

## BACKGROUND/INTRODUCTION

In 2016, the Kingdom of Swaziland implemented an approach to differentiated service delivery (DSD) for antiretroviral therapy (ART): Community-Centered Models of ART Service Delivery (CommART). Specific elements of the approach are described in guidelines and standard operating procedures (SOP) published by the Swaziland National AIDS Program (SNAP). In brief, the approach includes 5 DSD models (DSDM) for ART delivery: mainstream ART, outreach (i.e., services provided at locations outside of the main facility), fast-track, community groups, and facility-based clubs. The latter model may include clubs intended for specific groups of patients, such as adolescents, families, and pregnant or breastfeeding women. Eligibility criteria have been established for non-mainstream DSDM, with access limited to stable, virally suppressed, non-pregnant adult patients who have received >12 months of ART. Some exceptions exist, for example, in the outreach model, which may be used to initiate ART for adults, and for facility-based clubs established for adolescents. ICAP at Columbia University developed draft guidelines for monitoring and evaluation (M&E) of DSD for ART in May 2017. In light of these guidelines and the current implementation of CommART, SNAP requested an M&E consultation within the context of ICAP's HIV Coverage, Quality, and Impact Network (CQUIN) project.

## METHODS

Members of the ICAP CQUIN team visited Swaziland in July 2017 to conduct the M&E consultation. The expected deliverables from this consultation included: 1) a set of recommended CommART M&E indicators; 2) suggested changes to data collection and management, in particular to the national electronic medical record system, the Client Management Information System (CMIS), but also to paper records as needed; and 3) a description of routine CommART automated outputs, such as reports, that can be generated from data collected in CMIS. The consultation process included meetings with key stakeholders including Swaziland MOH (Swaziland National AIDS Program, Health Management Information Systems, Monitoring and Evaluation) and partners (University Research Co.I, AIDSFree, Médecins Sans Frontières, Institute for Health Metrics and Evaluation, and ICAP-Swaziland) to discuss issues related to M&E of CommART, and field visits to facilities implementing CommART models.

## RESULTS

### Recommendations for CommART indicators

SNAP expressed interest in monitoring the uptake of DSDM under CommART and tracking retention and patient outcomes under these models. These indicators would necessarily be entirely unique from the current set of national ART indicators, which focus on the initial 12 months of ART. Discussions regarding likely data collection approaches—in particular due to the central role that CMIS is expected to play—seemed to indicate that routine collection and calculation of uptake, retention, and outcomes indicators will be feasible. The preliminary set of recommended indicators is below.

Recommended indicators for M&E of non-mainstream models under CommART <sup>1,2</sup>
1. Number of patients enrolled in non-mainstream ART models at the beginning of the period
2. Number/percentage of newly-eligible ART patients initiating ART model
3. Number/percentage of all eligible patients receiving care under non-mainstream ART models
4. Number/percentage of patients with clinical assessment at the health facility 12 months after initiating DSDM
5. Number/percentage of patients receiving DSD who received VL test 12 months after initiating DSDM
6. Number/percentage of patients receiving DSD who are virally suppressed 12 months after initiating DSDM
7. Number/percentage of patients receiving DSD model with the following outcomes 12 months after initiating DSDM: <sup>3</sup> <ul style="list-style-type: none"> <li>Lost to follow-up or stopped ART</li> <li>Dead</li> </ul>

<sup>1</sup>Non-mainstream ART models: fast track, outreach, community ART groups, and facility-based ART clubs.

<sup>2</sup>Indicators will be disaggregated by DSD model type. For indicators 2-3, number (but not percentages) will be disaggregated by DSD model type. All indicators may be disaggregated by gender and, as desired, by age group.

<sup>3</sup>Patients with documented transfer-out should be removed from denominator.

### Changes to data collection systems

To adequately capture information for patient care and reporting under CommART, changes to CMIS and introduction of new and/or modified paper tools will be required. An approach to these types of changes is described below. Note that, with respect to the patient ART medical record, this expanded set of DSDM information will be limited to collection in CMIS, not in paper ART medical records. As CMIS ultimately expands to cover all facilities, data collection and reporting for DSDM will become universal.

