Emerging Strategies to Combat HIV/AIDS in Nigeria: Enhancing Prevention and HIV Counseling and Testing

11-12 October 2010
Abuja, Nigeria

Jointly organized by the National Agency for the Control of AIDS and the Research Alliance to Combat HIV/AIDS
EXECUTIVE SUMMARY

An international symposium on “Emerging Strategies to Combat HIV/AIDS in Nigeria: Enhancing Prevention and HIV Counseling and Testing” convened on 11-12 October 2010 in Abuja, Nigeria. The symposium attracted over one hundred scholars, activists, and policymakers from Nigeria and the United States. Nigeria’s National Agency for the Control of AIDS (NACA) and the Research Alliance to Combat HIV/AIDS (REACH) jointly organized the symposium with three main objectives:

- Identify emerging strategies and evidence-based outcomes to enhance HIV prevention and HCT (HIV counseling and testing) uptake in Nigeria.
- Synthesize these strategies to advance the development of innovative policy actions and interventions.
- Secure commitments of partner institutions and the private sector to meet the NACA target of administering HCT to twenty more million Nigerians in 2012.

This symposium report summarizes insights by researchers studying HIV and AIDS in Nigeria, the United States, and other African countries. Presenters were asked to focus on specific ways to improve Nigeria’s national response to the epidemic. The report distills highlights from the symposium’s four panels and two technical committees and summarizes keynote addresses by Professor John Idoko, NACA’s Director General, and Professor Robert Murphy, Director of Northwestern University’s Center for Global Health. The four

More research is needed to understand the factors that will drive effective behavioral change and acceptance of HIV testing. This is vital for prevention programming targeted at the general population and specific risk groups.

Nigeria currently has the second highest number of persons, about three million, in the world living with HIV and AIDS. In Professor John Idoko’s keynote address, he called for more research on HIV and AIDS in Nigeria. “More research,” he said, “is needed to understand the factors that will drive effective behavioral change and acceptance of HIV testing. This is vital for prevention programming targeted at the general population and specific risk groups.” In the second keynote address of the symposium, Professor Robert Murphy emphasized that doctors and public health advocates should not approach patient treatment in a reglemented way. The goal is to have the greatest impact on HIV prevention while achieving high cost efficiency and long-term positive outcomes. Professor Lai Erinosho stated in his presentation that, despite liberal access to treatment in Nigeria, there are steadily more new cases of HIV being reported. He, along with other presenters, suggested specific ways in which research could help improve HIV prevention.

Technical Working Groups

Throughout the two-day symposium, two groups met to continue discussions of challenges identified in the presentations. Each group consisted of about eight scholars, activists, and HIV policy makers and were assigned to review two topics: accelerate HCT uptake and accelerate research efforts and their application to HIV prevention. On the second day of the symposium, each technical working group
presented highlights and strategies based on their discussions.

The first group on challenges and strategies in HCT Uptake included Dr. Kalada Green, Dr. Phillip Nieburg, Dr. Jerry Gwanna, Dr. Modupe Oduwole, Dr. Hadiza Khamofu, Dr. Bolatito Aiyenigba, and Mr. Cartier Simon. They identified the following challenges in accelerating HCT uptake. First, there is inadequate coordination of HIV/AIDS activities at all levels because of poor budgeting and implementation of policies. Second, HCT sites are mainly located in urban areas which results in their low availability for rural communities. Third, the poor attitude of care providers, and inadequate and untrained staff, discourage Nigerians from making use of these services. To close these gaps, the first group on accelerating HCT uptake made the following recommendations: strengthen the coordination of HIV prevention and treatment efforts at federal, state, and local levels; scale up HCT services through decentralization and integration of existing services in communities; and increase funding for research projects.

The second group on Research Efforts and Utilisation included Professor Layi Erinosho as chair, Dr. Niyi Ogundiran, Dr. Norma Ware, Mr. Adedayo Adeyemi, Dr. Jennifer Anyanti, Mr. Chidozie Ezechukwu, Laide Sulyman, and Mr. Seun Osagbami. This group identified several challenges: the difficulty of getting policymakers to understand the importance of research and how to translate findings into policy; inadequate advocacy of research findings and recommendations; the need to educate people involved in politics to appreciate the importance of research; and poor funding and the over-centralization of available resources. To address these challenges, this technical group made several recommendations: the government should commit more funds to research; synergy should be fostered between researchers and policy makers; the latter
helped to translate research into policies by improving the skills and capacities of persons who can communicate research outcomes effectively; and an assured statutory allocation from the federal government’s budget for HIV research.

