INFECTIOUS DISEASES INSTITUTE

Quarterly Performance Review

July-September 2009

Investing in the Future: Impacting Real Lives

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A patient waiting for care at a Kiboga health facility

This Quarter's Highlights

Prevention, Care and Treatment (PCT):

- The position of the Senior Health Administrator was replaced by two senior manager positions (Senior Clinic Manager and Principal Medical Officer). Ms. Faridah Mayanja and Dr. Isaac Lwanga were appointed to these positions.
- The Europe-Africa Research Network for Second-Line Treatment (EARNEST) clinical trial, in which IDI will participate, was launched in September. The study will provide insights on the best way to approach second-line ART in resource-limited settings.
- A data QA/QC initiative began, and will enable tracking of improvements in data collection in the clinic.

Training:

- IDI and district-based courses were offered this quarter related to HIV, Lab, and Malaria.
- The Ministry of Health invited IDI to share its laboratory management curriculum for review and possible adoption (or extraction of management modules) for the national laboratory training curriculum.
- Progress was made on IDCAP—particularly related to site selection, curriculum development, and establishment of approaches for on-site support, distance learning and data collection.

Research:

- The programme had four new publications, and 17 abstracts were presented at the International AIDS Society Conference in Cape Town.
- IDI has received approval from the Makerere University Research and Ethics Committee to analyze routinely collected data at the Adult Infectious Diseases Clinic and Kampala City Council Clinics.

Laboratory Services:

- The new translational research lab room became operational.
- The MU-JHU Core Lab procured two additional instruments to enable Hepatitis B testing capabilities.
- A new IDI Lab Services Manager was hired, to support lab capacity building in outreach programmes.

Outreach Programmes:

- In Kibaale and Kiboga 219 counseling and testing community outreach activities were conducted; 38,334 people were counseled, tested and received results.
- In supported Kampala City Council clinics, the number of clients on ART fell slightly to 2,574 due to a range of factors (deaths, transfers, and loss to follow up); the non-ART client numbers continued to increase to 4,443.
- A consortium led by the Mulago-Mbarara Teaching Hospitals' Joint AIDS Programme (with IDI and TASO as partners) won a five year PEPFAR-funded project for *Expanding Access to, Coverage and Utilization of HIV Counseling and Testing Services* across 22 districts in Uganda.

Prevention, Care and Treatment (PCT)

Client Numbers

The total active client population remains relatively stable at just over 9,000 clients. There is continued growth in the second-line ART population from 520 in the previous quarter to 555 this quarter. This increment is due to a small number of individuals at IDI who fail on first-line ART, and referrals (from partner clinics) of those who need second-line care. During this quarter there was an increase in the proportion of clients on nurse and pharmacy refill visits; the emphasis on adherence to clinic guidelines related to task-shifting is responsible for this positive trend.

The number of HIV care visits in the six supported KCC clinics continues to grow substantially; at this point the number of people being cared for through KCC is just over 50% of the number being cared for at IDI. Only about one third of the clients being seen at KCC are on ART. As a result, there is a much greater emphasis on primary care at KCC clinics, than at the IDI clinic.

Other Developments this Quarter

Discordant Couples' Clinic/Transition Clinic for Young Adults: This quarter IDI's approach to the care of young adults was presented at the 5th International AIDS Society (IAS) meeting in Cape Town, South Africa by Dr. Sabrina Kitaka-Bakeera. The presentation was well received and has led to invitations for IDI to share this model with others in the region. For instance, IDI hosted a team of HIV Programme Officers from the International Centre for AIDS Care and Treatment Programmes (ICAP)-Kenya who wanted to learn first-hand from IDI's experience of handling young adults living with HIV.

The transition clinic has formed a "dream team" to reach out to other young adults with prevention messages. The team has a video production entitled "*The Mike and Jessica Story,*" which was adapted from a comic book produced by the Health Communication Partnership.

Transition clinic drama team

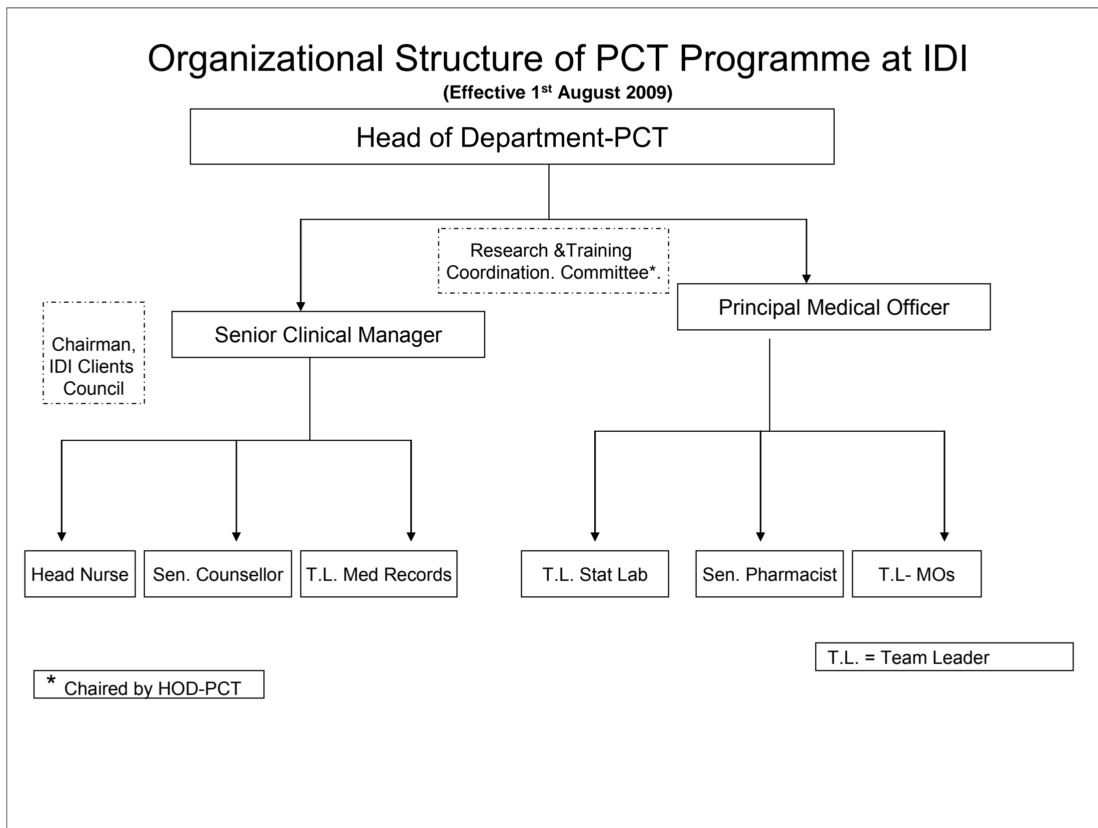
IDI continues to face challenges in enrolling discordant couples into support groups. Additionally, getting the sero-negative partners in these couples to return for follow-up visits (including repeat HIV tests) has been

