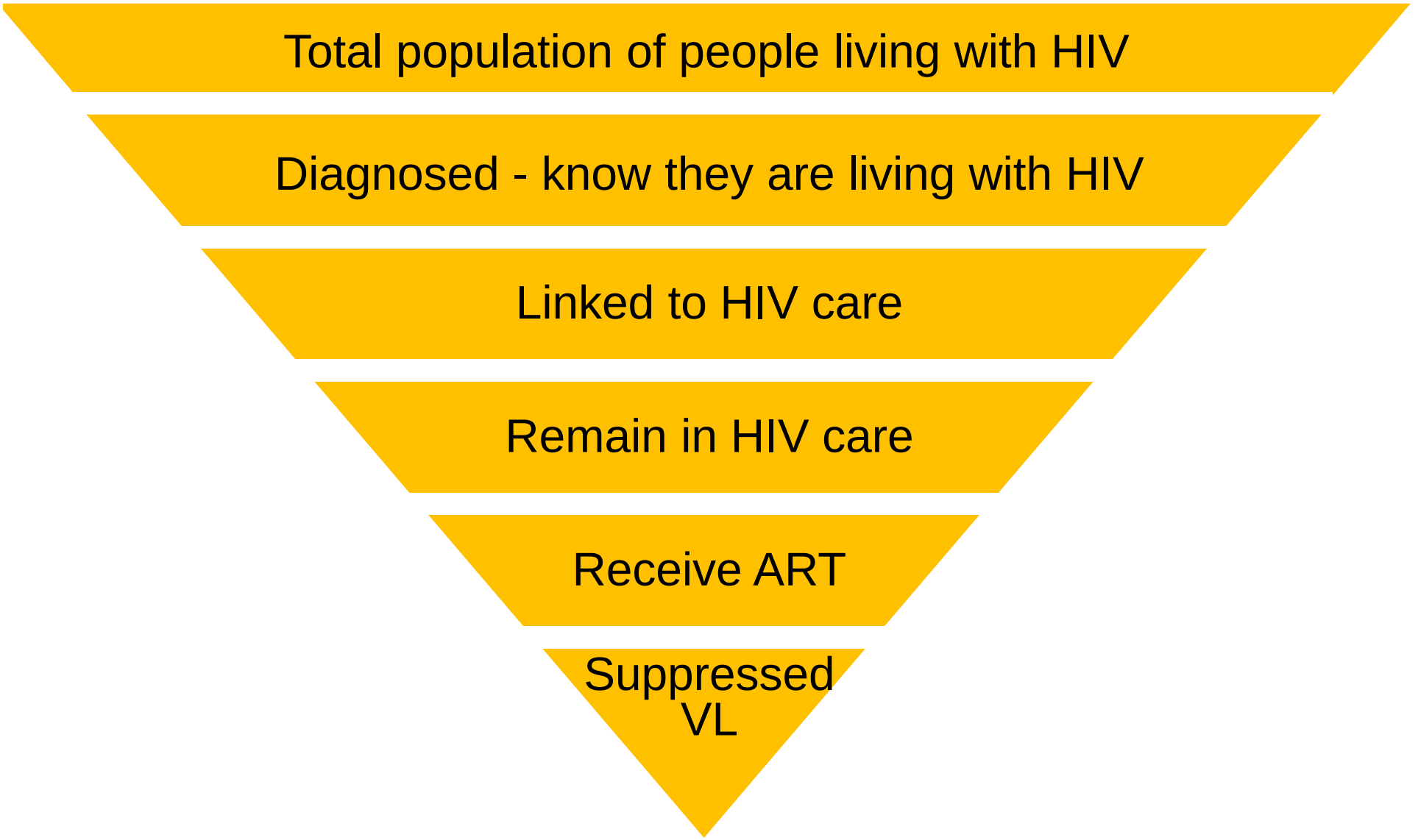
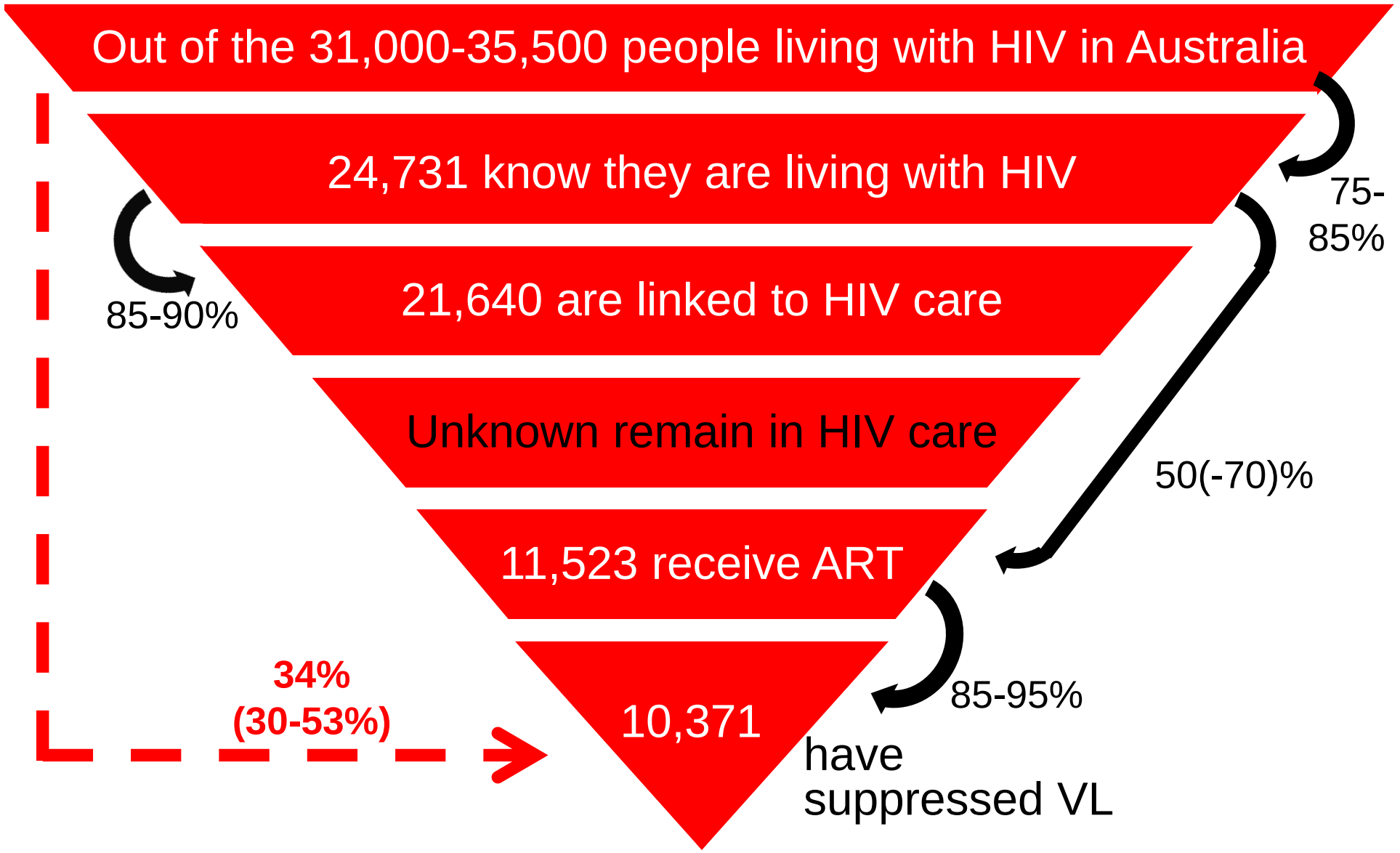
HIV treatment as prevention: monitoring, strategy and operationalizing

