



INSTITUTE OF
HUMAN VIROLOGY

GLOBAL

GLOBAL HEALTH INITIATIVES

INSTITUTE OF HUMAN VIROLOGY

10 YEARS OF GLOBAL IMPACT

2004 - 2014

10 COUNTRIES

400 FACILITIES

1,000,000 PATIENTS



UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE



OUR MISSION

The Institute of Human Virology implements its Global Health Initiatives with the mission to enhance the capacity of national governments, academic institutions and health care organizations towards ensuring better population health care outcomes. IHV is a mission driven leader in research and program implementation servicing the areas of health service delivery, health workforce development, quality improvement, laboratory systems strengthening and health care policy development with a special focus on infectious diseases, maternal child health, non-communicable chronic illnesses and neglected tropical diseases.

IHV is known for innovative approaches to bridging the gaps between science, theory and practice, and the ability to develop and implement local solutions for local problems informed by global knowledge and practice. IHV blends the acquisition of knowledge, application of technology, and human capacity to improve efficiency and effectiveness in health program delivery ensuring good value and returns for resources invested. Sustainability is at the heart of all IHV Global Health Initiatives work and the Institute is known for its successes in building capacity of local organizations demonstrated by verifiable transitions of knowledge, capacity and competence.

The Institute of Human Virology is an Institute of the University of Maryland School of Medicine.



CONTENTS

About the IHV GHI.....2

Global Footprint.....3

Program Highlights.....4 - 23



Global Health Initiatives is a unit of the Institute of Human Virology, an Institute at the University of Maryland School of Medicine which is affiliated with the University of Maryland Medical Center.

For more information call Kathy Vardjan - 410.706.4613 or Nora Grannell - 410.706.8614, or visit www.ihv.org

About the IHV-GHI



IHV Global Health Initiatives Global Leadership Team

2012

IHV Global Health Initiatives programs are implemented by the Division of Clinical Care and Research. Drawing on the strength of a large international, multi-cultural team of more than 200 experts and dedicated staff, and through partnerships with numerous international organizations, IHV has successfully implemented 42 health programs in 11 countries around the world.

Through these programs, IHV has positively impacted more than 1,000,000 lives by strengthening medical education and health workforce development, improving clinical service delivery, and enhancing healthcare systems and policies across Africa and the Caribbean.



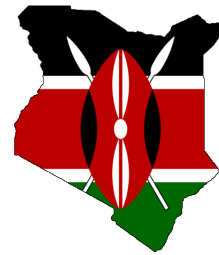
ETHIOPIA



GUYANA



HAITI



KENYA



NIGERIA



MALAWI



RWANDA



SOUTH AFRICA



TANZANIA



UGANDA



ZAMBIA



GLOBAL FOOTPRINT

2004 - 2014



IHV has built a presence in 11 countries leveraging broader partnerships and networks of the University of Maryland Baltimore - which are rooted in decades of collaboration in education, research and clinical services. The Institute's global health work continues to expand in line with its mission and strategic focus. The decision to enter new countries and territories is determined by evidence that our involvement will lead to desired and verifiable impact. IHV collaborates with various departments and divisions within the Schools of Medicine, Pharmacy, Nursing, Dentistry, Social Work and Law towards an interdisciplinary approach to developing solutions that enhance population health.

GUYANA



Country Program Director: Joanna Cole

IHV presence since: 2004

Number of programs implemented: 2

Current Programs: GPACE

Program partners: MoH, GPHC, UG

IHV in Guyana

IHV launched activities in Guyana in 2004 through a U.S. President's Emergency Fund for AIDS Relief (PEPFAR) funded program named AIDSRelief. With IHV as the lead clinical and technical partner to the Catholic Relief Services, the prime funding recipient, IHV worked collaboratively with the Guyana Ministry of Health and other partners to develop a framework for the rapid scale up of HIV prevention, care and treatment for persons living with HIV/AIDS.

The clinical program led by the center under the AIDSRelief Program enrolled more than 2,400 patients in HIV care and antiretroviral therapy. This program's scale up efforts contributed more than 30% of all HIV care and treatment enrolled clients in the country over its implementation period.

In addition to supporting patient care, IHV participated in training over 5,000 participants drawn from the pool of national health care workers in basic and advanced management of HIV, TB and related illnesses. Health workers trained included laboratory scientists, nurses and physicians. Furthermore, the University's interdisciplinary expertise was extended through the IHV to direct technical assistance to the Guyana Ministry of Health and the National HIV/AIDS Program by way of updating national HIV treatment guidelines for adults and children and developing Continuing Medical Education programs targeting all health professional cadres. IHV also supported the enhancement of laboratory capacity for Infectious disease management including support for the establishment of the national reference laboratory.

In 2011, IHV was awarded a PEPFAR grant by the Centers for Disease Control – 'the Guyana Partnership for advanced clinical education' which aims to train Guyana's first ever team of medical consultants in Internal medicine and Infectious diseases.



GUYANA PARTNERSHIP FOR ADVANCED CLINICAL EDUCATION

13

RESIDENTS IN
TRAINING

12

CME SESSIONS HELD

475

HEALTH WORKERS
TRAINED

159

MEDICAL STUDENTS
TRAINED

**Principal
Investigator:**
Bruce Gilliam

**Country Program
Director:**
Joanna Cole

In 2010, IHV supported programs cared for more than a quarter of all patients on HIV treatment in Guyana. As a result of the IHV's achievements under the AIDSRelief Project, it was in 2011, awarded a PEPFAR funded five year grant named the 'Guyana Partnership for Advanced Clinical Education' (GPACE) through the Centers for Diseases Control and Prevention (CDC). GPACE's overall goal was to increase local government ownership, leadership, and management of the response to HIV/AIDS and related diseases in the country. This goal was to be achieved through development of long-term country based capacity for the management of infectious diseases including HIV/AIDS by strengthening pre-service education and in-service training of health care professionals. Specific objectives include:

- Increasing the capacity of Health Sciences faculty at University of Guyana (UG) and Georgetown Public Hospital Corporation (GPHC).
- Working with the Ministry of Health to institutionalize and develop a sustainable framework for Continuing Education of health care professionals.
- Increasing the quantity and quality of locally available expertise in management of infectious diseases through development and delivery of post-graduate training programs in internal medicine and infectious diseases.
- Improving the capacity and quality assurance systems of the national reference laboratory to support training for HIV/AIDS and related diseases.

