

# Preferences for HIV treatment delivery models amongst clients on ART in Harare, Zimbabwe



## Background

Zimbabwe has made important strides towards HIV epidemic control, with more than 1.2 million people on antiretroviral therapy (ART) as of end-2018. However, overcrowding and long wait times strain the capability of healthcare workers (HCW), and potentially compromise the quality of care. In response, Zimbabwe's Ministry of Health and Child Care (MoHCC) has adopted the HIV differentiated service delivery (DSD) approach, moving away from a "one size fits all" delivery model to a client-centered approach, enabling stable recipients of care to attend health facilities less frequently and to access treatment closer to the community.

DSD is intended to improve the quality of health services for stable clients and create more time for HCW to attend to clients with advanced HIV disease. The approach is expected to increase both client and HCW satisfaction while also creating health system efficiencies. MoHCC and its implementing partners have implemented five models of differentiated ART (DART) for stable patients on ART, with the support of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the Global Fund for AIDS, TB and Malaria, and other donors. These include community ART refill groups (CARGs), facility-based refill clubs, community-based outreach model, fast-track/visit-spacing and family ART groups.

One of the DART models prioritized by MoHCC is the community ART refill group (CARG). CARGs are designed to include up to 15 stable clients doing well on ART, who meet in the community to provide mutual psychosocial support and to share the burden of traveling to health facilities to pick up ART refills. Although CARGs appear to be popular with people living with HIV in rural areas of Zimbabwe, uptake in cities has been limited. The MoHCC has identified this as a significant challenge to scaling up DSD, as many Zimbabweans with HIV live in urban areas.

In order to recommend specific implementation strategies for DART in urban settings, ICAP partnered with MoHCC to conduct a mixed-methods study to explore the treatment preferences of urban PLHIV. The project included key informant interviews with HCWs, focus group discussions with clients, structured site assessments, a survey of 500 clients on ART, and a discrete choice experiment (DCE). DCEs are an increasingly popular quantitative technique to elicit respondent preferences via hypothetical scenarios. DCEs enable valuation of individual attributes (e.g. cost, service quality) that comprise a scenario (e.g. health service package, like a DART model) and thus can be used to inform the development of policies and programs that include the specific characteristics of highest value to the target population.

## Evaluation Design & Methods

The evaluation was designed to explore demand-side facilitators and barriers to HIV treatment in Harare, Zimbabwe, with a focus on client preferences for characteristics of service delivery associated with Zimbabwe's five DART models. Data collection took place at 7 health facilities in Harare and included:

- ✓ 35 key informant interviews (KII) with HCWs;
- ✓ 8 focus group discussions (FGD) with 54 HIV-positive adults;
- ✓ A discrete choice experiment (DCE) in which 500 adult DART-eligible PLHIV selected their preferences for HF *vs.* community location, individual *vs.* group meetings, provider cadre and attitude, clinic operation times, visit frequency, visit duration (including wait time), and cost to patient (including transportation);
- ✓ A survey with the 500 DCE participants exploring DART knowledge and preferences.

## Key Findings

Patient preferences were consistent in the FGDs, DCE and survey. Participants strongly preferred HF-based services, individual DART models, respectful and understanding HCWs, and services costing < \$3/visit. Patients also preferred less frequent visits and shorter wait times. They were indifferent to variations in HCW cadre and distances from home to HF (Figure 1). These preferences were mostly homogenous, with only minor differences between male *vs.* female and older *vs.* younger patients. In KII, HCWs characterized the fast track/visit spacing model (a facility-based individual model) as the one most favoured by patients; HCW also preferred this model, which they felt decompressed HF and decreased HCW workload.