David Wilson and Klara Henderson
Surveillance and Evaluation Program

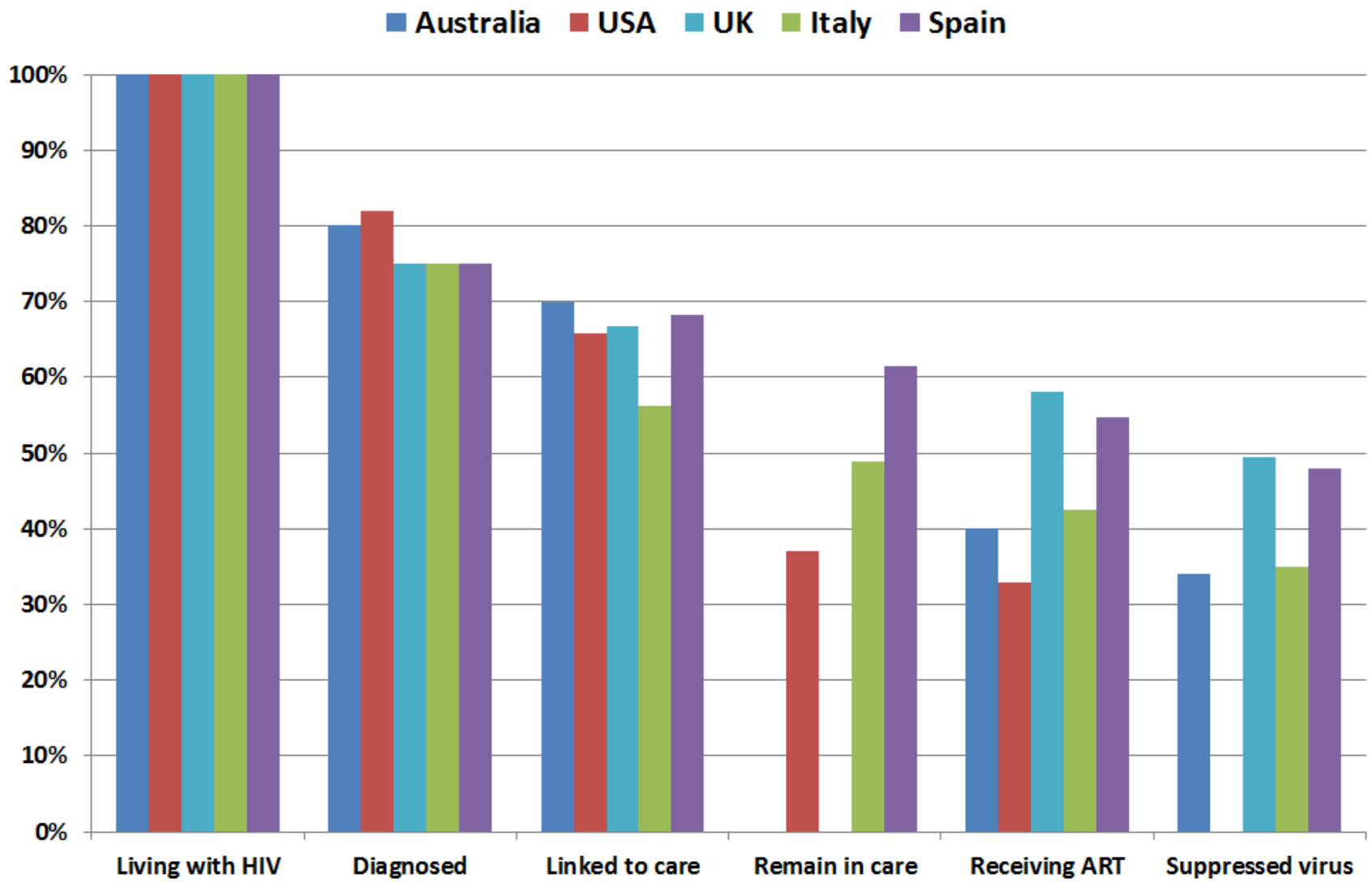
Treatment continuum



Treatment continuum in Australia

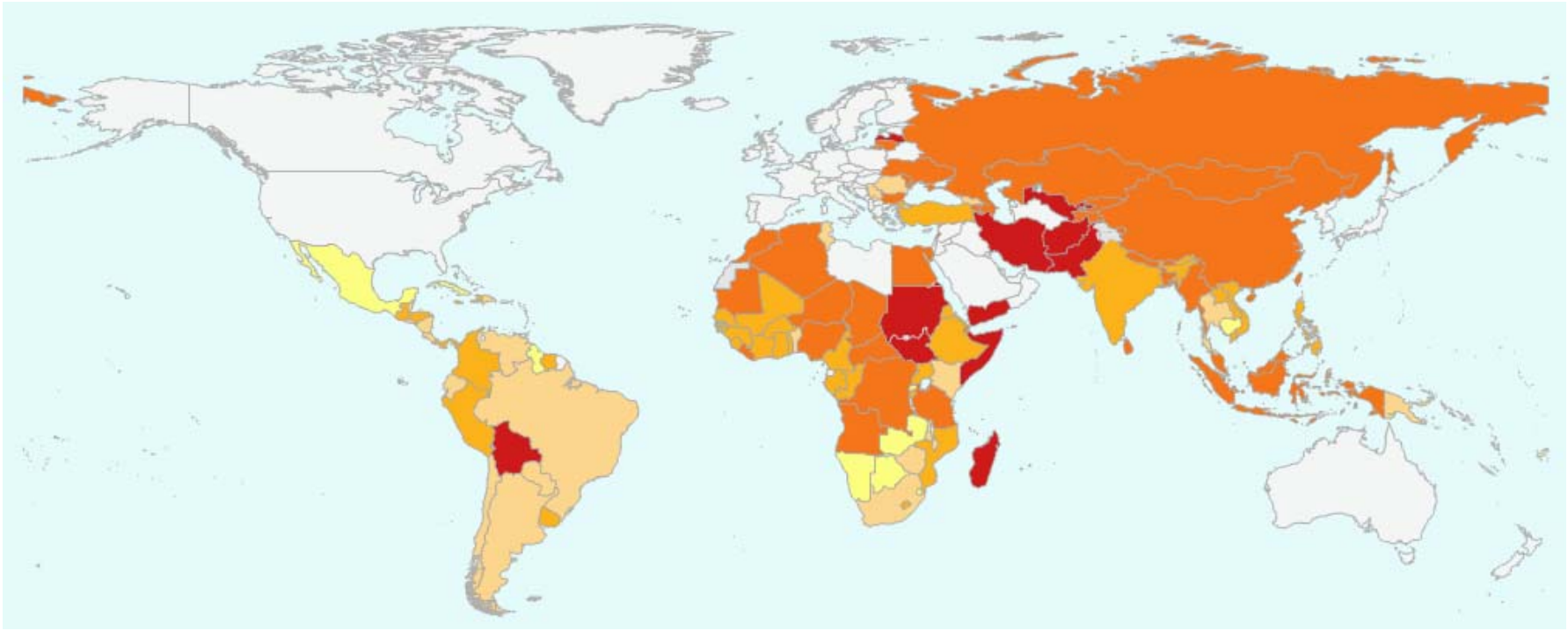


