CASE STUDY

Increasing adult ART uptake under Test and Treat in Lesotho through ART initiation at the village health post level

Summary

Globally, Lesotho ranks second in HIV prevalence. Prevalence rates vary among Lesotho’s 10 districts and range from 17% in Mokhotlong to 28% in Maseru (LDHS:2014). In June 2016, per the new Universal Test and Treat (UTT) guidelines released by the World Health Organization (WHO), Lesotho became the first African country to implement UTT guidelines. While these guidelines removed all restrictions to antiretroviral therapy (ART) initiation for HIV-affected people, actual ART coverage remained at 41% for adults and 40% for children. Many facilities face a backlog of patients now eligible for treatment, and many patients faced access challenges, in part due to Lesotho’s mountainous terrain and incomplete road system. With an ART initiation rate of 47% in September 2016, Tebellong Hospital in Qacha's Nek District faced many of these challenges; with support from the USAID ASSIST Project, a quality improvement (QI) team was formed to understand and address root causes of the low ART initiation rate. After deeper analysis and implementation of QI methodology, the QI team tested a change idea in December 2016: dispatching a nurse-midwife to the remote Qabane Health Post for ART initiations. Data collection and analysis revealed that by March 2017, all eligible patients had been initiated on ART, a success that has been maintained as of August 2017.

Background

Lesotho continues to have one of the highest HIV prevalence rates in the world, with an estimated 25% of adults living with HIV. Globally, Lesotho ranks second in the HIV prevalence. Prevalence rates vary among Lesotho’s 10 districts and range from 17% in Mokhotlong to 28% in Maseru (LDHS:2014).

In 2004, the Lesotho Ministry of Health initiated provision of ART for people living with HIV. At that point, the CD4 count threshold for antiretroviral therapy (ART) initiation was 200 cells. In the years since, there have been series of changes in national ART guidelines in an effort to accommodate evidence-based interventions that could curb the pandemic. ART initiation was guided by the clinical status and CD4 count immunological threshold. Patients who tested positive for HIV but who were not yet eligible for treatment were entered on the facility’s Pre-ART register and were supposed to be monitored every 3-6 months for CD4 count. From 2004, eligibility criteria have been as follows:

- 200 cells (2004-October 2007)
- 350 cells (November 2007-2013)
- 500 cells (2013-2016 May)
- Treat all (June 2016)

In June 2016, Universal Test and Treat (UTT) guidelines were released by WHO. These guidelines removed all restrictions to ART initiation for HIV-affected people. After their release, Lesotho immediately
transitioned to implementation of the guidelines, removing all limitations on eligibility for treatment, and encouraging ART initiation the same day as diagnosis. Lesotho was the first African country to implement a UTT strategy, to facilitate achievement of the global UNAIDS 90-90-90 targets.

**Problem Analysis**

Despite these advances in the provision of ART for HIV-infected individuals, nationally in Lesotho, ART coverage remained at 41% for adults and 40% for children. Some health facilities in the mountainous parts of the country continued to face access challenges, as catchment villages are very remote, and roads and transport are unreliable. The health system also continued to face adaptation challenges, as they must now utilize the new guidelines to:

1. Initiate/manage more patients on ART (overall);
2. Initiate ART more quickly; and
3. Initiate ART for all patients on their Pre-ART register

These challenges have left facilities with a backlog of patients to be re-tested for HIV and initiated on ART. Many ASSIST-supported quality improvement (QI) facility teams have focused on this new gap in service provision.

Tebellong Hospital, one of the Christian Health Association-administered health facilities in Qacha’s Nek District, was among those with a backlog of patients eligible to initiate ART. However, it faced multiple challenges, including insufficient infrastructure to accommodate an influx of patients, as well as inaccessible catchment villages, some of which do not have roads or reliable transport and require health staff to travel by horse to reach them. With the ART initiation rate at 47% at Tebellong Hospital catchment area in September 2016, the ASSIST team helped the facility do a deeper analysis of causes and possible solutions.