**Symposium Highlights**

The following pages demonstrate the significant insights taken away by the hundred-plus participants in this unique symposium jointly organized by a bi-national, and university-based, research program and an agency of the Nigerian federal government. We will signal here several of these: HIV testing as a key preventative weapon; the importance of increasing couples testing; vital issues to be resolved regarding when treatment should begin at a time of constrained externally-provided resources; factors other than sexual behavior that may account for high vulnerabilities to HIV infection in Africa; the unacceptably low level of pregnant Nigerian women having access to PMTCT; the need for a Nigerian national vaccine strategy; appropriate technical and attitudinal training for service providers; and opportunities for improving the quality of life - emotional, sexual, and social - of persons infected with HIV and subjected to life-long anti-retroviral treatment.
The symposium opened with welcoming remarks by several distinguished persons involved in HIV and AIDS prevention and treatment in Nigeria. **Professor Gbenga Sunmola**, representing NACA and REACH, gave a brief overview of the symposium and explained the three main objectives.

After a welcome address by Professor John Idoko, REACH Principal Investigator Professor Richard Joseph explained the origins of REACH and how it began officially at Northwestern University and the University of Ibadan in January 2006 with the support of the Bill and Melinda Gates Foundation. Goodwill messages followed from various individuals involved in HIV/AIDS prevention in Nigeria, notably the Country Director of the Centers for Disease Control and Prevention in Nigeria, **Dr. Okey Nwanyanmu**. He emphasized that, because there is no cure for AIDS, prevention remains key. It is important, he said, for African governments to become more fully engaged in prevention, care and treatment. Because of limited resources, available funds must be spent wisely. He stressed that the Nigerian government must fulfill its commitment to increase its share of financial resources devoted to combating the epidemic.

Also delivering a welcome message was **Dr. Michael O. Dwyer** of the World Bank. He stated that the mix between prevention and treatment must be constantly adjusted. More efforts should be directed to engaging policy makers. There is also a need for greater operational research to achieve a better understanding of the epidemic in the diverse states of the Nigerian federation.

**Keynote Address: Day One**

Professor John Idoko’s keynote address was entitled “Accelerating HCT Uptake in Nigeria: A Call for Action.” After reviewing the background and history of HIV and AIDS in Nigeria, Professor Idoko stated that Nigeria is currently ranked second in the world after South Africa with persons living with the disease. He identified several barriers to lowering that rate. Low coverage of HCT services in Nigeria, especially in the North; inadequate funding and coordination of HIV prevention, treatment, and care; weak political and financial commitments at all levels of government; inadequate coordination of research efforts; and low risk perception among policymakers and the general population. At present, only a third of persons requiring treatment for HIV in Nigeria, about 400,000, receive it. And there are only 150 sites in the country devoted to antenatal care, an inadequate number given the country’s large size.

Professor Idoko emphasized that prevention is the most important tool in fighting the battle against HIV and therefore everyone in Nigeria, regardless of age, sex, religious belief, location and educational status, should know their HIV status. He called on NACA and all its partners to intensify efforts in the following areas: improve the coverage of HCT services, including expanding the use of mobile HCT clinics; make use of mass media and community advisory boards to increase awareness of HIV/AIDS prevention and HCT; advocate for greater leadership with a committed strategic vision to scale up HCT services; innovate strategies for resource mobilization for HCT; reduce stigma and discrimination to create a conducive environment that will encourage people to get tested; implement couple counseling.
in HCT services; and increase the capacity of service providers to provide gender-appropriate services. He further proposed that NACA pursue an ambitious target of counseling and testing twenty million more Nigerians by 2012.

