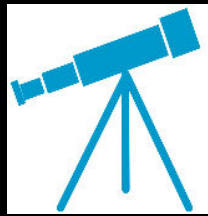


# ALTERNATIVE MODELS OF ART DELIVERY: OPTIMIZING THE BENEFITS



# AMBIT

## A SYSTEM-WIDE LOOK AT ALTERNATIVE MODELS FOR DELIVERING HIV TREATMENT

### BACKGROUND

Most high HIV-prevalence countries are experimenting with and scaling up alternative service delivery approaches, or differentiated models of care, for providing antiretroviral treatment (ART) for HIV. Hopes for such approaches include better access to and outcomes of treatment for patients; increased clinic capacity; and lower costs for providers and patients.

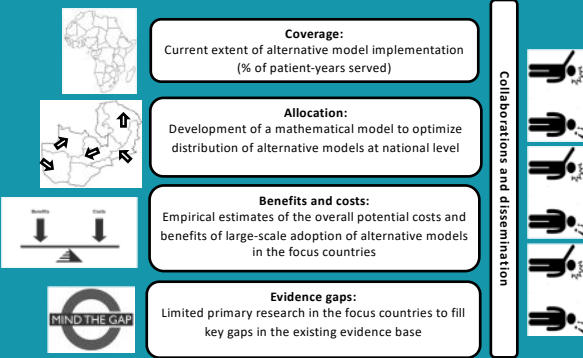
Although many evaluations are underway, we have little evidence on the big picture: the proportion of clinics offering alternative models, eligibility criteria and numbers of patients eligible, number of patients actually participating, program-wide outcomes, resource utilization and costs compared to traditional care, fidelity to guidelines, financial sustainability, and other system-wide indicators.

### PROJECT

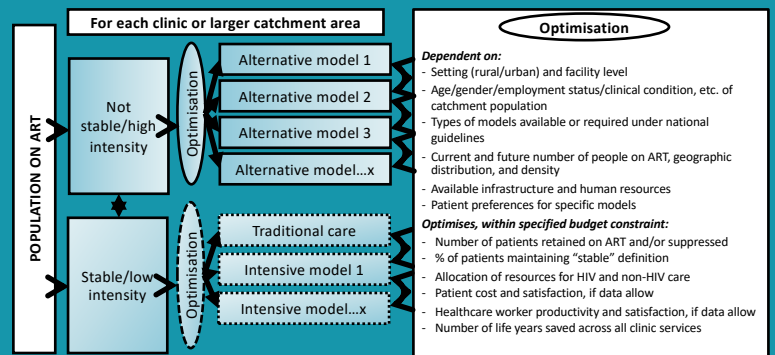
AMBIT is a 2.5-year research and evaluation project in sub-Saharan Africa supported by the Bill & Melinda Gates Foundation and implemented by the Boston University School of Public Health in the U.S., the Health Economics and Epidemiology Research Office (HE<sup>2</sup>RO) in South Africa, and other local partners. The project, launched in September 2018, will include data synthesis, data collection, data analysis, and modeling activities aimed at generating information for near- and long-term decision making and creating an approach and platform for ongoing evaluation.

Activities will include literature reviews, analysis of retrospective data and implementation reports, cost estimates, surveys, modeling, and modest primary data collection and analysis, with an anticipated emphasis on Malawi, Zambia, and South Africa.

### COMPONENTS OF AMBIT



### ALLOCATION OPTIMIZATION MODEL



### COVERAGE

Using routine electronic medical records, cohorts under observation, existing M&E reports from government and partners, implementation science studies, and primary quality assessment, AMBIT aims to estimate:

- Percentage of current ART patients meeting national definition of stable; distribution of reasons for not meeting definition
- Geographic distribution and description of alternative models
- Number (proportion) of patients in each model at time of data collection; patient-months enrolled in each model. (Anecdotal evidence indicates discrepancies between aggregate reports and actual practice.)
- Location, duration, and frequency of dispensing
- Number of facility visits per patient per year, by model of care
- Number of viral load tests per patient per year, by model of care

### BENEFITS AND COSTS

AMBIT will attempt to identify the universe of potential costs and benefits, as shown in the table to the right, and generate some empirical information for each domain, depending on data availability.

#### The AMBIT team (so far):

Sydney Rosen [sbrosen@bu.edu](mailto:sbrosen@bu.edu)  
 Sophie Pascoe [spascoe@heroza.org](mailto:spascoe@heroza.org)  
 Brooke Nichols [brooken@bu.edu](mailto:brooken@bu.edu)  
 Gesine Meyer-Rath [gesine@bu.edu](mailto:gesine@bu.edu)  
 Lawrence Long [lclong@bu.edu](mailto:lclong@bu.edu)

Domain	Expectation	Comments
<b>1. Clinical outcomes</b>		
For ART patients	Improve outcomes for all or some ART patients; maintain outcomes for all.	Retention and suppression for all ART patients in site's catchment area, not just those eligible for or served by alternative models.
For non-ART patients	Better uptake of ART among HIV+ and of screening and treatment for TB and NCDs.	Outcomes should improve or number of patients managed should increase due to more provider time/patient and other resources.
<b>2. Non-clinical outcomes</b>		
Costs to patients	Lower financial and opportunity costs to patients enrolled in alternative models.	Costs to patients should fall but may not in all cases, depending on model and patient.
Patient satisfaction	Satisfaction with services and quality of life should improve for all patients.	Details TBD; could include HIV and non-HIV patients.
<b>3. Clinic resource utilization and performance</b>		
Costs to provider	Lower overall costs to providers.	Cost of ART program at site divided by total number of patients in all models, including traditional care. Reallocation of costs without reduction is possible. Program costs could increase if outcomes improve.
Service delivery capacity	Increased or equal clinic capacity (patient volumes).	If alternative models reduce # or duration of visits, clinic may have capacity to take on more clients for ART or non-ART care. Only relevant if there is unmet demand and if clinic's resources are unchanged.
Staff utilization	More efficient use of available staff (professional and lay).	Staff numbers, cadres, and roles could change, but only if managers respond. Alternative is longer tea breaks, shorter hours, etc. Role of un- or minimally trained and/or un- or minimally-paid staff raises concerns for quality and sustainability.
Facility performance	Improvements in overall clinic performance.	Metric for this measure does not exist. May need to create an index, scale, or graph to incorporate multiple aspects of performance.
<b>4. Healthcare worker experience</b>		
Satisfaction	Higher HCW satisfaction due to lower burden, more time with patients	Improvement depends heavily on how clinic management adapts to use of alternative models
Guideline compliance	Better compliance with national guidelines for HIV and non-HIV care	Compliance could improve or diminish, depending on supervision of alternative models, reallocation of HCWs' time, etc.
Productivity	Patient load/HCW decreases	Ideally, alternative models will allow HCWs to produce a larger amount of health by making service delivery for each patient more efficient.

