

Decentralizing ART Services through the Differentiated Care Model in Namibia

December 2017



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Decentralizing ART Services through the Differentiated Care Model in Namibia

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Key Words

Community-based ART (CBART), Nurse Initiated and Managed ART (NIMART), Multi-month Dispensing, Community Adherence Support Group (CASG), HIV, ARVs

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ACRONYMS AND ABBREVIATIONS

ART	antiretroviral therapy
ARV	antiretroviral
CASG	community adherence support group
CASGL	community adherence support group leader
CBART	community-based ART
DH	district hospital
EDT	Electronic Dispensing Tool
HC	health center
HIV-DR	HIV drug resistance
MoHSS	Ministry of Health and Social Services
mEDT	mobile Electronic Dispensing Tool
NIMART	nurse initiated and managed ART
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	primary health care
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SOP	standard operating procedure
UNAIDS	United Nations Program for HIV/AIDS
USAID	US Agency for International Development

EXECUTIVE SUMMARY

Namibia has been affected by the HIV and AIDS epidemic, with an estimated HIV prevalence among adults of 16.9% as of 2014 and more than 160,000 patients on ART as of December 2017. The country has successfully expanded its ART patient coverage to 84% and needs to ensure retention of ART patients on treatment to minimize the development of HIV drug resistance (HIV-DR). The MoHSS is decentralizing ART services to primary health care (PHC) clinics and health centers (HCs) to improve access to antiretrovirals (ARVs), enhance patient retention in care, and reduce work overload at high burden sites by implementing strategies to bring ART services and medicines closer to rural communities in Namibia. The decentralization of ART services and patient care to PHC facilities is part of Namibia's strategy to achieve the ambitious UNAIDS 90-90-90 targets for ending the AIDS epidemic by 2020. Strategies adopted for ART decentralization in Namibia include the nurse initiated and managed ART (NIMART) initiative, multi-month dispensing, community-based ART (CBART), outreach activities, and community adherence support groups (CASGs). These initiatives are included in the Namibian ART guidelines (MoHSS, 2016)

The USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program has supported the ART program and the Division of Pharmaceutical Services to implement these ART decentralization strategies. SIAPS has collaborated with other USAID-funded implementing partners in the development of standard operating procedures (SOPs) for implementing CBART services and in designing process flows for the movement of patients between the community and ART facilities, including pharmacy visits for ARV refills. SIAPS trained more than 80 health workers in PEPFAR priority, high HIV prevalence regions on the SOPs and process flows for CBART implementation, dispensing tools, and procedures at NIMART sites. SIAPS has also supported the ART program by developing monitoring and evaluation tools to ensure that the care provided to patients accessing services from community service points and NIMART sites is well documented to allow health practitioners at the main ART sites to ensure that patients still receive the same high standard of care required in the delivery of ART services.

SIAPS also enhanced existing electronic patient and stock management tools to accommodate functionalities for group dispensing to ART patients who access their ARVs through CASGs. CBART and NIMART have been successfully implemented in selected districts in high HIV prevalence regions, and 55 CASGs were created to give an estimated 1,000 ART patients access to services. As per ART guidelines (MoHSS, 2016), all PHC facilities in Namibia offer NIMART services. On follow-up, patients accessing services through group dispensing shared the positive impact of CBART implementation, including improved adherence, good viral load suppression results among group members, and no more waiting in long queues to obtain ARVs after travelling long distances.

SIAPS has also supported electronic tools to facilitate multi-month dispensing to ART patients at main ART sites, NIMART sites, and CASGs. This has allowed less frequent visits to health facilities and is expected to improve adherence to ARVs among ART patients. The decentralization of ART services through CBART, NIMART, and multi-month dispensing has reduced congestion at ART sites and allowed patients to access ART services closer to their community, which is expected to impact quality of care indicators such as adherence to ARVs and retention in ART care.

