Background

Despite gains made by various HIV and AIDS response efforts, results of the 2011 Uganda AIDS Indicator Survey (UAIS) showed that 7.3% of adults aged 15-49 in Uganda were living with HIV, an increase from 6.4% since the 2005 population-based survey. Only 400,000 persons, approximately 47% of the estimated ART-eligible population, were enrolled on antiretroviral therapy (ART). In addition, estimates indicate that about 110,000 new HIV infections are added to Uganda’s HIV burden annually.

Working with the Uganda Ministry of Health (MOH), the USAID Strengthening Uganda’s Systems for Treating AIDS Nationally (SUSTAIN) project currently supports the provision of comprehensive HIV care and treatment services to over 52,542 clients at 10 regional referral hospitals (RRH) and one general hospital (GH). In line with the revised HIV treatments guidelines (Test and Treat), up to 52,517 (99.3%) of all clients in care are on ART. Of these, 3,581 (6.8%) are children under 15 years.

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USAID/SUSTAIN supports various components in HIV care, including:

- Provision of co-trimoxazole preventive therapy;
- Diagnosis and management of opportunistic infections; nutrition assessment, counseling and support;
- Routine clinical and laboratory (i.e. viral load and CD4) monitoring for ART clients;
- Counseling and psychological support for both adult and pediatric clients, including prevention support;
- Provision of a basic care package for HIV-infected clients;
- Adherence counseling and support for ART clients;
- Follow-up and linkages with community interventions and other healthcare facilities; and
- Targeted care for special groups like children and adolescents, tuberculosis (TB)/HIV co-infected, clients and clients on second-line antiretroviral treatment.

With the adoption of the UNAIDS 90-90-90 strategy by the Uganda MOH, the project has focused efforts around high-yield HIV counseling and testing, improved ART access for all HIV positive clients with subsequently improved viral suppression rates among the clients on treatment.

**USAID/SUSTAIN Strategic Approach**

The project utilizes the chronic care model approach to offer comprehensive HIV support to clients. This includes:

- Improving patients’ ability to care for themselves;
- Providing services in the community;
- Improving the efficiency of clinic service provision;
- Using systems to remind healthcare workers to provide essential elements of chronic care;
- Developing strong longitudinal patient records to improve patient information; and
- Gaining organizational support to implement these changes.

**Key Activities and Interventions**

**Developing health workforce skills for sustainability:** Through trainings, on-site integrated mentorships, and physician-led visits, the project has built healthcare service providers’ capacity to offer quality HIV services at the supported facilities. For example, physician-led visits have improved adherence to national guidelines and enhanced staff’s skills to manage complicated client conditions, while use of facility based specialists has provided ongoing oversight and guidance for client care at supported hospitals.

**Improving identification and linkage to quality HIV care and treatment:** In collaboration with the hospital unit in-charges and staff, client flow and clinic processes were re-organized to improve access to HIV testing services and linkage to care. Interventions that greatly improved access to HIV testing services (HTS) include: provider-initiated testing and counseling (PITC), index clients testing. Know your Child’s Status days, the family matrix and targeted HTS at high yield points. To strengthen linkage of HIV-positive patients identified at different testing points to HIV clinics for enrolment and care, peers or volunteers are selected to escort newly-identified clients to the enrolment points.

**Strengthening linkages along the continuum of care:** Through inter-departmental and inter-facility meetings conducted on-site, facilities established functional internal and external referral systems to ensure clients remain in care. For example, triplicate referral forms were adopted to support documentation and follow-up of referrals made within a facility and monthly inter-facility meetings (which involve stakeholders and healthcare staff from lower facilities in a region) are organized by project-supported facilities to help identify self-referrals, in addition to use of telephone follow-up calls.

**Ensuring routine monitoring of treatment outcomes:** Clients receiving HIV services at supported facilities are routinely monitored using clinical, laboratory and psychosocial methods. Clinic teams are trained to assess clients for psychosocial needs and job aides (designed with talking points on psychosocial needs counseling) are given to healthcare workers for additional support. Innovations, such as development and utilization of standard operating procedures (SOPs) at different care points, have improved client monitoring.

In addition, newly-created multidisciplinary teams review viral load results from the Central Public Health Laboratories (CPHL) to provide intensive adherence support and review for possible treatment failure. For possible intensive adherence counselling treatment failure. Clients with non-suppressed viral load results are called, reviewed and receive intensive adherence counseling and support to improve viral suppression.
Improving client retention in care: To support client retention in care at the facilities, project efforts have focused on providing information to clients for better self-management, establishing systems for client support and monitoring appointment keeping. Several interventions include: the provision of in-depth counseling and preparation of clients at enrolment in care and on ART; streamlining appointment systems to regulate the number of clients per clinic day; and the introduction of nurse-only drug refills to reduce waiting time at the high volume clinics. The client electronic database is also used to monitor client appointment-keeping. Clients who do not keep appointments are routinely followed with phone calls or home visits (for those not accessible by phone) for special categories, such as tuberculosis co-infected patients or patients on elimination of mother-to-child transmission (eMTCT) prophylaxis.