<p style="text-align: center;"><b>Discrete Choice Experiment</b> N = 500 “stable” ART clients</p> <p>Preferences were consistent, with little variation based on age or sex. The DCE found:</p> <ul style="list-style-type: none"> <li>• Statistically significant and relatively strong preferences for             <ul style="list-style-type: none"> <li>○ Individual <i>vs.</i> group models</li> <li>○ Clinic-based <i>vs.</i> community- or home-based services</li> <li>○ Respectful <i>vs.</i> not respectful providers</li> <li>○ Cost &lt; \$3 per visit</li> </ul> </li> <li>• Smaller but statistically significant preferences for:             <ul style="list-style-type: none"> <li>○ Visits every 6 months <i>vs.</i> every 3 months</li> <li>○ Shorter <i>vs.</i> longer waiting times</li> </ul> </li> <li>• No preferences re:             <ul style="list-style-type: none"> <li>○ Cadre of health care worker</li> <li>○ Distance from home to health facility</li> <li>○ Operation times of clinic</li> <li>○ Small fee <i>vs.</i> free services</li> </ul> </li> </ul>	<p style="text-align: center;"><b>Focus Group Discussions</b> N = 8 FGDs with 54 “stable” ART patients</p> <p>In FGDs, patients expressed preferences for:</p> <ul style="list-style-type: none"> <li>• Kind, welcoming and respectful staff who are attentive to issues of privacy and confidentiality</li> <li>• Clinic-based services</li> <li>• Flexible operating hours, including weekends</li> <li>• Reduced visit frequency</li> </ul> <p><i>“Everyone goes to the clinic, so no one knows why you are visiting the clinic...home delivery is a no, it is better to come and collect at the clinic” – female FGD participant</i></p> <p><i>“We are faced with different situations at work, this is why we suggested that if we can be given medication to last us 6 months, or even for the whole year.” – male FGD participant</i></p>																														
<p style="text-align: center;"><b>Key Informant Interviews/Site Surveys</b> N = 35 KII with HCWs, 7 site surveys</p> <p>Site survey:</p> <ul style="list-style-type: none"> <li>○ The 7 facilities had been implementing DSD for 1-3 years (median = 1 year)</li> <li>○ Median # of adults on ART = 4,301 (range 3,296 – 6,621)</li> <li>○ Median observed wait time for ART patients = 83 minutes (range 29-148 minutes)</li> </ul> <p>Key informant interviews:</p> <ul style="list-style-type: none"> <li>○ Health care workers reported that patients prefer the fast track/visit spacing model (a facility-based individual model) because of its privacy and efficiency</li> <li>○ Health care workers themselves preferred the fast track/visit spacing model because it reduced facility congestion and HCW workload</li> </ul>	<p style="text-align: center;"><b>Patient Surveys</b> “Stable” ART patients</p> <p style="text-align: center;"><b>How likely would you be to join this DSD model?</b></p> <table border="1"> <caption>Approximate data from the stacked bar chart</caption> <thead> <tr> <th>Model</th> <th>Very likely</th> <th>Somewhat likely</th> <th>Somewhat unlikely</th> <th>Very unlikely</th> </tr> </thead> <tbody> <tr> <td>Facility-based Fast Track model (N=75)</td> <td>70%</td> <td>15%</td> <td>10%</td> <td>5%</td> </tr> <tr> <td>Facility-based Family ART model (N=339)</td> <td>55%</td> <td>15%</td> <td>20%</td> <td>10%</td> </tr> <tr> <td>Facility-based Refill Club (N=76)</td> <td>40%</td> <td>5%</td> <td>35%</td> <td>20%</td> </tr> <tr> <td>Community ART group (N=182)</td> <td>25%</td> <td>5%</td> <td>55%</td> <td>15%</td> </tr> <tr> <td>Community-based Outreach model (N=42)</td> <td>15%</td> <td>5%</td> <td>60%</td> <td>20%</td> </tr> </tbody> </table>	Model	Very likely	Somewhat likely	Somewhat unlikely	Very unlikely	Facility-based Fast Track model (N=75)	70%	15%	10%	5%	Facility-based Family ART model (N=339)	55%	15%	20%	10%	Facility-based Refill Club (N=76)	40%	5%	35%	20%	Community ART group (N=182)	25%	5%	55%	15%	Community-based Outreach model (N=42)	15%	5%	60%	20%
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## Conclusion

DART-eligible people living with HIV in urban Harare preferred attributes associated with two of Zimbabwe’s five DART models, fast track/visit spacing and family pick-up. Prioritizing these for scale-up in urban areas may be the most efficient way to sustain positive patient outcomes and increase health system performance.

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