Panel 1: Strategies for accelerating uptake of HCT in Nigeria

In the first presentation, Dr. Otto Nzapfurundi Chabikuli discussed the impact of HCT on Prevention of Mother-to-Child Transmission (PMTCT) in sites supported by the Global HIV/AIDS Initiative Nigeria (GHAIN). Nigeria represents 30% of the global gap in PMTCT coverage. In 2008, that coverage in Nigeria was only 11%. GHAIN has sought to understand why attendance remained low at ante-natal clinics (ANC). Over time, there has been a gradual increase in HIV-positive women getting tested at GHAIN-supported sites. The reason for the slow uptake could be attributed to a number of factors: an inability to provide results of HIV tests on the same day they are administered; poor adherence of patients in their use of anti-retroviral (ARV) prophylaxis; and the occasional shortage of anti-retroviral drugs.

A key hurdle to be overcome is the reluctance of people to use available facilities. GHAIN has tried to address these problems with quality improvement interventions such as community mobilization (to help reduce stigma), improvements in procedures and methodology, and encouraging providers to examine HIV-positive women for anti-retroviral treatment (ART) eligibility and then refer them, if needed, to ART clinics. Dr. Chabikuli concluded that further evaluations must be made of the provision of PMTCT services with the aim of optimizing them. To achieve quality interventions, more information is needed on why attendance is low at ANC clinics and what more can be done to increase participation.

In his presentation, Dr. Phillip Nieburg discussed the challenges of HIV testing and counseling. He used the acronym “HTC” rather than HCT to emphasize the importance of post-test counseling. What are the obstacles, he asked, to improving HTC, and what clues are there to overcoming them? HTC is important, especially among discordant couples where one partner is infected and the other is not. It is vital for each of the partners to know the other’s status. Prevention efforts can be devoted to helping keep discordant couples discordant. To achieve optimal HIV testing and counseling, Dr. Nieburg said that HTC should be made widely available at known sites; the stigma minimized; and services, including travel costs, made affordable.

On the basis of available REACH data, Dr. Nieburg identified support for particular incentives: making available mobile HTC facilities; providing couples HTC; and offering HTC by health providers in a routine way to all patients who visit a hospital or clinic. While the initial data analysis is helpful in understanding the constraints to HTC in Nigeria, Dr. Nieburg emphasized that much of the REACH data still awaits further analysis. That work could increase our understanding of the barriers to HTC and opportunities for its improvement.

The final speaker on the panel, Dr. Elizabeth Marum, addressed HIV prevention in a lively presentation entitled, “Testing Alone is Not Enough!” In every country, testing for HIV is now available to help prevent HIV transmission. The goal, she argued, should be universal knowledge of HIV status which is essential for prevention. It is not possible, for example, to treat persons for diabetes
without testing. Testing can be made rapid, reliable and inexpensive. At present, testing rates are too low. Moreover, one-time testing is not enough for sexually active persons. Those who know their status, whether positive or negative, are more likely to adopt safe-sex techniques such as consistent condom use.

Of limited efficacy, Dr. Marum argued, were messages that are status-blind. Individuals should be encouraged to love “knowingly”, not just faithfully. The fact of marriage in itself does not guarantee safety, in view of the potential for discordance even in stable relationships. It turns out that most transmission takes place between cohabiting partners. Highest HIV rates are among cohabiting individuals, not single or divorced individuals. They must be encouraged to know their partners’ status and to conduct mutual disclosure of their status. A message can be borrowed from Coca-Cola which provides incentives for vendors to make its product available anywhere, and to guarantee that it is safe through regular testing. She pointed out that it has been possible to increase testing rates significantly in Zambia from under 5% to over 20%.

As noted in the title of Dr. Marum’s presentation, HIV prevention must go beyond testing. Many people who are tested for HIV do not obtain their results. We are developing, she said, the technology for promoting couples’ testing which can be shared with Nigerians. HIV-positive persons fear stigma and often experience discrimination and abandonment. These reasons, among others, explain their reluctance to inform their sexual partners of their HIV status. There has been a strong response in Kenya to the provision of mobile testing vehicles. In conclusion, Dr. Marum proposed that the number of new HIV infections could be reduced through “counselor assisted mutual disclosure” where HIV counselors are trained to provide care and treatment services to couples whether they are HIV discordant, concordant positive, or concordant negative.

