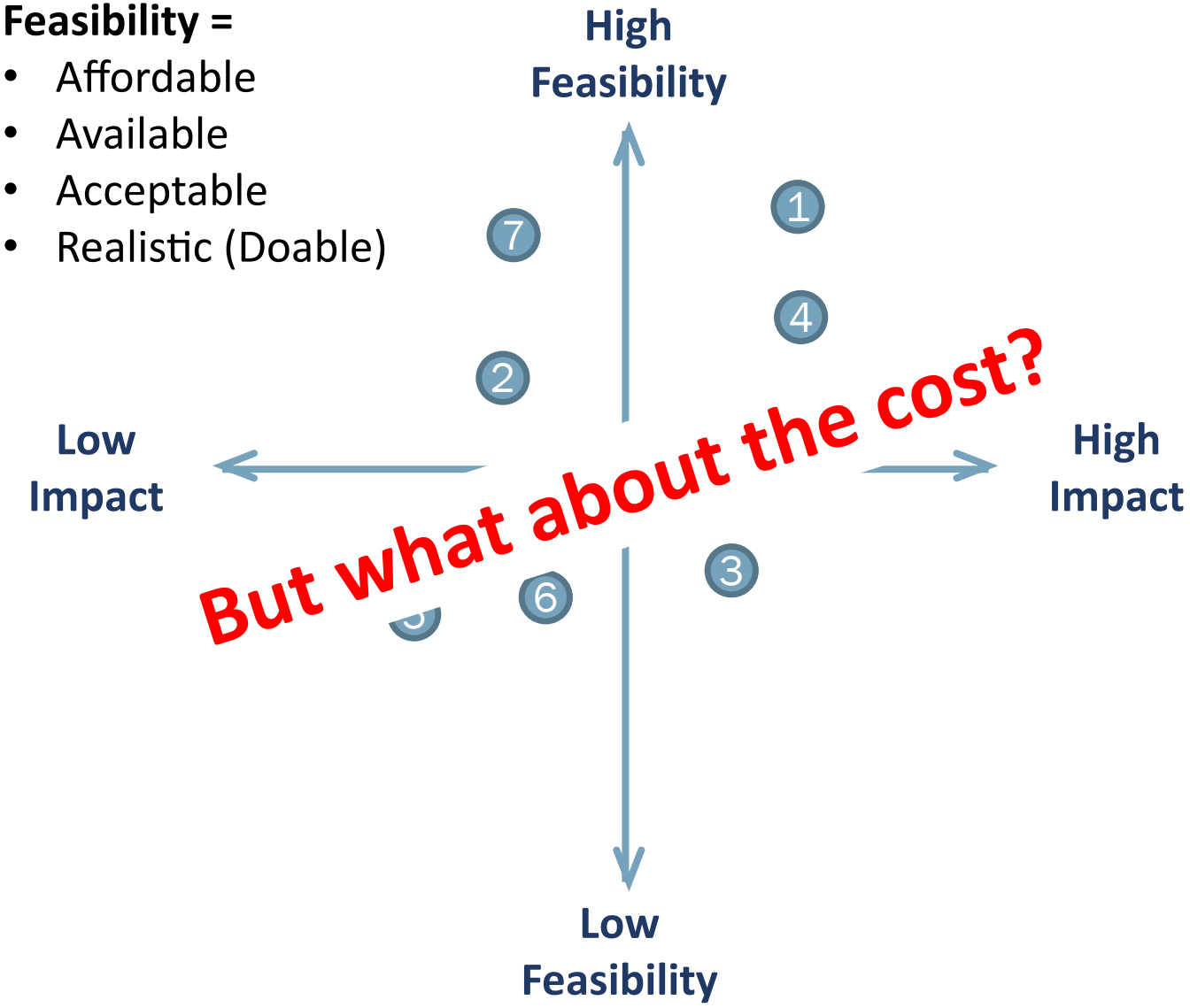
# Modelling to support prioritisation/optimisation

