South African HIV/TB Investment Case:

Analytical framework

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Purpose of South African HIV/TB Investment Case

- Inform (change) national HIV and TB policy
- Inform relevant domestic budgets
  - National-level MTEF envelope (Phase 1)
  - HIV Conditional Grant (Phase 2 onwards)
  - Prov'l Equitable Share (Phase 2 onwards)
- Inform concept note for GFATM proposal(s)
- Inform donor budgets (incl. PEPFAR)

Why change policy?

- Can we do better things?
  → allocative efficiency
- Can we do things better?
  → technical efficiency
- Can we do more with the same money?
  → economic efficiency
- But- do we have the staff?
  → feasibility

Analytical Framework: The objectives

1. To analyse the cost and cost effectiveness of the **current mix of interventions** against HIV and TB over the next 20 years, *at current coverage targets* and…..
   - *a) current* levels of technical efficiency
   - *b) optimal* levels of technical efficiency

   → **TECHNICAL EFFICIENCY**

2. To analyse the full and incremental cost and cost effectiveness of the **most efficient mix of interventions** against HIV and TB, with efficiency measured in number of HIV infections averted, number of TB cases averted, & number of live years saved, over the next 20 years, *at optimal coverage targets* and….
   - *a) current* levels of technical efficiency
   - *b) optimal* levels of technical efficiency

   → **TECHNICAL & ALLOCATIVE EFFICIENCY**

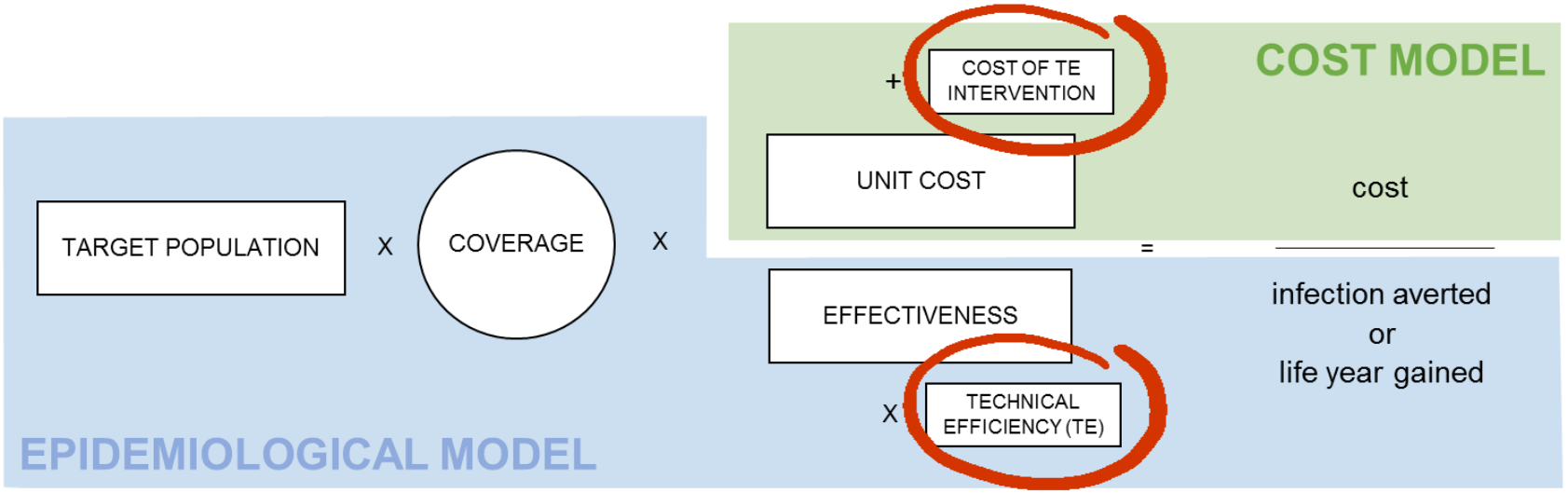
3. To analyse the most efficient mix of interventions **at a given level of funding** and…..
   - *a) current* levels of technical efficiency
   - *b) optimal* levels of technical efficiency

   → **ECONOMIC EFFICIENCY**

4. To analyse the **total number of staff at each staff level** required to implement all interventions under each scenario

   → **FEASIBILITY**

The models



Epi models:

HIV:

- THEMBISA
- SPECTRUM

TB:

- TIME

Cost models:

- National ART Cost Model (NACM)
- Custom-made models for other interventions

Definition: Intervention

- the “WHAT” of delivering a service

Definition: TE factor

- the “HOW” of delivering a service
- A way of improving the delivery of an intervention
  - quicker
  - closer to client
  - improves coverage
  - less staff or other resources
  - etc

- TE factors apply to one programme area only

Definition: Critical enabler

- similar to TE factors, but apply to more than one programme area
  - Social enablers:
    - community mobilisation
    - changing laws
    - stigma reduction
    - etc
  - Programme enablers:
    - community centred design and delivery
    - communication
    - management
    - procurement
    - research and innovation
    - etc

Data needs

- Definition and size of target population
- Coverage rates based on current government targets
  - NSP 2011-2016 for HIV/AIDS, TB and STIs
  - ministerial performance agreements
  - if necessary extrapolated until 2035
- Effectiveness of each intervention
  - HIV and/ or TB infections averted
  - mortality
  - and/or other, more programmatic or intermediary parameters
- Unit cost(s)
  - If no unit cost, at least ingredients

Some algorithms for choosing data

1. Specificity:

Data from same intervention > data from similar intervention

2. Location:

Local data > regional data (Southern Africa > sub-Saharan Africa) > data from elsewhere

3. Study type:

Randomised trial > observational study > impact evaluation > case study > unpublished data

4. Timeliness:

Recent data > older data

- NB: Eminence (ie, who suggested data) does NOT play a role!