Key Achievements

- Established the nation's first and only internal medicine and infectious disease residency program.
- Revised the Infectious Diseases curriculum for medical students at University of Guyana, procured access to medical journals and donated textbooks.
- Trained University of Guyana faculty on the revised medical curriculum and innovative teaching methodologies that emphasize practice competences post graduation.
- Upgraded and institutionalized quality assurance at the national reference laboratory.
- Revised laboratory microbiology, pathology and biochemistry curricula and have trained all relevant faculty in the implementation of the revised lab curricula.
- Trained GPHC staff in grants management and helped institutionalize processes and systems towards enhanced capacity to manage funds in line with various sponsor rules.
- Enhanced quality of care at GPHC through continuous quality improvement of clinical processes and enhanced efficiency in triage and patient management.
- Supported the development of management guidelines for HIV, Hep B, HPV and TB.



New Residents in training 2012

HAITI



Country Director: Herby Derenoncourt

Country Staff Size: 15

IHV Presence since: 2004

Total Number of programs implemented: 5

Current Programs: HPRI, Mâché Chache

IHV in Haiti

Haiti programs of the IHV commenced with the launch of the AIDSRelief program in 2004. In its role as the clinical technical leader under the grant leadership of Catholic Relief Services, IHV developed clinical systems and processes for initiating and sustaining HIV infected individuals in care and treatment including the establishment of community-health facility care continuums, development of treatment/adherence support systems and networks, organization and structuring of laboratory systems. IHV also trained thousands of health workers - across all cadres, and provided expertise for setting up Continuous Quality Improvement Initiatives (CQI) at each facility. Through training and working with over 200 service providers, by 2012, the AIDSRelief program was able to place 15,000 HIV patients on care and treatment for HIV.

Following the 2010 earthquake that devastated the country and led to the loss of numerous professional colleagues and friends that the IHV had worked with over the years, the Institute collaborated with The R Adams Cowley Shock Trauma Center of the University of Maryland (the nation's first and only integrated trauma hospital) to launch one of the largest international relief efforts in the University's history. Combined medical and surgical teams provided critical care and support to thousands of patients over a 10-week period following the earthquake. Most of the equipment mobilized and shipped for this purpose were donated to facilities in Haiti at exit hence leaving behind equipment that the country could leverage to address ongoing health challenges. IHV's efforts in partnership with other University institutions contributed greatly to savings lives, averting potential breakout of infectious diseases and helped in minimizing post-surgery infections.

IHV is further supporting the recovery in Haiti through post graduate training of physicians and nurses in internal medicine and infectious diseases in collaboration with the Université Notre Dame d'Haiti - which will help revamp human resources for health that were lost during the earthquake. IHV also continues to provide technical oversight for care and treatment of HIV patients and in 2012, IHV was awarded a WHO Stop TB Reach grant to increase TB case detection figures within urban slums of Port au Prince.

HAITI PARTENERIAT RENFORCEMENT INSTITUTIONNEL

Haiti Partnership for Institutional Strengthening

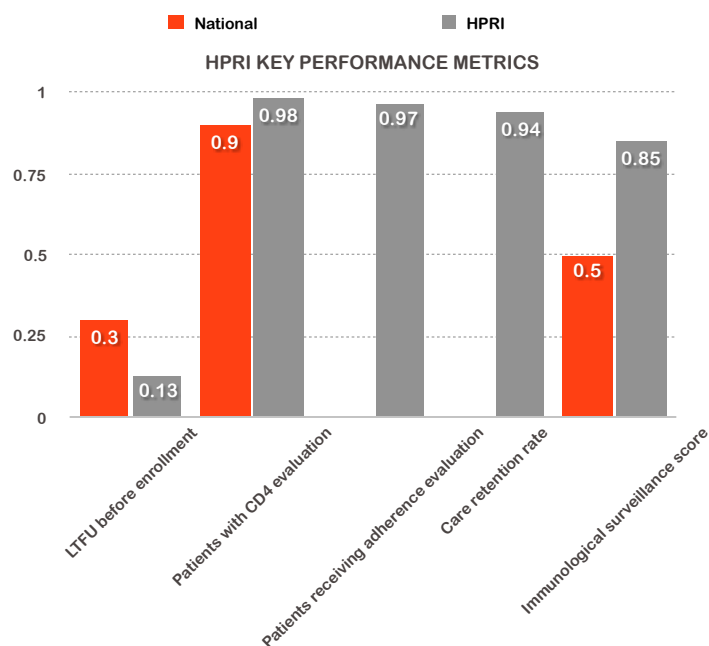
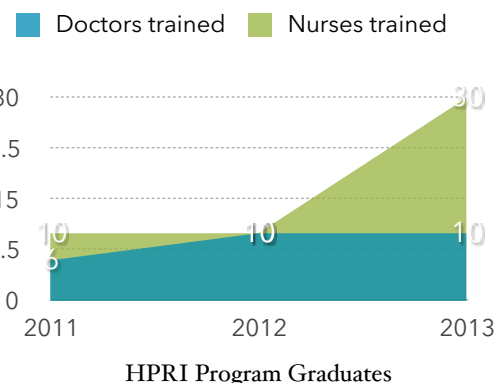
The *Haiti Partenariat Renforcement Institutionnel* (HPRI) program is a CDC funded 5-year grant tasked with developing short and long-term capacity for management of HIV/AIDS and related illnesses health within Haiti's health workforce. In partnership with Université Notre Dame d'Haiti, the Institute of Human Virology launched the nation's first country based postgraduate training programs in internal medicine and infectious diseases for physicians and nurses. Training emphasizes practice based skills for enhanced clinical problem solving, acquisition of attitudes that promote lifelong learning, continuous medical/nursing education, competence for conducting research and surveys, and ability to confidently consume, apply and teach complex medical knowledge. While the program focuses on internal medicine and infectious diseases, the innovative frameworks developed for teaching and curriculum development are being leveraged to benefit other areas of medicine and public health.