**Feasibility =**

- Affordable
- Available
- Acceptable
- Realistic (Doable)




**Impact modelling:**

- Validation/ robustness/ limitations?
  - Model ≠ "Crystal Ball"
- But how to address complexity?
  - Intervention packages vs interventions
  - Strategies depending on available resources
  - Short-term vs long-term vision
  - Intervention interdependency (A before B)

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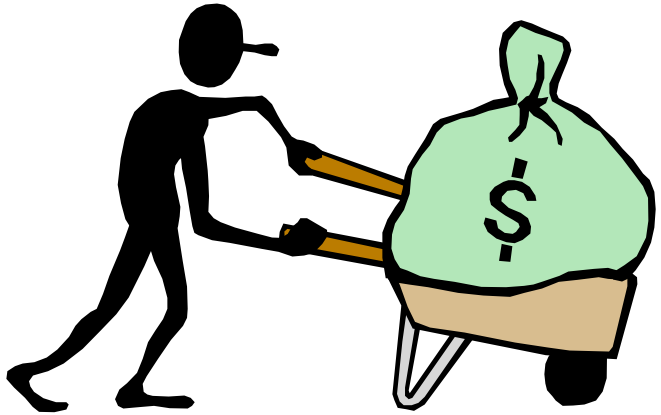
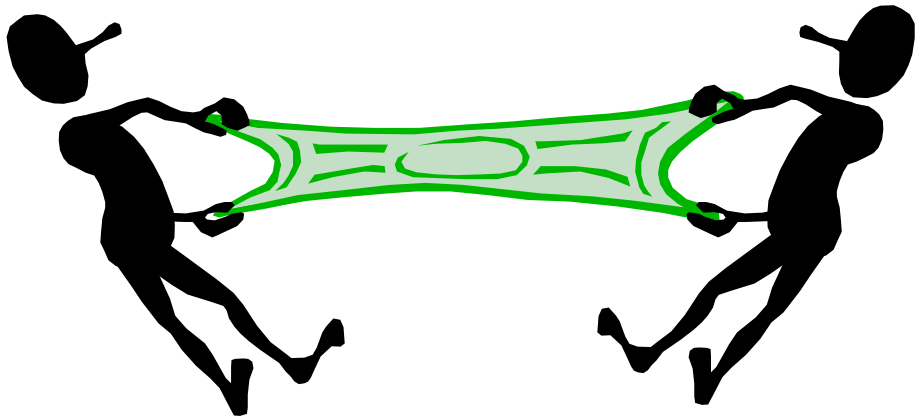
# How much?





How much do we have?
How much does it cost?
What is it worth?