BACKGROUND

Namibia has a population of approximately 2.18 million (National Planning Commission 2012) and is one of the countries in southern Africa significantly affected by the HIV and AIDS epidemic, with an estimated HIV prevalence among adults of 16.9% as of 2014. Two-thirds of Namibia's population live in sparsely settled rural communities with limited access to main ART sites, which are generally located in urban areas. Namibia has successfully expanded its ART patient coverage to 84% and needs to ensure retention of ART patients on treatment to minimize the development of HIV-DR. The MoHSS manages approximately 350 public health facilities in 14 regions. More than 60 of these are designated as main ART sites, including 35 hospitals and 25 PHC facilities. As of December 2017, an additional 108 PHC facilities had been designated as NIMART sites.

Many patients, especially those residing in rural areas, travel long distances to ART sites located at district hospitals and HCs, and the extended waiting time to get refills for ARVs makes it difficult to continue treatment uninterrupted. In response to this, the MoHSS is decentralizing ART services to PHC clinics and HCs through a number of strategies that have been incorporated into Namibia's standard treatment guidelines. Strategies include the NIMART program, multi-month dispensing to ART patients, and group dispensing to ART patients in CBART groups through their leaders (CASGLs). To support the MoHSS' efforts to decentralize ART services and patient care to achieve the UNAIDS 90-90-90 targets, SIAPS is supporting the differentiated care model through implementation of CBART and multi-month dispensing at high volume ART sites. The decentralization of dispensing services to PHC facilities presents challenges in monitoring adherence to ARVs and also the identification of potential side effects.

The data captured during dispensing at NIMART sites and community dispensing need to be sent back to the main ART site to enable updating of patient data and reporting on patient management parameters, such as adherence and side effects of medicines. Dispensing tools at the main ART sites need to be enhanced to accommodate patient and stock management for patients accessing medicines through community-based mechanisms. The SIAPS-supported Electronic Dispensing Tool (EDT) is used by public-sector ART pharmacies in Namibia to dispense ARVs, maintain ARV inventory, and manage ART patients. SIAPS is supporting the MoHSS in adapting the tool for dispensing to CBART groups and in developing and implementing SOPs and process flows for guiding and monitoring the movements of ARVs between health facility and the community.

INTERVENTIONS

Objectives and SIAPS Scope of Technical Assistance to CBART Implementation

- Ensure smooth enrollment of CBART groups into the EDT. Enrollment of groups into the EDT only takes place after screening for eligibility by clinical staff.
- Efficient group dispensing of ARVs to CASGLs at the pharmacy. This includes ensuring appropriate labeling of all medicines for each patient.
- Quality data capture in the EDT for CBART monitoring.
- Monitoring ART outcomes.

Stakeholder Engagement

Following the adoption of the differentiated care model to the Namibia ART guidelines in 2016, SIAPS coordinated several stakeholder meetings with ART program management, development partners, and regional management teams to develop operational plans for the implementation of NIMART and CBART in high HIV prevalence regions. Meetings included discussions on practical aspects of operational processes, such as responsibilities for group mobilization, tool development, monitoring and evaluation of implementation, and quality of care. Initial implementation discussions included regional management teams from PEPFAR priority regions with high HIV prevalence rates, including the Oshikoto, Ohangwena, Oshana, and Kavango regions. Collaborating partners included Tonata, Project HOPE, IntraHealth, and CASGs in the named regions.

Development of SOPs and Patient Monitoring Tools

SIAPS collaborated with Project HOPE in developing SOPs for managing ART patients who are accessing their ARVs through CASGs. The SOPs included procedures for screening patients for eligibility for CBART, enrollment eligibility criteria, flagging patients to CBART groups in the EDT, and process flows for CASGLs to pick up ARVs from the pharmacy and dispense them to group members at CASG meeting points. The SOPs also include dispensing procedures for CBART patients, including steps for pharmacy staff to follow in assigning and flagging patients to their CBART groups in the EDT. Figure 1 shows the flow of information from formation of the CASG to group dispensing in the EDT at the ART pharmacy, and figure 2 shows the SIAPS-developed process flow for ARVs, prescriptions, and patients during dispensing to CASGLs.