Strengthening human resources: The project supports targeted skills development in HIV prevention, care and treatment through on-site trainings and mentorships, including clearly defining roles and responsibilities for staff. In addition, supported facilities recruited critically-needed staff, such as Clinical Care Coordinators and Community Linkages Coordinators, to support service delivery and HIV-related activities at both the hospital and community levels.

Institutionalizing quality improvement: The project has built the capacity of healthcare providers to continually analyze—through QI approaches—HIV service delivery systems and processes to make progress and ensure service delivery; some of the QI projects focus on increasing efficiency, reducing waste and improving client outcomes.

Improving HIV Clinic infrastructure: Together with MOH engineers, CPHL and hospital teams, the project participated in the development of specifications for remodeling and expanding a few of the existing HIV Clinics at supported facilities. The current clinic structures are more spacious with consultation and counseling rooms, data rooms and better waiting areas.

Supporting key population programming: In collaboration with the MOH, the project has supported the process of setting up “most-at-risk” clients’ clinics by conducting entry meetings and training health workers to provide services at the health facilities. Targeted key populations include: commercial sex workers, truck drivers, fishermen, and individuals from the lesbian, gay, bisexual and transgender (LGBT) community.

Key Achievements and Progress To-date

**Improved proportion of clients on treatment:** The proportion of clients in care that are on antiretroviral therapy improved from 57.2% in October 2011 to 99.3% in June 2017 (Figure 1). This is attributed, among others, to increased choice increased from 50% in June 2014 to 94.3% by June 2017. This improvement is attributed, among others, to increased community involvement through peer educators and client representatives in the hospital QI teams thus improved feedback on client care. In addition, obtaining a list of accredited lower facilities where clients can easily access ART has helped link patients to care.

**Improved client linkages to HIV care and treatment:** As a result of improved linkages, the rate of clients who were tested positive at the supported facilities and referred for care accessed services at either the testing facility or another facility of choice increased from 50% in June 2014 to 94.3% by June 2017. This improvement is attributed, among others, to increased community involvement through peer educators and client representatives in the hospital QI teams thus improved feedback on client care. In addition, obtaining a list of accredited lower facilities where clients can easily access ART has helped link patients to care.

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**Figure 1.** Closing the Gap in ART Initiation and Active in Care, FY 11-FY 17 (As of Q3)
clients who opt for care near their homes, i.e. healthcare providers alert local facilities about the new client to be referred for chronic care.

**Enhanced routine client monitoring and treatment outcomes:** With client monitoring systems in place, the number of clients accessing a viral load test quarterly improved from 1,267 clients in December 2013 to 11,499 clients in September 2017 (Figure 2), and a viral suppression rate of 91% for clients on ART with a viral load test result. Up to 37,070 (71%) clients had a documented viral load test in the past 12 months. Patients who are identified as failing on treatment are reviewed by a panel of clinicians, counselors and nurses who analyze their clinical progress, provide intensive adherence support and record outcomes at monthly meetings.

**Increased number of clients retained in care:** Supported facilities conduct joint quarterly performance reviews which enable the sharing of best practices to improve performance. Some of the best practices include routine updating of client follow-up contacts during clinic visits, provision of a second post-test counseling session during enrolment into care and weekly tracking of clients with missed appointments with immediate phone call follow-up. The rapid scale-up of best practices has led to improvements in client retention, from 76% in December 2014 to 85.2% in June 2016.

**Improved linkage and enrolment into care for HIV-positive clients:** At all testing units, clients who test HIV-positive and have been counseled are physically escorted by facility staff to the enrolment points to start on treatment. At several hospitals, the escorting process is done by volunteers/expert clients, counselors and nurses. However, clients who opt to start treatment in another facility are initiated on contrimoxazole preventive therapy and given a written referral to the facility of choice.

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**Spotlight**

**Quality improvement on client ART retention: Experience from Jinja RRH, 2013-2014**

**Challenge:** In November 2013, 57% of clients were alive and active 12 months after initiation on ART at Jinja Regional Referral Hospital. This was 28% below the national client retention target of 85%. Using QI approaches, the clinic team was guided by a USAID/SUSTAIN mentorship team to analyze the problem.

**Causes:** Through brainstorming, it was noted that:
- The clinic lacked a patient appointment tracking mechanism. In addition, many clients either had wrong or missing telephone contacts.
- Client data routinely collected was rarely used to monitor client retention.
- Stigma existed among the patients due to non-disclosure and inadequate family support for some of the clients attending the clinic.

**Introduced Changes:** An improvement team was set up to monitor implementation of agreed changes. The team was also tasked to review progress on retaining clients on ART using monthly clinic data. The following changes were implemented starting November 2013:
- Emphasizing the importance of adherence and disclosure during ART client preparation sessions;
- Referring clients from far distances to nearby facilities;
- Updating client phone contacts per visit; and
- Using the family matrix to identify opportunities for family support and disclosure.

**Results:** By the end of December 2014, 91.8% of clients were alive and active 12 months after initiation on ART at Jinja RRH. The clinic has since maintained its performance above 93%, the most recent being 97% in June 2016.