- long-term/ short-term
- Micro-economic/ macro-economic

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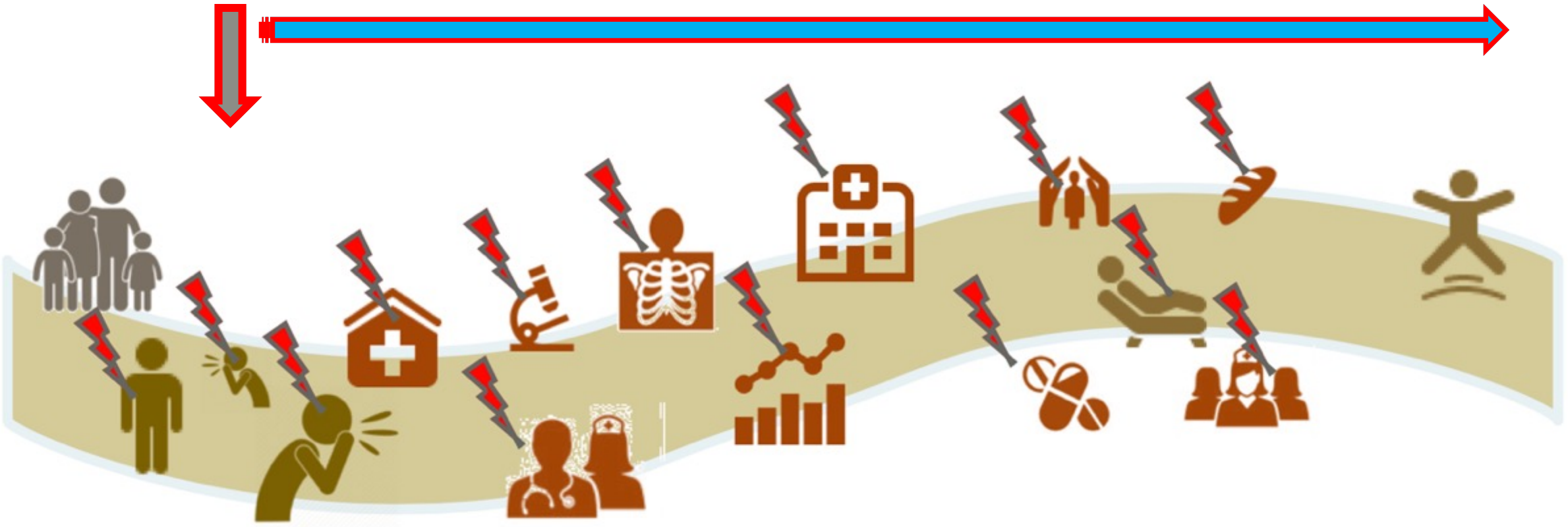
# Consider “true” and complete cost for both provider **and** patient



Don’t ignore hidden and related costs and “knock-on effects”