difficult. This challenge has been addressed through visiting the *Partners in Prevention* research project in Bukoto to learn from their experiences. A formal evaluation to understand why the uptake of services by discordant couples is low is also underway.

Sexual Reproductive Health Services: More women of reproductive age are accessing family planning services at the clinic. By the end of September 195 women had received sexual reproductive health-related counseling and over 120 had received a dual method of family planning. The uptake of family planning services is still low and the causes for this are not well understood. An assessment of potential causes is being planned for the next quarter.

Clinic Data Quality Assurance/Quality Control (QA/QC): A data QA/QC exercise has established a baseline rate of error for data generated by clinicians. The baseline will be used to track improvement in data collection. Data generated from the clinic is now checked in real-time (same day) so as to minimize errors as well as provide timely feedback to the clinicians when errors are found. A more detailed progress report on data quality will be made available in subsequent reports.

Restructuring of the PCT Organizational Structure: The Senior Health Administrator position has been replaced by two senior manager positions (Senior Clinic Manager and Principal Medical Officer), to streamline reporting in the department. Ms. Faridah Mayanja and Dr. Isaac Lwanga were appointed to these positions. Both were internal candidates. The new clinic organogram is shown below:



Launch of the EARNEST Trial: The Europe-Africa Research Network for Second-Line Treatment (EARNEST) clinical trial was launched in September. This is a very important research study that will provide insights on the best way to approach second-line ART in resource-limited settings. The PCT programme at IDI will be one of the larger sites that will participate; at least 250 clients at IDI will be enrolled. The benefits from the study will include access to newer classes of antiretroviral drugs and genotype resistance testing.

Training

IDI-Based Courses

HIV: Courses offered at IDI this quarter included the HIV/AIDS Core Course, the Training of Trainers Course, a Research Course, and a Multi-Disciplinary Course. One hundred eighty seven course participants were trained (up from 138 last quarter). Trainees came from Uganda, Zambia, Sudan, Nigeria, Tanzania, Malawi, Ghana, Swaziland and Argentina. This quarter the largest training sponsor was the Kibaale-Kiboga Project (sponsoring 46% of trainees); other sponsors included the Rakai Health Sciences Project, the Uganda Catholic Medical Bureau, Naggalama Hospital, the US Department of Defense, and the IDI Scholarship Fund. Pre-service HIV-focused training was also provided to 26 Makerere University School of Medicine fifth year students.

BD Laboratory Training Programme: This quarter four IDI-based courses were conducted: two HIV and Laboratory Management courses and two Laboratory Management/Train the Trainers courses.

Joint Uganda Malaria Training Programme (JUMP): This quarter JUMP conducted Integrated Management of Malaria (IMM) training (using a revised curriculum) for 29 Master Malaria Trainers. With the Ministry of Health (MOH), JUMP identified three districts (Nebbi, Arua and Kasese), from which master trainers were picked. Through this process, six facilities were selected to host cascade training using the revised IMM curriculum.

District-Level Courses

HIV: District-based HIV courses included an on-site Logistics Management course, and Data Management for AIDS Community Volunteers in Kibaale and Kiboga.

JUMP: Once the Master Malaria Trainers from Nebbi, Arua and Kasese were trained at IDI, they went back to the districts and trained a total of 151 people from across disciplines, using the revised IMM curriculum.

Collaborative Training Activities and Support

BD-PEPFAR Lab Strengthening Collaboration: IDI continued to offer logistical and technical support to this collaboration, which includes BD, CDC and MOH. The programme procured three batches of lymphosure biological controls, which were distributed to laboratories across the country that offer CD4 testing. The laboratory training coordinator also facilitated two quality management and one train the trainer course at CDC.

Contribution to the National Laboratory Management Training Curriculum: MOH is in the process of developing a national laboratory management training curriculum. The IDI laboratory training coordinator was invited to share IDI's laboratory management curriculum for review and possible adoption (or extraction of management modules) for inclusion in the national curriculum.