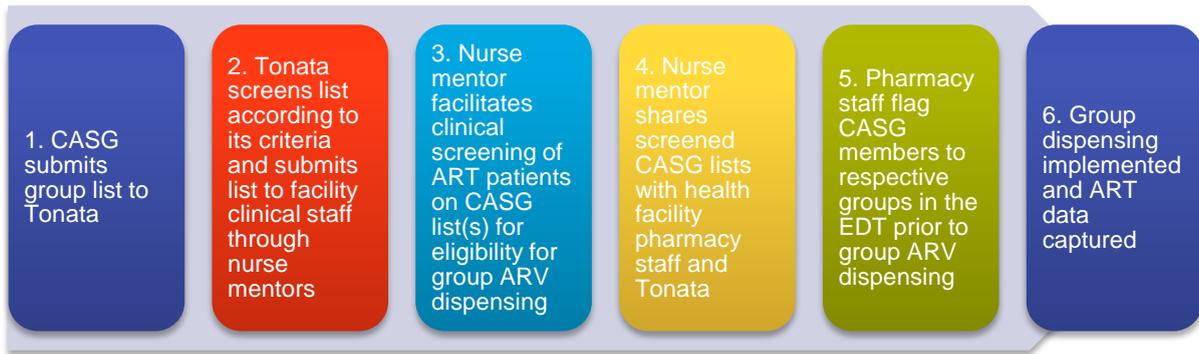


Figure 1. Flow of information from CASG to flagging in the EDT. *Pictorial illustration by H. Kagoya and B. Phulu for SIAPS in Namibia, September 2017*