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# TB Financing

## CLOSING FINANCING GAPS

**US$ 10.1 BILLION**
REQUIRED
ANNUALY FOR **TB**
IMPLEMENTATION

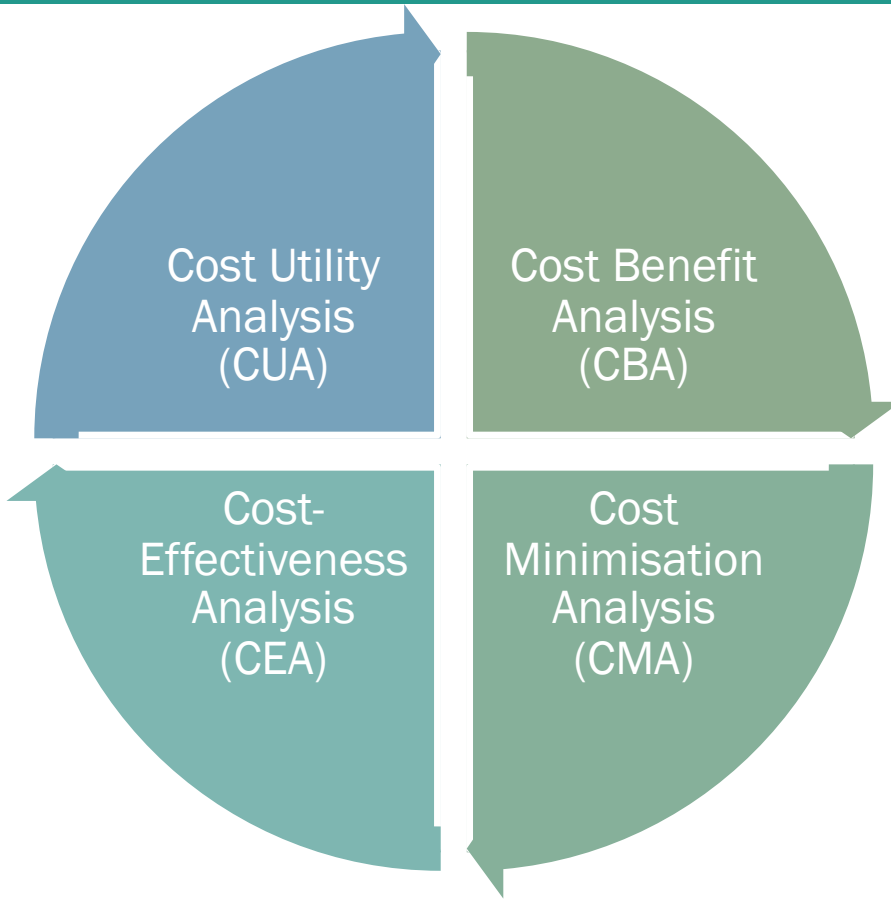
FUNDING GAP
**$ 3.3 BILLION**
IN 2019

## FUNDING GAPS IN TB RESEARCH

**US$ 2 BILLION**
REQUIRED
ANNUALLY FOR
**TB RESEARCH**

FUNDING GAP
**$ 1.2 BILLION**
IN 2017

# Economic evaluation is paramount




## Is it worth the effort?

- *Short-term and long-term gains (including future cost savings)*
- *Wider economic impact*
  - healthy workforce = higher productivity & GDP)
- *ICERs (Incremental Cost Efficiency Rates)*
- *"Business case"….*
  - "invest now, save later", "Best buy", etc.