**Design of the Improvement Strategy**

After conducting a root cause analysis, and using the Pre-ART register to categorize the clients by their villages, the QI team identified that most patients were from Qabane catchment area. The QI team then conducted a brainstorming session to identify why many Qabane community members did not go to Tebellong Hospital for HIV initiation. In the QI meeting, the facility staff mentioned distance and accessibility as one set of challenges. They also noted that some patients – particularly those who tested HIV-positive prior to test and treat implementation – were not aware of the new policy.

**Summary of challenges**

- Patients must travel long distances to access health services in Tebellong Hospital.
- ART initiation must be performed by a registered nurse; the nurse is based at Tebellong Hospital.
- Most clients being served at Tebellong Hospital are from the Qabane Village Health Post catchment area.
Development of Change Ideas

After identifying these gaps, the QI team started introducing changes to improve ART uptake among adults. The team decided to focus on using the existing village health worker system to recall all known HIV-positive clients for ART initiation. In September 2016, the QI team started with a total of 43 clients eligible for ART initiation.

First change idea tested: In October 2016, patients were tracked and re-called through the village health workers. This idea was tested for four weeks. Looking at their data, the team concluded that this change idea was not yielding desired results: most clients were still not initiated on ART. Data collected indicated that the most frequently cited reason for not going to the facility was the distance from their homes to Tebellong Hospital, where ART initiation was done.

Second change idea tested: In December 2016, the team discussed the access challenges patients were facing. Most clients are from Qabane Valley; a nursing assistant from the hospital visits Qabane Health Post twice per month for preventive services such as provision of immunizations, but this cadre is not permitted to initiate patients on ART. The QI team agreed to deploy a registered nurse-midwife, who is permitted to initiate ART, to be part of the team that visited Qabane Health Post. Once this change was introduced, all clients on the Pre-ART register and other clients newly eligible were initiated immediately. The graph below shows that by February 2017, the overall number of eligible clients in need of ART initiation had been reduced by 58%. And since March 2017, all eligible clients have been initiated on ART, reaching 100%.

Results

Table 1 below shows the number of clients on the Pre-ART register, the number of newly identified clients eligible for ART initiation, and the total number of eligible clients. In September 2016, the total number of eligible clients was 43. After the deployment of a registered Nurse Midwife to Qabane Health Post in December 2017, the total number of eligible but uninitiated clients was reduced by to zero by March 2017. Since that time, the health post has been able to initiate all newly diagnosed patients as well. Figure 1 shows these results in the form of a time series chart.

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<td>ART initiations: new clients</td>
<td>20</td>
<td>17</td>
<td>8</td>
<td>11</td>
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<td>7</td>
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<td>9</td>
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<td>6</td>
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<td>ART initiations: Pre-ART register</td>
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<td>9</td>
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<td>Total clients eligible for ART</td>
<td>43</td>
<td>40</td>
<td>29</td>
<td>32</td>
<td>26</td>
<td>19</td>
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<td>Percent reduction</td>
<td>47</td>
<td>48</td>
<td>28</td>
<td>34</td>
<td>54</td>
<td>58</td>
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Tebellong Hospital Quality Improvement Team. Photo credit: URC Lesotho.
Figure 1. Adult ART uptake in Tebellong Hospital, Sept 2016-August 2017

Conclusion

Although the entry point to quality improvement support was HIV services, the implementation of QI in Tebellong Hospital has led to nurses being part of the team that provides integrated services at Qabane Village Health Post. This in turn has led the district as a whole to consider deploying nurses in outreach services to improve access for all clients to integrated services.

HIV-positive clients are initiated on ART services and regular visits will continue to be conducted to reach those who cannot access services at Tebellong Hospital. It is recommended that Qacha’s Nek District Health Management Team consider budgeting for regular deployment of clinicians to Qabane Village Health Post, as many people served by the hospital reside in this area. They might also consider working with government to explore other approaches to improving access for those served by the village health post.

Way Forward

The Qabane model – initiation of ART at the village health post level – will be used to inspire other health facilities when they implement quality improvement initiatives.