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### BACKGROUND/INTRODUCTION

Most countries lack current, comprehensive data on the scale and status of differentiated service delivery (DSD) models for ART. AMBIT (Alternative Models of ART Delivery: Optimizing the Benefits) is aimed at generating information for near- and long-term decision making on differentiated service delivery in three focus countries: Malawi, Zambia, and South Africa. We interviewed implementing partners and other stakeholders in these countries to gather information about current DSD model coverage, distribution, outcomes, data, and evaluation.

### METHODS

In each AMBIT focus country, we compiled a list of organizations involved in DSD model implementation. Between March and September 2019, in-person or electronic interviews were conducted with representatives from these organizations to capture information on the following domains for each DSD model of care: population eligible, model characteristics (types of service, frequency, location, and provider cadre), scale, data availability, evaluation plans, and documentation. We then synthesized interview results from each country using descriptive statistics to create a snapshot of DSD model implementation status in each country.

### RESULTS

- ❖ Of the 50 stakeholders contacted, 44 agreed to participate (N=13 in Malawi, N=20 in South Africa, N=11 in Zambia).
- ❖ We interviewed 19 implementing partners, 6 government representatives, 9 research organizations, and 8 data/systems organizations. Most of the respondents were directly involved in DSD model implementation; the others provided information on policy, data, or health systems.
- ❖ Respondents jointly reported implementing or supporting 44 different models of care. Some of these were described by multiple partners, leading to a total of 94 DSD model reports (Table 1), each representing one partner supporting one model.
- ❖ Among the 94 model reports, most common (40%) were models delivering services to individual patients outside of facilities (mainly medication pickup points in communities). Also common were facility-based individual models (e.g. fast-track services and specialized clinics for different kinds of patients) (27%) and various forms of health care worker led group models, predominantly adherence clubs (28%). The few client-led groups were community adherence groups (5%).
- ❖ Six-month dispensing is becoming more common in Malawi and Zambia; other models are adapting to it (Table 2).
- ❖ Models for stable adults were most common (55%) (Table 3). Models for adolescents, pregnant and postpartum women, and those MSM and FSW focused were less likely to specify stability as a criterion for model participation.
- ❖ Each country has a set of DSD models prescribed in national guidelines and a set of pilot models being implemented at a smaller scale by specific partners.
- ❖ Each focus country has an electronic medical record (EMR) but challenges exist in using the EMR to measure DSD coverage. No country yet has a DSD indicator in the EMR or a unique identifier to link the routine EMR with other databases or between DSD models and traditional treatment facilities.
- ❖ While research has been built into some DSD model projects, there are very few evaluations of DSD model outcomes undertaken by partner organizations.

### DISCUSSION

- ❖ There is tremendous diversity in models of HIV treatment delivery underway in the three focus countries, including those sanctioned in national guidelines and many pilot projects for special populations, settings, or needs.
- ❖ Standardization of DSD model implementation and fidelity to implementation of guidelines-based models is sub-optimal with some partners using their own procedures, indicators, and data.
- ❖ Two thirds of current models are limited to stable adult patients, with fewer models serving key populations and unstable patients.
- ❖ Measuring the scale of DSD implementation is challenging without one or more dedicated, DSD-related fields in national EMRs.

TABLE 1. MODEL TYPE AND LOCATION

Model location and individual/group setting	Number of reports of partner supporting DSD model in specified category				Total number of different models described (each model counted once only)
	Total	Malawi	South Africa	Zambia	
Facility based individual model	25	10	6	9	11
Out of facility based individual model	38	5	23	10	18
Health care worker led group	26	6	17	3	14
Community led group	5	1	0	4	1
<b>Total reported in interviews</b>	<b>94</b>	<b>22</b>	<b>46</b>	<b>26</b>	<b>44</b>

TABLE 2. MONTHS OF ART DISPENSED IN MODEL

Average months of ARVs dispensed in model*	Number of models reported**	Malawi	South Africa	Zambia
1 month	11	6	3	2
2 months	36	1	35	0
3 months	15	7	2	6
1 or 3 months (patients typically start with 1 month, then move to 3 months)	3	1	1	1
6 months	9	3	1	5
3 or 6 months (typically previously dispensed 3 months but transitioning to 6 months in line with national policy)	14	2	0	12
Not reported	5	2	3	0
<b>Total reported in interviews</b>	<b>94</b>	<b>22</b>	<b>46</b>	<b>26</b>

\*Includes DSD models for both suppressed and unsuppressed patients, all ages and risk groups, excluding PMTCT programs.  
\*\*Specific models of care are present more than once in this table, as each instance of an implementing partner supporting a given model is counted separately. For example, multiple partners in South Africa support CCMDD; each is counted as a separate model in this table.

TABLE 3. PATIENTS SERVED BY CURRENT DSD MODELS

Patients served by current DSD models	Number of models reported*	Malawi	South Africa	Zambia
All patients (no restrictions by disease status or age)	3	2	1	0
Stable and unstable patients				
Adults and adolescents/youth	2	0	2	0
Adolescents/youth (age restrictions vary)	5	4	1	0
Stable patients only				
All ages	7	0	0	7
Adults	44	9	31	4
Adults and adolescents/youth	8	0	0	8
Adolescents/youth (age restrictions vary)	2	0	0	2
Children (age restrictions vary)	1	0	1	0
Advanced disease/not stable patients only				
All ages	5	2	2	1
Adults	4	2	2	0
Adolescents/youth (age restrictions vary)	0	0	0	0
Children (age restrictions vary)	1	1	0	0
Pregnant/postpartum women only (any disease status)	3	1	2	0
MSM/ FSW (any disease status)	7	1	2	4
Not reported	2	0	2	0
<b>Total reported in interviews</b>	<b>94</b>	<b>22</b>	<b>46</b>	<b>26</b>

\*Specific models of care are present more than once in this table, as each instance of an implementing partner supporting a given model is counted separately. For example, multiple partners in South Africa support CCMDD; each is counted as a separate model in this table.

### NEXT STEPS

- ❖ Interview responses are being analysed and synthesized into a full report.
- ❖ Data not available at time of interview but held within partner organizations are being elicited from respondents.
- ❖ AMBIT is launching several studies to collect primary data at site level to fill in gaps on DSD model coverage, uptake, benefits, and costs.