**Costing ≠ economic evaluation!**

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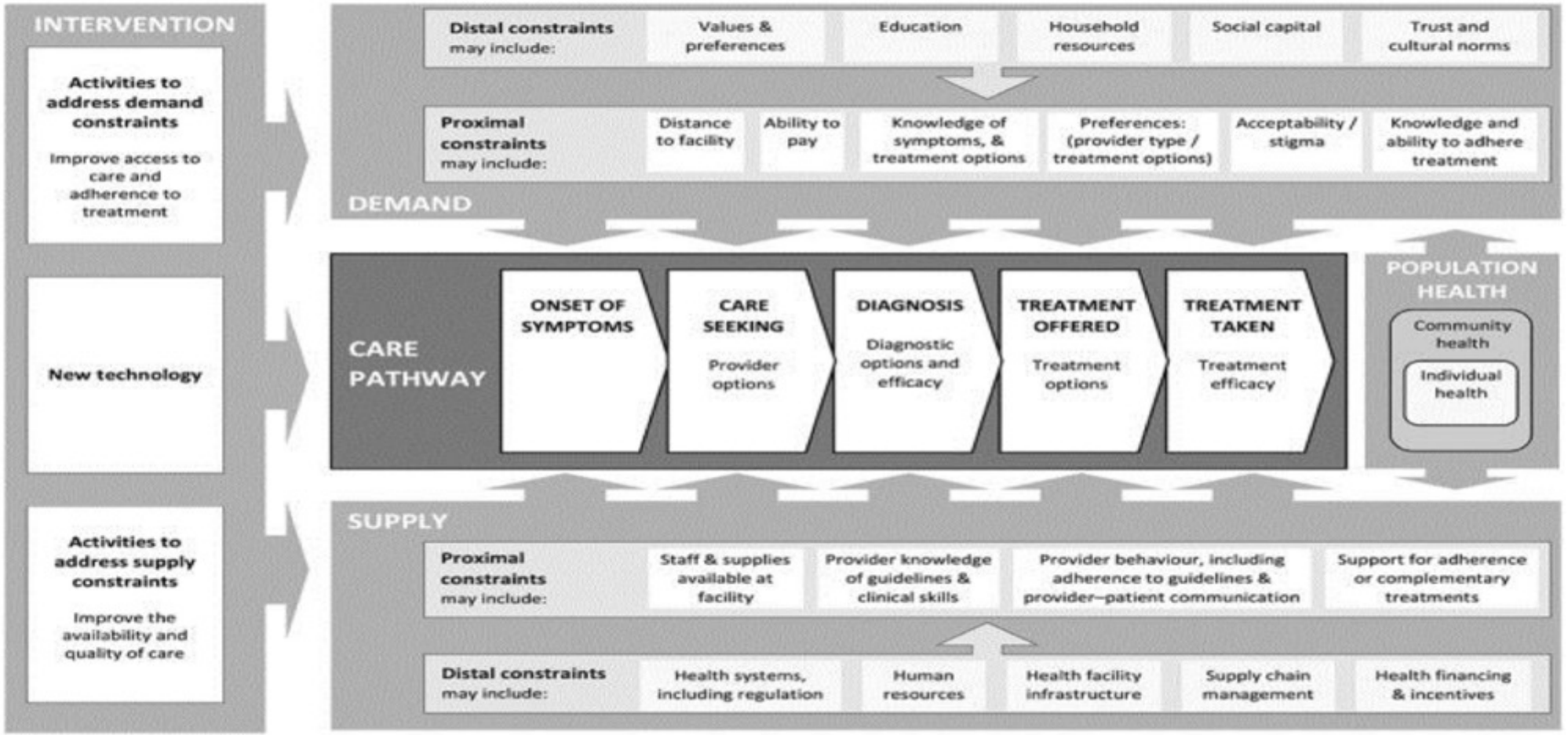
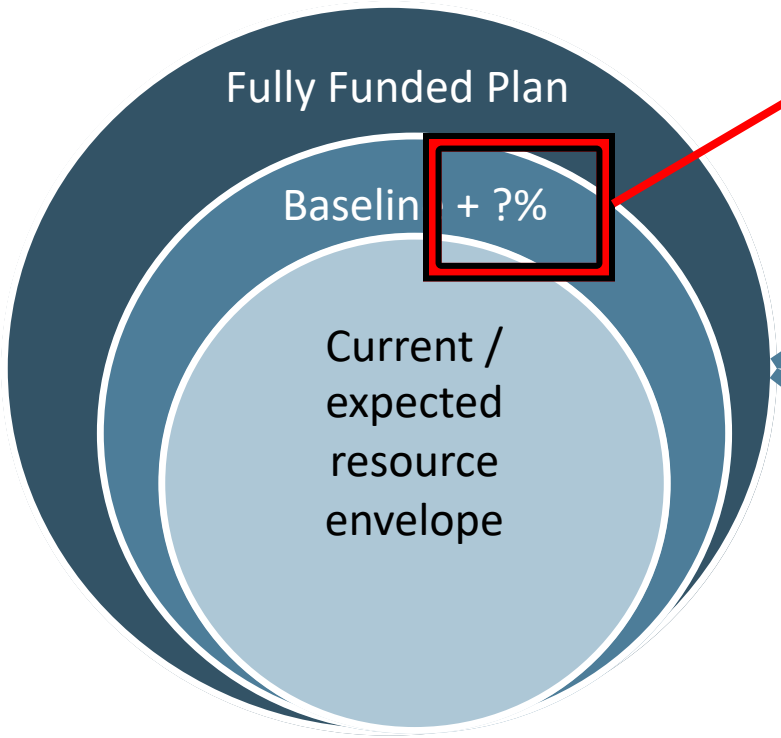
# Understanding the intervention and cost




Vassall A, Mangham-Jefferies L, Gomez GB, Pitt C, Foster N. Incorporating Demand and Supply Constraints into Economic Evaluations in Low-Income and Middle-Income Countries. Health Econ. 2016 Feb;25 Suppl 1:95-115.

***Aim:*** *To create a national plan that is prioritized to reflect optimal allocative efficiency given at least 3 funding scenarios: 1) current / expected resource envelope, 2) +X% increase; and 3) fully funded*

Acceptable additional resource input vs worthwhile enhancement/ improvement of impact

