THE COSTS OF PrEP IMPLEMENTATION IN 7 ZIMBABWE CLINICS

Collin Mangenah, Definate Nhamo, Fern Terris-Prestholt with PSI, Zimbabwe MOHCC & OPTIONS teams

3 DEC 2019, ICASA, Kigali
Background

- Zimbabwe is scaling up availability of oral PrEP to populations at high risk:
  - >3% incidence per year: AGYW (16 - 24), FSW, MSM
- Need understanding on actual implementation costs to inform:
  - Program budgeting, national scale-up & cost-effectiveness (PrEP-IT modeling)
Background

• Zimbabwe is scaling up availability of oral PrEP to populations at high risk:
  • >3% incidence per year: AGYW (16 - 24), FSW, MSM

• Need understanding on actual implementation costs to inform:
  • Program budgeting, national scale-up & cost-effectiveness (PrEP-IT modeling)

Costs of observed program implementation:

• Sample included all PrEP services implementing ≥12 months, Jan-Dec 2018:
  o 6 PSI Zimbabwe clinics
  o 1 government health facility

• Provider perspectives (full economic costs)
• Time & Motion (1-6 providers per site) in all facilities
• Total costs by input, unit cost per person, per person continued to 3 & 6 months
• Modelling cost per person year protected on PreP ($ppy)
<table>
<thead>
<tr>
<th>Management</th>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
<th>Site 4</th>
<th>Site 5</th>
<th>Site 6</th>
<th>Site 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSI</td>
<td>PSI</td>
<td>PSI</td>
<td>PSI</td>
<td>PSI</td>
<td>Partner</td>
<td>Partner</td>
<td>Public sector</td>
</tr>
<tr>
<td>Site Type</td>
<td>Stand-alone</td>
<td>City Health Clinic</td>
<td>Stand-alone</td>
<td>Stand-alone</td>
<td>Stand-alone</td>
<td>Stand-alone</td>
<td>City Health Clinic</td>
</tr>
<tr>
<td>Clinic size (visits/year)</td>
<td>124,124</td>
<td>5,070</td>
<td>22,356</td>
<td>53,214</td>
<td>28,217</td>
<td>3,614</td>
<td>63,928</td>
</tr>
<tr>
<td>Maturity (months)</td>
<td>29</td>
<td>27</td>
<td>29</td>
<td>32</td>
<td>32</td>
<td>29</td>
<td>18</td>
</tr>
</tbody>
</table>
Total costs by site

<table>
<thead>
<tr>
<th>Site</th>
<th>Capital</th>
<th>Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site 1</td>
<td>$272,655</td>
<td></td>
</tr>
<tr>
<td>Site 2</td>
<td>$104,534</td>
<td></td>
</tr>
<tr>
<td>Site 3</td>
<td>$93,425</td>
<td></td>
</tr>
<tr>
<td>Site 4</td>
<td>$167,091</td>
<td></td>
</tr>
<tr>
<td>Site 5</td>
<td>$226,763</td>
<td></td>
</tr>
<tr>
<td>Site 6</td>
<td>$186,782</td>
<td></td>
</tr>
<tr>
<td>Site 7</td>
<td>$4100</td>
<td></td>
</tr>
</tbody>
</table>
Outputs: Initiations and continuation at month 3 and 6
Unit costs along the continuation cascade
Person-year-protected on PrEP: nrs needed to initiate by continuation duration

Nr needed to achieve 1 person-year-protected on PrEP = 52 weeks / average weeks of continuation
Cost ppY protected on PrEP: cost by continuation duration

\[
\text{Cost per person year} = \text{\$ppY protected} = \text{\$initiations} \times \text{\Quantity_{initiations}} + \text{\$follow up visits} \times \text{\Quantity_{FUs}}
\]
## Discussion

### Total Cost Drivers
- Large variation across sites:
  - PrEP program maturity
  - Overall clinic size
  - Type of staff
  - Structure of demand creation.
- Challenges remain with continuation:
  - 50% clients < at 3 months, and 25% < 6 months
  - $/initiation comparable to other estimates, but $/retained client is higher
- Huge drop in $/PPY with higher continuation

### Unit Cost Drivers
- Economies of scale, i.e. numbers initiated and retained

### Why do clients initiate but not continue PrEP?
- Better targeting = continuation and better support
- Improved efficiency i.e. spread fixed initiation costs over more months of PrEP protection.

### Future research needs
- Consideration of informed cycling on and off of PrEP
- Consideration of “optimal” M&E metrics -> optimal incentivisation.
Thank you

Fern.Terris-Prestholt@lshtm.ac.uk
Collin Mangenah cmangenah1@gmail.com
Definate Nhamo dnhamo@pzat.org

This program is made possible by the generous assistance from the American people through the U.SAgency for International Development (USAID) in partnership with PEPFAR under the terms of Cooperative Agreement No. AID-OAA-A-15-00035. The contents do not necessarily reflect the views of USAID or the United States Government.

OPTIONS Consortium Partners