Support to STOP Malaria Project:

Support for District-Based Training: The JUMP team offered technical support to training of 60 laboratory staff from six districts.

Training on Fever Case Management using Rapid Diagnostic Tests (RDTs):

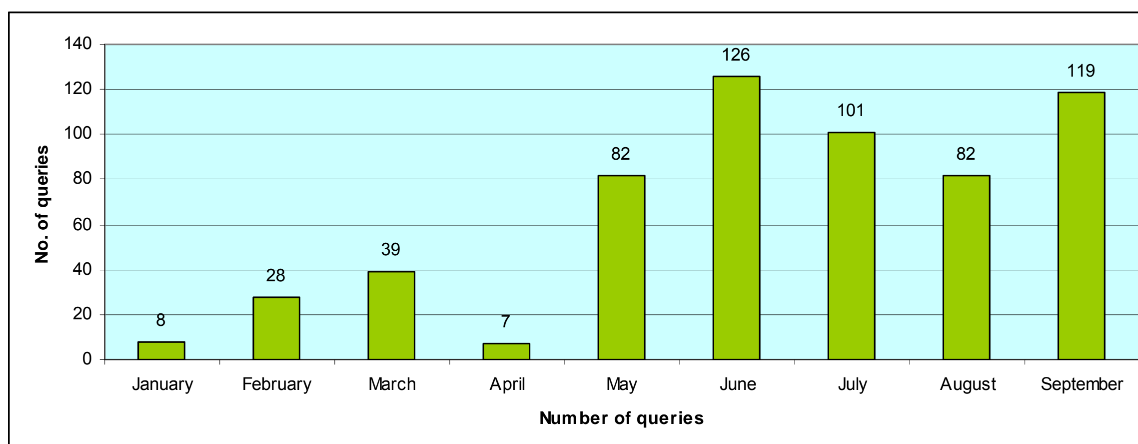
- The World Health Organization (WHO) country office requested the JUMP senior medical officer to join the national team of facilitators guiding the introduction of RDT use in Lira district. The team offered technical support for the sensitization of district leaders, training of district trainers and supervision of step-down trainings for 126 health workers.
- The JUMP laboratory technologist offered assistance to WHO in training 15 district trainers in Gulu on fever case management using RDTs.
- The JUMP team leader and senior medical officer conducted a four hour course for 30 nurses and midwives, sponsored by Pfizer; the objective was to update the trainees on recent changes in approaches to malaria case management.

Evaluation of RDT Training Effectiveness: This quarter JUMP analyzed data collected from the follow up of health workers who attended recent RDT training in Kisoro and Rukungiri. The data revealed appropriate use of RDTs and improved fever case management. There was also a significant reduction in total number of patients diagnosed with malaria (for all age groups); proportion of patients with malaria treated with antibiotics (in patients over five years old); and proportion of malaria patients given both antimalarials and antibiotics.

Policy Support:

- The JUMP team leader participated in meetings related to the development of the draft Uganda National Malaria Control Strategic Plan.
- The JUMP team leader and senior medical officer participated in meetings to develop the policy guidelines for integrated community case management for malaria, pneumonia and diarrhea. This new policy is intended to ensure that community medicine distributors have access to knowledge, skills and drug kits for home based management of the three illnesses.

The AIDS Treatment and Information Center (ATIC): There were 302 requests for information this quarter; 110 were from sources that had never used ATIC before. This was up significantly from earlier this year:



In addition, a number of other activities took place:

- ***Continuing Medical Education:***
    - ATIC facilitated a continuing medical education course for thirty six participants at Kitovu Hospital. They were given information on how to recognize and manage adverse drug reactions related to ARVs. The hospital itself does not run an ART clinic, but it handles many patients with adverse drug reactions who are referred from the nearby Kitovu Mobile Clinic run by Uganda Cares.
    - In Kibaale and Kiboga , 20 participants were reoriented in basic ART , PMTCT and Post Exposure Prophylaxis.
    - 11 IDCAP participants were given a brief session on how to collect information in a telephonic consultation.
- ***Outreach to Non-Alumni Health Care Workers:*** Through MOH and other partners, ATIC contacted 81 District Health Officers and 30 Heads of Health Centres throughout the country, in order to increase health workers' awareness about ATIC.
- ***Outreach to Alumni:*** ATIC contacted 611 alumni in an effort to verify contact information, to support establishment of a bulk SMS system as a means of keeping alumni engaged and up-to-date. Arrangements are also being negotiated with bulk SMS providers.
- ***Distance Learning—Management Sciences for Health (MSH)/IDI Partnership:*** A website is being established for distance learning related to pharmaceuticals management.

IDCAP

Revisiting Site Selection: By the end of last quarter, IDCAP had identified 33 sites as IDCAP programme sites. Ongoing concern about potential contamination of those sites resulted in a decision to replace certain study sites. USAID agreed to make 18 of its Health Care Improvement (HCI) sites available for IDCAP use, by postponing their planned interventions at those sites. Replacement of previously selected sites with HCI sites will enable IDCAP to maintain its original criteria for size and capacity of its study sites, and will provide some protection from similar information being presented by other projects.

Review of Draft Curriculum is in Final Stages: The curriculum development team has finalized revision of the three week Infectious Disease Training session. In June 2009, the first review of the curriculum was conducted, to ensure consistency with national guidelines and accuracy of the technical content within the local context. A second draft of the curriculum was developed using feedback from this and an earlier review. A second group of reviewers has been identified to review this draft during the next quarter. The course will be piloted, and will begin being run, in the next quarter.