Impact of training

Since its inception, the HPRI program has graduated 26 physicians and 50 nurses. These professionals have significant capacity to serve as technical experts and national leaders of the development and implementation of interventions against HIV, TB, and malaria, and more than 90% of graduates have taken up positions within the Haiti public health system thus enhancing the quality of program and clinical leadership of HIV/AIDS programs and services in the country.

Impact of TA for care and treatment

As an adjunct to the training program, technical assistance for care and treatment is also provided under HPRI, with services designed to provide robust patient care as well as holistic teaching platforms for health workers at four selected training facilities. IHV managed facilities produce some of the best performance metrics for HIV care programs in Haiti.



Project Mâché Chache

The "Mache Chache" Project is a TB Reach-Wave 3 funded collaboration between IHV and partners: Hôpital Foyer Saint Camille, Centre Professionnel de Femmes Ouvrières, Hôpital de la Communauté Haïtienne and a camp in Canaan for displaced persons erected after the 2010 earthquake.

The project aims to increase TB case finding amongst vulnerable populations by mentoring community health workers, volunteers and community leaders to perform active case finding, by linking community programs with facilities that have TB care capabilities and by implementing provider initiated screening for high risk patients in health facilities. The project also builds laboratory capacity through expansion of microscopy and GeneXpert technology. IHV is ensuring sustainability of these interventions by partnering with government health services and local stakeholders.

By July 2014, 25,513 people have been screened with 4,453 identified as suspects and 2158 confirmed positive for TB.

HPRI
Principal Investigator:
Dr. Devang Patel

Mâché Chache
Principal Investigator:
Dr. Robert Redfield

NIGERIA



Country Director: Michael Obiefune

Country Staff Size: 28

IHV presence since: 2004

Total Number of programs implemented: 9

Current Programs: SEEDS, RITT, PMET-P, PMET-S

IHV in Nigeria

The Institute of Human Virology has implemented programs in Nigeria since 2004. The Institute has worked within the healthcare and education sectors to scale up care and treatment for HIV and infectious diseases, enhance healthcare systems - especially human resources for health and medical technologies, promote data and information demand and utilization as well as the incorporation of continuous quality improvement practices into healthcare services, and support health science education at both pre and post graduate levels.

IHV has worked across a wide area of Nigeria with programs implemented in 16 states across all six geo political zones. Within the healthcare sector, IHV has implemented programs through public, private and faith based institutions and care facilities. In addition to working with national, regional, state and community level stakeholders in health and education, IHV has collaborated with the Ministry of Defense to strengthen the provision of quality care for HIV and infectious diseases, and to train health workers serving the military and defense corps. IHV has also collaborated with numerous international and indigenous non governmental organizations through formal partnerships and synergistic relationships that enhance value and maximize the benefits of combining different organizational competencies. Chief amongst these collaborations is the AIDSRelief project which ran from 2004 to 2012 and of which Catholic Relief Services was prime and IHV was technical lead. This project supported care of over 110,000 patients at 34 facilities and 48 satellite centers. IHV has also implemented programs in collaboration with the WHO to increase TB case detection in Nigeria and scale up these detection and treatment services to important underserved populations.

IHV has also supported clinical research in Nigeria with five protocols investigating various aspects of healthcare delivery being implemented in the last eight years.

SEEDS

SERVICE EXPANSION AND EARLY DETECTION FOR HIV

The SEEDS program is a Health Systems Strengthening grant implemented in partnership with the Center for Clinical Care and Research in Nigeria (prime) targeting enhanced human resource capacity and improved service delivery at healthcare facilities in South East Nigeria. Through training, mentorship and curriculum development, IHV supports capacity development of Nigerian health care workers and Government of Nigeria personnel to provide comprehensive, quality, sustainable HIV services according to National standards. A robust monitoring and evaluation process linked to real outcomes is layered on SEEDS, enabling the provision of insightful data and results on quality of care to both facilities and GoN oversight personnel. By deeply integrating a continuous quality improvement system with these services, SEEDS is able to continuously improve the effectiveness of HIV care and treatment services and respond appropriately to the patient population.

Key achievements in the last year

603

**NEW PMTCT
SITES**

1,709

**PREGNANT WOMEN
TREATED**

53

**NEW ART
SITES**

11,067

**NEW ART
PATIENTS**

Health Worker training

In keeping with a core philosophy of the IHV, a combination of on-site mentorship in real patient care settings and formal didactic, practice oriented training is provided under SEEDS. Health workers are trained to integrate data demand and information use into their daily activities, and are empowered to modify Care delivery based on service and outcome linked results. Training is provided in continuous quality improvement systems that take a holistic approach to service improvement by assessing and influencing all HIV related service elements at facility and community levels. The training approach employed under SEEDS ensures facility level sustainability of enhanced systems with the processes and approaches being fully integrated into the daily functioning of the facility.



