A RESEARCH AGENDA FOR DIFFERENTIATED ART DELIVERY

Many countries, particularly in sub-Saharan Africa, have adopted policies on differentiated service delivery (DSD) for antiretroviral therapy (ART) and have begun implementing models. However, there are unanswered research questions on how best to meet the diverse needs of people living with HIV as DSD is scaled up. This policy brief outlines a research agenda for differentiated ART delivery based on a think tank discussion [1] that brought together key stakeholders from eight countries, including ministries of health, HIV service providers and HIV implementation scientists.

The research gaps identified from the discussion are presented in this brief, arranged according to the four groups of people living with HIV as described by the World Health Organization.

FOR INDIVIDUALS WHO ARE CLINICALLY STABLE ON ART

1. Evaluate the degree of scale up of differentiated ART delivery at the country level to determine whether the majority of eligible clients have access to ART.
   
   Identify barriers and enablers to scale up, including the impact of longer ART prescriptions (multi-month scripting), quality of care for clients and healthcare worker satisfaction.

2. Conduct health system research to determine and support health system reorientation to facilitate implementation of differentiated service delivery routinely, including resource allocation, managing the drug supply chain and assessing monitoring and evaluation indicators.

3. Determine the minimum intervention required to enable self-care by stable clients and monitor how frequently clients in DSD models self-report to facilities when unwell.

4. Undertake implementation science studies and quality improvement projects to determine the role, capacity and impact of differentiated ART delivery models integrating other healthcare provision, specifically chronic disease management, tuberculosis preventative therapy and active disease treatment, and sexual and reproductive health and rights services.

For low HIV-prevalence settings, the opposite should be considered – integration of differentiated ART delivery into existing integrated healthcare provision. Some best practices exist and should be identified and profiled.

INDIVIDUALS RECEIVING AN ART REGIMEN THAT IS FALING

1. Review existing evidence and datasets to estimate the proportion of clients who are on a failing ART regimen or at risk of failure at any given time.

2. Determine the key barriers and enablers to: enable the refining of tools to identify these clients (viral load, pharmacy refill data, a clinical prediction rule); frequency of their use; and development of appropriate DSD models geared toward the needs of broad subgroups identified.

3. Determine the outcomes of these clients within DSD models.

Define the method of identification of eligible clients and differentiated service delivery for broad subgroups with differing needs (psychosocial support, clinical support, simplified and easier access to ongoing care, or a combination of these).

Generate evidence that increasing visit frequency for individuals receiving an ART regimen that is failing may not support sustained retention and viral suppression.
### INDIVIDUALS PRESENTING OR RETURNING TO CARE WHEN CLINICALLY WELL

1. Determine the factors that enable a client to do well in the first year on ART and if earlier eligibility for stable client models should be considered. Determine if communicating the roadmap for ongoing care to the client, including eligibility for stable client models, can support early retention.

2. Evaluate retention and viral suppression in public sector cohorts in non-research sessions where same-day and rapid ART initiation have been routinely implemented.

3. Pilot DSD models for non-ART-naive clients returning to care after a treatment interruption. Describe the broad subgroups of returning clients and their differing needs.

### INDIVIDUALS PRESENTING OR RETURNING TO CARE WITH ADVANCED HIV DISEASE

1. Utilize existing datasets to estimate the proportion of clients who are presenting with advanced HIV disease (AHD). Disaggregate by those presenting to hospital and to clinics (well or sick) to enable the development of appropriate DSD models.

2. Determine the key defining reasons for, or pathways to, late presentation or returning to care with AHD. Develop and pilot appropriate interventions that enable or support earlier presentation.

3. Pilot models that effectively utilize results from the semi-quantitative rapid CD4 to ensure development of appropriate service delivery approaches.*

* This requires the semi-quantitative rapid CD4 assay to be as simple as an HIV rapid test. If not, alternative approaches to establish CD4 should be developed with the same purpose.

### IMPLEMENTING THE RESEARCH AGENDA: KEY METHODS AND APPROACH

- **COLLABORATE**
  
  Sharing the DSD research agenda and current projects promotes a coordinated and informed building of the evidence base.

- **LEVERAGE ROUTINE DATA SETS**
  
  More in-depth analysis of existing data sets could provide insights into the questions identified in this research agenda. These data sets are critical for providing baselines and target benchmarks.

- **IMPROVE ADVOCACY AND DISSEMINATION**
  
  Not all gaps between evidence and implementation scale up require more data: advocacy and demand creation efforts based on existing evidence at global, regional and national level could improve access to DSD for people living with HIV.

- **GENERATE AND DIVERSIFY THE EVIDENCE – INCLUDE LOW-PREVALENCE SETTINGS, SPECIFIC POPULATIONS AND DSD ACROSS THE HIV CARE CASCADE**
  
  Much of the data has been from high-prevalence settings in East and Southern Africa. Data from other contexts, including West and Central Africa, other populations and across the HIV care cascade, is vital to ensure access to DSD for everyone.

### REFERENCES

