



The TASO Community Drug Distribution Points (CDDP) Model



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Operational Definitions

The Community based ART Model; is a delivery model for antiretroviral therapy in which ART care is delivered and distributed at a community based site by counselors

Community ART Support Agent (CASA); is an expert client, experienced in ART, with an excellent adherence record and has been trained to provide basic psychosocial support to fellow clients.

Background

TASO offers services to its registered clients both at facility and community based levels. At the community level, TASO builds the capacity of communities to respond to the AIDS epidemic and this widens the base of services to the clients through sensitizing, educating and mobilizing the community resources both human and material for the care and support to individuals and families infected and affected by HIV and AIDS.

TASO started an Antiretroviral Therapy program in June 2004, with support from PEPFAR, to contribute to the fulfillment of its mission that seeks to improve the quality of life of persons, families and communities infected or affected by HIV and AIDS. At the initial phase, the program was structured to deliver ARVs to its clients through 2 models. These included the Facility based delivery and the Home based deriving experience from the *HBAC study* then in Tororo.

As at the end of 2005, the active clientele was 50,000 of which more than 90 % were needy and of whom 75% were living in rural Uganda with low access to information and HIV services. The organization instituted a Home Based Care service (*TASO Home Based Care guidelines 2002*) for its registered clients as a means of continuity of the medical care to cater for the clients who might have been too weak to reach the centers; and to address any emergencies that may have arisen in the health of the clients at home. For this reason, TASO set out to start a home based ART delivery system (*ART implementation guidelines*) to maximize adherence. In this model, a field officer would deliver drugs to the homes of TASO clients in order to ensure regular supply of ARVs and at the same time monitor adherence. This was the core foundation for the high adherence levels the program enjoys to-date.

By the end of March 2006, only 16 % of TASO clients in need of antiretroviral therapy were receiving ARVs compared to almost 35,000 who needed them. As TASO continued to solicit for resources to avail enough ARVs to cover all those in need, it also had to think of how this critical service would be provided to a larger number of clients in a more cost effective way. This called for the most feasible and efficient ways of delivering quality antiretroviral therapy on a large scale thus the birth of the Community ART Delivery Model in 2006.

Community ART Delivery Model

The Community based ART Model is a delivery model for antiretroviral therapy in which ART care is delivered at a community based site. It is an expansion of the home based model. Antiretroviral drug refills, monitoring and psychosocial support are offered to a specified group of clients by TASO staff together with expert clients in the community.

Central to the function of this model were the counselors (by then Field Officers) and Community ART Support Agents (CASAs). The Community ART Model has less human resource needs with use of lay persons, increased community participation and most importantly ownership of ART care. The objectives of the model include;

- To reduce the cost of delivering ARVs to clients while increasing access
- To maximize use of Community human resources available including the community volunteers and clients who are resident in these communities
- To continuously work towards a sustainable community based option in ensuring adherence to ART.
- To enhance monitoring of adherence to ART and promote HIV prevention following the national goals of accelerated HIV prevention through the index client as an entry point to the community at grass root level.

Description and implementation of the CDDP model

The process involved data analysis to establish how many clients on ART came from a particular district, Sub county and Parish. The clients were sensitized during health talks on the new model of operation that was to be introduced and the district Health officers and the Parish leaders were notified of the changes in delivery of ARVs. The client Leaders, TASO community volunteers and nurses were also sensitized of the model for buy in and ownership.

The chosen Community site is any location chosen by a group of clients from that locality in consultation with the local leaders. The clients convene regularly to receive their drug refills and other services including counseling and treatment monitoring. This site should be at least 5 km from the nearest ART accredited health facility. It may be a school, a place of worship, a residence of a community member or sometimes a local Government building.