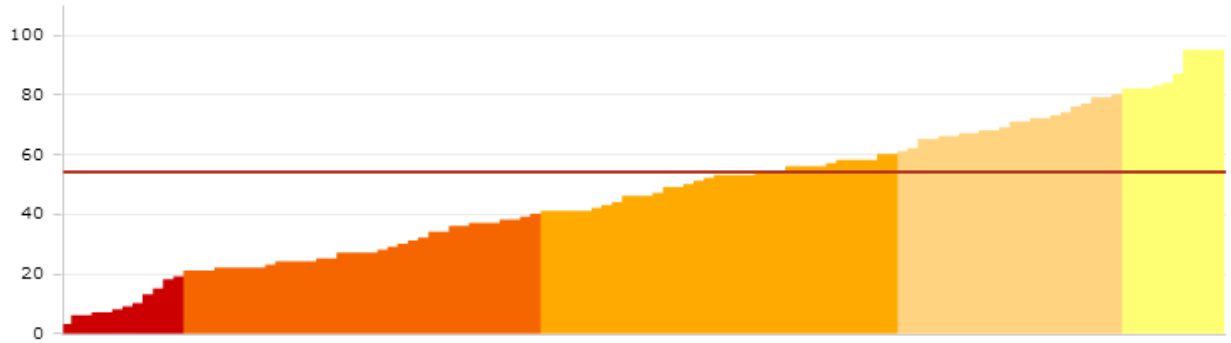
Treatment continuum



Source: Irene Hall (US CDC), Valerie Delpech (UK HPA), Barbara Suligoi (Italia Centro Operativo AIDS), Jordi Casabona (Spanish Center for HIV/STI Epidemiological Studies)

