On June 28th 2012 news of the US Supreme Court upholding Obamacare flashed around the world. Access to healthcare is important to every global citizen; while many in the US welcomed the increased access to healthcare that Obamacare brings, other nations also eagerly followed the US debates in the hope of learning lessons to improve access to healthcare in their own countries. This article describes current provision of healthcare services and access to medicines in Uganda, focusing on HIV, a leading cause of morbidity and mortality; and proposes an approach of co-insurance taking a lesson from Obamacare to provide more affordable healthcare for all Ugandans.

In 2012 I had the privilege to serve as a Pfizer Global Health Fellow at the Infectious Diseases Institute (IDI) in Kampala, Uganda. Accordia Global Health Foundation and its Academic Alliance, in partnership with Pfizer Inc and Makerere University established the Infectious Diseases Institute in Kampala, Uganda in 2004 as a Center of Excellence for establishing, achieving, and promoting the highest quality standards in HIV and related diseases. IDI improves access to healthcare by providing free treatment for patients attending its clinic; by training health workers across Uganda and Africa; and by conducting translational research to improve policy and practice in the prevention and treatment of infectious diseases. My assignment was to develop a five year strategic plan for IDI’s research program.

I’ve enjoyed a long and varied career in drug discovery and development in roles ranging from strategy consultant, through business development and licensing, to portfolio and project management. IDI is entering its strategic planning cycle in 2013 and was excited to have the opportunity to bring in someone with my breadth of experience to help identify key strategic goals for research. Through benchmarking IDI with other leading research institutes in sub-Saharan Africa I identified several critical success factors that will enable IDI to improve access to healthcare for Ugandans:

1. International partnerships – collaboration with research groups in developed countries
2. Patient access and care – research built upon serving a large patient population
3. Efficient research operations – the ability to participate in global clinical trials
4. Influencing policy – translating the results of research into national healthcare guidelines
Improving Access to Healthcare in Uganda
Janet White
2012 Global Health Fellow

Demographics and Healthcare Spending

Uganda’s population is over 35 million and life expectancy is 53.5 years. The country is undergoing a population explosion with an average birth rate of over 6 babies per woman, and there is a growing affluent working middle class. GDP per head is $1,300, and health expenditure was 8.2% of GDP in 2009, or $106 per person year with $46 of this coming from the Government and the rest from foreign aid or out of pocket. Although, in theory, public healthcare is supposed to be free, in practice there are unofficial fees and patients are often asked to buy drugs and surgical items privately. Additional ‘hidden’ costs of healthcare for Ugandans living in rural areas include the cost of transportation to get to clinics and then the loss of income from time off work, especially when wait times are long.

IDI is able to provide free services and drugs to patients through funding from the Government of Uganda, and international donor organizations, fulfilling the second strategic critical success factor of access to and care of patients. These services are in high demand and the waiting room is always full. While patients wait for their appointments, they can spend their time productively by using the Resource Center which includes onsite computers with access the internet, playing board games, attending health education presentations, and making and selling crafts.

Structure of Healthcare Provision in Uganda

About 50% of healthcare provision is delivered by public or government owned facilities and the remaining 50% by private providers. The public sector facilities include two National Referral Hospitals, Mulago and Butabika in Kampala, eleven Regional Referral Hospitals, 43 General Hospitals, and 112 District Health Center IV’s, one per District. Basic services are provided in Heath Centers III and II to provide diagnosis and maternity care, and health information is disseminated to village households by unpaid volunteer Village Health Teams at the lowest level.

Mulago hospital was built in 1962 and the Infectious Diseases Institute is sited at the Mulago complex. Demand for hospital services is overwhelming and family members carry most of the burden of caring for sick relatives who are admitted, bringing them food and laundring clothes and bedding. Sheets are strung to air dry from the balconies at the rear of the hospital buildings and relatives rest sitting in the shade under the trees on the lawn at the front of the hospital.

Butabika hospital is the referral center for mental illness. Uganda is trending towards decentralization of government, continuously expanding the number of administrative Districts by subdivision, and therefore driving an increase in the number of District Health Center IVs. Similarly, the Infectious Disease Institute is building capacity at eight Kampala City Council clinics and 22 clinics in the Kibaale and Kiboga districts in western Uganda to support decentralization of healthcare and improve access and services in rural areas.
I visited Kibaale Health Center IV in order to understand whether smaller health centers in rural areas outside Uganda’s major cities might have the capabilities to participate in clinical trials conducted by IDI. This was in support of the second and third strategic critical success factors – access to patients and research efficiency. The Health Center had several small inpatient wards, an outpatient department, and a well-equipped laboratory, and was connected to the power grid, as well as having its own rainwater supply.

I also visited Bwikara Health Center III in Kibaale District. Women may choose to be admitted during labor and childbirth; outpatient, lab and pharmacy services are also provided. Patients travel large distances to attend the clinic, often on market day since they can buy and sell produce and catch up on news as well as receiving care and treatment. Most pregnant women choose to deliver at home but if the pregnancy is difficult they can travel to the health center in order to receive prompt medical attention. Few Ugandans in rural areas have cars so travel is by bicycle or on foot, or at best by motorcycle taxi or boda-boda. When you have experienced the bumpiness of Ugandan murram (dirt) roads in a four wheel drive vehicle you can appreciate how uncomfortable the ride on the back of a motorcycle must be for these patients. Unlike the larger health centers, smaller rural clinics have neither power nor running water; a solar panel on the roof can power a microscope for screening samples for malaria or TB but is not sufficient to power a refrigerator or other electrical equipment.