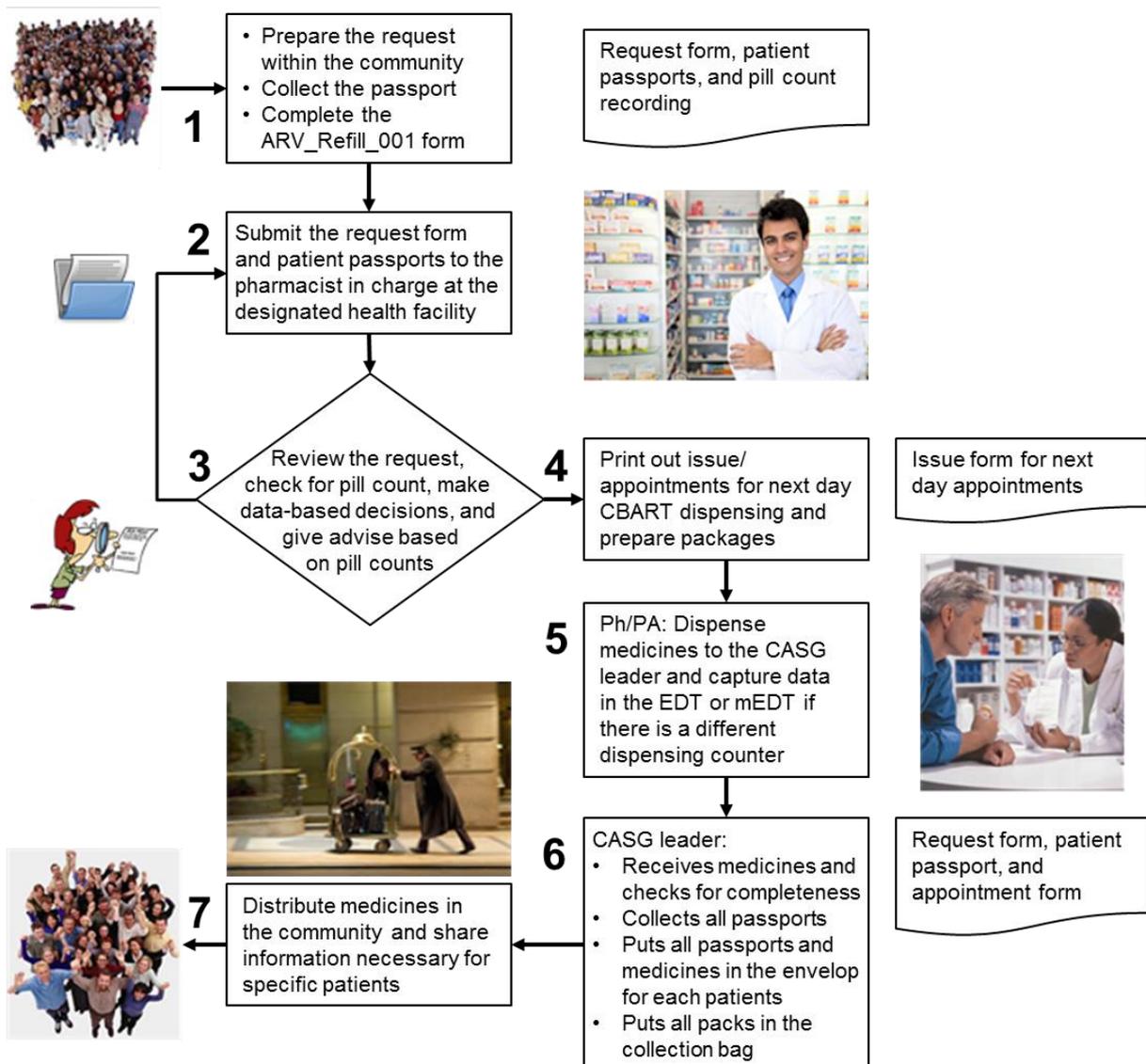


Figure 2. Flow of patients and ARVs between communities and the ART pharmacy

Flagging patients to CBART groups in the EDT enables pharmacy staff to manage appointments for CBART separately from the other patients collecting ARVs at the same facility, which reduces the waiting time at ART sites for CASGLs. New EDT installations were implemented at NIMART sites that had adequate staff to manage NIMART patients using the EDT. NIMART implementing health facilities that were unable to use the EDT were equipped and trained on using mobile EDT (mEDT) devices. The mEDT is an extension of the main EDT site that allows remote dispensing of ARVs at outreach and NIMART sites. The dispensing data can then be uploaded to the EDT database at the main sites through a simple five-step process. Figure 3 shows the mEDT, a hand-held device for dispensing at remote sites.



Figure 3. The mEDT

Sites Visited in High HIV Prevalence Regions and Facility-based On-the-job Technical Support

SIAPS conducted facility-based support visits to high HIV prevalence regions in Namibia to orient and mentor health facility staff on CBART implementation and the management of patients accessing ARVs through CBART mechanisms. The onsite support included training on SOPs, using the EDT to manage CBART patients, process flows for patients and ARV medicines, and tools for patient monitoring at CBART and NIMART dispensing points. Health care workers at health facilities offering NIMART services were trained on capturing dispensing data for entry at main ART sites and on using the EDT and were provided with either the EDT or mEDT to record dispensing data. The facilities visited are summarized in table 1.

Table 1. Number of Health Facilities Supported on CBART and NIMART Implementation during Site-level Visits

5 Regions	33 Health Facilities Supported
Oshana	Oshakati IH, Eloolo Clinic, Ou Nick HC, Ongwediva HC, Okatana HC, Eluwa Clinic
Oshikoto	Onandjokwe DH, Omuthiya DH, Onyaanya HC DH, Onayena HC, Okankolo HC, Ndamono clinic
Ohangwena	Eenhana DH, Engela DH, Odibo HC, Oshigambo Clinic, Okongo DH, Omungwelumbe, Oshandi clinic, Ekoka HC, Endola clinic, Oshaango clinic, Omboloka clinic, Ondobe HC, Epembe clinic, Olukula clinic, Omundaungilo HC, Amukoto clinic, Anamukulo clinic, Oshikunde clinic
Kavango	Nyangana DH
Omusati	Oshikuku DH

In Ohangwena Region, the regional management team is in the process of installing the EDT at all PHC facilities and training facility staff on patient and stock management using the EDT. Table 2 shows the distribution of ART patients at NIMART sites in Ohangwena Region that were supported with EDT installation and training of health workers.

