into the overall health systems of the province. These meetings are inexpensive to run, but have a considerable impact on strengthening relationships between the two sectors. In particular they have recognized the role that private providers are playing and an acceptance of their role as partners.

Maternal and Child Health

A number of challenges remain in the relationship, primarily as a result of budget constraints in the Ministry of Health. Accessing commodities remains a challenge since private partners are not following the correct channels to access commodities. Supervision continues to be sporadic since DHMTs struggle to provide the coverage needed. Quality assurance also remains a challenge and many private facilities would benefit from support in renovating their premises to make them more conducive to quality, confidential service provision. Future interventions would benefit from ensuring that development of public-private partnerships is integrated into planning and implementation from the start of a program. Facilities should be assessed for a completely integrated support package that should especially focus on infection prevention practices.

Overall, this intervention has contributed to an increase in the numbers of people accessing private health services and to a better ability to monitor the quality of services that they provide. It has proved to be a good model for creating linkages between the public and private sectors and bringing private providers into the overall health service system.

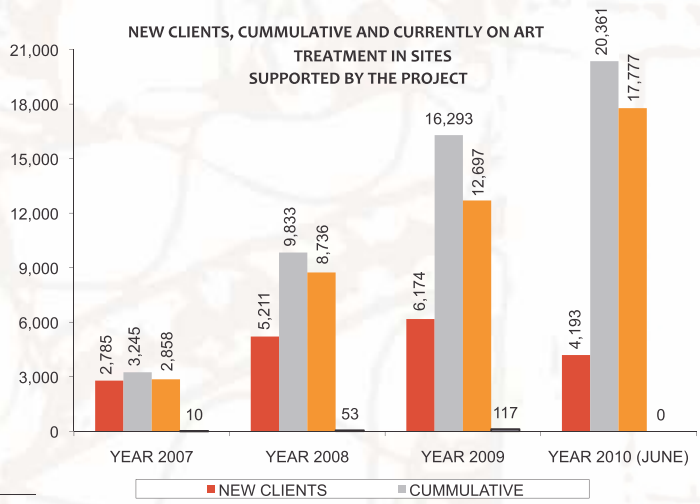
3.2 HIV Care & Treatment

ART Decentralization- Best Practice

In 2007, Kenya had an HIV prevalence rate of 7.1%, with a population of 1.42 million people living with HIV. Women were more likely to be infected than men, with young women aged between 15-24 years four times more likely to be infected than young men in the same age group. Western Province had a prevalence rate of 5.4%, with a population of 115,000 people living with HIV. Treatment scale-up is having a notable effect on HIV-related mortality in Kenya, AIDS-related deaths fell by 29% between 2002 and 2007. In 2007, 9.7% of HIV-infected adults or 138,000 individuals were taking ARVs nationwide. Among ARV-eligible adults in Kenya, 40.5% were taking ARVs. In Western Province 14,000 or 48.5% of ARV-eligible adults were taking ARVs, whilst 15,000 of those eligible were not taking ARVs. In December 2006, APHIA II Western was supporting ten imperative sites that delivered ARVs to 3,300 individuals in the province.

The high number of patients needing treatment meant these facilities experienced a greater volume of patients than they were able to cope with. This factor combined with the fact that previous health policies only allowed doctors and clinical officers to administer ART meant that there were serious limitations on the number of HIV+ clients who could be treated with ART in these settings. The quality of care and treatment available was also compromised due to the heavy and often competing workloads of the clinicians providing the treatment services. The decentralization of ART services aimed to expand access to care and treatment services for PLWHIVs as well as to improve the quality of care they received and aimed to offer ART services to 17,000 PLWHIVs through 53 sites by the end of the project period.

All targets for ART treatment scale up were exceeded. By the end of the project a total of 60 APHIA II Western-supported facilities were offering ART services in Western Province to 17,777 clients. A total of 20,347 people were on treatment and 880 staff had been trained to deliver ART services to national and international standards. A total of 56 sites were offering pediatric ART services and 1,587 of those receiving treatment at the end of the project were under 14 years.