Capacity Building for Mobile Teams to Conduct On-Site Support (OSS) Visits: The IDCAP team is currently developing training modules for use during the mobile team's monthly OSS visits. In IDCAP's approach to OSS, the mobile teams will lead on-site training and will mentor multi-disciplinary teams during site visits. Those who have been through the core course will be encouraged to provide everyday mentoring and leadership to the multi-disciplinary team.

This quarter meetings were held to review existing approaches to the provision of on site mentoring, coaching and training of multidisciplinary teams at health facilities, and to identify approaches that can be used in the delivery of OSS by IDCAP mobile teams. A draft OSS guide has also been developed; and existing materials developed by USAID's HCI Project have been adapted to fit alongside clinical training during OSS visits.

Development of Distance Learning Materials has Progressed: To support distance learning, IDCAP has developed the first draft of a logbook. The logbook will be used between the core course and booster courses to facilitate trainees' continued learning. Trainees will use the logbook to document actual cases they have seen at their sites and how those cases relate to their classroom training.

ATIC is also being strengthened as a source of distance support. Strategies are being explored for increasing the number of requests for information—including asking the mobile teams to encourage staff at the sites visited during OSS activities to utilize ATIC services.

IDCAP Indicators Developed and Data Collection System Set Up: The programme indicators for IDCAP were revised during this quarter. In addition, IDCAP developed the methodology to be used for collection of data on each indicator, definitions of the numerators and denominators for each indicator, timeframes in which data would be collected, and the people responsible for collecting data. These were all packaged into an IDCAP programme Performance Monitoring Plan.

IDCAP also designed data extraction tools to extract data from the existing national Health Management Information System (HMIS) tools—including the antenatal, post-natal and maternity registers for PMTCT; the National TB and Leprosy Programme register for TB; HIV care/ART cards; pre-ART and ART registers for HIV care; and the inpatient registers. A Uganda Malaria Surveillance Project patient form was also adopted and appropriate modifications were made. The tools were tested at three selected potential IDCAP sites with help from the mobile team, and were shared with a range of other stakeholders. Establishment of data collection systems will be completed in the next quarter.

Research

Publications

1. Castelnuovo, B., Manabe, Y.C., Kiragga, A., Kamya, M., Easterbrook, P., Kambugu, A.(2009) Cause-Specific Mortality and the Contribution of Immune Reconstitution Inflammatory Syndrome in the First 3 Years after Antiretroviral Therapy Initiation in an Urban African Cohort. *Clin Infect Dis.*, 2009 Aug 12. [Epub ahead of print]
2. Sacktor, N., Nakasujja, N., Skolasky, R.L., Rezapour, M., Robertson, K., Musisi, S., Katabira, E., Ronald, A., Clifford, D.B., Laeyendecker, O., Quinn, T.C.(2009) HIV subtype D is associated with dementia, compared with subtype A, in immunosuppressed individuals at risk of cognitive impairment in Kampala, Uganda. , *Clin Infect Dis*, 49(5):780-6.
3. Katwere, M., Kambugu, A., Piloya, T., Wong, M., Hendel-Paterson, B., Sande, M., Ronald, A., Katabira, E., Were, E., Menten, J., Colebunders, R.(2009)Clinical presentation and aetiologies of acute or complicated headache among HIV-seropositive patients in a Ugandan clinic. *JIAS*, 12:21.
4. Nassali, M., Nakanjako, D., Kyabayinze, D., Beyeza, J., Okoth, A., Mutyaba, T. (2009) Access to HIV/AIDS care to mothers and children in sub-Saharan Africa: Adherence to the postnatal PMTCT program. *AIDS Care*, 21:9, 1124 – 1131.

Presented Abstracts

5th International AIDS Society Conference, 19th – 22nd July 2009, Cape Town

Meya D .B, Castelnuovo C, Kambugu A, Manabe Y, Kamya M, Bohjanen P, Boulware D. Cost effectiveness of Serum Cryptococcal antigen (CRAG) screening to Prevent Death in HIV- infected persons with CD4 <100/μL in sub-Saharan Africa. Oral presentation

Boulware D, Meya D. B, Bergemann T, Rhein J, Wiesne D, Williams D, Vlasova I, Kambugu A, Janof E, Bohjanen P. Gene expression biomarkers in blood predict cryptococcal immune reconstitution inflammatory syndrome. Poster

Robertson G.B, G. de Bruyn, Newell K, Menten J, Kiragga A, McIntyre J, Gray G. Health Control Beliefs, Risk Behaviour and HIV-serostatus in Soweto, South Africa. Poster

Sendagire H, Castelnuovo B, Kiragga A, Kambugu A, Kamya M, Easterbrook P, Manabe Y, Arts E, Thomas C. Quinn, Steven J. Reynolds. Factors associated with increasing HIV-1 resistance to antiretroviral therapy in an urban cohort in Kampala, Uganda. electronic poster

Castelnuovo B, Kiragga A, Kamya M, Manabe Y. Stavudine toxicity is the main reason for treatment change in women in a prospective cohort of patients started on first line antiretroviral treatment (ART) in Uganda. electronic poster

Ssewankambo F, Nabankema E, Walusimbi J, Nanyonjo A, Lutalo I, Kambugu A. Predictors of Pregnancy Among HIV-Positive Women attending an Urban HIV-Care Center. poster

Robertson G, G. de Bruyn, Newell K, Kiragga A, McIntyre A.J, Gray G. Reliability of Reporting of Recent Sexual Activity within Couples. poster