Table 2. Number of Patients Accessing ART Services at NIMART Sites in Ohangwena Region

Engela District		Eanhana District		Okongo District	
Site	# Patients	Site	# Patients	Site	# Patients
Omungwelumbe	599	Oshandi	306	Ekoka	389
Endola	577	Oshaango	414	Omboloka	185
Ondobe	564	Epembe	487	Olukula	100
Amukoto	445	Oshikunde	513		
Anamukulo	343	Omundangilo	511		

Enhancement of the EDT

SIAPS enhanced the EDT to accommodate modules for managing ART patients accessing ARVs through CBART mechanisms. SIAPS also developed a quick user guide with simple diagrammatic instructions to show how pharmacy staff can add CBART groups to the EDT and flag patients to their respective CBART groups. Figures 4 and 5 demonstrate steps to add CBART groups to the EDT and flag a patient to a CBART group.

How do I add a CBART or outreach site?

- 1 Share list of sites (*Name & Type of site*) to be added with the Admin*.
- 2 The Admin will send you an update file for the EDT which you need to run on your system to effect the changes requested.
- 3 Once updated, Open the EDT, Click on [Admin](#) > [Maintenance](#) > [Add or Edit Referral Site](#) > Add sites from the drop down list (see *image below*).

To ensure uniqueness, facility codes are generated centrally.

* The Admin is the ART Logistics Pharmacist or Information Systems Administrator at Div. PhSs/NMPC: MoHSS. Tel. 061-203-2348.

Figure 4. Adding a CBART group to the EDT

How do I Assign a Patient to a CBART or Outreach site?

- 1 Click on the **User Menu > Patient View > Find** and search for the patient. (Use **Patient Add** for new patients)

Enter any part of the number or Last Name you wish to find...

Search by

ART No

Unique No

Last Name

CDC No

- 2 Click on **Edit** and select the CBART or outreach/NIMART site from the drop down list.

Outreach/IMAI: * **Let Us Unite**

- 3 Click on **Save**.

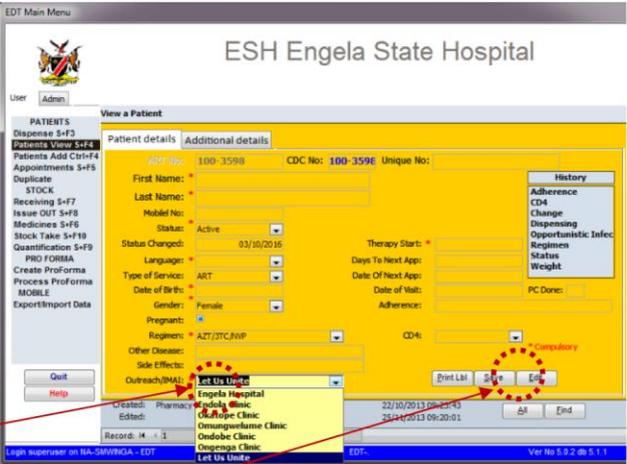




Figure 5. Flagging CBART patients to their respective CBART groups

Multi-month Dispensing

Multi-month dispensing is when pharmacy staff provide ARVs to ART patients for two to six months at a time rather than the traditional monthly refills, which reduces the number of patient visits to the pharmacy for pill pick-ups. Multi-month dispensing applies to lifelong medicines, such as ARVs and medicines for other chronic diseases.