Panel 2: Research Gaps and Priorities in HIV Prevention and Testing
The first presenter in this panel, Professor Larry Sawers, addressed the symposium on “Concurrency and HIV: What is the Evidence?” Using his economics training, Professor Sawers has analyzed HIV prevalence rates. He contended that it was necessary to look beyond sexual behavior to explain the patterns identified. His basic argument is that just having more sexual partners did not necessarily translate into a bigger risk for contracting HIV. Other factors, he argued, should be taken into account, such as other sexually transmitted infections (STIs), nutritional deficiencies, medical blood exposures (such as injections, blood transfusions, and circumcisions), and non-medical blood exposures (intravenous drug use, hair cutting, and shaving).

The next presentation by Dr. Norma Ware was entitled, “Filling Gaps in HIV Prevention Research: What Qualitative Social Science Can Do for You.” Dr. Ware discussed the ways in which social science research can
advance HIV prevention. In contrast to Professor Sawers, she stated that since much of HIV prevention focuses on behavior, social science research is vitally needed. Social science studies of perceptions, opinions, beliefs, and attitudes enable us to understand more about HIV prevalence. Dr. Ware gave the example of a program at Jos University Teaching Hospital that is trying to increase community access to prevention services in Nigeria’s Plateau State. Users of these services were asked such questions as: “What do volunteers in these programs do that influence people?” In responding to this question, users stated that seeing someone take the test can prompt another person to get tested. Also demonstrated is the importance of post-testing phone calls and counseling at the clinic on the same day that the test is administered. The feedback from such social science studies will help prevention services learn what they can do to make their services more accessible and helpful to patients.

In his presentation, Dr. Darrel Singer addressed the prospects and challenges of HIV vaccine research in Nigeria. Dr. Singer pointed out that because HIV vaccine trials are conducted over a long time period, it is not likely that a vaccination will be available any time soon. He explained that there have so far been only three HIV vaccine trials worldwide and they have shown little or no efficacy. More vaccine trials must therefore be conducted. Dr. Singer considered other issues that pertain to HIV vaccines in Nigeria, assuming one becomes available: ethical, regulatory, societal, cultural, and scientific. What would be, he asked, the criteria for administering a vaccine? Who should be vaccinated, only persons at high risk or everyone? International Review Boards would have to include to avoid stigmatization. Dr. Singer concluded that, in view of the many issues and concerns, a National Vaccine Strategy was needed in Nigeria.

Professor Layi Erinosho pointed out the importance of a number of issues for research in HIV prevention and testing. He pointed out that, despite liberal access to treatment in Nigeria, more new cases of HIV are steadily being reported. Professor Erinosho discussed at length the various ways in which research can assist prevention in Nigeria. He suggested the kinds of studies that are needed in HIV prevention research, such as the degree of compliance with treatment regimens and its implication for the control of HIV/AIDS; the impact of liberal access to treatment on the prevention of HIV/AIDS; systemic and/or societal challenges (e.g., vertical versus horizontal health programming) that act as barriers to HIV prevention; and assessing national (at the level of NACA) and institutional (at the level of various strategic organizations/institutions) responses to HIV/AIDS in Nigeria, including those of NACA.

Continuing on the theme of HIV prevention research, Dr. Friday Okonofua discussed research gaps and priorities.

A Conceptual Model for Understanding HIV/AIDS Prevention

Awareness of HIV/AIDS

Uptake of prevention methods for both positive & negative clients

Behaviour change

HIV/AIDS Testing

Uptake treatment for those test positive

Dr. Friday Okonofua discussed research gaps and priorities.
for HIV prevention and testing. The research methodology he advanced would examine the context in which HIV infection occurs and would monitor HIV trends over time. It would also provide a guide to the design of more appropriate interventions, and facilitate the evaluation and comparison of cost-effective measures. Dr. Okonofua further discussed the objectives set forward in the NACA 2010-2015 Comprehensive National Framework. The main goal is reaching 80% of sexually active adults and 80% of most-at-risk populations with voluntary HIV counseling and testing (VCT) by 2015. To meet these targets, NACA would have to focus its efforts on increasing the number of persons with access to testing and counseling. Similar to earlier speakers, Dr. Okonofua emphasized the need for more research to identify the contexts in which people use or do not use VCT in order to understand how VCT services can be improved.