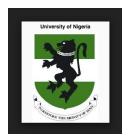
**Trainees of the University
of Nigeria**

Monitoring and Evaluation

IHV is responsible for monitoring and evaluation on the SEEDS grant. In developing the system, two key attributes were considered: program targets must be delivered at facility level and facilities empowered to monitor and utilize the data to enhance local service delivery; patient level outcomes or suitable proxies must be monitored. In order to achieve these requirements, IHV developed an EMR system that is integrated with the national EMR system, generates both GoN and funder required reports, and is usable for patient care. This achievement has greatly facilitated access to data at all levels of the health system and has improved data use for patient care and management. IHV is working on enhanced integration of this system across facilities to ensure smooth referral services.



**On site M&E, CQI
Activity**



PARTNERSHIP FOR MEDICAL EDUCATION AND TRAINING



The Partnership for Medical Education and Training (PMET) grant is implemented by the IHV in collaboration with the Centers for Disease Control, and the Center for Clinical Care and Research in Nigeria (Prime partner). The project represents a unique approach to developing human resources for health at pre-service and in-service levels. Rather than singling out facilities or different types and tiers of education, a regional approach is taken with all healthcare training institutions in the region being engaged under a comprehensive, integrated framework, utilizing a harmonized curriculum with integration of pre and in service training elements and requirements, and leveraging different competencies for cross cutting impact.

PMET includes 13 Schools of nursing and health technology as well as seven Medical/Health Science Institutions. A four week Certificate Course in HIV medicine has been developed at the University of Nigeria at Nsukka targeted at post graduate doctors in MPH and residency programs, and an HIV track has been added to the University MPH program. In addition, a national Nursing HIV curriculum has been developed and approved by the Nursing Council for implementation at the collaborating Schools of Nursing. Training Hubs have been identified and furnished with infrastructure upgrades as well as training material and equipment. So far, 41 faculty and 37 tutors have been trained in adult teaching methods, leadership and management. PMET institutions also serve as centers for in service training of different cadres of health workers and all training under PMET is designed and formatted to ensure applicability within existing care delivery systems and development of practice ready personnel.

CLINICAL RESEARCH BY IHV-CTU

Through its Global Health Initiatives, IHV established a Clinical Trials Unit (CTU) in Nigeria to support the implementation and development of clinical trials in partner institutions and facilities. Staffed by UMB faculty and experienced study coordinators, the CTU has implemented five studies and trials in Nigeria since 2006. Collectively, these projects (with brief summaries below) enrolled 481 subjects and investigated various aspects of care and treatment for HIV/AIDS. A brief description of each is provided below:

1. The Encore Study: A randomised, double-blind, placebo-controlled, clinical trial to compare the safety and efficacy of reduced dose efavirenz (EFV) with standard dose EFV plus two nucleotide reverse transcriptase inhibitors (N(t)RTI) in antiretroviral-naïve HIV-infected individuals over 96 weeks.
2. The Second Line Study: A randomized open label study comparing the safety and efficacy of ritonavir boosted lopinavir and 2N(t)RTI backbone versus ritonavir boosted lopinavir and raltegravir in participants virologically failing first line NNRTI/2N(t)RTI therapy.
3. Kaletra Mono-therapy as a Simple, Cost Effective Strategy in the Salvage of d4T, 3TC, Nevirapine Containing Regimens in Resource Limited Settings.
4. Targeted evaluation to assess the impact of treatment preparation and treatment support programs on the durability of initial ARV regimens in resource constrained settings.
5. Targeted Evaluation to assess the durability of the WHO recommended second line regimen to induce sustained viral suppression when initiated after evidence of treatment failure.

KENYA



Country Technical Director: Sylvia Ojoo

Country Staff Size: 43

IHV presence since: 2004

Total Number of programs implemented:

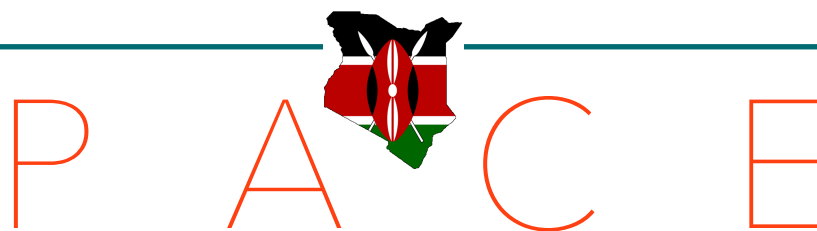
Current Programs: PACT, PACE, MEPI, CoE, CRISP, APHIA plus, ENGAGE

IHV in Kenya

Partnering to improve service delivery and health workforce competences through a quality led strategy augmented by local leadership and ownership

The Institute of Human Virology has been active in Kenya since 2003. The Institute's work in Kenya spans several dimensions of the health system including; leadership, governance and policy development, health work force development (human resources for health), laboratory and essential health technologies, health services research, outcomes evaluation and support for health services delivery. Programs have been implemented to address a wide spectrum of needs including HIV/AIDS, TB, and Maternal & Child Health amongst others. Geographically, IHV has worked in central places like Nairobi county, coastal regions like Mombasa, and within hinterland regions such as the North arid region.

The wide ranging activities of the IHV in Kenya have been implemented in collaboration with various national partners including the University of Nairobi, AMREF Kenya, Kenya Episcopal Conference, Christian Health Association of Kenya, Health Strategies Kenya and others. These are in addition to international partners such as Catholic Relief Services, Futures Group and EDC that IHV has collaborated with extensively in Kenya. IHV also has a close working relationship with the Ministry of Health in Kenya and various county health offices and has supported national and county level initiatives addressing HIV, TB, Malaria and other infectious diseases.