SIAPS has supported the training of pharmacy staff in multi-month dispensing in several formal EDT trainings for pre- and in-service health facility staff since 2014. Pharmacy staff have been mentored on multi-month dispensing and appointment planning for ART patients during service quality assessments and support supervisory visits for pharmaceutical services. SIAPS also supported the revision of Namibia's standard treatment guidelines to include multi-month dispensing as a component of the differentiated care model for patient management.

RESULTS

As of June 30, 2017, 55 CBART groups had been created and added in the EDT and approximately 1,000 ART patients were accessing their ARV refills through the CBART mechanism. SIAPS supported 16 facilities to dispense ARVs to patients accessing services through the CBART model and from NIMART facilities, including ARV refills through CASGLs. Figure 6 shows the distribution of patient accessing ART services through CBART group ARV refills.

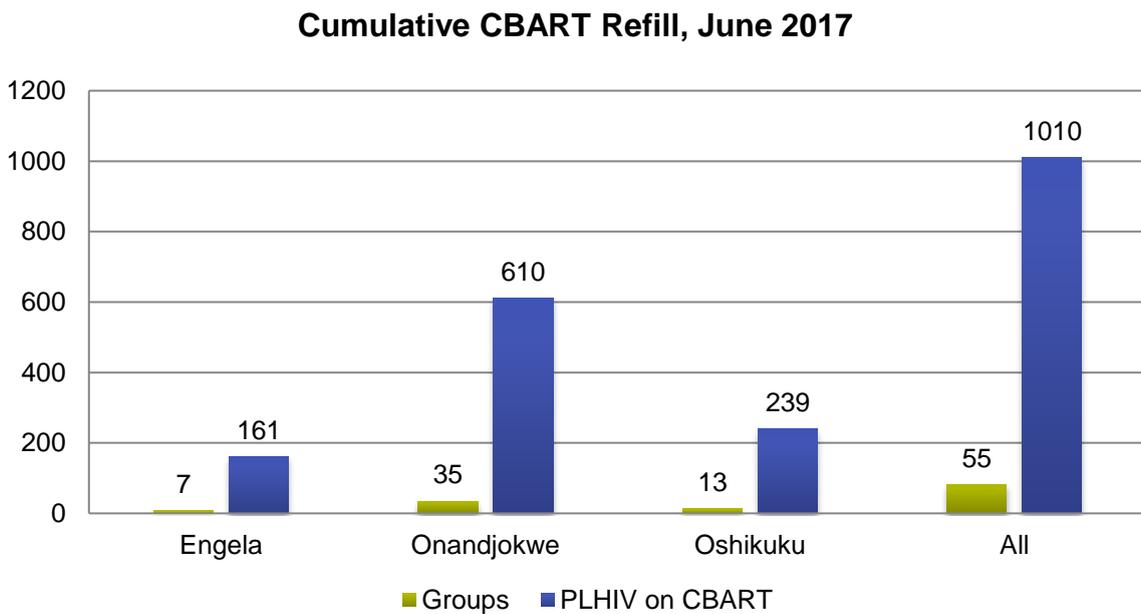


Figure 6. Distribution of patients accessing ARVs through CBART

As reported in the comprehensive Namibia Adherence and Retention Project quarterly report presented and reported to USAID by Project HOPE and subpartners

A total of 84 health workers from five of Namibia’s 14 high HIV prevalence regions were oriented on the SOPs for dispensing ARVs to CBART groups and patients at NIMART facilities. The EDT was updated at nine ART and 20 NIMART sites to facilitate the addition of CBART groups and flagging of prescreened patients to their respective groups. SIAPS oriented three CASGLs on the paper-based tools used to support dispensing to CBART group members at community-based ARV pick up points. SIAPS also built the capacity of nurse and clinical mentors who provided orientation to other support groups on the tools that would enable them to support CASGLs in dispensing ARVs at community-based sites and monitor patients’ adherence to treatment. The Oshikoto Region has been the most successful in actively implementing CBART with active group ARV refills following the official launch of CBART in 2017. Table 3 shows the number of groups accessing ARVs through group dispensing in the Onandjokwe District as of September 2017.