Keynote Address: Day Two

In the keynote address on the second day of the symposium, Professor Robert Murphy discussed antiretroviral therapy for the treatment of non-AIDS related complications and prevention. He posed several questions: When is it too early to start treatment? What medications should be used first and does it really matter? What alternatives are there to currently available drugs? What are the new strategies in treatment? And finally, should there be two levels of treatment recommendations for the people in rich and poor countries? Reaching conclusive answers to some of these questions, except the last which is NO, will require more extensive studies.

Professor Murphy put forward a detailed presentation with many diagrams and charts. He explained that there is a division of opinion regarding when to start therapy treatment. In the United States, it is recommended that ART should usually begin when a patient’s CD4 count is below 500. Meanwhile, in Europe, treatment is started at a lower CD4 count of 300. Professor Murphy contended that there are benefits to earlier treatment. However, starting ART at a later stage will not necessarily yield faster results for someone who is young and has a less impaired immune system. Generally, starting early treatment reduces the chance of patients contracting other infections that often accompany AIDS such as tuberculosis.

According to Professor Murphy, many of these issues should be considered when designing recommendations for starting treatment. He discussed the various factors, such as age, gender, and CD4 count, that should be considered when deciding whether to begin or defer ART. He emphasized that doctors and public health advocates should not approach patient treatment in a regimented way. The goal is to have the greatest impact on HIV prevention while achieving high cost efficiency and long-term positive outcomes. Such an approach would make it possible to reach a clearer consensus on which patients to treat, when, and how.
We should not promote double standards, Professor Murphy emphasized. He concluded his address with four policy recommendations: develop rational and open guidelines; utilize available resources more efficiently; encourage local research to achieve optimal prevention and treatment approaches; and include long-term complications and the impact on public health and prevention in cost-effective analyses.

Panel 3: Treatment as a Prevention Strategy

Professor Eileen Stillwaggon’s presentation was entitled, “Population Health and HIV Prevention and Management: Emerging Biomedical Strategies.” She began by citing the example of guinea worm eradication in Nigeria led by the Carter Center. If this was possible, she said, why is the same not true of HIV prevention in Nigeria? Similar to Professor Larry Sawers’ presentation, Professor Stillwaggon stated that there is a large discrepancy in the percentage of HIV infections between Africa, on the one hand, and the U.S. and Western Europe, on the other. Yet there is no correlation between risky sexual behavior and rates of HIV infection. Factors other than risky sexual behavior, she contended, should be considered in HIV prevention programs in Nigeria. Protein-energy malnutrition, which is common in many African countries, reduces the integrity of skin and mucous membranes and T-cell production. Malaria not only causes chronic immune activation but increases HIV replication seven to ten times. In addition to addressing these other health risks that correlate with HIV prevalence, echoing Professor Murphy, Professor Stillwaggon proposed that there should be the same standard of care for HIV infected persons in Africa as in Western Europe and the U.S.

Malaria not only causes chronic immune activation but increases HIV replication seven to ten times.

Professor Isaac Adewole spoke on “Strategies for achieving rapid improvements in PMTCT.” In 2002, PMTCT services began in Nigeria and currently only cover 11% of the country, repeating an observation earlier made by Dr Chabikuli. While Nigeria is capable of reducing mother to child transmission of HIV, the country faces other related challenges such as the lack of male involvement in child care, inadequate political support and funding for HIV/AIDS programs, poor access to maternal health services, the low level of community involvement, and stigma and discrimination against HIV-infected persons. To address these issues, Professor Adewole proposed a strategy to achieve satisfying and healthy emotional and sexual relationships, advance the sexual and reproductive rights of everyone regardless of HIV status, and
combat stigma. It has four main elements: greater efforts to assure prevention of HIV infection in women of reproductive age; reducing unintended pregnancies in HIV-positive women; prevention of mother to child transmission of HIV using ART; and care and support services for HIV-infected mothers, their infants, and family members.