ART coverage in low and middle income countries





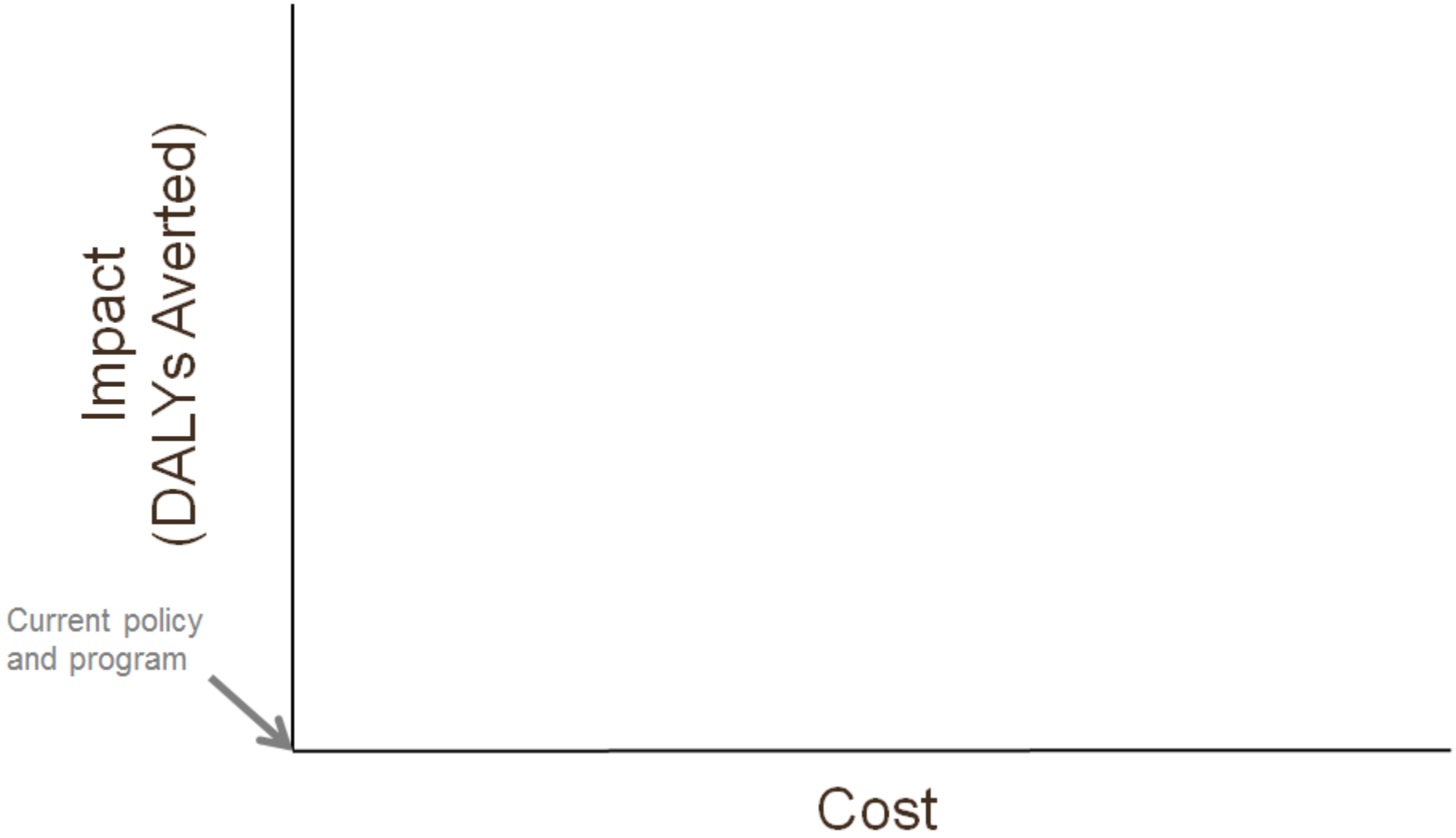
ART coverage
of eligible (CD4<350)