9. KAIS 2007
10. KAIS 2007
11. KAIS 2007
12. National AIDS Control Council & National AIDS/STI Control Programme, 2007
13. KAIS 2007
14. KAIS 2007
15. KAIS 2007

The APHIA II Western team and the Ministry of Health conducted an assessment of health facilities within the service and periphery catchment area of the existing ART delivery sites. The assessment identified potential sites for roll-out and decentralization of ART services and analyzed the gaps and needs that would hinder delivery of ART services in these settings. Based on the information gathered, the Ministry selected the sites where ART services would be rolled out. Together with the APHIA II Western team they developed a timetable for the roll out of decentralized services to the facilities.

Once the sites had been selected, they were equipped with everything necessary to implement the treatment program. In some cases this involved creating the physical capacity for the service through the infrastructure renovation program before providing them with furniture, files and registers for service delivery and monitoring. APHIA II Western deployed technical staff to most of the sites before the Capacity Project took over responsibility for their salaries. The Ministry of Health selected and trained facility staff in ART service provision with APHIA II Western financial and logistical support.

Once the facilities were equipped and the staff trained, the sites set about recruiting clients and offering ART care and treatment services. Once the treatment phase was underway the APHIA II Western team provided ongoing mentoring and support to the personnel through on-the-job training (OJT). Personnel were also attached to high volume sites for experience and exposure.

The dramatic increase in the number of sites offering ART services has been a great success, particularly in terms of the increase in the number of sites offering pediatric ART services. A critical factor in the success of this roll-out and decentralization initiative has been the extent to which the Ministry of Health has driven the process, with DASCOs continuing to identify new ART sites and then requesting APHIA II Western's support to establish them.

One of the challenges faced in this initiative has been maintaining regular commodity supplies to all the sites. Some of the periphery sites are expected to obtain their commodities through central sites, but they weren't reporting properly on their commodity use, which made it difficult for central sites to maintain a regular commodity supply to their satellite facilities. Efforts are now in place to strengthen communications between the facilities and to tackle this problem within the limitations of the Ministry of Health commodity supply chain system.

This intervention has proven to be an effective and efficient means of increasing PLWHIV access to better quality ART services.

Maternal and Child Health

By offering services that are closer to home, it has reduced the time that clients take to obtain their treatment and has contributed to a reduction in the numbers of patients who are lost to follow-up. It has also shared out the burden of responsibility for treatment amongst health workers, which has reduced rates of health worker burnout due to excessive caseloads.

The intervention was developed to work within existing Ministry of Health service delivery structures, which has meant that it has required a minimal financial outlay beyond the cost of drugs. It is an easily replicable model that strengthens linkages between facilities and uses existing monitoring and support structures to ensure that standards of quality of care and treatment are maintained.

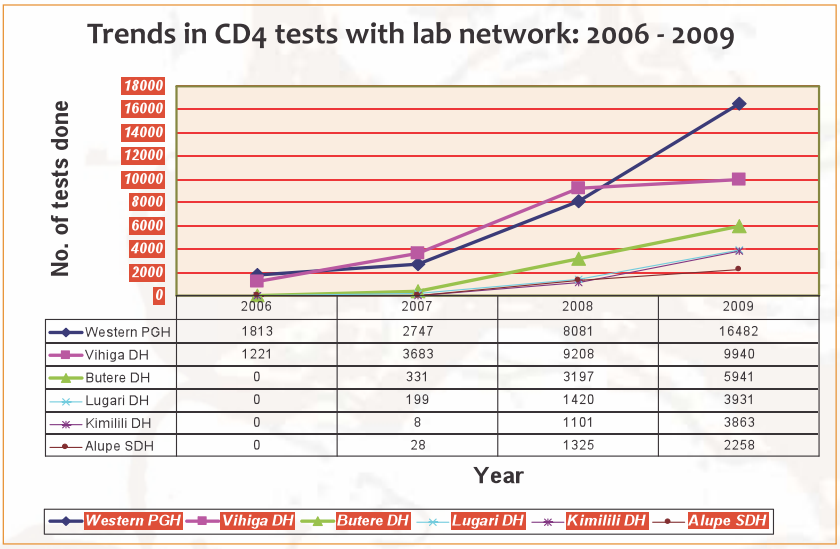
Laboratory Networking - Best Practice

The capacity to offer clients comprehensive laboratory testing services that include CD4 counts, DBS and Polymerase Chain Reaction tests (PCR) is a crucial factor in both expanding treatment availability and improving the quality of care on offer. Access to these tests enables care providers to develop an accurate picture of a client's state of health and ensure that they are given appropriate treatment. According to KAIS 2007, 34% of Kenyan adults who knew their HIV+ status weren't offered CD4 tests.

In 2006, four APHIA II Western-supported laboratories had CD4 machines, of which three were public facilities. By the end of the first year of implementation a further four CD4 machines had been procured. This made a total of seven nodal network sites that were serving 60 ART and 307 PMTCT sites in the province by the end of the program.
Other programs have approached the challenge of

insufficient laboratory services by building laboratories within ART sites. In contrast to this approach, the laboratory networking initiative has been designed to take advantage of existing laboratories within the province without any large capital expenditure. The program was developed with the objective of expanding HIV care and treatment services and improving the quality of care offered to HIV+ clients. It aimed to make use of the existing laboratories working in the province to increase access to laboratory testing services, with a particular goal of ensuring that all HIV+ clients had access to regular CD4 testing and that all HIV-exposed infants had access to DBS and PCR testing.

Data shows that there has been a significant increase in the number of CD4 tests provided in Western Province during the project period, as illustrated in the graph below.



	2006	2007	2008	2009
Western PGH	1813	2747	8081	16482
Vihiga DH	1221	3683	9208	9940
Butere DH	0	331	3197	5941
Lugari DH	0	199	1420	3931
Kimilili DH	0	8	1101	3863
Alupe SDH	0	28	1325	2258

This initiative was developed in close collaboration with the provincial laboratory team of the Ministry of Medical Services. Implementation started in 2006 on a pilot scale in Kakamega Provincial Hospital, Bungoma District Hospital and Vihiga District Hospital.

The remaining four laboratories have since been included in the networking process using a phased approach. Each laboratory is linked to satellite facilities that do not currently have their own comprehensive laboratory testing capacity.

Health workers draw samples from their clients during regular visits, record them in a register and store them in facility fridges until they are transported to the central laboratory for processing on a weekly basis. Specimens are carried in a cool box and are taken to the laboratory on public transport either by the facility laboratory technician or a designated nurse in cases where there are no technicians.

Once the specimens are delivered to the laboratory they are recorded in a central register before processing.

The previous week's results are collected and taken back to the facility for passing on to the care providers and their patients. When laboratory technicians deliver the samples, they are also able to stay and receive OJT as they help to run the tests.

The Ministry of Medical Services laboratory mentoring team offer mentoring and supervision to facility staff who are drawing the specimens as well as to the laboratory staff who are processing them. The ministry holds regular meetings for laboratory services quality assurance to help identify and deal with any problems that are identified in the course of their supervision work.

One of the main successes of this intervention is the fact that HIV+ clients are now able to get their CD4 counts on time and are able to receive appropriate treatment.

The strong sense of ownership of and responsibility for this initiative from the Ministry of Medical Services has been a key factor in contributing to its successful implementation and roll-out. The close supervision and support that is offered to all laboratory personnel involved in the initiative has proved to be an important motivating factor.

One of the challenges that we have faced is in trying to offer access to viral load testing services for clients who are suspected to be experiencing treatment failure. At this point in time only two facilities in the province have the capacity to run viral load testing. In order to be cost effective these tests must be run in batches of 72 samples. Currently clinicians and nurses are not sufficiently sensitized on the availability of this test. As a result they aren't producing enough specimens to make the testing process cost effective and viable.

This intervention has demonstrated a significant increase in the numbers of people who are accessing laboratory tests such as CD4 counts, which allow them to receive appropriate and timely care. It is an easily replicated model that can be implemented within existing services without needing large injections of capital funding. However, the successful implementation of this approach is entirely dependent on the Ministry of Medical Services' ownership and responsibility for it.