Continuing Professor Adewole’s message on improving access to PMTCT services, Dr. Muhammad Ali Pate spoke on “Decentralization/integration at the PHC level as strategy for strengthening health systems and achieving rapid expansion of PMTCT.” Dr. Pate proposed that greater decentralization of PMTCT services in Nigeria could result in increased PMTCT uptake. Such a policy would scale up and decongest comprehensive sites and take services closer to the people. Other African countries, such as Swaziland, Mozambique, and Mali have benefited from decentralizing PMTCT. Stable patients are systematically transferred from secondary and tertiary health facilities to primary health centers where they can be given routine care. Such a process requires a functional referral system to ensure that appropriate use is made of all levels of the healthcare system.

Panel 4: Intensifying Prevention among Most-at-Risk Populations and Vulnerable Groups
Dr. Kalada Green focused his presentation on quality prevention techniques and methods to address the HIV epidemic in Nigeria. He proposed that a combination prevention method would be best. This includes looking beyond behavior changes (as several other presenters also argued during the symposium) and focusing on the health outcome of individuals. More specifically, Dr. Green proposed a quality HIV-prevention program called the Minimum Prevention Package Intervention (MPPI) approach. It includes several features: promoting behavior change using a combination of interventions targeted at an individual, as well as his community and milieu; pursuing effective and sustainable behavior change; encouraging media interventions to serve as cross-cutting reinforcement; developing interventions that target drivers of the epidemic; and combining these interventions to catalyze behavior change. Dr. Green argued that MPPI programs would be adjusted depending on the region and population. By using MPPI combination interventions, quality would be achieved with comparability of data and outcomes across the programs.

Dr. Kayode Ogungbemi, Director of the Strategic Knowledge Management Department of NACA, discussed NACA research findings as evidence for HIV-prevention implementation. These research studies found that the majority of new HIV infections do not occur only in men who have sex with men (MSM) and sex workers, but also in cohabitating and married sexual partners. The research also suggests that men are nine times more likely than women to report more than two sexual partners and that the median age of sexual debut has decreased, especially among men, in Nigeria. Dr. Ogungbemi emphasized the need to involve policy makers in HIV-prevention programs and to evaluate results from emerging studies to understand implications of that research.

Dr. Pat Matemilola discussed intensifying national prevention efforts in Nigeria through positive health dignity, and prevention via an approach he calls “Positive Prevention”. The three strategies under Positive Prevention are: Prevention with Positives, Prevention for Positives, and Positive Health, Dignity, and Prevention. Positive prevention consists of four
ideas, according to the Canadian AIDS Treatment information
Exchange (CATIE): empower people living with HIV to take
control of their sexual health as a way of preventing the
transmission of HIV and other sexually transmitted infections;
promote full, satisfying and healthy emotional and sexual
relationships; advance the sexual and reproductive rights of
everyone, regardless of HIV status; and combat stigma and
discrimination to ensure equal access to services to help
improve the health and well-being of people living with HIV.

Dr. Patrick Dakum delivered the final presentation of the panel entitled,
“Post-Exposure Prophylaxis (PEP): Target population, coverage and efficiency.” He
emphasized that PEP, a short-term anti-retroviral therapy to reduce the likelihood
of HIV infection after potential exposure, should be an integral part of a
comprehensive prevention strategy. Dr. Dakum pointed out that there is poor knowledge and utilization of PEP among health care workers in Nigeria, and this needs to change. Additionally, stigma still shapes health care workers’ behavior towards people living with HIV. In a recent study of 345 health care workers, 80% of them said they would refuse surgery or assistance at surgery by an HIV-infected doctor or nurse. Other gaps in PEP coverage in Nigeria include: poor penetration of rural and primary level facilities, lack of institutionalization of universal infection prevention and control activities, and poor knowledge in key target populations. Dr. Dakum suggested that PEP could contribute to preventing both occupational and non-

occupational HIV exposure-related transmission.