- <20
- 21–40
- 41–60
- 61–80
- 81–100
- Not applicable
- No data

Source: WHO

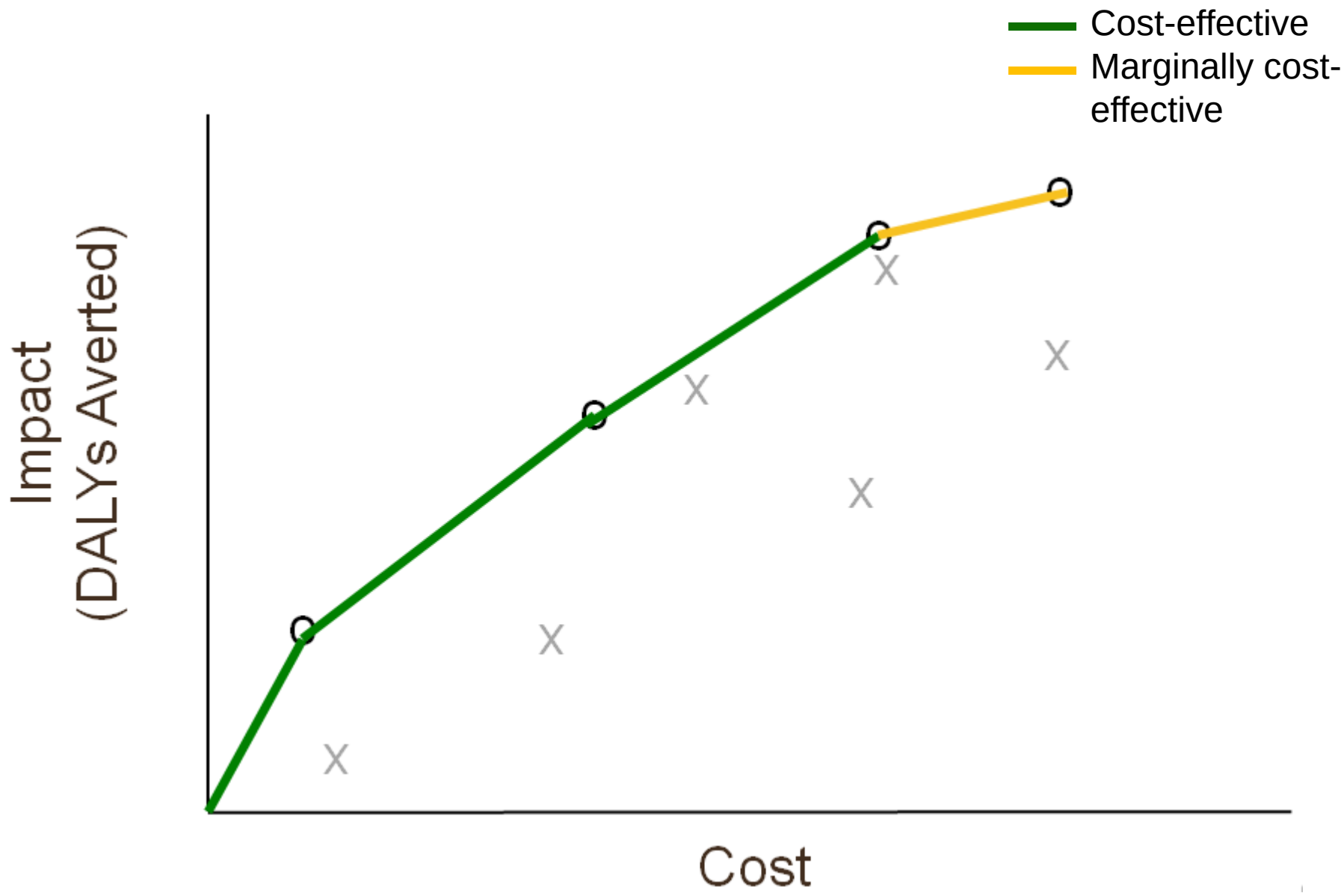
Treatment scale-up prioritization strategies