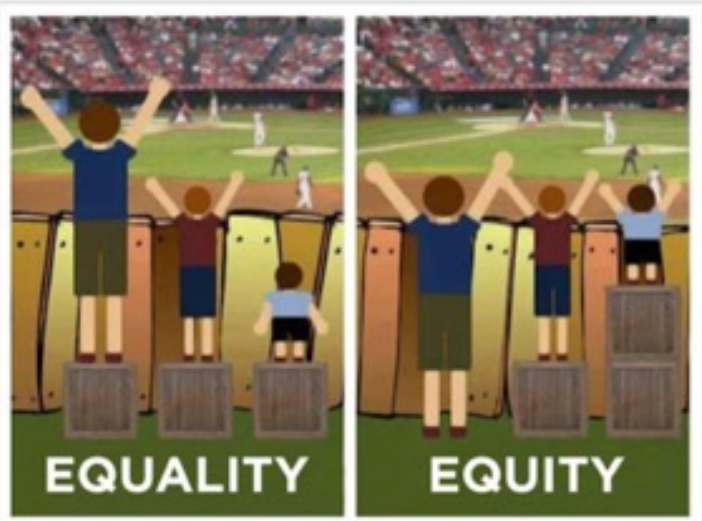



*Which will enable:*

- Prioritized allocation of domestic budget
- Framework for allocation of sub-national budgets
- Prioritized investment case
- NSP-based funding application to Global Fund
- Expression of priorities for other donor funding and research activities

# And yet … there is still a tendency …

- To prioritise rather than **optimise** – i.e. chose one intervention or risk group over another
- For donors & policy makers to “pick & choose” certain aspects to focus on and invest in rather than seeing the programme as a whole
  - *(e.g. gender bias, investment has to equal lives saved, etc.)*
- To oversimplify a complex situation
  - *Assuming heterogeneity*
    *(programming based on national aggregated average)*
  - *Misunderstanding UHC as*
    *“everyone needs and is getting the same”*



Source: Out Front Minnesota

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# A note on modelling:

ARTICLE

https://doi.org/10.1038/s41467-019-10447-y OPEN

nature COMMUNICATIONS

## Introducing risk inequality metrics in tuberculosis policy development

M. Gabriela M. Gomes[1,2], Juliane F. Oliveira[2], Adelmo Bertolde[3], Diepreye Ayabina[1], Tuan Anh Nguyen[4], Ethel L. Maciel[5], Raquel Duarte[6], Binh Hoa Nguyen[4], Priya B. Shete[7] & Christian Lienhardt[8,9]

"Global stakeholders including the World Health Organization rely on predictive models for developing strategies and setting targets for tuberculosis care and control programs. **Failure to account for variation in individual risk leads to substantial biases that impair data interpretation and policy decisions.**"

**=> Call for Risk Inequality Coefficient (RIC) compliant transmission & impact models**

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# Purpose

Closing the gaps along the care continuum to find and cure **ALL** people with TB

