Online MIS database to improve HIV case detection and case management tracking in Central Asia
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1. BACKGROUND

In the previous projects, the MS Access database did not allow reviews until the end of a quarter, when the project’s NGO partners sent their data files to the country program teams. This delay hindered ongoing data quality checks and real-time data-driven decision making. With all eyes on this new USAID Central Asia HIV Flagship Project, from the region and the international community, the project staff decided to move to a web-based MIS database that would eliminate the disadvantage of these delays.

2. DESCRIPTION

- Online database and work with an open source coding (MySQL, JavaScript, HTML, CSS and PHP)
- Local web-development
- Iterative process responsive to project changes
- Very strict time constraint to build the database
- Regional complexity (three countries: Kazakhstan, Kyrgyz Republic, Tajikistan)
- Multiple target groups (People Living with HIV, sexual partners, People Who Inject Drugs, Men Who Have Sex With Men)
- Case finding and case management components

3. LESSONS LEARNED

- Elimination of time lags in data verification
- Real-time monitoring of NGO performance
- Stronger communication between the USAID Central Asia HIV Flagship Project staff and NGOs to increase project effectiveness
- Data-driven decision making

4. CONCLUSION/NEXT STEPS

- The new MIS system:
  - accurately captures the complex case detection process following RDS recruitment
  - extremely responsive to program design changes,
  - able track at an individual client, target group, or NGO level.
- enables conducting ongoing monitoring and evaluation of the project activities and provide improved, comprehensive support to clients.
- Next steps:
  - Complete migration of data entry from paper-based data collection forms to tablet-based data entry (mobile application) to decrease paper work,
  - improve data quality through multiple in-built data checks and enable NGO field staff to track their performance in real time.

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**FIG 1** - Tajikistan, cascade, LOP, from 2016-10-01 to 2018-06-30

<table>
<thead>
<tr>
<th>Number of clients</th>
<th>1200</th>
<th>1000</th>
<th>800</th>
<th>600</th>
<th>400</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td># found</td>
<td>623</td>
<td>575</td>
<td>491</td>
<td>488</td>
<td>379</td>
<td>374</td>
</tr>
<tr>
<td># linked to care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># on ART</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FIG 2** - RDS Recruitment Map

- The system captures different variables of case management for PLHIV. This cascade starts with case detection when a client learns that he/she is HIV positive, to enrollment into the case management cycle, linking him/her to care at AIDS Centers, CD4 count and viral load diagnostics, and antiretroviral therapy (ART) initiation (Figure 1). The MIS database is also capable of storing all the clients’ socio-demographic data.
- All necessary tracking of the respondent driven sampling (RDS) recruitment method is built into the new MIS system (Figure 2), including tracking of coupon distributions to seeds (initial contacts) and wave (recruitment) management.
- HIV Yield can also be visualized through dashboard module (Figure 3).

**FIG 3** - Kazakhstan, Yield, hts_tst_dsd, Y3, from 2017-10-01 to 2018-06-30

- **LTFU** - Newly found
- **positivity yield%**
- **2000** - 2,309
- **1600** - 93
- **1200** - 3.95
- **800** - 4.00
- **400** - 4.05
- **200** - 4.15
- **0** - 4.20

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