Community ART Delivery Models

TASO
Service Delivery Model Partner Meeting
Kampala, 2 Feb 2016
• **Founded in 1987** by 16 individuals personally affected by HIV and AIDS

• **Vision:** “A world without HIV and AIDS”

• **Mission:** To contribute to the process of preventing HIV, restoring hope & improving the quality of life of PLWHA & their families.

• 87,608 active clients (Oct-Dec 2015)

• ART to 80,631 patients across the 11 centers and supported public health facilities serving more than 55 districts in Uganda.
TASO ART Delivery models

Delivery of ARVs to Bedridden clients, clients with disabilities

Facility Based (FB)
- Feedback on quality of services
- Delivery of ARVs to clients at CDDP and CCLAD

Hospital ward counseling on ARV related issues

Home
- Management of illness

Public Health Facility
- Linkage of clients by CCLAD leader for management of illness

Facility Based (FB)
- Feedback on quality of services
- Delivery of ARVs to clients at CDDP and CCLAD

Hospital ward
- Linkage for urgent Counselling of complicated issues which can’t be handled by the community health worker before the next CDDP appointment

Community Drug Distribution Point (CDDP)
- [Delivery of ARVs to group CCLAD leaders]

Community Client-led ARV delivery (CCLAD)
- [Clients living within the same area, form Groups of 10, each lead by CCLAD Leader, who picks drugs from CDDP]
- Feedback on quality of services, Link clients for 6monthly reviews
- Delivery of ARVs by CCLAD leaders for each group
Client distribution per approach (Oct-Dec 2015)

Client distribution:
- CCLAD: 24,482
- CDDP: 17,694
- FACILITY: 24,554
Community Drug Distribution Point (CDDP)

- The Community based ART Model is a delivery model for antiretroviral therapy in which ART care is delivered at a community based site.
- It started as an expansion of the home based model of ART delivery in 2006.
- Each CDDP consists of minimum of 30 clients and a maximum of 45 clients.
- This site should be at least 5 km from the nearest ART accredited health facility.
- The designated place is chosen by the patients within their communities.
Objectives of CDDP

- 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
- To give more time to technical staff to support the novices on ART
Eligibility Criteria for CDDP

• At least 6 months on ART
• More than 6 months on current regimen if there is switch in regimen.
• Viral load greater than 1000 copies/μl (plasma) or 5000 copies/μl (DBS)
• If viral load testing is not available, consider CD4 more than 350 cells/μl
• No active TB or other WHO stage III/IV opportunistic infection
• Not pregnant or lactating
• Above 15 years old
• Well documented good treatment adherence (and appointment keeping)
Intervention frequency

- Drug refills are conducted every 2 months
- At 6 months, a general check up is done including clinical assessment, CD4 testing and other laboratory monitoring.
- This is changing to annual with the roll out of Viral load testing.
- Clients are encouraged to seek medical care from nearby health facilities or TASO centre in case of need during the intervals.
- At any point, a client that is deemed unstable/ineligible for receipt of ART in the community will be referred back to the facility for closer monitoring until stable enough to be re-sent to the community arm of ART delivery.
Package of Services

- Provides ART and adherence counseling,
- Two monthly ARV refills,
- Assessment for OIs by the clinical team every 6 months,
- Follow up of clients by expert clients,
- TB screening, nutritional assessment, HB, HCG, CD4 bleeding, viral load testing
- Psychosocial support by peers
Health talk at a CDDP
Community Client Led ART Delivery (CCLAD)

- An off-shoot of the CDDP
- Started in 2013
- Aims to address new challenges of congestion of CDDPs and promote beneficiary participation
- Eligibility is same as CDDP + 3 years on ART
- 3 monthly refills
- 6 monthly clinical and laboratory monitoring (changing to annual with VL)
- Biannual performance reviews with CASAs and refresher training
CCLAD Process

- Sensitize clients about the model
- Organize clients into peer support groups (PSGs) of 7-10 members;
- Support them select their group leaders (using a standard selection criteria);
- Orient leaders about their roles;
- Identify ARV drug delivery points within their localities and
- Pre-packing of each patient’s drugs and labeling of pre-packed drugs by name and unique identifier.
- Leader picks drugs from CDDP or TASO centre and delivers to clients upon filling simple data collection tool
- Data tool is returned to the TASO centre for quality checks and transcription
Pre-Packed drugs for CCLAD
12 months cohort retention was 87.3% across the approaches (Oct-Dec 2015 Quarterly report)