Clients initiated on ART at the facility and are found clinically and immunologically stable after 10 weeks on ART, are reviewed and evaluated by clinicians and counselors for down referral to CDDP. To be eligible for down-referral to CDDP from the facility, a patient must;

1. Have been on ART for at least 10 weeks
2. Have no opportunistic infections,
3. Have recorded a stable weight as reflected by 5% weight loss between the last three visits

Down-referred clients are dispensed a 2-month supply of ARVs at the facility and an appointment at the down-referral site (CDDP) for subsequent 2 month ART refills thereafter. All the subsequent ARV refills, consultations and ART monitoring occur at the down-referral site (CDDP) managed by social workers and expert client (CASA). Following the Uganda ART National Guidelines, at the CDDP stable clients are scheduled for medication refills every 2 months. Treatment follows.

Clients at the down referral site are refilled by counselors who have had a 1 month comprehensive HIV care training. These are usually professional teachers with degree in education or social workers with a degree in social sciences. Consultation at the Facility is done by a doctor, nurse or clinical officer.

At each visit, the counselor or expert clients asks whether the patient has had any unexplained weight loss (by taking weight), experienced symptoms related to OIs especially TB, performs HCG, HB testing and assesses whether the patient visited any other medical facility since the last appointment. If all the results are within the normal ranges and the client is stable, he/she collects a 2-month supply of ART medications and is scheduled for an appointment 2 months later.

Services at the CDDP

- Provides ART and adherence counseling,
- Two - three monthly ART refills,
- Assessment for OIs by the clinical team every 6 month,
- Follow up of clients by expert clients,
- TB screening, weight, HB, HCG, CD4 bleeding
- HIV testing and referral

Children, pregnant and lactating women, TB/HIV co-infected persons and clients with other severe chronic medical conditions are not served in the CDDPs. These remain at the TASO facility.

Otherwise, if patient is not stable he/she is up-referred back to the facility for more medical reviews by the clinical team.

The counselors or expert clients do not prescribe or change ARV medications; they only continue refilling the patient on the standard drug collection and visit schedule (i.e., every 2 month. The nurses, doctors, clinical officers do a routine blood draw every 6 months, with samples processed for CD4 count, HB, HCG and viral load. Based on the results of these tests, the nurses, clinical officers or doctors can order for up-referral of the client back to facility for possible change of any concomitant non-ARV medications.

Both sites perform the same routine monitoring tests every 6 months. Clients who are up-referred to the facility remain under treatment and care of the facility until a treatment initiation site care taker recommends (re-)down-referral. At both sites, a client who is more than 3 months late for the next scheduled visit is classified as lost to follow up.