Differentiating subnational responses to address TB in local contexts

Optimizing the implementation of TB services within UHC

Preventing infection, active disease, morbidity and mortality due to TB

Enabling patient-centered approaches which promote quality of care

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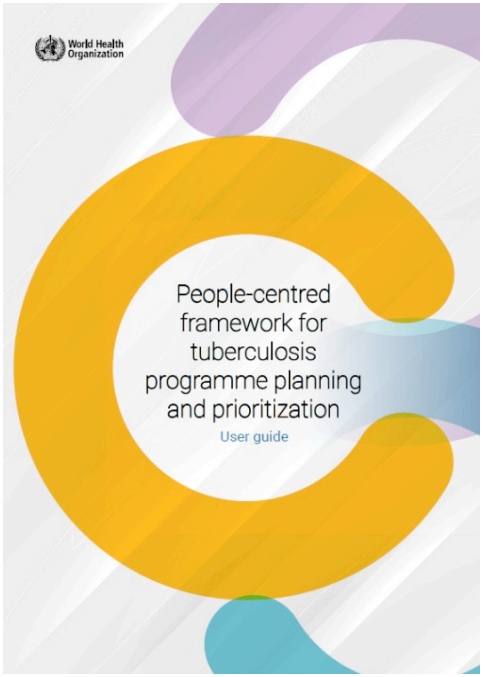
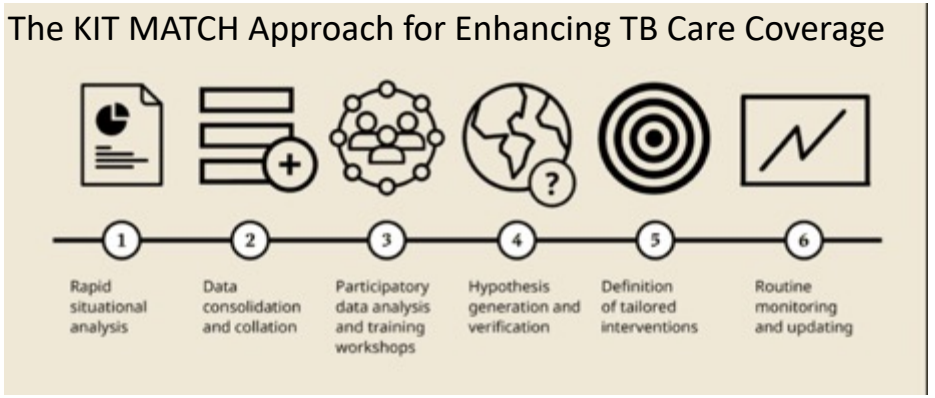
# Tools & Resources


https://www.kncvtbc.org/en/people-centered-framework-for-tb-programming/

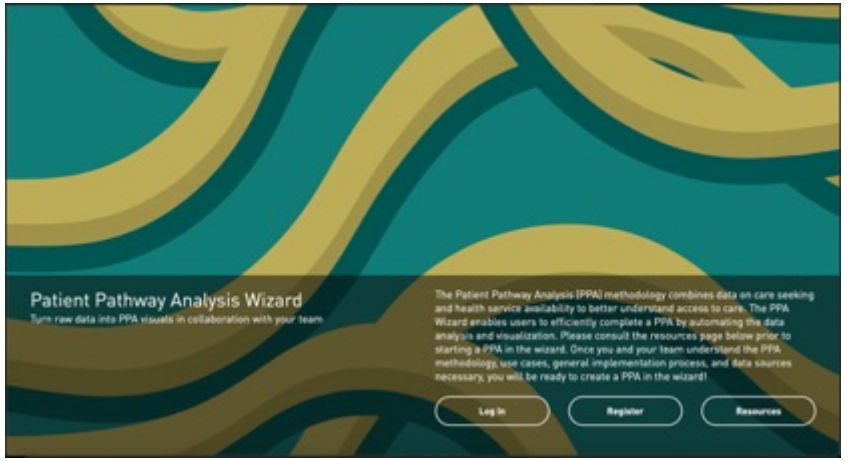


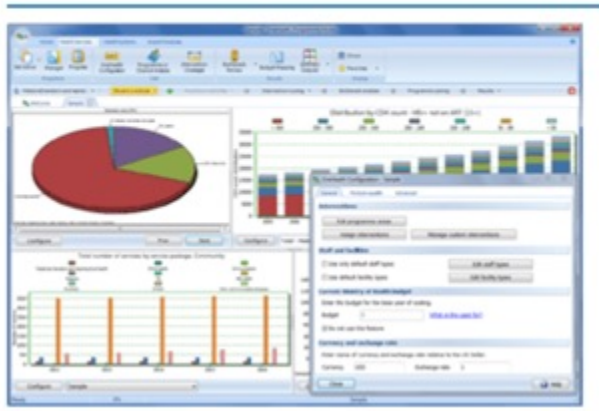

https://www.kit.nl/project/the-kit-match-approach-for-enhancing-tb-care-coverage/

TIME
TB Impact Model & Estimates

OHT OneHealth Tool




https://ppa.linksbridge.com/home



https://www.avenirhealth.org/software-onehealth.php

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# Optimisation is about more than just the ingredients …

**New data** acquired over the past 2-5 years will drive a **targeted and prioritised approach**.

NSP reflects a **patient-centred approach** to planning and **evidence-based prioritisation** of resource allocation to close the gaps along the patient pathway to quality care.

