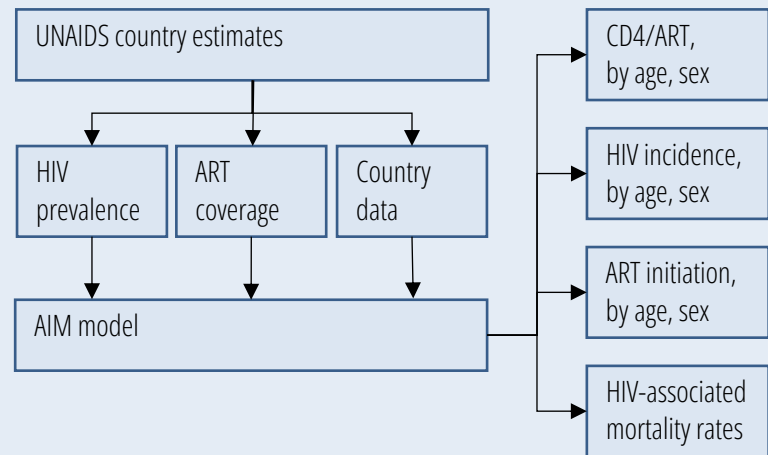


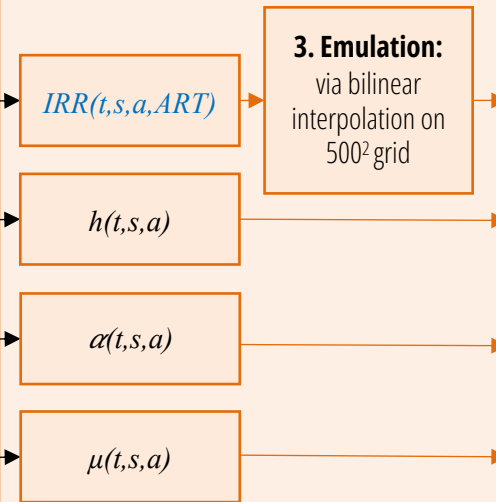
### 1. AIM HIV/ART model (5184 states):

Sex: Male/Female  
Ages: 0,...,80+  
HIV: HIV-negative, CD4 $\geq$ 500, 350-499, 250-349, 200-249, 100-199, 50-99, <50  
ART: None, 0-6 months, 7-12 months,  $\geq$ 12 months



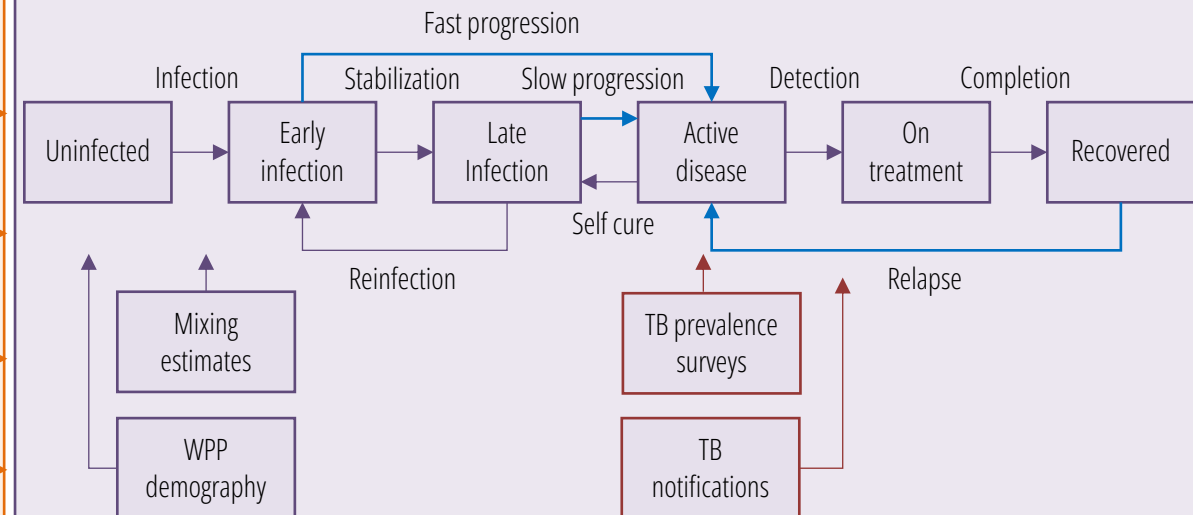
### 2. Reduced HIV/ART/demography (102 states), with time dependency:

Sex: Male/Female  
Ages: 5 year groups  
HIV/ART: 3 states



### 4. TB transmission model (612 states):

Sex: Male/Female  
Ages: 5 year groups  
HIV/ART: 3 states  
TB: 6 states  
20 parameters



### 5. Bayesian inference using Markov chain Monte Carlo: calculation of epidemiological outputs