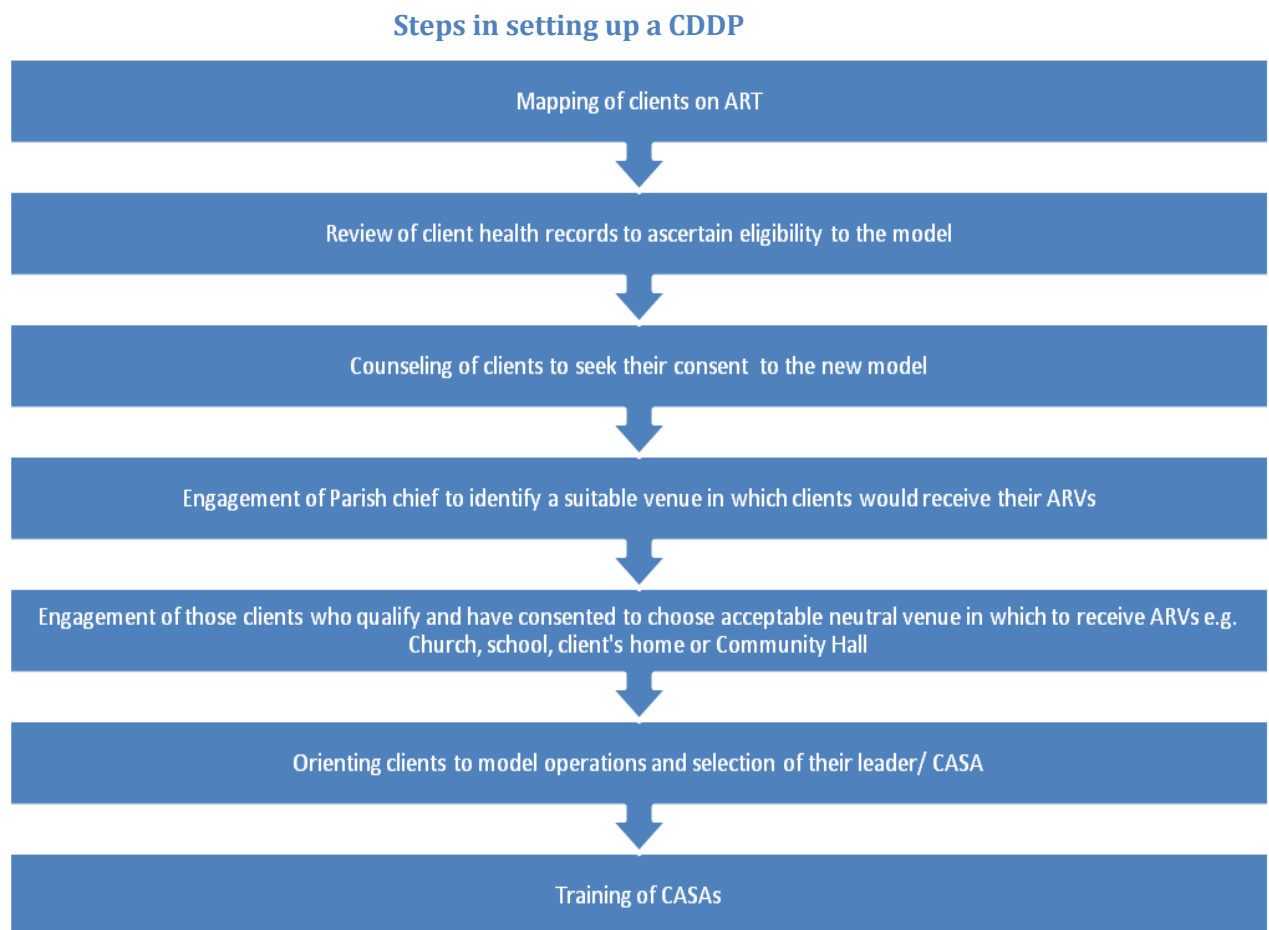


Figure 1: Establishing a CDDP

Achievements and advantages to TASO

- According to TASO program data, 70% of TASO clients at the 11 service centers receive ARVs through this model. 799 CDDPs have been established with 1,122 CASAs to support clients receive ARVs nearest to them.



TASO Counselor showing a client the different ARV packaging during a Health Talk at a CDDP

- To date 89% of the patients at CDDPs have been retained in care for a period of over 5 years
- In 2013, TASO conducted a comparative retrospective cohort analysis to assess patient retention and adherence among 3457 patient in TASO Jinja. It was found that 1,302 (37.65%) were facility based and 2,155(62.35%) were CDDPs based. The loss to follow-up was four times higher in the facility arm with 215(16.5%) of 1,302 patients compared to 103 (4.28%) of 2155 CDDP based clients, $p < 0.0001$. The average adherence was 96.8% for CDDPs compared to 95.6 of facility based, $p > 0.074$ for facility clients. Fewer deaths were reported in the CDDP arm 84 (3.9%) compared to facility with 77 (5.7%), $p = 0.008$ (3).
- TASO recently randomly sampled 870 clients for a viral load test under decentralized community models of care to assess their virological outcomes and found that (756) 87% had a viral load < 50 copies/ML (1,2). It was also found that long term retention of patients who commenced ART in 2004-2009 and were followed up to June 2013 was 13503 (78%) in TASO Uganda in general. 21.95% were dead or loss to follow up, most of the dead were patients who were on under the facility model of care and better retention was noted in decentralized model of care.
- TASO Masaka and Mulago are now scaling up viral load monitoring for clients as per the National Guidelines. Of the 8,681 patients assessed, 80% of those served in CDDPs the virological suppression is achieved in 92% of the patients, which is in line with the UNAIDS 90-90-90 Goal of the 90% patients virologically suppressed by 2020.