Table 3. Number of Community Support Groups Implementing Group Dispensing in Onandjokwe District

Region	Health facility for group ARV refill	Number of CASGs
Oshikoto	Oshigambo	4
Oshikoto	Ndamono	4
Oshikoto	Okankolo	5
Oshikoto	Onadnjokwe	4
Oshikoto	Onayena	1
Oshikoto	Onyaanya	2

The EDT appointment module supports the planned scheduling of pick up dates for ART patients. Pharmacy staff are able to dispense multi-month supplies of ARVs and adjust appointment dates for ARV pick-ups between clinical visits. Figure 7 shows the number of times patients picked up medicines at the facility in the 2015 calendar year.

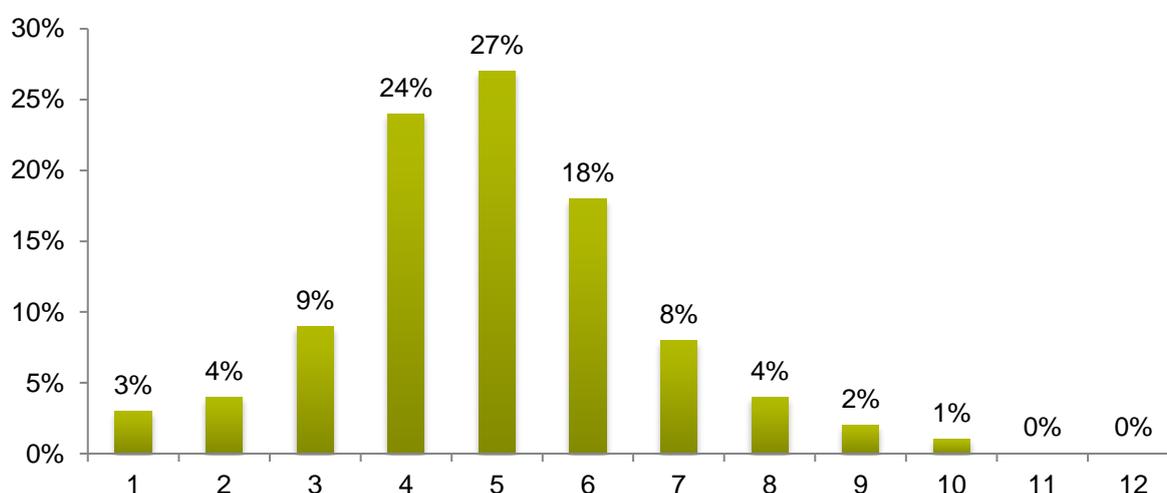


Figure 7. Percentages of frequency of pill pickups by ART patients in Namibia in 2015

A national analysis of patient ARV pick up trends at ART facilities in 2015 demonstrated that the majority of patients only visited the health facility four to six times a year, which translates to picking up an average of a two- to three-month supply per visit. Fewer patient visits to the facility reduces the burden on patients, congestion at ART sites, and the workload of health facility staff.

Documented Experiences of CBART Group ARV Refills: Successes, Challenges, and Recommendations

CBART group ARV refills: Testimonies of clients, health workers, and implementing partners



- Reduced costs associated with travel and waiting time at health facilities
- Improved service environment by reducing crowding and workload at health facilities
- Improved adherence and viral load
- Improved membership to some support groups
- More comprehensive group counseling within a community setting
- ART services are closer to the people



- More ARV information needed by group leaders (e.g., change in ARV brand names)
- Counseling on storage of ARVs
- Timely pick of ARVs by CASGLs for same-day distribution to members



- Continue technical assistance
- Share lessons learned

DISCUSSION OF FINDINGS

The implementation of CBART was mostly successful in the Onadjokwe District, with 610 patients enrolled in 20 CBART groups. The enabling factors for successful implementation in Onandjokwe included extensive collaboration among regional and district management teams; development partners, including USAID-funded partners such as SIAPS, IntraHealth, and Project HOPE; and community-based organizations such as Tonata. Another factor that made implementation of CBART a success is the on-site support provided through clinical and nurse mentors who were trained to provide ongoing support to CBART groups, CASGLs, and health facility staff in addition to support and mentorship visits from SIAPS staff.