The Anatomy of a Health-Economics Decisions



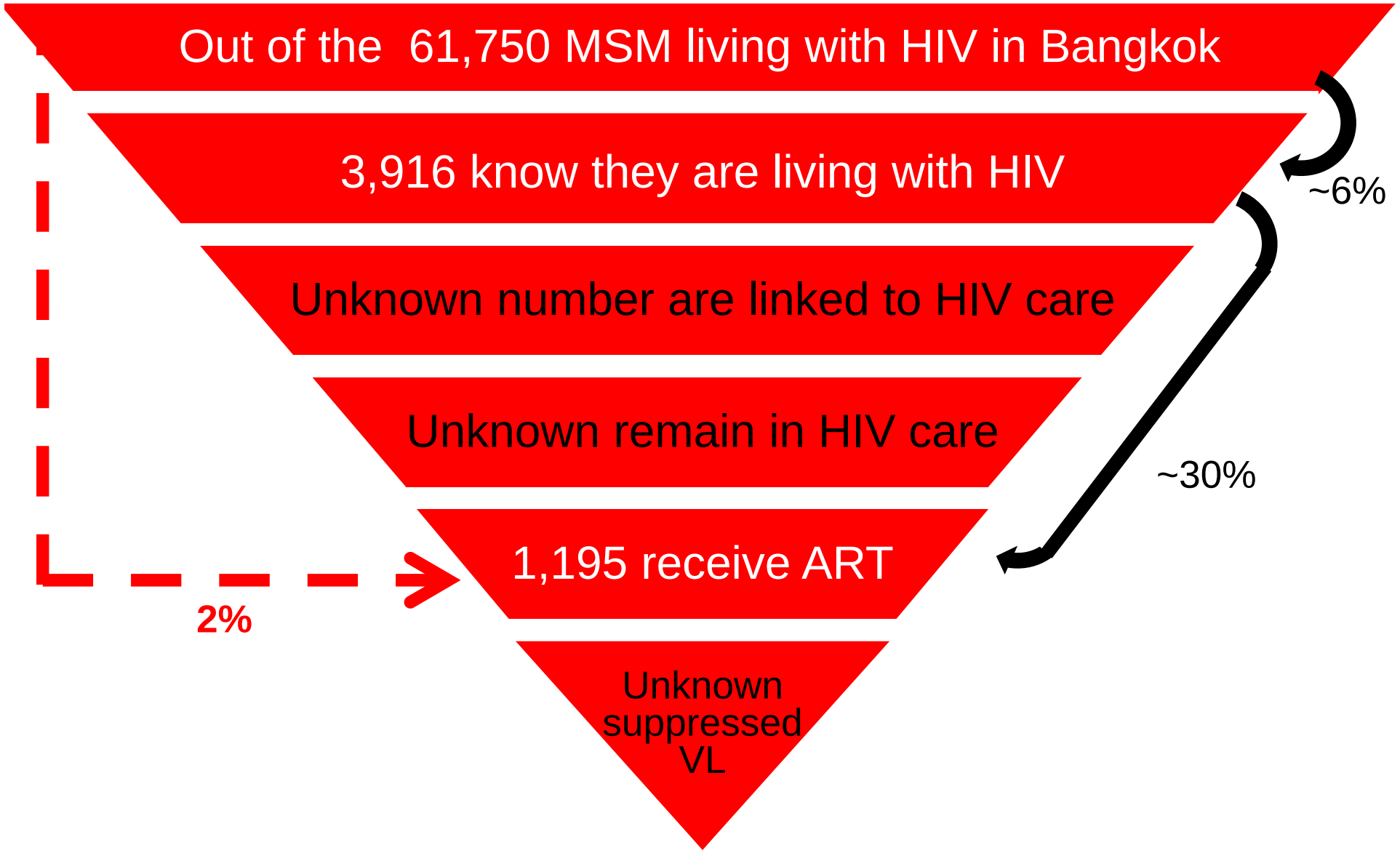
Source: HIV Modelling Consortium

Treatment scale-up prioritization strategies



Source: HIV Modelling Consortium

Treatment continuum in Bangkok (MSM)



Source: personal communications, team analysis

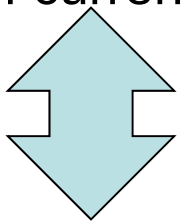
What would it take to actually scale-up treatment in a major metropolitan city in a middle-income country?

Objectives

1. Assess the current load and possible future capacity of Bangkok's existing health facilities in providing VCT and ART programs to MSM
2. Identify strategies using existing infrastructure and designing new sites where required in order to achieve large ART scale-up in Bangkok
3. Evaluate the cost-effectiveness and return-on-investment of treatment scale-up strategies for minimizing the number of new HIV cases and related deaths among Bangkok MSM