HIV and AIDS in Nigeria:
Progress or Regress?
According to Donald G. MacNeil, writing in the New York Times in May 2010, in the opinion of experts worldwide, “without a change in approach, a major epidemic will be with us in 2031,” a half century after the disease was first identified. With the second highest number of infected persons in the world, Nigeria has a major interest in designing and implementing this “change in approach.” In its October 2010 Report, the REACH programme identified ten Enhanced HIV Prevention Strategies (http://www.cics.northwestern.edu/documents/reach/REACH_Report_FINAL.pdf). Throughout this report on the October 2010 NACA-REACH Symposium, further recommendations for more effective and comprehensive strategies are advanced, notably in the keynote address of NACA’s Director General, Professor John Idoko.

More Nigerians become infected daily with HIV, or reach the level of impairment of their immune system to require anti-retroviral treatment, than can be given treatment. Despite the very important gains in treatment, prevention remains key. Keeping Nigerians free from infection is therefore the number one challenge facing the nation in this struggle. A new federal government will be installed in Nigeria following the elections of April 2011. As national
priorities are identified, a decision to make Nigeria a leader in the worldwide combat against HIV and AIDS could be firmly made. Nigeria has the financial, intellectual and institutional resources to undertake such an enhanced campaign. NACA proposes delivering HCT to an additional 20 million Nigerians by 2012. REACH proposes expanding the capacity to conduct community-based research on the factors that render Nigerian communities vulnerable to infection, and on the barriers to making use of HCT facilities. The justification for these recommendations was further demonstrated during many presentations and discussions during the Symposium. Moreover, they are complementary in nature and their implementation would be synergistic.

Will Nigeria progress or regress in its response to this epidemic starting in 2011? The answer will depend, in large part, on actions taken by leaders in government, civic, professional, business and religious organizations. In this report, we have distilled strategies to enhance HIV prevention and HCT from the presentations and discussions in the symposium. If these proposed strategies are diligently and consistently implemented, there is no question that significant advances will be made in HIV prevention, counseling and treatment in Nigeria. In numerous meetings conducted over several years, it has been demonstrated that Nigerians of all socio-economic levels, and residing in urban as well rural communities, are prepared to take much more vigorous and concerted action to combat the infection. We hope that this symposium report will strengthen the resolve of many individuals and institutions to undertake such action, and that it will foster a more informed campaign to control and reduce HIV and AIDS in Nigeria and other heavily affected countries.
SPEAKERS AND INVITED PARTICIPANTS

Adeyinka Aderinto, University of Ibadan
Isaac Adewole, University of Ibadan
Babatunde Ahonsi, Population Council, Nigeria
Emmanuel Alhassan, NACA
James Anenih, NACA
Amina Az-Zubair, Senior Special Assistant to the President on the MDGs
Senator Iyabo Obasanjo Bello
Otto Chabikuli, Family Health International Nigeria and Global HIV/AIDS Initiative Nigeria
Grace Ibun Delano, Association for Reproductive and Family Health
Patrick Dakum, Institute of Human Virology Nigeria
Michael Dwyer, World Bank
Bright Ekweremadu, Society for Family Health Nigeria
Peter Eriki, WHO Nigeria
Layi Erinosho, African Sociological Association
Uche Isiugo-Abanihe, University of Ibadan
Adeniyi Gbadagesin, University of Ibadan
Kalada Green, USAID
Emily Heroy, Northwestern University
John Idoko, Director General of NACA
Uche Isiugo-Abanihe, University of Ibadan
Richard Joseph, Northwestern University
Elizabeth Marum, Centers for Disease Control and Prevention
Pat Matemilola, Independent HIV Consultant
Robert Murphy, Northwestern University
Phillip Nieburg, Center for Strategic and International Studies
Okey Nwanyanmu, Centers for Disease Control and Prevention
Oka Obono, University of Ibadan
Kayode Ogungbemi, NACA
Friday Okonofua, Ford Foundation
Razak Olajide, University of Ibadan
Muhammad Ali Pate, National Primary Health Care Development Agency
Larry Sawers, American University
Umaru Shehu, Chairman, NACA
Darrel Singer, Military HIV Prevention Program-Nigeria
Eileen Stillwaggon, Gettysburg College
Gbenga Sunmola, NACA
Fred Tamen, Benue State University
Norma Ware, Harvard University
Babafemi Taiwo, Northwestern University
Bola Udegbe, University of Ibadan