PARTNERSHIP FOR ADVANCED CLINICAL EDUCATION

6

UNIVERSITY PROGRAMS
STRENGTHENED

23

DISPARATE
CURRICULA
CONSOLIDATED

161

FACULTY
TRAINED

1000

STUDENTS
TRAINED



Principal Investigator:
Robert Redfield

Technical Advisors:
Sylvia Ojoo, Jeremy Penner,
Reson Marima

The Institute of Human Virology implements the PEPFAR/CDC-funded Partnership for Advanced Clinical Education (PACE) in collaboration with the MoH, University of Nairobi and Kenya Pediatrics Association. PACE is a direct response to priorities outlined in the Kenya National AIDS Strategic Plan III (2009-2013), which recognized: 1. The proliferation of in-service HIV training and associated high costs and time health workers spend away from work and; 2. The lack of HIV-practice-ready graduates emerging from the country's training institutions. The goal of PACE is to increase the impact, efficiency, and sustainability of pre and in-service HIV training in Kenya using four broad strategies: 1. Rationalizing what is taught to focus on core competencies a health worker needs in daily practice; 2. Improving how professionals are taught - through problem, and systems based adult learning methodologies; 3. Changing where learning occurs — moving training from the classroom/hotel into clinical practice training centers which mirror the participant's workplace, and utilizing distance/self-learning formats and online teaching platforms, and; 4. Implementing a rigorous monitoring and evaluation framework that not only measures changes in health worker knowledge, but also evaluates improvements in clinical practice, quality of care, and patient outcomes. PACE has worked with Universities and the Ministry of Health National AIDS and STI Control Program (NASCOP) to integrate twenty-three disparate HIV related training curricula into one harmonized, multi-competency curriculum, reorganized training around service settings, and institutionalized the practice of self-learning for health professionals. This new approach has enhanced teaching outcomes at a significantly reduced cost.

National impact through regional training centers

In collaboration with various key institutions, PACE has developed Five Inter-disciplinary Regional Training Centers across the country which lead the roll out of the Integrated curriculum and institutionalization of Continuous Medical Education. These centers have been equipped with functional libraries, Uptodate®, and other clinical decision support tools. The program has collaborated with the Moi, Maseno, and Kenyatta universities, the Jaramogi Odinga and Jomo Kenyatta Universities of Science and Technology, and the University of Nairobi. In addition PACE has supported training of allied health professionals through the Kenya Medical Technical College (KMTC) and supported health professional regulatory authorities including the Medical and Dental Practitioners Board, Pharmacy Board, Nursing Council, Clinical Officers Council and Kenya Medical Technologists and Technicians' Board.

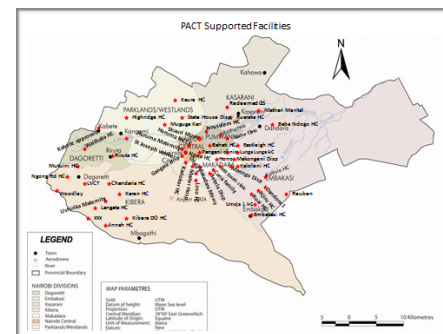


PACT

Partnership for Advanced Care and Treatment

Strengthening health systems in Kenya through improved clinical care practices

The Institute of Human Virology in partnership with the CDC, University of Nairobi and Kenya Ministry of Health, implements the Partnership for Advanced Care and Treatment which is strengthening health system planning, coordination and management in Nairobi county through enhanced HIV/AIDS related services. Hard to reach populations of Nairobi's central districts and slums have obtained access to quality care, referral networks have been improved and there is enhanced use of data for planning and patient management. PACT provides 14,000 patients with TB / HIV care and has provided PMTCT services to 130,000 women. The program employs a quality improvement platform for sustained health services development and develops quality improvement capacity at facility, sub-county and county levels. PACT is currently working with the Nairobi County and the MOH to implement a comprehensive IDU care and safety program for inner city drug users.



Renovated Laboratories



Laboratory services

PACT has enhanced, expanded and improved laboratory capacity for infectious disease care in Nairobi, upgrading and refurbishing 6 laboratories, training lab specialists in 21 labs, and setting 21 labs on the pathway to continental accreditation. Under the program, all HIV positive patients seen through 40 facilities in the program have access to (as mandated by national guidelines) CD4 count, viral load testing, pediatric HIV diagnostic viral DNA PCR, serum cryptococcal antigen and hepatitis B screening. In addition, PACT has enhanced tuberculosis (TB) diagnostic capacity by installing and operationalizing 4 MDR TB/RIF (Gene Xpert) machines supporting 40 facilities in the county and beyond.

Commodities & Supply Chain management

PACT spearheaded the establishment of the Nairobi County Commodities Management Committee, which has resulted in significant improvements in health commodities management. Through improved use of stock tracking tools and capacity building, PACT has improved the inventory management capacity of 27 facilities and installed electronic systems for commodities management at six, with the result that facility monthly stock out incidence went from 72% at the beginning of the grant to less than 1% over the past 3 years.

72% - 1%
INCIDENCE OF MONTHLY STOCK OUT

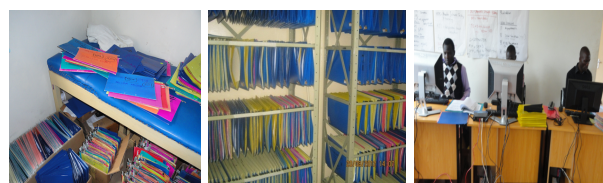
10
FACILITIES RENOVATED WITH: ENHANCED INFECTION CONTROL TRIAGE & CLINIC FLOW ORGANIZATION

Strategic Information & Medical records

PACT introduced electronic medical records and facilitated data reconstruction at 16 care centers. Record filing and storage systems were overhauled, and data managers hired and trained to oversee electronic transition of patient records. The use of patient outcomes data based on strategic information is now a routine aspect of clinic review and planning.