Matovu E, Birabwa E, Muwonge T, Lutalo I, Kambugu A. Sexually Transmitted Infection (STI) symptom prevalence, knowledge, disclosure and treatment seeking behaviours amongst discordant couples at the Infectious Diseases Institute (IDI) Mulago. poster

Muwonge T, Bakeera-Kitaka S, Nkuraija J, Lutalo I, Matovu E, Kambugu A. Sexually Transmitted Infections and family Planning usage among Young Adults accessing care at Infectious Diseases Institute (IDI), Mulago Kampala, Uganda. poster

Hermans S.M, Kiragga A, Schaefer P, Kambugu A, Hoepelman I.M, Manabe Y.M. The use of efavirenz is associated with a decreased incidence of tuberculosis after antiretroviral therapy initiation in an urban HIV clinic in sub-Saharan Africa. poster

Kiragga A, Schaefer P, Kambugu A, and Castelnuovo B. High rate of misclassification of treatment failure based on WHO immunological criteria in resource limited settings (Uganda). poster

Musiime V, Ferrier A, Bakeera – Kitaka S, Odongo F, Kekitiinwa A, Thomason M, Lee D, Burger D, Thoofer N, Nahirya Ntege P, Nathoo K, Snowden W, Musoke P, Mugyenyi P, Walker A. Pharmacokinetics of Once versus Twice Daily Lamivudine and Abacavir in HIV-1 Infected Ugandan Children in the ARROW trial. poster

Nahirya P, Naidoo B, Kekitiinwa A, Spyer M, Kasirye P, Bakeera – Kitaka S, Crawley J. Very low rates of abacavir hypersensitivity reactions among African children in the ARROW (AntiRetroviral Research for Watoto) trial. poster

Bakeera-Kitaka S, Angevine R, Dillingham R, Kekitiinwa A. Barriers to ARV Therapy Adherence in a Cohort of Adolescents in Urban Uganda. electronic poster

Kiragga A, Castelnuovo B, Mambule I, Kambugu A, Manabe Y. Clinical and immunological outcomes of second line treatment delivered in a routine clinical setting in Uganda. poster

Wandera B, Sethi A, Easterbrook P, Castelnuovo B, Kiragga A, Whalen C, Kambugu A, Kamya M. Sexual behaviour of HIV infected patients on antiretroviral therapy (ART) in an urban HIV clinic in Kampala Uganda: a 3-year follow-up study. poster

Semitala F, Kiragga A, Castelnuovo B, Kambugu A, Kalyesubula R, Mayanja- Kizza H, McAdam K, Schlech W, Colebunders R, Kamya M. Toxicity to fixed dose stavudine, lamivudine and nevirapine in Uganda is very high but not associated with increased virologic failure. electronic poster

Other Activities

During this quarter the research programme focused on analysis of data collected in observational studies as well on supporting the PCT programme to improve and develop the quality of the clinic data so it can be used for analysis and research purposes.

Recent Findings from the Infectious Diseases Institute Observational Cohort *(Presented at the 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention, Cape Town July 2009):* 559 patients were enrolled in this observational study; all the patients have been followed up for at least four years. 413 (74%) patients were started on stavudine, lamivudine and nevirapine, and 146 (36%) on zidovudine plus lamivudine plus efavirenz. There were 148 (27%) patients with at least one treatment change. The main reason for the first treatment change was drug toxicity (91, 61.5%). Stavudine accounted for the majority of the toxicities that led to a switch (n=76, 84%). Males on treatment with zidovudine were less likely to require drug switches. Viral suppression was noted in 372 (92%) of 404 active patients. When patients who died/withdrew were also classified as ART 'failures', the treatment success rate was 66.5%. These data, taken together, show a high post-ART mortality, but surviving patients experienced sustained viral suppression and low treatment failure rates on first-line regimens. Findings also provide compelling evidence for not using stavudine, especially in women.

Analysis of Routinely Collected Data to Evaluate, Monitor, and Assess Outcomes at the Adult Infectious Diseases Clinic and Kampala City Council Clinics, Kampala, Uganda *(Principal Investigators: Barbara Castelnuovo and Andrew Kambugu):* IDI has received approval from the Makerere University Research and Ethics Committee to analyze routinely collected data at the Adult Infectious Diseases Clinic and Kampala City Council Clinics. The primary objective of this study is to evaluate, monitor, and assess outcomes of patients receiving ART.

The protocol includes a broad spectrum of outcomes such as development of side effects and drug toxicity, requirement for drug switching, development of opportunistic infections, immunologic response, consequences of regimen adjustments, sexual behavior and sexual networks. Data from IDI's special clinics (the Transitional Clinic, the Kaposi Sarcoma Clinic, and the TB/HIV Integrated Care Clinic) will also be analyzed.

The analysis of routinely collected data will inform best practices in HIV care and delivery, and evaluation of the impact of different clinical approaches, and can help in the process of developing standards of care. Evaluation of outcomes in high incidence diseases such as TB, Cryptococcus, and Kaposi's sarcoma are very important issues in public health. Evaluation of sexual behavior and reproductive health issues may inform the development of effective and affordable prevention strategies for other resource-limited settings.

In addition, IDI is currently seeking for approval to analyze routinely collected data to evaluate, monitor, and assess outcomes in Kibaale and Kiboga districts in Western Uganda.