CBART implementation in the Nyangana District was not as successful due to limited leadership from district management and a lack of other enabling factors that were present in the Onandjokwe and other districts. Tonata, the community-based organization that facilitated community mobilization in most of the CBART implementing districts, had not yet taken root in Nyangana District, making it difficult for ART patients to organize themselves into community support groups. Oshana Region is also coordinating decentralization efforts centered on increasing access through NIMART sites and outreach services. Their model included support to teen clubs to promote adherence to ART in pediatric and adolescent patients. SIAPS supported the region with the installation of the EDT at five PHC facilities to improve access to ART services for patients. The success of decentralization in the Oshana Region was mostly due to political support from the leadership of the regional management team for the Oshana Region, which supported activities to improve access to ART services. This was mostly due to the commitment from the regional pharmacist in supporting the new NIMART sites with implementation of the EDT and related reporting functions. The neighboring Ohangwena Region is in the process of implementing the same strategy through EDT installation and training of health workers, including nurses, administration officers, and nurse and clinical mentors in patient management at NIMART sites using the EDT.

During CBART implementation, the following challenges slowed down implementation:

- A lack of a clinically screened list of CBART groups to flag in the EDT
- The format of screened lists from the clinical team to pharmacy staff was not ideal for flagging
- Limited coordination of efforts among partner agencies to follow the SOPs
- Procurement of mEDT devices for community outreach services

SIAPS proactively engaged partners to address the challenges, which enabled accelerated implementation of CBART.

Stakeholder engagement, coordination of partner efforts, clarity of purpose and roles, and leadership were key elements for successful implementation.

CONCLUSIONS AND RECOMMENDATIONS

Implementation of the differentiated care model of ART service delivery through CBART, NIMART, and multi-month dispensing has contributed to reduced congestion at ART sites and improved access to ART services through community support groups and NIMART-implementing PHC facilities located closer to patients in rural areas. The biggest challenge health professionals face in implementing CBART and NIMART has been data capture of the dispensing data from patient management tools at the new NIMART sites and CBART groups. This has been overcome in most regions through collaboration among MoHSS management in the regions and districts and implementing partners such as SIAPS that have employed different models at these facilities to ensure that high quality patient and stock management continues to be provided using the relevant patient and ARV stock management tools. Successful implementation requires deep political buy in by the management at the national, regional, and district levels; collaboration with implementing partners; and regular support and mentoring of health facility staff to build capacity in managing ART patients using tools and SOPs.

As the MoHSS continues to roll out CBART and increase ART decentralization, there is a continued need for regular collaboration meetings among stakeholders, continued use of the mEDT at community outreach points, and updating CASG members in the EDT based on final clinically screened patients lists. The MoHSS may build on the successes and lessons learned for further roll out of CBART and other models of ART service delivery.

ANNEX A. DISPENSING TOOLS USED BY COMMUNITY ADHERENCE SUPPORT GROUP LEADERS IN DISPENSING TO PATIENTS AT COMMUNITY DISPENSING POINTS



COMMUNITY ADHERENCE SUPPORT GROUP (CASG) SPREADSHEET

Details of CASG				Details of health facility			
Support group name: _____				Nearest Health Facility: _____			
Year group was formed: _____				Name of village: _____			
Support group leader name: _____				Region: _____			
Cell/contact No: _____				Constituency: _____			
Surname	First Name	Date of birth	File No	EDT No	ART Facility	F/M	Cell
1							
2							
3							
4							
5							
6							
7							
8							

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