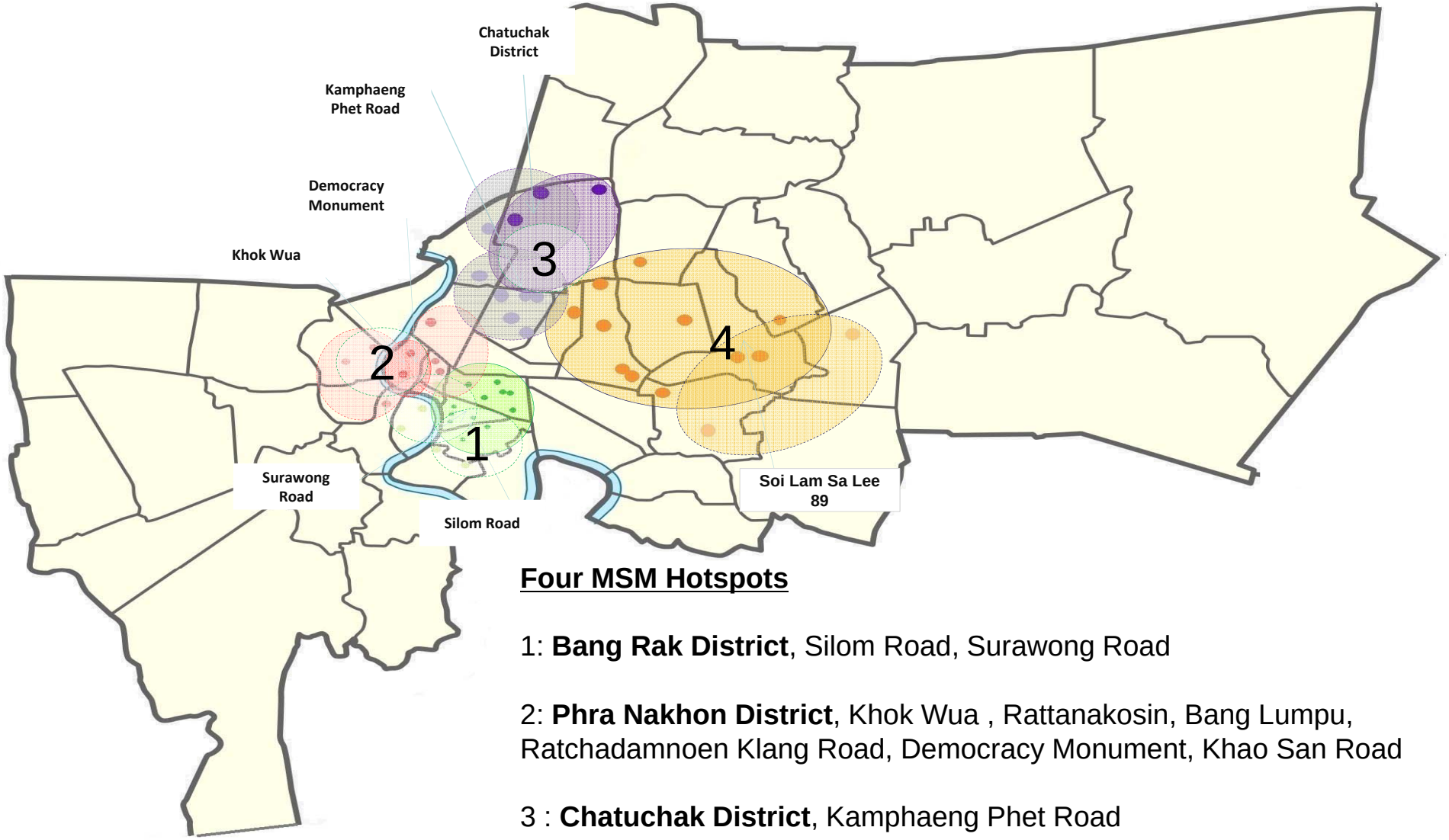
Methods

1. Mapping of current testing and treatment sites in Bangkok, assess the spare capacity
2. Survey 13 sites to collect costing and output data
   - (Research facilities, Public hospitals, Primary care clinics, Private Hospitals)
3. Use KI ‘prevtool’ model to evaluate cost-effectiveness and return on investment of current VCT and ART program



4. Create scenarios, showing resulting costs and effectiveness to provide realistic guidance on scale up

Mapping MSM Hotspots in Bangkok



Four MSM Hotspots

1: **Bang Rak District**, Silom Road, Surawong Road

2: **Phra Nakhon District**, Khok Wua , Rattanakosin, Bang Lumpu, Ratchadamnoen Klang Road, Democracy Monument, Khao San Road

3 : **Chatuchak District**, Kamphaeng Phet Road

4 : **Lat Phrao District** Ramkhamhaeng Road (Soi Lam Sa Lee 89), Ratchadaphisek Road (Soi Ratchadaphisek 8)

Next steps

- Determine spare capacity in existing testing and ART sites in proximity to MSM hotspots
- Going beyond that MSM hotspot spare capacity, what are the options for scale up?
- Model the effect and cost-effectiveness of alternatives for incremental changes in pragmatic treatment scale-up scenarios