TASO Jinja retrospective cohort study
- Long term retention after 7 yrs at 69%,
- Improved clinical outcomes:
  - Loss to follow-up 16.5% facility arm, 4.28% at CDDP, p<0.0001
  - Average adherence 96.8% for CDDP compared to 95.6% of facility based, p>0.074 for facility clients.
  - Fewer deaths were reported in the CDDP arm 3.9% compared to facility with 5.7%, p=0.008

Virological suppression of upto 92% for CDDP clients (Okoboi et al, 2015)
<table>
<thead>
<tr>
<th>FACILITY</th>
<th>CDDP</th>
<th>CCLAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number per day</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Clients served</td>
<td>110</td>
<td>60</td>
</tr>
<tr>
<td>Skilled staff at 100% LOE</td>
<td>3 doctors, 4 clinical officers, 4 nurses, 2 pharmacy technicians, 2 lab techs, 6 counsellors</td>
<td>4 counsellors</td>
</tr>
<tr>
<td>&lt;100% LOE</td>
<td>1 MO, 1 CO, 1 Nurse, 1 lab tech (6 months review)</td>
<td>2 Counsellors</td>
</tr>
<tr>
<td>Expert clients</td>
<td>4 expert clients</td>
<td>2 CASAs</td>
</tr>
<tr>
<td>Fleet</td>
<td>2 motorcycle or MV</td>
<td>2 Motorcycle or MV</td>
</tr>
<tr>
<td>Training</td>
<td>Varied</td>
<td>1 week training 6 monthly 3 day refreshers</td>
</tr>
</tbody>
</table>
Findings: Average cost per visit and annual cost per client (2012)

<table>
<thead>
<tr>
<th>Location</th>
<th>Total expenditure (USD)</th>
<th>Total ART clients</th>
<th>Total ART visits</th>
<th>Average annual visits/client</th>
<th>Average cost per ART visit (USD)</th>
<th>Annual cost per ART client (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural - Gulu</td>
<td>$2,094,695</td>
<td>6,969</td>
<td>28,654</td>
<td>4.1</td>
<td>$73</td>
<td>$301</td>
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<tr>
<td>Rural - Rukungiri</td>
<td>$1,944,096</td>
<td>4,602</td>
<td>27,693</td>
<td>6.0</td>
<td>$70</td>
<td>$422</td>
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<tr>
<td>Semi-Urban - Jinja</td>
<td>$1,969,940</td>
<td>5,454</td>
<td>32,233</td>
<td>5.9</td>
<td>$61</td>
<td>$361</td>
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<tr>
<td>Semi-Urban - Entebbe</td>
<td>$1,744,231</td>
<td>6,329</td>
<td>23,461</td>
<td>3.7</td>
<td>$74</td>
<td>$276</td>
</tr>
<tr>
<td>AVERAGE COST</td>
<td>$7,752,962</td>
<td>22,814</td>
<td>112,041</td>
<td>4.8</td>
<td>$69</td>
<td>$332</td>
</tr>
</tbody>
</table>

The TASO annual unit cost per ART patient was US $ 332 compared to findings from previous studies (2012 PEPFAR estimate of US $ 335)
Potential Cost-Savings from Appointment Spacing

Cost drivers’ evolution with appointment spacing:
- Staff costs
- Operational costs
- Cost of drugs
- Lab tests’ costs
- Training costs

Provider cost per patient per year at TASO (USD):
- 2-month refill: 233 USD
- 3-month refill (simulation): 189 USD
- 6-month refill (simulation): 146 USD

Cost savings:
- 19% reduction for 3-month refill
- 23% reduction for 6-month refill
• With a cost saving of $3 per client per year, TASO saves 3*66,730 = $200,190 on the ART program.

• This saving can be further increased through intensified use of Client led Community ART models and reduced frequency of visits by stable clients.

• More cost studies are needed to clearly describe the efficiency for each model as well as applicability in the public health facilities.

• Plans to scale the models to key populations.
References

• The Global Fund, A toolkit for Health Facilities, Differentiated Care for HIV and Tuberculosis, November 2015
• TASO Community ART Guidelines 2014
• Antiretroviral therapy guidelines, 2013, MoH
• Okoboi S. et al; Community-Based ART programs in resource limited settings; CROI Boston 2014,