### CMIS

Users of the CMIS system select data entry modules or screens which correspond to elements of patient visits. For example, the module for entering data captured as part of HIV/ART clinical services is labelled “pre ART/ART” and the module for entering appointment dates is labelled “appointments”. In addition, automated outputs (i.e., formatted reports) may be generated by CMIS. Recommended changes to these areas are summarized here.

## RESULTS, continued

### Recommended changes to CMIS

- It was recommended that the following fields be added to the **CMIS pre-ART/ART module**
  - Eligibility for non-mainstream ART** (eligible/not eligible), assessed at each ART visit
  - ART model** (mainstream/fast-track/outreach/community group/facility club/other—specify), at each ART visit, including ART initiation
  - CAG ID number** or **club ID number** field should appear for community ART group (CAG) patients or facility-based treatment club patients at the first visit in which the patient enrolls in the CAG or club
  - Reason for switch** (eligibility/preference/other—specify), question appears for cases where a non-mainstream model changes to mainstream
  - Visit type** (clinic visit/drug pickup), should appear for each CAG or fast-track ART visit.
  - Summary notes** field for drug pickup visits under community ART model
- The following changes were recommended for the **CMIS appointments module**
  - Clearly allow user to **record multiple appointment dates** is separate fields (currently permitted but perhaps not immediately apparent to users)
  - Add a **classification of appointment type** for each appointment date entered (select one: clinic/drug pickup only/other—specify)

### Recommended new paper tools

Two new types of paper tools were recommended based on stakeholder input:

- Registries of CAGs and treatment groups:** These facility-based paper tools will be used by facility staff to document the formation of CAGs and treatment groups (including teen clubs and groups for adults), their membership, and to assign group numbers. The establishment of the group numbers and entry of these numbers in CMIS for group members will allow CAG and treatment groups members to be linked (within specific groups) in CMIS.
- Patient-held CAG card:** A paper-based tool to document CAG member activities, including the distribution of ART to individuals within the CAG, was recommended. Each CAG member's card would be brought to the health facility during each ART pickup, to allow the provider to review the clinical and adherence self-assessments and signatures documenting receipt of ART provided during the prior pickup.

### Recommended CMIS automated outputs

Two types of outputs from CMIS of interest to SNAP were:

- Longitudinal DSD ART registers:** These registers could similar in design to draft CommART registers that were recently developed in Swaziland. Separate registers may be generated by facilities for each model type.
- Monthly/quarterly facility DSD ART report:** Stakeholders also expressed strong interest in having CMIS generate monthly/quarterly DSD ART reports, formatted similarly to the existing MOH ART report. A draft report was developed based on the indicator cascade shown above, and detailed definitions of these indicators were developed.

## DISCUSSION

This brief consultation was remarkably productive, due to prior planning and the extensive involvement of the various key stakeholders, in particular within the MOH and in support of CMIS. The Swaziland MOH planned to work from these recommendations during the second half of 2017 and agree upon final revisions to indicators and to CMIS, and in regards to the creation of new paper tools. Key steps are below.

## NEXT STEPS/WAY FORWARD

Implementing changes such as those recommended here will be a joint effort between stakeholders including Swaziland MOH and partners. Agreed upon next steps will include:

- Finalizing CMIS changes with MOH HMIS department, with technical support by national IT support partner IHM Southern Africa
- MOH HMIS department finalizing paper tools, including CAG register and CAG patient-held card
- MOH M&E department finalizing and approving routine monthly/quarterly M&E report

ICAP and the CQUIN project will look forward to supporting these efforts both as a PEPFAR implementing partner in Swaziland and within the context of Swaziland's participation in the CQUIN learning network and M&E Community of Practice.



**HIV LEARNING NETWORK**  
The CQUIN Project for Differentiated Service Delivery