The East African Chapter of the International Epidemiological Databases for the Evaluation of AIDS (IeDEA): IDI joined the East African chapter of the International Epidemiological Databases for the Evaluation of AIDS (IeDEA) so as to facilitate utilization of IDI's clinical data in evaluating several aspects of ART management in resource-limited settings. Through the IeDEA grant to IDI a number of full-time staff are

now being supported to undertake retrospective as well as prospective data quality improvement activities. One very important benefit from IDI's involvement in IeDEA is the opportunity for IDI staff, particularly scholars, to use the data from this important network to generate research ideas leading to advanced degrees.

Laboratory Services

MU-JHU Core Lab at IDI: During this quarter, the new translational research lab room became operational, and Pharmacokinetic and TB slide screening began being conducted in the new lab. The new space will also be used for processing and validating new tests.

The lab's overall testing volume has dropped by between 10-20% over the past quarter, primarily due to projects ending and lack of funding for lab testing support. Nevertheless, during the same period the lab has dropped the price of CD4 and CD8 testing by about 30% (from $12 per test to $9 per test), to enable a wider range of facilities to access lab tests for ART initiation and monitoring.

Though DAIDS funding, the lab has procured two additional instruments this quarter (a plate washer and a plate reader) to enable Hepatitis B testing capabilities. The lab has also completed validation for additional assays such as RPR Syphilis, Hepatitis B antigen and Hepatitis B antibody testing. The new tests will become available in October 2009.

Lab Training: This quarter four IDI-based lab training courses were run. In addition, support was provided to the BD-PEPFAR Lab Strengthening Collaboration. Finally, the lab training coordinator participated in meetings related to the development of the national lab training curriculum, and the IDI lab training curriculum has been shared, for possible adoption into the national training curriculum. Please see details on pages 6.

Lab Capacity Building: During this quarter a new IDI Lab Services Manager was hired, to support lab capacity building in outreach programmes. In addition, through the Kibaale-Kiboga Project, two FACS count machines for running CD4 cell counts were procured for Kagadi Hospital (in Kibaale district) and will be installed next quarter. Additional details are available on page 14.

Outreach Programmes

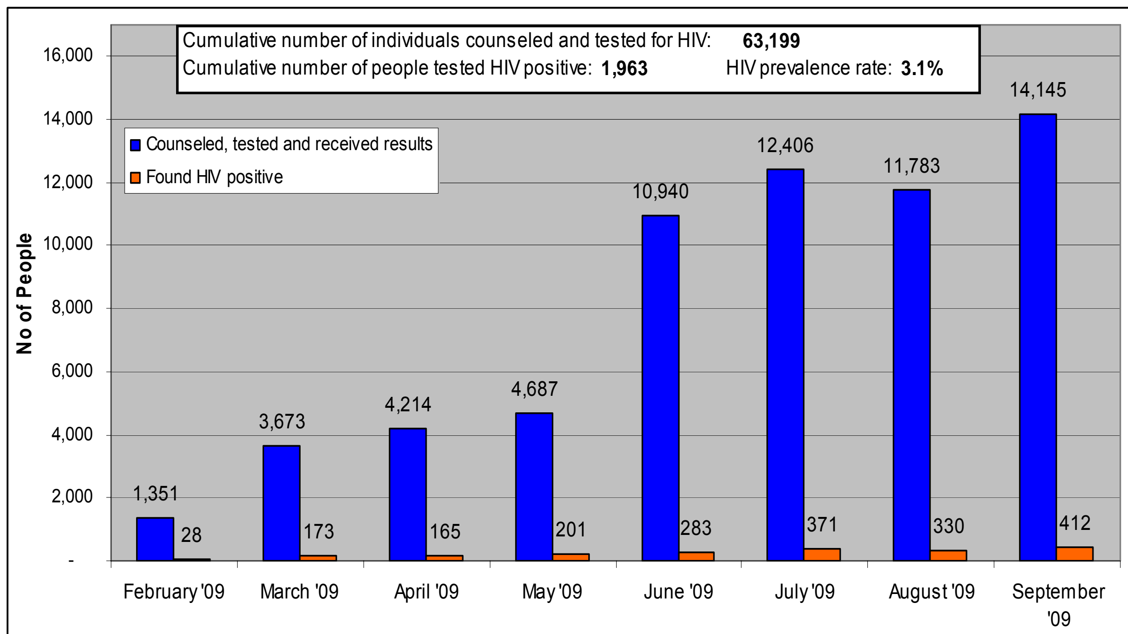
IDI Kibaale-Kiboga Project (KKP): Building Capacity for Scaling Up HIV/AIDS Services: The pace of implementation continues to accelerate. During the quarter, 219 HIV Counseling and Testing (HCT) community outreach activities (in markets, churches, and other hard to reach areas) have been conducted (compared with 112 in the previous quarter). And 38,334 people have been counseled, tested and have received results (compared with 19,841 in the previous quarter). A total of 1,113 people were found to be HIV positive (compared to 649 in the previous quarter) and were referred for treatment at ART-accredited health facilities.

Cumulative totals are as follows (from mid-February to 30 September 2009):

- Number of outreaches conducted: 371
- No of people counseled, tested and receiving results: 63,199
- No of people found to be HIV positive: 1,963

- HIV prevalence rate using community HCT outreach data: 3.1%

Figure 1: Number of individuals counseled, tested for HIV and receiving results; and those found HIV positive during community HCT outreach in Kibaale and Kiboga districts



Mobile clinical teams have been recruited as an effective way to increase the reach of comprehensive HIV/AIDS services to the poorest community members in hard to reach rural areas within the two districts.