BEFORE

AFTER



Medical Education Partnership Initiative

Building capacity for Clinical and Implementation Science Research

With funding from the NIH, IHV provides structured, hands on, mentor supported training in research methodologies and implementation science to faculty of the University of Nairobi. With an interdisciplinary focus, the capacity for quality research is being steadily built. Two fellows spent seven weeks in UMB in 2013 and 2 again for the 2014 session. Protocols for clinical, pharmaceutical and community based research investigating questions of significance to the local population have been developed under this initiative.

Multidisciplinary Skills lab

Under MEPI, IHV is supporting the College of Health Sciences of University of Nairobi to house the first internationally accredited skills lab in Africa. IHV has facilitated linkages with accrediting agencies, sponsored a Skills Lab Manager for membership of the Society for Simulation in healthcare, facilitated learning experiences for UoN personnel in facilities with robust functional skills labs, and assisted in the equipping of a newly established skills lab at UoN. The lab is currently part of the training curriculum for students.



Dr. Penner carrying out a demonstration in the new skills lab at UoN

A medical library for the 21st century

IHV has provided support for increasing utilization of the College of Health Sciences library at UoN. Towards this end exchange visits between UoN and UMB library teams for capacity building, technical support, and experience-sharing have been facilitated. Additionally, IHV has provided access to priority e-journals not previously available to the UoN faculty and students through the library.

APHIA PLUS

AIDS, POPULATION AND HEALTH INTEGRATED ASSISTANCE

Transforming the health status of the people of the Northern Arid Lands (NAL) of Kenya

APHIAplus IMARISHA is a 5-year USAID funded service delivery support program led by AMREF Health Africa with the IHV as the technical lead for health services delivery support. Other partners in the program include FHI360, BroadReach Health Care, Catholic Relief Services and Land O'Lakes. The program now in its third year seeks to: 1) increase use of quality health services, products and information, and; 2) improve the well-being of the community, especially marginalized, poor and underserved populations through addressing underlying social determinants of health. IHV's role includes: a) increasing availability of integrated, high quality and impactful interventions at health facility level, and; b) provision of technical leadership in development and implementation of a health service delivery model that ensures quality, sustainable HIV/AIDS, Reproductive Health/Family Planning, Maternal and Child Health, Nutrition and other neglected illnesses services. IHV pursues a strategy of knowledge translation using a cascade mentorship model, anchored on expert technical leadership of field based multi-disciplinary teams of health care workers and resources that support county health management and service delivery teams at all levels of the system - county, facility and community.

TANZANIA



Country Technical Director: Sekela Mwakyusa

Country Staff Size: 41

IHV presence since: 2004

Total Number of programs implemented: 5

Current Programs: LEAD, TUNAWEZA, SHIRIKI

IHV in Tanzania

IHV has been active in Tanzania since the commencement in 2004 of the PEPFAR funded AIDSRelief project implemented in partnership with Catholic Relief services, Futures group and Interchurch Medical Assistance. With the AIDSRelief project going on to enroll 165,000 patients in care for HIV/AIDS and test more than half a million women for HIV in pregnancy during its eight year implementation, the same consortium of partners was awarded a follow on grant by PEPFAR/CDC to oversee the transition of care facilities being managed under AIDSRelief to adequately capable local partners. Under this follow on LEAD grant, IHV continues to provide highly regarded technical assistance to HIV care providers and facilities across large areas of Tanzania.

Under AIDSRelief, IHV developed extensive community mobilization and treatment support networks as well as effective models for reaching patients and clients within their communities. This competence was mobilized for enhanced case detection of patients with TB in five regions and districts of the country as part of the Shiriki and Tunaweza projects funded under Waves 2 and 3 of the WHO/STOP TB project to increase global detection of TB cases. These projects have now screened more than 370,000 individuals and increased case detection in implementation areas by up to 38%.

IHV also supports laboratory infrastructure in Tanzania and manages referral TB diagnostic centers on behalf of the MoH and National TB program. In addition IHV provides training and supportive supervision as well as quality improvement interventions for good laboratory practices.

LEAD

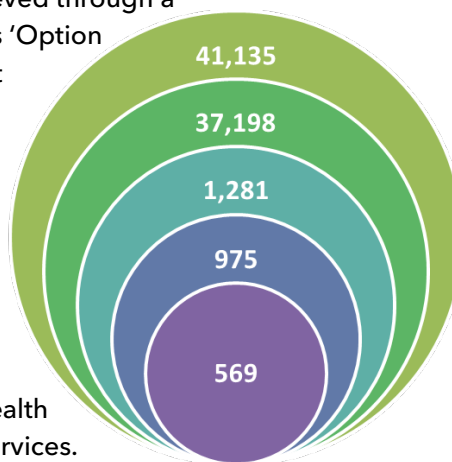
Local Partners Excel in Comprehensive HIV/AIDS service delivery

INTRODUCING LEAD

The Institute of Human Virology provides technical leadership on LEAD - a CDC funded HIV care and treatment project. Working with Catholic Relief Services (CRS), Futures Group and IMA World Health, LEAD supports 101 facilities with adult and pediatric HIV care, Early Infant Diagnosis, PMTCT, Community Based Treatment Support, Nursing services, Laboratory services and Continuous Quality Improvement. The LEAD project has enrolled 90,000 patients in care. IHV also supports the National AIDS Control program (NACP), and Regional/council health management teams (R/CHMT) with training, mentorship, and tools for uninterrupted, quality care.