- Although no cost effective study has been conducted yet to ascertain whether the intended objective of reducing costs has been achieved, TASO has managed to reduce the number of staff required to run an ART program at all its centers of operation. Previously each Field Officer\Counselor was in charge of delivering ARVs to 100 clients' homes per month which meant that for a center like Tororo with 8000 clients on ART, it required 80 counselors to serve them per month but with this model 30-70 clients are served at one point in the community by 2 counselors.
- The model supported decongestion of the center clinics thus allowing staff time to attend to clients in most critical need of clinicians' attention. These include; TB/HIV co-infected patients, patients with severe opportunistic infections, clients that are newly initiated on ART among others.



Clients receiving a health talk from an expert client at a TASO facility

- It has made task shifting in the health care setting a reality thus counselors that are lay workers are able to deliver ARVs to clients and also conduct basic monitoring of side effects, HB pregnancy testing and NACs in addition to provision of HIV information and counseling. Expert clients are now able to do more in caring for their peers.
- It strengthened the Meaningful / Greater Involvement of People Living with HIV/AIDS (MIPA/GIPA) principle in service delivery through engagement of CASAs (Expert clients on ART) to support in service delivery thus fostering ownership of the program.
- It has improved adherence and keeping of refill appointments since the drugs are taken by TASO staff to the clients' localities.

- The model lowered the transport costs on TASO since one does not have to drive or ride to all the clients' homes but rather go to a single destination.
- It strengthened partnership with the community structures since they are involved from inception of the model and as result they provide shelter, seats and venue where the services are delivered.
- It reduced work load for the service providers because the CASAs supplement service delivery at the CDDPs.
- It enhanced monitoring of clients as they are served in one group and always given the same appointment date as compared to the facility and home delivery model.
- Peer support for ART adherence amongst clients within the same community became easy because they keep track of each other. This enables the health workers to receive updates on each client as well as reduce the costs on TASO in monitoring adherence. It also increased positive prevention efforts by the PLHIVs.

Achievements the side of the clients

- Supported many clients to disclose their sero status to their family and community members thus enhancing retention and adherence to ARVs.
- Strengthened recognition of PLHIV organized group to benefit from other Non-Governmental and government and programs like NAADS.
- Reduced stigma and discrimination against PLHIVs in the community. Self stigma was also addressed through this model for clients that still felt so thus increasing the number of clients served in through this model.
- It reduced clients' waiting time because a small number of them were served at a particular destination and at an agreed time.
- Clients' follow ups are more easily done in the CDDP by group leaders as compared to other models



An expert client clerking a fellow client

- The model has enhanced the establishment of peer support groups which are key in promoting adherence to treatment, and positive behavior, thus reducing the lost to follow up clients.
- The model has promoted the community's understanding of HIV and related issues hence making it easier for the clients to deal with the challenges that come with the infection.
- The Service provider - client relationship has been enhanced as specific service providers are attached to handle different CDDPs
- Communities own the programme in terms of provision distribution points
- It supplemented HIV/AIDS prevention efforts through condom distribution, information giving and community mobilisation among others.
- CASAs have been able to support fellow clients who have adherence issues and those involved in harmful lifestyle e.g. alcohol, smoking, and GBV. In addition they identify those who should be urgently attended to by counselors for counseling and those in need of medical services who are referred to the nearest health facilities for support.

Challenges and way forward

Challenges	Way forward
As time went on in the implementation of the model, the numbers of clients preferring to be served through CDDPs has increased. Originally it was meant to serve not more than 30 clients. As a result of the increased enrollment on ART and the model as a preference for many clients, the number of clients has to between 50 - 100 clients at a CDDP. Thus an increase in demand for more staff to serve clients in the community	Developed another model referred to as Community Client Lead ART Delivery (CCLAD) adopted from the Mozambique CAG model to decongest the CDDPs and further involve clients in managing their own health. In this model pre-packed drugs are delivered and distributed by group leaders to groups of 10 clients.
Burn out of staff and compromising the quality of service delivery as a result of the high numbers of clients served through the CDDPs.	The above mentioned model has supported in this area. Clients are now delivering ARVs to their peers in the community. Thus the staff