HCT outreach in Kiboga: IDI Executive Director and CDC Technical Advisor with the TASO Regional Manager during a technical support visit

Lab systems and procedures have been reviewed and upgraded, and two FACS count machines for running CD4 cell counts have been procured and delivered to IDI and will be installed in Kagadi Hospital (in Kibaale district) in early November. The project continues to strengthen the established courier services for laboratory samples from lower level facilities to a referral laboratory in Kampala which has tremendously improved the ART services because clients at all the project-supported sites now have access to free, comprehensive HIV/AIDS diagnostic and treatment monitoring laboratory tests (which they did not have before the project).

A total of 98 health care workers were trained in ART management and ART logistics management during the quarter.

A total of 60 community counselors were identified, interviewed and selected by TASO to support health facilities; they were subsequently trained by SCOT.

A partners meeting was held at IDI in September, to improve coordination and planning and mobilization of the pool of technical resources available; and to begin the process of assessing participatory progress, avoiding activity overlaps, and developing a common advocacy approach among the partners.

Finally, IDI was informed by CDC that they should plan to extend the approach adopted in Kibaale and Kiboga to the neighbouring districts of Hoima, Masindi and Buliisa.

IDI/KCC Capacity Building Collaboration: The project continues to enroll patients into care, provide treatment for opportunistic infections, and provide prophylaxis treatment for different opportunistic infections. The number of clients on ART fell slightly to 2,574 during the quarter due to a range of factors (deaths, transfers, and loss to follow up) while the non-ART client numbers continued to increase to 4,443. Prevention activities continued and by the end of August those individuals counseled, tested for HIV, and in receipt of test results had already exceeded the annual target by 20%.

The project has continued to offer logistical support to KCC health centres through provision and maintenance of buffer stocks of ARVs and other Opportunistic Infection drugs, laboratory supplies and other consumables (testing kits and lab reagents). Efforts are underway to transfer clients from PEPFAR-funded drugs to drugs from the MOH supply chain management system. The project has continued to facilitate transport of drugs and medical supplies to the health centres from MOH and the National Medical Stores in Entebbe. All patients on PEPFAR-funded drugs (ART) at Kitebi Health Centre have now been transferred to MOH drugs. Currently, patients initiating ART are started on MOH drugs.

During the quarter, the new IDI Lab Services Manager provided valuable input to the process of fully operationalising the well-equipped lab at Kiswa Health Centre and will ensure that it continues functioning at an acceptable standard (through strengthening systems and ensuring the use of SOPs).

As the funding for the current project ends 31 March 2010, efforts are focused on identifying long term approaches to continuing the partnership with, and support for, KCC in a sustainable way; this remains the most critical challenge.

District HCT Support Program (DHSP): During the quarter, a consortium led by MJAP (with IDI and TASO as partners) won a five year PEPFAR-funded project for *Expanding Access to, Coverage and Utilization of HIV Counseling and Testing Services* across 22 districts in Uganda. IDI will be focusing on improving HCT services in seven districts in the West Nile region (northwest part of the country). Development of implementation plans and start up activities are already underway.

Management and Administration

Development Update: During the quarter IDI was part of various consortia which bid successfully for projects, including:

- PEPFAR (USAID): Expanding access to, coverage and utilization of HIV counseling and testing services: lead is MJAP; IDI will be focusing on improving services in seven districts in Northwest Uganda.
- US National Institutes of Health (NIH): Tuberculosis Clinical Diagnostics Research Consortium (CDRC); lead is Johns Hopkins University.
- European Union: Beneficiary Frameworks 2009: lead is IBF International Consulting (formerly known as the Institut Belge de Formation); IDI's potential work relates to support for infectious diseases programmes and institutional governance (based on the IDI model).
- US NIH: Hepatitis B and HIV co-infection study; lead is Johns Hopkins University and Rakai Health Services.

In addition, major extensions to ongoing contracts / allocations were approved: by PEPFAR (via US Department of Defense) for regional HIV/AIDS training; by Government of Uganda for funds to support IDI clinic non-staff costs; by the Gates Foundation (via University of Washington) for the Pre-Exposure Prophylaxis (PrEP) Adherence Study; and by Gilead Sciences Inc. for building the capacity of African researchers.

IDI's new Grants Management Services (a business unit within IDI focusing on providing grants management support to non-IDI projects) concluded a second contract to support projects led by the Makerere University – University of Medicine and Dentistry of New Jersey collaboration.

Proposals Submitted this Quarter Included:

- US National Institutes of Health (NIH): International Extramural Associates Research Development Award; to improve grants management at the MU College of Health Sciences and Gulu Medical School.
- PEPFAR (USAID): Strengthening Uganda's Systems for Treating AIDS Nationally (SUSTAIN); to support services in the west of Uganda, plus training and lab QA/QC.
- PEPFAR (USAID): Comprehensive Faith-Based HIV/AIDS Prevention, Care and Treatment; to provide training and lab QA/QC and strengthening services to faith-based organizations.

Strengthening the Strategic Planning and Development Team: During the quarter, and in line with the size and complexity of the IDI grants portfolio, the Strategic Planning and Development team expanded considerably with the appointment of a highly experienced and capable Lab Services Manager (to initially support the IDI Outreach Programmes), a Monitoring and Evaluation Officer (focusing primarily on research projects), two Assistant Officers for Grants and Monitoring and Evaluation, and an intern for grants.

Annual Audit: The main activity in the Finance office during this quarter was the audit of financial results for the previous year, in coordination with IDI's external audit partners. The firm PricewaterhouseCoopers conducted the audit, for the fourth consecutive year. The Finance team grew with the addition of the Projects Auditor, who will perform internal audit reviews of the rapidly expanding volume of field-based activities.