The NSP is operationalised through a **partnership framework** aligned to each **stakeholder's comparative advantage**.

Activities **address systemic and root causes** of the gaps **along the patient pathway**, suggesting the **complementary roles** of sub-national and central governments, departments across the Ministry of Health, partners and other sectors.

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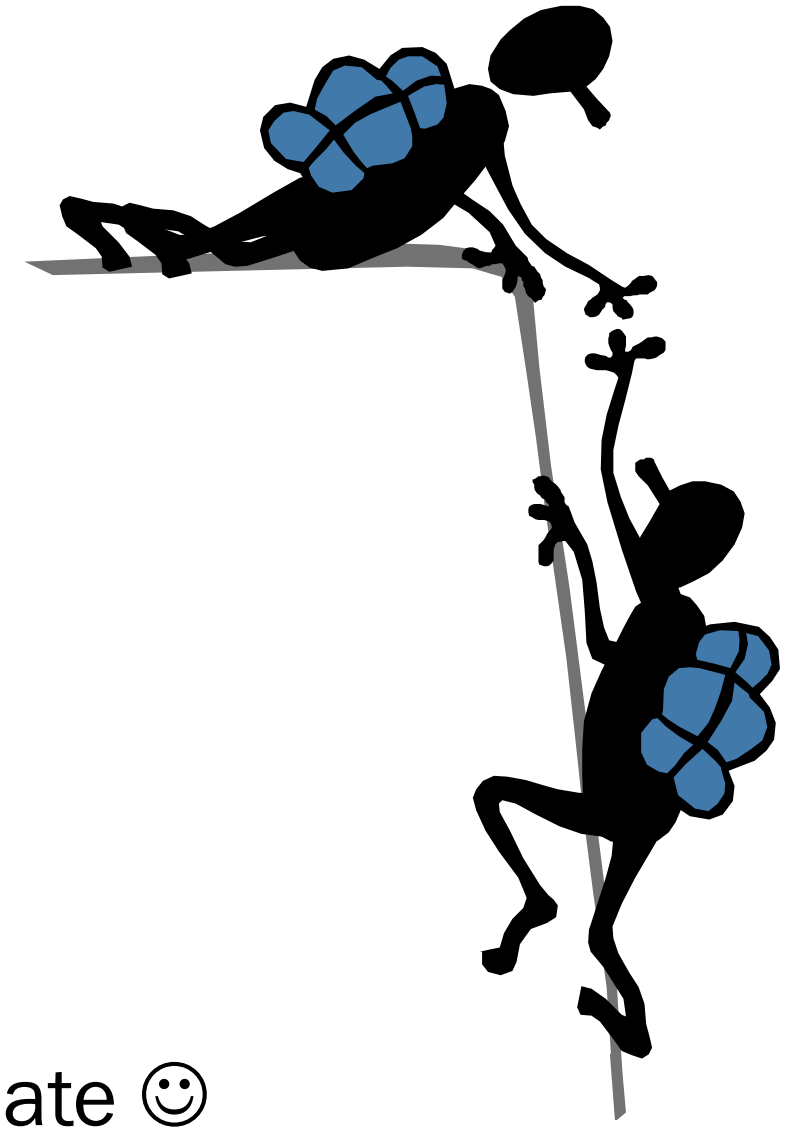
The best strategic plan

… is only as good as its implementation



- Who is doing
- What
- When
- To what extend
- and for How much

--- and don’t forget to monitor and evaluate ☺

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## Acknowledgements

Bill & Melinda Gates Foundation

World Health Organization

Linksbridge

TB MAC

LSHTM

Avenier Health

KIT

The Global Fund

KNCV Tuberculosis Foundation



Contact details: Kathy Fiekert – kathy.fiekert@kncvtbc.org


https://www.kncvtbc.org/en/people-centered-framework-for-tb-programming/

https://pcf4tb.org

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