Challenges	Way forward
	only interacts with the Leader of the group and they conduct spot checks at sampled distribution sites.
Transportation of drugs and other clinical equipment to the community sites is challenging due to the old fleet working in remote areas with poor roads and bad terrain.	TASO has requested CDC for purchase of new fleet of vehicles to support these programmes.
Once a client has been recruited in the model, if for any reason they are not doing well and are required to go back to the facility arm, they are usually hesitant because their preference is to continue at the CDDP.	Such clients are counseled individually and when they recover they are free to go back to the community arm.
High mobility of some clients especially those in urban centers leading to non-adherence to appointments	Continued counseling for such clients on the importance of adherence in relation to continuity with their trade.
Variation in terms of facilitation rates between TASO and other implementing partners for community volunteers making some of the experienced CASAs to abandon work to serve in other organisations.	No solution yet but we try to provide other incentives whenever funds allow.
The vehicles and staff are few especially when it comes to 6 monthly ART review, because it entails comprehensive review, many staffs are needed, i.e. medical review, counseling review, laboratory review.	Hire stand-ins and engage expert clients trained in basic counseling to support the team. Sometimes transport is hired if there is no vehicle to this activity.
Some children most especially travel long distances to the centers and therefore prefer to be served through this model for example in Mbarara.	Operate children out reach outreach clinics where there are nearest service providers to refer the children for care
There is lack of enough evidence guiding this practice, Uganda has just started conducting plasma viral load testing in selected pilot ART accredited sites – thus, this is the time to define the timing when patients should be classified as stable on therapy and ready for down referral for community or decentralized care. In most settings appointment frequency is dictated by drug supply	To conduct a study to define the perfect timing when patients should be down referred to community care, a research proposal already submitted to CDC strategic information unit for consideration

Conclusion

Overall, the model has been successful in improving access to ARVs for clients in the community using less technical human resources in a resource limited setting.

Bibliography

1. Birungi, J. *et al.* (2014). Very low prevalence of virologic failure among HIV positive patients receiving first line ART for >than 5 years without routine viral load testing in TASO Uganda. *20th IAS Conference*. Melbourne: International AIDS Society.
2. Ministry of Health. (2009). *National Antiretroviral Treatment Guidelines for Adults, Adolescents and Children*. Kampala: Ministry of Health Uganda.
3. Ministry of Health Uganda. (2003). *Antiretroviral treatment policy for Uganda - Draft*. Kampala: Ministry of Health Uganda.
4. Ministry of Health Uganda. (2005). *Uganda National Policy Guidelines for HIV Counselling and Testing*. Kampala: Ministry of Health Uganda.
5. Ministry of Health Uganda. (2006). *National Policy Guidelines for TB/HIV Collaborative activities in Uganda*. Kampala: Ministry of Health Uganda.
6. Ministry of Health Uganda. (2006). *Uganda HIV/AIDS Sero-behavioral Survey*. Kampala: Ministry of Health Uganda.
7. Mpiima, D. *et al.* (2013). Community Antiretroviral Therapy (ART) delivery models for high patient retention and sustaining good adherence: The AIDS Support Organisation (TASO) operational research findings, CDC/PEPFAR funded project in Uganda. *7th IAS Conference on HIV pathogenesis, treatment and Prevention*. Kuala Lumpur: International AIDS Society.
8. Okoboi, S. *et al.* (2014). Community Based ART programmes in resource limited settings can facilitate long term programme retention and low mortality: The example of The AIDS Support Organisation (TASO) Jinja. *Conference on Retroviruses and Opportunistic Infections*. Boston: International Antiviral Society - USA.
9. Okoboi, S *et al* (2014). Community Based ART programmes in resource limited settings can facilitate long term programme retention and low mortality: The example of The AIDS Support Organisation (TASO) Jinja. *International Treatment as prevention workshop*. Vancouver: British Columbia Institute for Excellence in HIV/AIDS.
10. The AIDS Support Organisation. (2002). *TASO Home Based Care Guidelines*. Kampala: TASO (U) LTD.