Staff Training and Career Development: The Human Resources department also expanded, adding the positions of Staff Training Officer and Career Guidance Counselor. IDI recognizes that one of the key contributors to our long term sustainability will be well trained, motivated staff. The new staff members began by intensively reviewing the Strategic Plan, in order to translate its objectives into long term staff training needs and career opportunities. They have now begun to offer their skills and services to the IDI community.

Facilities: The Facilities section worked closely with the KKP team, to define and tender facilities upgrades for more than twenty sites in the two districts. The Facilities team also contributed to mapping the Makerere University land allocation for the proposed IDI Training Centre. IDI has formally accepted the exceptional 4,700 square meter site on Makerere's Main Campus, and will select a project architect before the end of the year.

Information Services Evaluation of Virtual Learning Systems: A virtual learning system is an information and communication system for delivering content to participants who are not in the same location as the teacher. One objective in the IDI Strategic Plan is "to introduce a greater variety of modes and models of learning to be used at IDI". A key outcome of this objective is to introduce and develop at least one open / distance / e-learning course every two years with participation by at least 20 IDI alumni. Over this past quarter progress has been made toward this objective through the documentation of IDI's minimum requirements for a virtual learning platform, and through commencing evaluation of the Moodle Learning platform in collaboration with Management Sciences for Health.[1]

Streamlining Comprehensive Support to Friends: A Friends' Resource Centre has been established to serve as a central source for health information, peer support and life skills for IDI Friends. Within the next few months the Resource Centre will be enhanced with the establishment of a "Friends' Market Place," to link Friends to training and other learning opportunities, and entrepreneurial and microfinance opportunities. In addition, members of the Friends' Council and Peer Educators are now making daily health talks in the clinic, to provide Friends with the latest information related to HIV prevention.

Leadership Development: The *Nurturing Leadership Initiative* began this quarter, with the support of the US-based Center for Creative Leadership. During a two-week intensive training of trainers, 13 IDI staff members were given the tools and skills to conduct a two-day leadership training programme called "Leadership Essentials". Approximately 90 IDI staff members have now gone through the "Leadership Essentials" training, taught by the IDI trainers. The two week session finished with two days of discussion and planning for how to roll out the initiative to IDI staff and IDI project beneficiaries. Proposed plans for taking the initiative forward are currently being reviewed, and will be finalized in the next quarter.

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[1] Moodle is a free and open-licensed learning management system which is copyrighted and trademarked by lead developer Martin Dougiamas, and released under a GFDL license. The Moodle Platform creates a virtual learning environment that can be used by lecturers to manage educational courses for their students. It is used widely for distance learning courses.

Focus on Excellence: TB/HIV Integrated Care at IDI

Background: Although TB and HIV are different diseases, it is very common for people who have HIV to contract TB. In July and August 2008, three interns from Yale University conducted a survey on TB management at IDI. As a result of findings, the integrated HIV/TB Clinic was formed in late 2008. A TB working group was also formed, and was given the following mandate:

- To improve TB/HIV care for patients at IDI
- To standardize TB diagnosis and follow-up procedures
- To increase involvement of medical officers in TB management
- To centralize challenging management decisions
- To improve TB infection prevention
- To decrease TB treatment default rates

Approaches Used: The integrated TB/HIV clinic currently runs on a daily basis and is manned by two doctors, a counsellor and a clinic coordinator.

HIV-positive patients who show signs of TB during routine examinations are sent to the TB clinic. Once in the TB clinic, a patient is evaluated by a TB doctor who may request a chest x-ray and a sputum exam. All the necessary investigation forms are completed at that time. The patient's file is reviewed two weeks later when x-ray and sputum test results become available. If the results are positive for TB, treatment is started and continued for a total of eight months. If the results are negative, the patient is sent back to the main clinic for continued care.

Some patients are referred to the clinic when they already have laboratory results showing TB infection. These patients are registered, counselled and started on TB treatment right away.

In some cases patients' test results may not indicate TB infection, but based on clinical conditions the doctor may start the patient on TB treatment.

Patients waiting for care at the integrated HIV/TB clinic

Key Accomplishments:

1. Since the beginning of this year more than 2,400 patients have been screened for TB. Approximately 240 patients have been diagnosed with TB and started on treatment.

2. TB-related SOPs have been developed, including forms for diagnosis and treatment initiation, and a protocol for follow-up. This has led to an improvement in sputum results reporting.

3. A number of research activities have been initiated in the clinic following the streamlining of TB management activities. In June 2009 an oral abstract (*Examining Drug Default for Treatment of Tuberculosis in an Urban HIV Clinic in Uganda*), generated from this clinic, was presented at the HIV/AIDS Implementers' Meeting which took place in Windhoek, Namibia.

Challenges and Opportunities:

There are many opportunities for research, specialized training in TB/HIV co-infection and collaborative activities in this field.

One key challenge is the fear that patients and health workers have about contracting TB while working in the TB clinic. SOPs have been put in place to reduce the likelihood of nosocomial infection, and as a result staff and clients are gaining the confidence to participate actively in the clinic.

Some of the logistical challenges include:

- Lack of space: the clinic is currently operating out of a small semi permanent area, and a larger space would enable the clinic to see more patients.

- Training: it would be useful to have more medical workers trained in how to offer advanced clinical care for integrated HIV/TB.

- Limited lab facilities: it would be useful to have space and equipment for more sophisticated diagnosis, such as a TB culture facility.

Other examples of excellence will be available in IDI's 2009 special edition annual report, which will be released during the next quarter.