Towards eMTCT

The government of Tanzania has established the elimination of Mother To Child Transmission of HIV as a national priority. This is being achieved through a massive scale up of PMTCT services and transition to WHO's 'Option B+' strategy which recommends lifelong ARV's for pregnant women. IHV is training health care workers on these new guidelines, providing extensive supportive supervision and mentoring, collaborating to ensure availability of commodities including test kits, reagents and ARV's, and using CQI approaches to ensure high quality services. A current challenge with the PMTCT program is linking HIV+ pregnant mothers to care and treatment and follow up of Exposed infants. IHV is addressing these challenges by ensuring a one stop provision of services in reproductive health and infant clinics, and strengthening of home based care services.



2013 PMTCT results

41,135 ANC attendees

37,198 women tested for HIV (90%)

1,281 HIV positive women (3.1%)

975 women receiving antiretrovirals (76%)

569 children receiving antiretrovirals (58%)

370,783

People screened for TB

3,805

New cases detected

THROUGH

Strengthened laboratory systems for TB diagnosis

Reduction of MDR-TB and enhanced TB control

Empowered community case identification and referral

Enhanced TB case management systems



THE TUNAWEZA AND SHIRIKI PROJECTS

The TUNAWEZA project implemented by IHV is funded under Wave 3 of the TB Reach Program to increase TB case detection in Manyara, Geita and Tanga districts of Tanzania. The Shiriki project is funded under Wave 2 and targets the Mara region. Implemented in partnership with Catholic Relief Services and Catholic University of Health and Allied Sciences, both projects have significantly increased TB case detection rates in the target areas. In addition to community mobilization for increased screening, the projects have upgraded TB diagnostic facilities, supported the acquisition of TB related data and significantly enhanced the case management system.

RWANDA



Country Director: Cyprien Baribwira

Country Staff Size: 7

IHV presence since: 2004

Total Number of programs implemented: 3

Current Programs: PHHS

IHV in Rwanda

Improving Health Care Systems and Health Work Force Competences for Optimal Health Outcomes

The Institute of Human Virology has been active in Rwanda since 2004. Initially the Center was a consortium member on the Catholic Relief Services led AIDSRelief program – funded by PEPFAR to dramatically scale-up comprehensive HIV prevention, care and treatment in the country and improve quality of that care. IHV's role in the program was to provide technical leadership for capacity enhancement of care delivery, improve competences of health care workers, institutionalize quality improvement within facilities, strengthen laboratory quality assurance systems and improve the management of TB.

Under the AIDSRelief program, IHV provided technical assistance to 20 facilities for the care of 12,000 patients of which 14% were children and 90% achieved viral suppression after 12 months of therapy, and trained over 200 workers. IHV was also given a special assignment to enhance capacity of the MOH HIV Care clinic within the Rwanda Biomedical Center (formerly TRACplus Clinic) to manage advanced HIV disease. Under this arrangement, IHV provided significant training to frontline national leaders in Infectious disease and public health and embedded clinical infectious diseases and quality improvement experts within the MOH and RBM Clinic providing care to more than 5,000 ART patients.

Following the recognized value of IHV contributions under the AIDSRelief program, CDC awarded IHV a five-year grant in 2011 to continue systems strengthening work for better health outcomes under the Partnership for Health Systems Strengthening (PHSS). Recently, IHV supported the National University of Rwanda with the development of a curriculum for post graduate training in infectious diseases while faculty from the University of Maryland schools of nursing and dentistry are engaged in a program to build significant infrastructure in Rwanda for health care education at the tertiary level.



PARTNERSHIP FOR HEALTH SYSTEMS STRENGTHENING

20

CME'S PROVIDED
LAST YEAR

510

HEALTH WORKERS
TRAINED

80

FACILITIES
VISITED

42

DATA MANAGERS
TRAINED

**Principal
Investigator:**

David Riedel

IHV works with the Rwanda Biomedical Center/HIV Division of the Ministry of Health to implement a decentralized mentorship program designed to strengthen effective oversight of public health programs including HIV/AIDS, TB, malaria, and neglected tropical diseases. The program focuses on: 1) addressing competence gaps within the health work force for effective management of major causes of mortality and morbidity in the country; 2) enhancing the capacity of MOH to review and update key policies, plans and guidelines; 3) developing efficient systems for integration of service delivery at facility levels; 4) training a core team of health workers (physician-nurse pair) in advanced infectious diseases management at all provinces and districts; 5) institutionalizing continuous quality improvement at all levels of healthcare service delivery.

Key aspects of the program include:

Gap Analysis: A baseline assessment of health workers across 30 sites and review of 950 patient records were carried out with competence/skills gaps identified and training needs defined. Regular on going assessments compare progress against these baseline.

Clinical Mentorship: Mentorship is at the program's core and IHV experts mentor teams of Provincial and District mentors who in turn support health workers across 76 ART sites.

Data Demand and Information use: To ensure health workers have the requisite patient information to provide effective care, IHV worked with the Decentralization and Integration Unit of the MOH to migrate patient data from IQ Charts to Open – Medical Record Systems which ensure faster information retrieval with an emphasis on data utilization for clinical decision making and reporting in line with GOR and PEPFAR requirements.

Continuous Quality Improvement: Mentors work with mentees at all levels to ensure that activities result in changes to standards of practice and measurement of the impact of these changes. PHHS uses a small tests of change approach to continuously improve quality - an approach fully supported at facility level through the establishment of quality committees and integration of QI into routine service delivery.