The public sector faces many challenges, one of which is chronic understaffing by health workers; 45% of all positions in Health Center IVs are unfilled and the shortages are worse in rural areas, resulting in long waiting times for patients. Private clinics fill the gap, some for profit run by individual clinicians, and others not for profit, many of which are affiliated with religious organizations. Patients who can afford to pay use private clinics, and private not for profit institutions are largely funded by donations and foreign aid.

Access to Medicines

In order to supply medicines in Uganda, the manufacturer must register the product with the National Drug Authority (NDA)³. To date about 4500 human drugs, 450 veterinary drugs and a number of herbal drugs and dietary supplements have been approved for use in Uganda. A majority of drugs for HIV, malaria and TB in Uganda are provided through multilateral foreign aid via PEPFAR and the Global Fund; other basic generic drugs are mainly imported from India and Kenya. Uganda has a fledgling generic drug product manufacturing industry to serve local markets, for example Quality Chemical Industries Ltd is a Ugandan subsidiary of Indian generic manufacturer Cipla, but it will be a while before local manufacturers can compete with imports on price.
About 60% of Ugandans use traditional medicine as a first port of call; witchdoctors offer herbal remedies for minor ailments and spiritual ones for more serious disease, or will refer patients to modern medical practitioners. Traditional medicines can be found for sale at Owino market, an outdoor market in Kampala – you can buy bundles of dried herbs and calabash gourds alongside the stalls piled high with second hand clothing and produce.

When AIDS emerged in Africa in the early 1980's, Uganda was one of the first countries to recognize the problem and to implement broad national policies to contain the epidemic. In 1987 when AZT, the first antiretroviral drug was approved for use in the US, the annual cost per patient of $10,000 was beyond the reach of most Africans. At the time standard of care treatment for HIV patients in Africa was limited to generic antibiotics to treat opportunistic infections.

By 1996, triple therapy or highly active antiretroviral therapy (HAART or ART) – combinations of three drugs of different classes to keep HIV at bay – had become standard of care in the US, but the cost remained too high for African patients. Pilot research studies in Uganda demonstrated that if ART could be made affordable, the drugs would be effective in controlling HIV in the local population. IDI continues to conduct research into optimizing the way that ART is dosed; the sequence and combination of the various antiretroviral drugs that are available as well as innovations in healthcare delivery that improve patient compliance. These findings are translated into national healthcare guidelines to support the fourth strategic critical success factor, influencing policy.

From 2001-2003, several forces converged in a perfect storm that created the possibility for providing widespread, affordable access to ART for patients with HIV in Africa. In 2001, Indian generics manufacturer Cipla announced that it would break innovator company patents and manufacture generic ART drugs that would cost only $350 per patient per year. In 2003 WHO, the World Health Organization announced a new vision for three million people worldwide to access ART by 2005, a goal that became known as “3 by 5”. The United Nations established a Global Fund to raise $7-10 billion per year to be spent on AIDS. In 2003 US President George W. Bush founded PEPFAR, the President’s Emergency Fund for AIDS Relief, and with that, ART became accessible to many more Africans.

By 2005, around 1.3 million people worldwide were on ART treatment, slightly short of WHO’s vision. Today approximately 8 million people worldwide are living with HIV are receiving ART. In Uganda, an estimated 1.2 million people or 6.7% of the population are living with HIV. Of these about 577,000 are eligible for ART treatment, which may be initiated according to national guidelines when CD4 counts, the white blood cells that confer immune response, fall below 250 if the patient is asymptomatic or below 350 if symptomatic, i.e. if opportunistic infections are present. Through its research studies, IDI has had critical input into establishing and updating Ugandan national treatment guidelines as new data emerges, supporting the fourth strategic critical success factor of influencing policy. According to the Uganda Ministry of Health about 55% of eligible patients or about 250,000 people currently receive ART.

**Recommendation**

Almost half of patients eligible for ART in Uganda go without is due to lack of funding; currently 80% of HIV treatment is funded free of charge to patients by bilateral donors such as PEPFAR through the Government of Uganda, 10% by the Government of Uganda directly and 10% by multilateral donors. Local HIV experts urge that a system of patient copayment based on ability to pay, not unlike the new provisions of Obamacare in the U.S., is needed so that healthcare will become accessible to all Ugandans.
Sub-Saharan Africa has strong growth potential as a developing pharmaceutical market with population growth and increasing affluence. There is already significant investment in the region from Chinese and Indian manufacturers eager to capitalize on this growth potential. Uganda may present an attractive opportunity for global pharmaceutical manufacturers to provide an expanded range of affordable established products to patients who are able to pay through co-insurance programs to treat not only HIV but many other chronic diseases impacting the health of Ugandans. This in turn would enable IDI to focus its resources on those who are HIV positive who have the greatest need.

References

1. CIA World Factbook
2. Uganda Ministry of Health Health Sector Strategic Plan III 2010/11 – 2014/15
3. National Drug Authority Online Drug Register