Achievements

Guidelines/ policies/protocol development: PHHS played critical roles in developing the:

- National Comprehensive HIV Care and Treatment Guidelines
- Other Blood-Borne Infections (Hepatitis B and C) guidelines
- National Health and Safety Guidelines
- Guidelines for Management of Sexually Transmitted Infections
- National Clinical Mentorship Guidelines
- HIV guideline pocket booklet aligned with the latest guidelines

Continuous Professional Development: PHHS delivered 20 CMEs to 510 health workers last year. These CME sessions were carried out in collaboration with the Ministry of Health.

Trainings and workshops: UMB routinely hosts key training sand guideline development workshops for the MoH and key programs implementing partners

Support for Laboratory Services: PHHS installed an analytical balance at the National Reference Laboratory (NRL) for Gravimetric Pipette Calibration and trained 6 NRL personnel - improving the quality of calibration and reducing the need to ship pipettes abroad for this service.

ZAMBIA



Country Technical Director: Robb Sheneberger

Country Staff Size: 26

IHV presence since: 2004

Total Number of programs implemented: 6

Current Programs: ZEPACT, MEPI, ART II, ISAP

IHV in Zambia

The IHV commenced global health operations in Zambia in 2004 with the initial mandate of combatting the HIV epidemic through the provision of technical assistance for care and treatment programs. With funding from the Presidents Emergency plan for AIDSRelief (PEPFAR), IHV was the technical lead for the AIDSRelief program with Catholic Relief Services as prime. Under AIDSRelief, IHV was able to train, support and work along side front line health workers to bring care and treatment to approximately 100,000 patients at 120 facilities and referral centers.

During implementation of the AIDSRelief project, IHV recognized the need for highly trained Zambian physicians to provide critically needed oversight, guide policy formulation, and support implementation of on going efforts to address HIV and related infectious diseases. Accordingly, IHV established Zambia's first post graduate training program in HIV medicine and proceeded to train a significant number of the very few doctors working in Zambia. The success of this program informed the establishment of a full masters program in Infectious Diseases within the University of Zambia.

IHV has implemented programs specially targeting pregnant women and children infected and affected by HIV, and continues to provide technical assistance for care and treatment support to more than 120,000 patients as part of the AIDSRelief Transition Project - a follow on grant to the AIDSRelief project. As part of this project, IHV is also building the internal capacity of local Zambian institutions to manage the national HIV response and sustain the provision of long term, quality care to enrolled patients. IHV has been extremely supportive to the national government and ministries of health in Zambia - providing HIV trained physicians to occupy key leadership positions, and providing significant technical assistance towards the development of multiple editions of various HIV and infectious disease related guidelines and documents.

AIDSRELIEF

TRANSITION PROJECT

The AIDSRelief Transition project is a five year PEPFAR CDC funded grant with Catholic Relief Services as the prime agency, IHV as the technical lead, and Christian Health Association of Zambia as the main transition partner. This project has the main objective of transitioning a high quality, comprehensive HIV prevention, care and treatment program with over 120,000 patients at 19 facilities and 111 referral centers, to full Zambia owned, Zambia led programming and support by 2016. Though the program, IHV provides critical technical support to both site level front line health care workers, as well as to supervisory staff at local indigenous organizations, the Ministry of Health, and the Ministry of Community Development, Maternal Child health. A comprehensive array of services are covered under this program including but not limited to; Antiretroviral therapy, prevention and treatment of opportunistic infections, TB HIV management and integration, Prevention of mother to child transmission of HIV (PMTCT), enhanced point of care diagnostics and laboratory capacity building, community advocacy and mobilization, community based treatment support, psychosocial and spiritual support. IHV builds human resources for health to provide all these services. A continuous quality improvement framework is applied to all these components and services which ensures the provision of quality services at the front line which are constantly being evaluated for process improvements.

In providing technical assistance on this project, IHV operates a mentorship heavy approach that stations technical experts to sit side by side front line providers and improve competencies through learning in real care settings. The program is able to leverage human resources contained and being developed (with IHV participation) in two masters level physician training programs at the University of Zambia to serve as mentors and trainers.

Z E P A C T

ZAMBIA EDUCATIONAL PARTNERSHIP FOR ADVANCED CLINICAL TRAINING

In 2008, IHV launched a Masters program in HIV medicine in collaboration with the University of Zambia Teaching Hospital and with support from the Centers for Disease Control and Catholic Relief services through the AIDSRelief Project. Since its inception, the program has trained and graduated 14 physicians with all retained in Zambia to serve in strategic positions related to the HIV/AIDS response across the country. As of 2012, the program had trained 10% of all doctors practicing in Zambia.

In recognition of the impact this program had and of its potential to further impact health care service delivery in Zambia, the University of Zambia in collaboration with the IHV and University of Alabama was awarded the ZEPACT Grant. This grant extends the scope of the masters in HIV program and implements a concurrent Masters of Medicine in Internal Medicine and Infectious diseases degree program for physicians. This program has graduated 16 individuals with another 6 currently in training.

The Masters in Medicine and Masters in HIV medicine programs follow competence, skills and Knowledge based curricula that are very heavy on practice acquired competence. In order to ensure the graduates are suited for and ready to practice within the anticipated environments, preceptorship and training activities are carried out in real care settings. Within these settings, senior students are used to train and mentor other health workers further enhancing the impact of the program on the country's health work force. Program faculty and trainers are drawn from a large pool of local and international experts with extensive experience in the practice of HIV/Infectious diseases medicine in Sub Saharan Africa. The ZEPACT program also collaborates with another related program implemented by the University of Zambia with IHV as a partner - the Medical Education Partnership initiative (MEPI) which is funded through the National Institutes of Health for the purpose of developing cadres of highly trained local faculty across Sub Saharan Africa that can lead and support expanded medical education and implementation research capacity across the sub continent.

GLOBAL PARTNERS

2014



INSTITUTE OF HUMAN VIROLOGY
UNIVERSITY OF MARYLAND



UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS