Making History: The First Decade of PEPFAR, CDC, and the National HIV/AIDS Response in Namibia

Inside

Editorial .......................... 2
CDC-Namibia Welcomes New Country Director ......................... 3
Naemi Shoopala Wins Global Award ........ 4
An Oral History of the National, CDC, and PEPFAR HIV/AIDS Response in Namibia ................... 5
Dear colleagues,

It's my pleasure to introduce the PEPFAR 10-year anniversary issue of Pamwe (“Together” in Oshiwambo and Otjiherero). Just a few years after winning a bloody liberation struggle against apartheid in 1990, the government of Namibia was faced with a crisis of enormous proportions – an HIV epidemic that was ravaging the newly independent and ever-diverse society. Ten years into the national response to this epidemic we can now say that Namibia faced this challenge as it had faced previous challenges – with commitment, industry, and a spirit of camaraderie. Ten years into the national HIV response we can reflect on the fact that Namibia has achieved among the highest impact in reducing HIV incidence and AIDS-related mortality in the world. But is Namibia resting on its laurels, content to receive the accolades and encomiums of the global community? Absolutely not!

In 2014, thousands of Namibians will be infected with HIV; thousands of HIV-infected Namibians will die of HIV/AIDS, many from tuberculosis – a curable disease; hundreds of children will be infected with HIV from their mothers; thousands of Namibians receiving HIV treatment will be lost to follow-up; thousands of Namibians will be non-adherent to HIV medications and develop drug resistance; thousands of Namibians will learn that they are HIV-infected but will not access appropriate services; thousands of HIV-infected Namibians will infect, knowingly or unknowingly, their partners – those people they love most in the world; and thousands of HIV-infected Namibians will suffer from the intractable stigma that defies principles of basic human dignity, respect, and logic.

These are the challenges that remain, challenges that will test Namibia as never before given its new-found status as an “upper middle income country,” and thus no longer privy to the historic levels of support from the international community. Prime Minister Geingob has spoken eloquently about the inadequacy of this designation but as importantly the Namibian government has invested its own financial resources at unprecedented levels – in health and in HIV/AIDS, TB, and malaria. Namibia has taken ownership of the national HIV response in a manner that inspires, and inspires confidence. There is little doubt in the minds of those who know Namibia that in another 10 years Namibia may be the first country to have achieved elimination of HIV transmission.

Along the way Namibia will undoubtedly achieve the goals set forth in its National Strategic Framework for HIV/AIDS, which underpin the Fourth National Development Plan. Namibia’s ambitious new HIV treatment guidelines, elimination plan for maternal to child transmission of HIV, and strategic plans for HIV testing and male circumcision are daunting, but in Namibia, doable. Namibia can and will achieve an AIDS-free generation.

As I prepare to depart Namibia in the coming months for a starkly different landscape in Haiti, I would ask you to join me in applauding the brave warriors from across Namibia who fought this good fight for the past 10 years, and those that will continue to fight far into the future. There is still much work to be done. Let's get to it!

Namibia can and will achieve an AIDS-free generation.
The CDC-Namibia team is proud to welcome Dr. Simon Agolory, MD, as the new CDC-Namibia Country Director. Dr. Agolory follows Dr. David Lowrance, who will be taking up new duties at the CDC Country Director for Haiti starting in July 2014.

Dr. Agolory is a Lieutenant Commander in the U.S. Public Health Service and holds a Medical Degree from the University of North Carolina School of Medicine, Chapel Hill. After completing an internship and residency in internal medicine at Tulane University and a fellowship in infectious diseases at New York University (NYU), Dr. Agolory joined CDC’s Epidemic Intelligence Service in DGHA’s HIV Adult Treatment Team in 2009. He has served as the lead investigator on a variety of EPI-AID investigations and implementation science projects, and has provided extensive technical assistance to DGHA program offices globally. He has been working as a Medical Officer and Lead of the Country Support Unit for the Adult HIV Treatment Team (2012-2014). Dr. Agolory is also an adjunct faculty member in the Division of Infectious Diseases at the NYU School of Medicine, where he provides consultation on infectious diseases service and supervises medical students, medical residents, and infectious disease fellows. Dr. Agolory will begin service in his new capacity in July 2014.

As we welcome Dr. Agolory to the CDC-Namibia team and to the entire U.S. Mission to Namibia, we look forward to continuing to support the Government of the Republic of Namibia to work towards the goal of an AIDS-free generation. Our commitment to promoting innovative interventions to respond to the public health challenges facing Namibia remains strong and steadfast, and we will continue to be guided by CDC’s global health mission to protect and improve health around the world through science, policy, partnership, and evidence-based public health action.

Welcome Simon!

Tuberculosis Facts

Tuberculosis (TB) is caused by a bacterium called Mycobacterium tuberculosis. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidneys, spine, and brain. If not treated properly, TB disease can be fatal.

How TB Spreads

TB is spread through the air from one person to another. The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. People nearby may breathe in these bacteria and become infected.

TB is NOT spread by
- Shaking someone’s hand
- Sharing food or drink
- Touching bed linens or toilet seats
- Sharing toothbrushes
- Kissing

TB Symptoms

TB disease include:
- A bad cough that lasts 3 weeks or longer
- Pain in the chest
- Coughing up blood or sputum
- Weakness or fatigue
- Weight loss
- No appetite
- Chills
- Fever
- Sweating at night

TB Risk Factors

Once a person is infected with TB bacteria, the chance of developing TB disease is higher if the person:
- Has HIV infection
- Has been recently infected with TB bacteria (in the last 2 years)
- Has other health problems, like diabetes, that make it hard for the body to fight bacteria
- Abuses alcohol or uses illegal drugs
- Was not treated correctly for TB infection in the past

Testing for TB Infection

There are two kinds of tests that are used to detect TB bacteria in the body: the TB skin test (TST) and TB blood tests. These tests can be given by a health care provider or local health facility. If you have a positive reaction to either of the tests, you will be given other tests to see if you have latent TB infection or TB disease.

Learn more about TB at: http://www.cdc.gov/tb/
On April 2, 2014 Ms. Naemi Shoopala was announced as the recipient of the first annual U.S. Department of Health and Human Services (HHS) Locally Employed Staff of the Year Award. The “Secretary’s Locally Employed Staff of the Year Distinguished Service Certificate” is given annually in recognition of the contributions to the health promotion, disease prevention, research, and product safety missions of HHS and the U.S. Government’s global health mandates. Selected from among more 1,800 eligible individuals, Naemi was cited for her exceptional leadership and unwavering commitment in the fight against HIV/AIDS, contributing to the unparalleled high coverage and quality of health services in Namibia.

Naemi, who joined CDC-Namibia in October 2006 as the Field Coordinator, established and leads the CDC Field Office in northern Namibia. The Field Office provides technical assistance at decentralized levels through site visits, mentorship, and quality improvement programs. In January 2014 she moved to the CDC-Namibia Office in Windhoek to serve as the Maternal and Child Health Specialist.

Naemi remains dedicated to helping the most vulnerable, particularly women and children living with HIV/AIDS in remote areas of the country. Her passion for assisting others is contagious, and she continues to inspire not only the doctors and nurses she mentors, but her CDC and PEPFAR colleagues. Naemi’s warmth, generosity, and kindness are evident in how she engages with patients as well as her colleagues at the MoHSS, U.S. government agencies, and implementing partners. Her collegiality and technical excellence have gained her the respect and admiration of colleagues across the country and enabled her to establish strong, lasting relationships which she leverages in daily work.

Naemi’s motto is simple: *if someone else can do it, she can do it.* She continues to learn from others and apply their best practices to improve the quality of technical assistance she offers to clinicians around the country. In addition, she uses this motto to motivate colleagues and encourage them during mentorship visits. Although proud of how far Namibia has come in the fight against HIV/AIDS, she is unwilling to rest until the country achieves her ultimate dream: an AIDS-free generation.

The CDC-Namibia team congratulates Naemi on her extraordinary achievements and well-deserved recognition from the highest levels of the US government, and thanks her for her hard work over many years supporting the national HIV response. Congratulations Naemi!

## How to Prevent Diabetes

### What are the risk factors which increase the likelihood of developing diabetes?

- Being overweight or obese.
- Having a parent or sibling with diabetes.
- Having a prior history of gestational diabetes or birth of at least one baby weighing more than 4 kilograms.
- Having high blood pressure measuring 140/90 or higher.
- Having abnormal cholesterol with HDL (“good”) cholesterol is 35 or lower or triglyceride level is 250 or higher.
- Being physically inactive—exercising fewer than three times a week.

### When should I be tested for diabetes?

Anyone aged 45 years or older should consider getting tested for diabetes, especially if you are overweight. If you are younger than 45, but are overweight and have one or more risk factors (see above), you should consider getting tested.

Learn more about diabetes at: [http://www.cdc.gov/diabetes/consumer/prevent.htm](http://www.cdc.gov/diabetes/consumer/prevent.htm)
An Oral History of the National, CDC, and PEPFAR Response to HIV/AIDS in Namibia

Introduction

On March 21, 1990 Namibia gained independence from South Africa after decades of apartheid rule. Although autonomy had been achieved and economic and social gains had been made, the new nation faced significant challenges. In addition to vast income disparity and high levels of poverty, an epidemic of HIV was sweeping through the country. In 1991, out of a population of 1.8 million, there were an estimated 13,600 adults and children living with HIV and the number of those infected was rising dramatically. AIDS was the number one cause of death in the country. The prevalence of HIV among pregnant women was one of the highest in the world. Rates of tuberculosis (TB) among those living with HIV was unfathomable. And to make matters worse, decades of colonial rule had prevented the creation of a robust health workforce capable of handling the disease. But the public health leaders of Namibia, in collaboration with international partners, refused to be defeated by the epidemic. This is their story: a story of perseverance, passion, creativity, and a belief in what we can achieve together. This is their story, told in their own words.
Chapter I: The Early Years of the Epidemic 1986-2001

**Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005):** In 1983 we had the first case of HIV, while we were in exile; it was one of the teachers. By the time he died, he was grey, grey, grey, and people could see his struggle. When they came to visit him, they saw how bad he looked. I tried to order him medication from London but it was too late. At the beginning the medicines and their side effects were themselves poisonous.

**Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007):** After independence we had immediate health challenges, especially malaria, and TB and HIV were coming to the fore. Four cases of HIV were detected in Namibia in 1986. By 1990 there were more than 100 cases recorded. Of course there was no system of response, although the MOHSS tried to come up with different strategies, especially awareness-raising.

**Dr. Ndapewa Hamunime, Medical Doctor (1986-present):** HIV started with a few cases among Namibians in the late 1980s. There were few cases around 1986, I remember. A few people were tested and diagnosed with HIV by that time, although the stigma associated with HIV was very problematic. People who were tested were known and isolated by society. I remember one man, one of the first people who tested positive for HIV, even the tent he was sleeping was burned down. People really suffered due to stigma.

**Ms. Ella Shihepo, Director, Directorate of Special Programs (2003-2013):** Coming back home in 1989 people were saying HIV is a “returnee disease” since there was a belief that it was the people who were returning from exile who were the ones bringing the disease.

**Dr. Richard Kamwi, Minister of Health and Social Service (2005-present):** People were dying at that time of AIDS but it was a period of denial, of discrimination. It was frustrating for the families of those infected.

**Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005):** I was really taken aback to hear about nurses dying, young people dying, and the stigma that was attached to it. People did not understand what was happening.

**Dr. Ndapewa Hamunime, Medical Doctor (1986-present):** HIV really took Namibia by storm. It was painful to see so many patients suffering, as often people were only tested when they were already sick. It was a pity to see such a person, as there was nothing one could do except to counsel the patient to eat nutritious food and to provide symptomatic treatment to treat AIDS-related symptoms such as diarrhea, fever, and cough. It went on like that and as time passed, the cases increased. There were still no medicines available and morbidity and mortality increased.

**Madame Penehupifo Pohamba, First Lady of Namibia (2005-present):** In the first 10 years of the epidemic, HIV/AIDS was a serious problem in Namibia. We did not enjoy our weekends, as we do today. Our weekends were spent just attending funerals. We were burying people—our family members, friends, colleagues—every Saturday and Sunday. We didn't really know when that situation was going to come to an end and we thought that it was going to wipe us out. You would go to a church and you find up

*Continued on page 7*
Ten years ago, blood transfusion services across southern Africa faced a daunting challenge: How to collect enough safe blood when up to one in five potential blood donors was infected with HIV? In Namibia, where the national HIV prevalence estimate among adults peaked at 15.75% in 2002/03, the Blood Transfusion Service of Namibia (NAMBTS) used a number of strategies to successfully mobilize and retain a pool of blood donors with a much lower risk of HIV, and to screen 100% of all donated units for HIV.

In 2004, the year CDC began supporting NAMBTS through PEPFAR, the prevalence of HIV among blood donors was about one-half of one percent – a remarkable accomplishment in a country with one of the highest HIV population prevalence rates in the world.

Since 2004 PEPFAR has provided almost US$10 million in direct assistance to NAMBTS. The funds were invested across several technical and administrative areas – from supporting human resources to an innovative agreement with the South African National Blood Service (SANBS) to test Namibian blood for HIV, hepatitis B and C, and syphilis. A new computer system allowed more efficient management of data on blood donors and blood units as they moved from collection to testing to the wards; new platelet collection machines helped increase the number of platelet units available each year while reducing the number of donors needed; and new training courses opened the way for a closer collaboration between NAMBTS and the Ministry of Health and Social Services on medical education.

Dr. Bjorn von Finckenstein, NAMBTS’s Medical Director highlights that, “To a large extent, PEPFAR has made NAMBTS what it is today.” Over the last decade, PEPFAR’s investments have “contributed to the technological sophistication of NAMBTS’s blood collection and screening efforts.” In 2012 NAMBTS became fully accredited by international regulatory bodies, a rare achievement in sub-Saharan Africa and a testament to the impact of PEPFAR investments in the institution.

MS. FRIEDA KATUTA, MOHSS NATIONAL PREVENTION COORDINATOR (2008-2013): I came to really know about the epidemic around 2001. It was characterized by a lot of morbidity and mortality, so almost every Saturday one would see all of the graveyards full, with multiple burials.

MS. ZEBALDINE KANDJOU-PAKARA, CDC-NAMIBIA SENIOR FINANCIAL ANALYST (2003-PRESENT): Most people remember that there were many deaths during the early days of the epidemic. Everyone around us, in our offices, at home, was affected. There were funerals every day. Anyone could diagnose the disease, even if you were not a medical doctor. You would think to yourself, “This person is sick.”

MS. MARY GRACE MCGEEHAN, CHARGÉ D’AFFAIRES, U.S. EMBASSY (2013-PRESENT): I was in South Africa from 1999 to 2003, so I saw for myself the epidemic when it was really at its height in this region. You would see from day to day the number of people who were dying of HIV and how it was affecting everybody’s life. I remember talking with a senior Namibian official who said she would go to a funeral every weekend and sometimes there would be more than one funeral so she had to choose which one to attend.

MS. ELLA SHIHEPO, DIRECTOR, DIRECTORATE OF SPECIAL PROGRAMS (2003-2013): You would go to a meeting, look at your colleagues, and see two or three people at the table who would make you feel so sad—you knew that they shouldn’t be at the meeting at all. Or you would see a nurse at a facility and think, “This nurse should not be on duty.”

MS. HAROLD KAURO, GENERAL MANAGER, TECHNICAL OPERATIONS NIP (2000-PRESENT): When you went to Oshakati you would see that the mortuary was full and the police mortuary was also full. People were dying, especially during the first few years of the epidemic.

Continued on page 8

Safe Blood, Saving Lives
10 Years of Partnership between NAMBTS and PEPFAR

Blood bank at NAMBTS
Ms. Ella Shihepo, Director, Directorate of Special Programs (2003-2013): You just wanted the situation to end. The radio stations were continuously requesting people to take their loved ones from the mortuaries.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): I met the HIV epidemic head on, at the beginning of my career. I was a freshman in the Oshakati Nursing College, attached to Oshakati hospital. The practical training on the medical wards was a terrifying experience, though I always wanted to help other people. As a young person I began to doubt whether I had made the right career choice. As a nurse I could see the millions of questions in my patient’s eyes, as if they were saying “Please help me, don’t let me die now!” But there was very little knowledge of what to do, what to say to the patient and family about the condition, and what to offer to patients with HIV/AIDS.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): I remember that around 1997 the epidemic began to be seen as a major issue but the only things which we could do were awareness raising and prevention, as there was no treatment available at that time. ARVs (antiretroviral treatment) were non-existent in the country and the epidemic was assuming greater proportions. It instilled fear among the people. There was a hell of an outcry, with everyone looking at the Minister of Health for an answer.

Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005): We were trying to take action but when I would talk about AIDS in Parliament, people did not understand and they would say, “Oh, not AIDS again.”

Ms. Maggie Nghatanga, Director, Primary Health Care, Ministry of Health and Social Services: (1997-present): The national response at that time was not fully participatory. There was a lot of stigma. If you were HIV-positive or had AIDS, you were laid off or could not get medical or life insurance coverage.

Ms. Ella Shihepo, Director, Directorate of Special Programs (2003-2013): You would sit down as a family and there are so many orphans. There was so much discrimination, as well as suicide, which was very sad. We saw many cases where children lost property or life insurance was not paid out because their parents died of HIV/AIDS.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): The issue of discrimination was very prevalent, whether in public, health facilities, medical aid, insurance, or the workplace. To me that was the biggest challenge.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): In communities and families, as a nurse, relatives would confide in me about their new HIV diagnosis and ask, “I was told this disease has no cure, nor treatment. What should I do to live longer, what about my children and partner? What about my job?” Hopelessness, stigma, pain, fear, and worries about the loved one were the order of the day.

Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005): The challenge was that people were hiding. For example, if a couple was HIV-positive and the wife died, the man married a young girl and didn’t tell her. If somebody knowingly infected somebody else, people would try traditional things, like sleeping with a young virgin or raping a child. There was a belief that if people who were HIV-positive if slept with a virgin they would be cured.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): The same stigma that used to apply to TB now applied to HIV/AIDS. At the beginning nobody even wanted to touch a person who was HIV-positive, because out of ignorance people thought that if they shake their hand they can get it. There were lots of stories about it coming from mosquito bites and those kind of things.

Ms. Ella Shihepo, Director, Directorate of Special Programs (2003-2013): I recall one of my cousins was sick and she had just lost her husband. I was up north, at my aunt’s house and we were all together. We were having traditional beer and even though there were many people, as is customary we were using just one cup and passing it around. My cousin, when it was her turn, took the cup and drank from it. Then someone whispered to me, “No, don’t drink from it.” I knew better so I said, “Can I have that, I will drink from that.”

Ms. Adolfine April, Nurse in Charge, Katutura Hospital ART Clinic (2013-present): People were even stigmatizing this clinic, thinking that if they sit in the queue with HIV-positive people if somebody else sees them, they will think they are also HIV-positive.

Mr. Craig Dennis, Director, Potentia (2000-present): I remember patients used to use the rear entrance to Katutura Hospital. There was a road between the hospital and the chapel and patients would sit in chairs set up there. I remember in the wintertime, it was very cold for the patients to sit out there, but they were very keen not to go in through the front entrance of Katutura Hospital. The doctor and the pharmacist were set up in the chapel. The doctor worked in the chapel proper and the pharmacist dispensed drugs from the ladies’ bathroom, I understand.

Dr. Ndapewa Hamunime, Medical Doctor (1986-present): Only by the end of 1990s, around 1996, did medicine become available in the private sector. First as monotherapy, then dual therapy, and then triple therapy, which came in the private sector around the year 2008. It was a great relief for doctors when the government decided to provide free HIV treatment to the public.
Chapter II: Establishing the National Program 2002–2006

Dr. Ismael Katjitae, Senior Specialist Physician (2013–present): In early 2002, we started seeing a bad phase of the HIV epidemic. At the time I was the Head of Internal Medicine at Katutura Hospital and we saw an increasing number of people coming in with opportunistic infections, in particular tuberculosis—both pulmonary and extrapulmonary tuberculosis. The cases just kept on increasing. We were aware that a lot of these illnesses were actually due to HIV/AIDS, because at that time we had started some testing for HIV. We saw a lot of suffering.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997–2007): Initially all the HIV control efforts in Namibia came from the government. There was no input from anyone else but as we continued to show the commitment and all efforts some development partners came on board, like UNAIDS, UNICEF, WHO, and the U.S. I remember Dr. Tom Kenyon from CDC, as we worked very hard with him. He is a person with great understanding and empathy, and was really very helpful.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997–2007): Initially all the HIV control efforts in Namibia came from the government. There was no input from anyone else but as we continued to show the commitment and all efforts some development partners came on board, like UNAIDS, UNICEF, WHO, and the U.S. I remember Dr. Tom Kenyon from CDC, as we worked very hard with him. He is a person with great understanding and empathy, and was really very helpful.

Dr. Tom Kenyon, CDC-Namibia Country Director, (2002–2006): In August of 2002 Dr. Helene Gayle [the former director of CDC's National Center for HIV, STD, and TB Prevention] had been invited to do a talk in Namibia on HIV. I was based in Botswana, which had already started its program. Because Namibia was behind in its response Dr. Gayle asked me to come as well and I found myself giving a presentation with the Minister of Health and the Minister of Education in the front row. I described how Botswana was starting to respond to the horrific epidemic that they shared with Namibia and after that the Minister of Health invited CDC to come to Namibia. We were very busy in Botswana but I agreed to come and do an assessment to see what the opportunities would be.

Dr. Tom Kenyon, CDC-Namibia Country Director (2002–2006): I remember my first activity when I got to Namibia was the antenatal surveillance. Nobody had analyzed the data but there was a stack of 5,000 forms so I said, “Do you want these analyzed?” One other person and I entered the 5,000 forms and created the antenatal care report for 2000; I think I still have that report. The results showed horrific HIV prevalence in the country but differences by geographic area, which was complicated to explain. Katutura State hospital had 17% of the national burden of HIV-positive pregnant women, so I said, “Shouldn’t we have a strong program there?”

Katutura State hospital had 17% of the national burden of HIV-positive pregnant women, so I said, “Shouldn’t we have a strong program there?”

Continued on page 10
Preventing Mother-to-Child Transmission of HIV: Helping Create an AIDS-Free Generation In Namibia

Stopping the spread of HIV from mothers to infants is one of the key interventions required to achieve an AIDS-free generation. Prevention of mother to child transmission (PMTCT) services can serve as an entry point to care, treatment, and support for HIV-infected women and their HIV-exposed children and families. The PMTCT program in Namibia was introduced by the Ministry of Health and Social Services in 2002 in Oshakati and Katutura Intermediate Hospitals, a few months before the introduction of antiretroviral treatment (ART) services in public health facilities. Since then the program has expanded nationally through integration within maternal and child health services, including antenatal care (ANC) and maternity. Early Infant Diagnosis (EID) using HIV DNA PCR with dried blood spot (DBS) for HIV-exposed babies was introduced in 2005.

By 2009, about 80% of all the health facilities in the country were providing antenatal care services with close to 90% providing PMTCT services. These services are now offered routinely to all pregnant women, their newborn babies, and their partners in 94% of all health facilities across Namibia. HIV rapid testing with same day results is provided in PMTCT settings, resulting in increased uptake of PMTCT services in Namibia. In 2012/2013, the PMTCT program, reached over 55,000 pregnant women with HIV testing and counselling services. That year, 8,612 HIV positive women were reached with ARVs for PMTCT (91% of those in need), approximately half of whom were already on ART, and the positivity rate for EID for children less than nine weeks old was 1.0%. Since the start of the program in 2002, the estimated risk of transmitting HIV from an HIV-positive mother to her infant reduced from 32% to just 4% in 2013. With the adoption of Option B+ (i.e., lifelong ART for all pregnant and breastfeeding women) by the Namibia MoHSS in 2013, as well as the roll-out of the National Elimination of Mother to Child Transmission (EMTCT) Strategy, Namibia is poised to increase coverage and decrease transmission even further. PEPFAR remains a critical partner in the scale up of these prevention services and identification of HIV-positive children and their linkage into care and treatment. Namibia continues to surprise the world with the success of its PMTCT program, and may be the first country to fully eliminate MTCT. Like the ART program, the PMTCT program has been hailed internationally a great success stories for the country. Since 2002, huge strides have been made with regards to expanding coverage and ensuring quality so that the vast majority of HIV-exposed infants remain HIV-negative. Many HIV-positive mothers continue to express their appreciation to the MoHSS and PEPFAR for being able to protect the health and future of their children.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007):
In 2002 we decided to establish a program for the prevention of mother to child infection (PMTCT). That was the second significant response to epidemic, with the first being prevention through awareness-raising.

Dr. Tom Kenyon, CDC-Namibia Country Director (2002-2006): We decided to do something because preceding PEPFAR was something called the Life Initiative, which Clinton had started, and a PMTCT initiative, which Bush started, so we had some funding for PMTCT. We had enough to get an office established so I drove to Namibia from Botswana. The Embassy had no space but the Public Affairs Office loaned us an office.

I also got a desk in the MOHSS in the AIDS Control Program so I went back and forth.

Ms. Ella Shihepo, Director, Directorate of Special Programs, (2003-2013): When Dr. Kenyon came to Namibia from Botswana, we worked together with him and we set up the office. We sat down with the MOHSS and said we have to start doing something. Our first intervention in terms of treatment, once we had scientific evidence that PMTCT is possible, was a pilot program for PMTCT. We started with Katutura and Oshakati Hospital since that’s where we have the majority of people in need. We put together a plan and when Dr. Kenyon came we started recruiting doctors and training people. Dr.

Continued on page 11
Amathila kept reminding us that, “We should move forward.”

Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005): Ella and I worked very hard and in July 2003, I launched the program in the Ministry. Dr. Shangula and Ella were with me throughout the process, as we started treating mainly women. We started providing PMTCT services in Katutura and Oshakati, and we travelled with Tom Kenyon to the north. Those were the days; we worked very hard but I was quite happy to see the progress being made.

Dr. Richard Kamwi, Minister of Health and Social Service (2005-present): I recall vividly Dr. Libertine Amathila was then Minister and Dr. Shangula was Permanent Secretary, and I was the Deputy Minister (2000-2005). Dr. Amathila would call me “Deputy”—she never addressed me as Dr. Kamwi. We had such an excellent relationship. I remember when Dr. Amathila launched the PMTCT program at the Country Club. The primary objective of the program was to start a pilot for the two major hospitals, that is Katutura Intermediate Hospital and Oshakati Intermediate Hospital.

Dr. Tom Kenyon, CDC-Namibia Country Director (2002-2006): The Minister herself was looking after the pilot project in Oshakati and Katutura. She was terrific, but the staff was scared to say anything was wrong like, “We don’t have counsellors” or “We don’t have test kits.” But the Minister herself had seen the issues and there was openness to change. For CDC it helped to be inside the MOHSS; we weren’t outside. We were staying late together, huddled in cramped offices with no infrastructure, but there was a spirit of camaraderie that’s rare.

Ms. Zebaldine Kandjou-Pakarae, CDC-Namibia Senior Financial Analyst (2003-present): Initially when we started we were working very closely with the MOHSS. We had to do more than one person’s job, as it was a very busy time at the start of the epidemic. Both the CDC staff and our Ministry counterparts would say, “8 o’clock in the evening is the same as 8 o’clock in the morning.” We worked on Saturdays and Sundays, drafting guidelines, working on training materials. It was so busy, with a lot of travel to the regions, but we did everything together.

Dr. Tom Kenyon, CDC-Namibia Country Director (2002-2006): The Minister Amathila would be at my door every week saying, “Tom, we have got to start in Oshakati” or “Tom, we have got to start in Otjiwarongo.” Dr. Goraseb would say “Tom, we have got to go.” I got to Namibia in August 2002 and the program started in May 2003. I remember the launch of the PMTCT program and rolling it out to clinic after clinic.

Dr. Richard Kamwi, Minister of Health and Social Service (2005-present): Once we started the pilot we saw HIV-positive pregnant mothers start giving birth to HIV-negative babies, and then the success stories began. That was the time of the U.N. General Assembly Special Session on HIV/AIDS (UNGASS) and immediately after learning about what the Government of Namibia has done and following the outcry of Kofi Annan, we first saw in the Global Fund coming in, with Namibia as a recipient.

Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005): In 2003 we were in Geneva and I heard about this PEPFAR initiative and that PEPFAR had chosen 12 countries, but that Namibia was excluded. I put my foot down and said, “In Namibia people are dying of AIDS and HIV-related diseases. How come South Africa is in and Namibia has been excluded?”

Continued on page 12
Ms. Ella Shihepo, Director, Directorate of Special Programs, (2003-2013): Namibia was initially not on the list of countries to receive PEPFAR resources. But Dr. Amathila went to a meeting and started having discussions with the U.S. Government and that is how Namibia was included. She said we have the same diseases as other countries in southern Africa and she lobbied until Namibia was selected as a recipient of PEPFAR funding.

Ms. Maggie Nghatanga, Director, Primary Health Care, Ministry of Health and Social Services: (1997-present): At that time the other ministries were reluctant to get involved or address HIV/AIDS, as they thought it was just a health issue. Although there was a committee consisting of all of the ministries, they couldn't see how HIV affected them. The MOHSS tried to educate the other ministries on the issue and slowly, they began to come on board, beginning with the Ministry of Education.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): In the Ministry the Directorate of Primary Health Care was responsible for malaria, TB, HIV/AIDS, environmental health, health promotion and all the components of primary health care. These major challenges of HIV/AIDS, TB, and malaria were overwhelming the Directorate. I was concerned that maybe these major challenges would not getting proper attention. I approached the Public Service Commission (PSC) to create a new Directorate, which then I called the Directorate of Special Programmes (DSP) to coordinate the multi-sectoral response.

Dr. Ismael Katjitae, Senior Specialist Physician (2013-present): The Ministry identified that HIV is going to create a big problem if it's not addressed so they mobilized everyone and at that time I was one of the physicians who was in the country and was available. Obviously all of the action started in Windhoek as we looked at ways to start providing antiretroviral treatment (ART). But just starting and bringing drugs would not have helped. You need to have a plan, you need to have well-trained people, and you needed to have the drugs.

Dr. Ndapewa Hamunime, Medical Doctor (1986-present): The government had a roll-out plan for PMTCT but the demand over took that plan so a second strategy was needed to provide treatment throughout the country. That was the time that support from PEPFAR came in, which enabled the government to provide services to other regions and populations.

Dr. Tom Kenyon, CDC-Namibia Country Director (2002-2006): When I first got to Namibia we were not treating anybody but the Ministry wanted to move on with treatment. There were people like Drs. Katjitae and Flavia Mugala who were already doing treatment in the private sector.

Ms. Deqa Ali, I-TECH Country Director (2008-present): CDC and HRSA invited I-TECH to help the MOHSS to roll out care and treatment in 2003. We came to Namibia with an invitation from CDC and conducted our first needs assessment in 2003, and helped develop the care and treatment trainings for health providers.

Dr. Ismael Katjitae, Senior Specialist Physician (2013-present): PEPFAR and Tom Kenyon were instrumental in obtaining funding to set up the hospital. “PEPFAR came to our rescue,” we would say. CDC

Continued on page 13
especially helped through I-TECH, which assisted with the planning. In addition, experts from CDC and I-TECH like Mark Netherda and John Cohen came to Namibia to help set up a training curriculum and guidelines. They also used the WHO guidelines at that time as a resource. We also got input from CDC and other partners like WHO. There were too many partners to mention all of them but CDC and I-TECH played a big role.

Dr. Roopal Patel, CDC-Namibia Maternal and Child Health Technical Advisor (2011-present): Training and deploying skilled health workers was critical to expanding care and treatment for HIV-positive people. I-TECH not only contributed to in-service trainings for health care workers but also to pre-service training, through its support to UNAM School of Nursing and Public Health, which started in 2004.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): Once we set up the guidelines and training curricula for the treatment of HIV/AIDS we had to select the sites. We looked at which sites had the capacity of human resources and laboratory facilities in order to be able to start providing treatment. Initially it was only Windhoek and Oshakati that met our criteria.

Dr. Ismael Katjitae, Senior Specialist Physician (2013-present): The day that we started with the roll-out of the program it was quite chaotic. The moment that people heard that ART was available they all came. The place was just overflowing. There were patients who had to wait for a whole day to be seen, to be assessed, and finally to be put on treatment. I think it took about four weeks for someone to have gone through the system and be put on treatment. There were more, far more patients to be seen than doctors to treat them or health care providers to care for them. But Dr. Shangula provided an enabling and supportive environment. He is a very good man who cared for the well-being of this nation.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): My first job in Namibia was as the lead physician providing HIV care and treatment at Oshakati State Hospital. I started in July 2004, just at the beginning of the expansion of the HIV care and treatment program in the public sector. When the HIV clinic first opened in Oshakati it was the only one in the northern part Namibia so it catered for several regions. We were only two physicians, a pharmacist, and a few nurses but we quickly became responsible for starting about 500 patients on treatment who were on the register. Very soon we were swamped with patients coming from Oshana, Kunene, Omusati, Ohangwena, and Oshikoto regions. It was hectic and we were swamped, as the need was just overwhelming. Because people had waited so long to start treatment many of those who came were basically on their deathbeds.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): At Oshakati Hospital, rooms in medical wards were always full over capacity and ward corridors were lined up with mattresses so nurses would have to kneel down in order to provide care to their patients. Thanks to the launch of the ART program at Oshakati, we began to see a decline in HIV related hospital admissions.

Dr. Gram Mutandi, CDC-Namibia HIV and Treatment Team Lead (2007-present): We used to start work at 8am but often wouldn’t finish until 10pm, 11pm, or midnight. Being the only hospital in the region that was offering HIV care and treatment at that time, with all the other hospitals referring patients to us, meant that by the time the patient came to Oshakati they had been waiting for treatment for several months just to get an appointment. What it meant was when I saw a patient in a queue, I knew that these patients had been waiting for months to get this opportunity, because their hospital would only refer a few. We started allocating days to specific regions so that on Monday we are saw patients from this particular district, on Tuesday from a different district. That was the only way we could handle the volume.

Dr. Ismael Katjitae

Dr. Gram Mutandi

Ms. Kirsten Moeller Jensen

Ms. Kirsten Moeller Jensen, DAPP Country Director (2006-present): When we started the Total Control of the Epidemic (TCE) program in 2005 the role of Development Aid from People to People (DAPP) was to link communities to health services, and that was no small task. At that time there was only treatment available in two places in Namibia, namely Katutura and Oshakati hospitals. Many people were afraid of knowing their status and so many people were dying. The issue of mobilizing people to know their status was a big thing so we started by offering HIV testing to our own staff. We knew that it would be easier for them to mobilize their communities if they first knew their own HIV status.

Ms. Adolfine April, Nurse in Charge Katutura Hospital ART Clinic (2013-present): Along with stigma, a major challenge at that time it was the lack of staff. Staff was a major problem, as was the lack of space. The space was so limited that we couldn’t see our patients in private. We only two three rooms but we had three doctors so we had to share. There was one room for the nurses to do everything, from drawing blood to exams to counseling.

Continued on page 14
hospital/clinic/region is ready and will need the following staff.” We would then deal with the recruitment and HR management issues so the doctor, nurse, or pharmacist could start working.

Dr. Tom Kenyon, CDC-Namibia Country Director (2002-2006): The numbers of patients were going up but we had a bottleneck when it came to staff so we had to figure out what to do. Before we started working with Potentia, Zimbabwean doctors were showing up on my doorstep, as that was a particularly difficult time in Zimbabwe. One doctor, I can’t remember her name, showed up said, “I am here to work.” We needed doctors so I went up to the Embassy and asked “Do we have a mechanism to hire her?” The Embassy put her on a 30-day contract, we went to the Katutura State Hospital, and she started working. Eventually our partnership with Potentia created a much more robust and effective system for recruitment.

Dr. Craig Dennis, Director, Potentia (2000-present): In 2005 we started our official relationship with CDC and the MOHSS. We played a vital role by allowing the Ministry to cut through the bureaucratic red tape and in a very short space of time, to find and source health care workers, and bring them into the country. When the Ministry was ready for staff they would contact us and say, “This hospital/clinic/region is ready and will need the following staff.” We would then deal with the recruitment and HR management issues so the doctor, nurse, or pharmacist could start working.

Ms. Adolphine April

Mr. Craig Dennis, Director, Potentia (2000-present): The recruitment process worked very well, and we had 100% cooperation between CDC, the Ministry, and Potentia. There was a national need and everyone was pulling in the same direction. Sometimes there were issues with accommodation in remote areas, but for the most part integration of medical personnel was fairly smooth and we found that people were quite prepared to move into remote areas and establish themselves in Namibia.

Dr. Gram Mutandi, CDC-Namibia HIV care and Treatment Team Lead (2007-present): With the support of PEPFAR and the Global Fund, and with Potentia working closely with the government, we were able to bring in a massive number of doctors and other staff, like myself, from the surrounding countries and they managed to post these providers to health facilities around the country. My responsibility then became providing mentorship and training, so the new doctors would come to Oshakati for a formal training on ART and spend between two to four weeks working with us to see how we managed patients, how we managed our workflow, and how to manage an ART clinic. Having gotten that experience they would then be sent back to their facilities to start an ART clinic. This was the system in 2006 until early 2007 and it enabled treatment to be decentralized to all 34 health districts throughout the country.

Mr. Edington Dzinotyiweyi, CDC-Namibia Prevention/HTC Technical Advisor (2007-present): Once the treatment program was underway, health care providers were overwhelmed and there were very few of them, so they were not doing HIV testing and counseling (HTC). HTC is the gateway to HIV care and treatment and is an essential part of the program but in the beginning health care providers were so overwhelmed that they did not have time to do it.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): One of the last things I did before I left my position was ask the team, “How do we scale up the uptake in of HIV testing and counseling?” That had been a challenge, as in the beginning HIV testing was mostly done based on clinical indications. Most people did not seek out testing, as they were apprehensive to know their HIV status.

Mr. Edington Dzinotyiweyi, CDC-Namibia Prevention/HTC Technical Advisor (2007-present): Once the MOHSS identified the need for HTC in health facilities I was tasked to assess the feasibility of implementing HTC, in my role with Family Health International. They decided to create a cadre of staff known as community counselors, who are lay people trained to do HTC and deployed to public health facilities. In 2005 we wrote to the Permanent Secretary, Dr. Shangula, and asked him to approve the policy allowing community counselors to do testing and he did.

The introduction of HIV rapid testing is a huge success, and no one would have imagined it would be the strong program it is now.

Mr. Craig Dennis, Director, Potentia (2000-present): The recruitment process worked very well, and we had 100% cooperation between CDC, the Ministry, and Potentia. There was a national need and everyone was pulling in the same direction. Sometimes there were issues with accommodation in remote areas, but for the most part integration of medical personnel was fairly smooth and we found that people were quite prepared to move into remote areas and establish themselves in Namibia.

An counsellor conducting an HIV test

Continued on page 15
On May 15, 2014 Potentia Human Resources Consultancy was awarded the CDC Center for Global Health (CGH) Director’s Partnership Award. Potentia, a CDC-Namibia partner since 2005, was cited for exceptional and unparalleled performance, perseverance, collaboration, and creativity in support to the MoHSS to scale-up clinical services in Namibian public health facilities and the subsequent human resources for health transition.

Through PEPFAR funding, CDC-Namibia has been collaborating with Potentia since 2005 to hire and deploy health care workers to public health care facilities across Namibia. At the request of the Ministry of Health and Social Services (MOHSS), Potentia brought hundreds of highly-qualified medical officers, nurses, pharmacy staff, and M&E professionals into the public health sector in Namibia, allowing for the massive scale-up of HIV/AIDS services in the country. Tens of thousands of HIV-positive individuals have received care and treatment services from these health professionals, thus mitigating the impact of HIV on Namibia.

Potentia Wins CDC/CGH Award for Partnership

by reducing new infections and AIDS-related mortality. Potentia has been an unsung hero in this scale-up, working quietly behind the scenes to recruit, hire, manage, and retain these staff over the past nine years.

Always professional, exceptionally responsive and diligent, Potentia has been a true partner to both CDC and the MOHSS. This has never been truer than over the last three years, during absorption of these clinical staff into the MOHSS ranks. Potentia has been a vital part of the process, providing expert technical assistance to the MoHSS and other stakeholders on human resources management, Namibian labor law, and organizational development. This assistance has enabled MoHSS to successfully motivate for and absorb hundreds of expatriate and local health care providers and thus maintain high-quality services in the public health sector. Endlessly creative, hard-working, collaborative and thoughtful, Potentia is a model for cooperative agreement partners around the world and an essential part of Namibia’s ability to work towards an AIDS-free generation.
public health facilities. Rapid HIV testing in Namibia started in 2005 with eight facilities offering this service by the end of the year. Now there are over 345 health facilities offering rapid testing and 550 community counselors providing HTC services.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): Once we started HTC I undertook a trip with some of my colleagues to the USA to observe the uptake of people in voluntary counseling and testing. That’s when I learned that there is a specific HIV testing day, which motivates people to get tested. When I came back home I wrote up a protocol to establish the National HIV Testing Day, which is now an annual event. I learned about this practice in Chicago.

Edington Dzinotyiweyi, CDC-Namibia Prevention/HTC Technical Advisor (2007-present): I remember that visit well. I took the then PS and

Dr. Richard Kamwi during the National HIV Testing Day in 2011
a MOHSS program manager to the U.S. to observe how they were doing testing days and when I came back, I was requested to start Namibia’s own testing event. Since then it has become a very popular event, and is an opportunity to for people to be tested and learn their status.

Dr. Ndapewa Hamunime, Medical Doctor (1986-present): With PEPFAR support, by 2006 all regions and all district hospitals were providing ART, PMTCT, and HTC.

Namibia quickly reached its national targets and contributed to helping PEPFAR meet its global goals in a very short period. Even though treatment was costly, the impact was very positive because people were able to regain their health, go back to work, and became productive citizens once more.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): Those were the days of miracles. It was incredible to see patients go from being on their deathbeds to sitting in a wheelchair, to being assisted to walk, to coming in on their own—all within just a few weeks or months. As health care providers that progress was our consolation and reward for the long hours we put in. You could see exactly how our work and the medication were saving lives. We began turning the tide of the epidemic by 2006. Truly, it’s remarkable how much Namibia achieved in just a few short years.

Impressive Gains Made in the Uptake of HIV Testing and Counselling

HIV counseling and testing is the gateway to prevention, care, and treatment services. Because of the pressing need to scale up HIV testing and counseling (HTC), coupled with a critical shortage of health care providers, the Ministry of Health and Social Services (MoHSS) created the community counselor program in 2004. With CDC support, 139 community counselors were trained and deployed to 45 public health facilities by the end of 2005. The training was conducted using a CDC-adapted six week training curriculum. By the end of 2006, the total number of trained community counselors had increased to 175, covering 74 health facilities. Eight years later there are approximately 551 community counselors offering HIV testing in 343 public health facilities across the country, for more than 90% coverage.

From its inception, the MOHSS has owned and managed the program and has been responsible for policy development and supervision, with CDC providing funding and technical assistance, including for quality assurance. Almost all public health facilities in Namibia now offer HIV testing system, and services are expanding beyond fixed sites. As part of a new integrated national HTC strategy, PEPFAR is supporting the MoHSS to scale-up community-based HTC as well mobile and outreach services. In addition, PEPFAR is working closely to expand coverage of provider-initiated HTC and couples HTC. Together, these approaches will increase the number of men, couples, and first-time testers receiving HTC, and will identify HIV-positive individuals before they become too sick.

Utilizing multiple strategies of HTC has increased the availability and quality HIV rapid testing over the last nine years, with the program routinely exceeding its targets. More than 305,000 individuals to receive services every year, representing about 15% of the total Namibian population. Over the next few years CDC will support the country to strengthen linkages between HTC and clinical services, and to complete the transition of community counselors to the government payroll, which will help ensure the sustainability and continued success of the national HTC program.
Chapter III:
Scaling Up and Strengthening Systems
2007–2013

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): By the time I left in 2007, a very good foundation has already been laid. I think that the government was able to face the challenge of HIV/AIDS, and with the assistance of the development partners, to achieve great successes in health, especially in HIV/AIDS control.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): In 2007 the Ministry was working to finish the decentralization of HIV/AIDS services and build up all of the supporting systems for the program, including on the laboratory side.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997-2007): Once we put in place the infrastructure in Oshakati and Katutura Hospitals for PMTCT we then started working with NIP to strengthen its diagnostic capacity. We needed to be able to follow-up babies after the administration of nevirapine for PMTCT in order to establish how many of them were actually HIV-negative. Because even if a child may be initially test HIV-positive, it may not necessarily be that she has the virus, but just the antigens from the mother.

Mr. Harold Kaura, General Manager, Technical Operations NIP (2000-present): I felt so fortunate when I saw Souley’s CV and the work he was doing with CDC. I went to the CEO of NIP then and I said, “I want to recruit this guy.” Souley would play an important advisory role and would be instrumental in our efforts. He was the person we went to for assistance and the two of us set up the molecular diagnostic department. We went through that whole process together, the renovation process, the purchase of equipment, the recruitment, and making sure we had the correct people in that department. Someone like Souley has really been instrumental in the response. We have been together throughout.

Mr. Souleymane Sawadogo, CDC-Namibia Laboratory Technical Advisor (2005-present): Before I came to Namibia I was working at CDC Headquarters in Atlanta, where we were trying to figure out new methodologies of HIV testing to detect HIV earlier on, especially for babies born to HIV-positive women. We started doing PCR with dried blood spots in Atlanta to test for HIV and detect HIV early and with that approach we could see within six weeks—rather than 18 months—if a child was HIV-positive; we called this technique Early Infant Diagnosis (EID). Tom Kenyon, the first CDC Country Director, heard about this work and asked me to come to Namibia to help set up the molecular diagnostic lab at NIP so that we could do EID.

Mr. Souleymane Sawadogo, CDC-Namibia Laboratory Technical Advisor (2005-present): I remember helping set up the molecular diagnostic lab so that Namibia was

Continued on page 19
Strengthening Laboratory Systems and Expanding Point of Care Testing
Priority Laboratory Interventions for PEPFAR and Namibia

The 38 public sector laboratories in the Namibia Institute of Pathology (NIP) network provide services that enable the determination of HIV treatment eligibility, diagnosis of tuberculosis (TB), and identification of HIV-related infections. The more than 400 staff (55% female) in the NIP laboratories perform almost 4 million tests every year and offer a wide range of testing services, and complement their capacity with resources in South Africa. Over the last ten years PEPFAR has supported the strengthening of these services, including for quality assurance, and the initiation and/or completion of accreditation processes for six facilities. Access to laboratory services will be improved through the continued roll-out of point-of-care (POC) technologies, including diagnostics for CD4, TB/MDR-TB, hepatitis, syphilis, and others. Operational research conducted by the MoHSS and CDC since 2011 has shown the potential of POC testing to reduce the turnaround time on key tests from weeks to minutes, which can increase the retention of patients in services. The joint research has also shown that POC testing can be effectively conducted by lay cadres, such as the community counsellors who perform HIV rapid testing.

The MoHSS and PEPFAR are investing in various POC technologies, including for CD4 testing, a major criteria for HIV treatment eligibility. In 2005 only three laboratories were able to do CD4 testing; now the number is eight, with POC CD4 testing being done at an additional ten. The MoHSS has a plan to scale up POC CD4 testing to 180 health facilities, which will transform the way testing is performed, and create significant savings in terms of both time and money. The roll-out of this system will be rigorously monitored and evaluated by the MoHSS and PEPFAR to ensure quality, accessibility, and effectiveness. The further adoption of POC diagnostics will continue to be integrated into the tiered national laboratory system with PEPFAR support, particularly into the new National Public Health Laboratory (NPHL).

In 2013, with PEPFAR support, the MOHSS launched the NPHL Policy and Strategic Plan. The Policy represents a huge leap forward for the Namibian laboratory system and will increase the quality of public health laboratory services in the country. PEPFAR will support the establishment and strengthening of the NPHL network over the next few years to improve referral systems and support integrated services. In order to promote sustainability and local ownership, the MOHSS has taken on financial responsibility for the salaries of 19 of 22 staff previously supported by PEPFAR, as well as more than US$7 million in costs for bioclinical monitoring of HIV-positive patients, and will take on another US$3 million within the next two years. These policy and programmatic successes reflect the strong leadership taken by Namibia of its laboratory systems and networks.

### Number of HIV and TB Tests Performed by the Namibia Institute of Pathology, 2012/2013

<table>
<thead>
<tr>
<th>Type of Test</th>
<th>Number Performed in 2012/2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4</td>
<td>245,476</td>
</tr>
<tr>
<td>HIV Viral Load</td>
<td>72,080</td>
</tr>
<tr>
<td>HIV ELISA</td>
<td>31,410</td>
</tr>
<tr>
<td>HIV DNA PCR</td>
<td>11,334</td>
</tr>
<tr>
<td>HIV Drug Resistance</td>
<td>115</td>
</tr>
<tr>
<td>TB Microscopy</td>
<td>147,293</td>
</tr>
<tr>
<td>Bacteriological DNA (GeneXpert)</td>
<td>16,766</td>
</tr>
<tr>
<td>Rapid Bact BD MGIT TBc ID</td>
<td>2,150</td>
</tr>
<tr>
<td>Total</td>
<td>526,624</td>
</tr>
</tbody>
</table>

Mr. Bester Malimba, TB Lab Technician at NIP
able to do EID and introduce viral load testing. I was involved in training, design, everything. At that time we were a small community we all knew each other—doctors, nurses, lab staff. When I look back I find those days to be very inspiring, as you could see the effect of all these people working for the same goal: scaling up HIV treatment to save lives in Namibia.

Mr. Harold Kaura, General Manager, Technical Operations NIP (2000-present): Thanks to the support of Souley and CDC we are now able to do 90% of routine laboratory testing in the peripheral sites [40 NIP laboratories, public health facilities] especially for bioclinical monitoring of HIV-positive patients. Only specialist testing like molecular diagnostics is actually referred to the reference laboratories. We are now looking into expanding the number of services which can be provided at the point of care, including CD4 testing, to increase accessibility.

Mr. Souleymane Sawadogo, CDC-Namibia Laboratory Technical Advisor (2005-present): EID testing started as a pilot program in Katutura, Windhoek Central, and Onadjokwe hospitals and now we have more than 220 facilities covered. We made great progress together but are focused on everything else we still need to do, particularly in terms of supporting high-burden health facilities and regions.

Ms. Naemi Shoopala, CDC-Namibia Maternal Child Health Specialist (2006-present): The northern regions of Namibia are densely populated...
and have higher rates of HIV. Recognizing this, in 2006 Dr. Kenyon opened the CDC Oshakati Field Office to provide technical support to the northern regions. The MoHSS had embarked upon the national rapid scale up ART, PMTCT, and HTC services, but the infrastructure, capacity, and human resources were a challenge. As the first Coordinator of that office, my role was to work closely with the MOHSS regional and national program managers, as well as the CDC office in Windhoek, to establish the field coordination program. Our goal was to help the MOHSS to coordinate and roll-out services at district hospitals, health centers, and clinics, to provide on-site training, and to mentor nurses in clinical services, as well as to support quality improvement activities.

**Dr. Dave Lowrance, CDC-Namibia Country Director (2011-present):** Tom [Kenyon] recognized early on that given the disproportionate burden of the epidemic in the north there was a need to target extra resources to those regions, otherwise the country would never really get the epidemic under control.

Ms. Ella Shihepo, Director, Directorate of Special Programs (2003-2013): Naemi and the rest of the Field Office team have been valuable assets to the MOHSS and the health facilities in the north, providing critical support in many different areas. Especially in the early years it was overwhelming to try to do everything and they provided much needed assistance, especially in terms of training, supportive supervision, and mentorship.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): During our mentoring and support visits to ART and ANC/PMTCT clinics we saw the challenges facing our fellow clinicians and did our best to help them troubleshoot and resolve them. Between the volume of patients and all the complexities of HIV/AIDS it was tough on them so we tried to keep them motivated, cheer them on, and tell them what great work they were doing. We gave them tools and offered technical guidance and support.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): It was amazing to see the change over time in terms of patients’ survival. A couple of years after implementation and the scale-up we started seeing a difference in the clinical picture, with patients looking healthy and strong. The reports from the electronic patient monitoring databases of most hospitals showed that more than 95% of patients enrolled in HIV care were working and ambulatory. Once common, it became rare to find patients categorized as bedridden. This was a clear indication that we were fighting a winnable battle.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): Once we moved out of the crisis stage of the response and had basic systems in place we started to pay more attention to the issue of quality. We noted that the program had successfully ramped up in terms of geographic coverage and the number of patients receiving care and treatment was growing, but began to realize that as much as the excitement was focused on the quantities of services provided, this would ultimately be meaningless unless equal attention was paid towards the quality of those services. If services are provided but do not meet the minimum clinical standards, the clinical outcomes of most patients would be under serious threat and could unfortunately have deadly repercussions in the long term. Quality assurance and quality improvement are pillars of an effective HIV/AIDS program so CDC and the MOHSS worked to establish a program to address these topics; that program is now known as HEALTHQUAL.

Ms. Christine Gordon, Quality Assurance Program Manager, MOHSS (2004-present): Ensuring the quality of HIV/AIDS services is part of how we ensure that people with HIV stay alive. But quality improvement is a continuous process, not something that happens overnight. Gram and CDC have been with us throughout that process, starting in 2007, providing the resources and technical expertise necessary to scale up the HEALTHQUAL program to 34 district hospitals.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): The success of quality improvement and assurance activities depends on the commitment of clinicians and program managers to using data to inform decision-making. In the beginning it took some time to get people used to this way of thinking, but the MOHSS HIV program management—including Ms. Francina Tjituka, Dr. Ndapewa Hamunime, Ms. Claudia Mbapaha and others—as well as Ms. Gordon and her team at the QA Division, brought about that change. It was remarkable to see teams of doctors, nurses, pharmacy staff, laboratory technicians, and data clerks come together for the first time to review results, talk about challenges and bottlenecks, and work out solutions. We used to have to provide a lot of technical assistance for this but people have really embraced this data-driven analysis to services.

Ms. Sadhna Patel, CDC-Namibia Strategic Information Team Leader (2009-present): The issue of data use is central to a sustainable HIV program. When I first came to Namibia in 2009 I was the only person working on strategic information at CDC and there were very few people at the Ministry focusing on it. The team that was there, the Response Management and Evaluation unit, considered their basic function reporting to donors and fulfilling all their requests. They took the “R” in their unit title very seriously, but the “M and E” did not receive as much attention.

**Continued on page 21**
Supporting Evidence-Based Decision-Making for Impact: Strategic Information

The term "strategic information" (SI) encompasses many domains, including monitoring and evaluation, surveys and surveillance, health management information systems, and operational research. Although these arenas are vastly different, they share a purpose: to provide robust evidence used to inform program planning, management, and implementation. Particularly in the context of limited or declining resources, evidence-based decision-making is essential to maximizing the impact and efficiency of investments, both financial and technical. As such, SI has been a major pillar of CDC’s support to Namibia for the last ten years and a priority for the future. But SI does not stand alone; instead it crosses and covers multiple areas, imbuing each with the data and analytical skills required to deliver effective services to those in need.

For example, Namibia has perhaps the most complete longitudinal HIV treatment patient-level database in the world, but until recently the information it contained was not being used. With the support of CDC, the Ministry of Health and Social Services (MOHSS), was able to merge and migrate the data in the system and to initiate in-depth, subnational analysis of patient outcomes since 2004. This data will be used to assess the HIV treatment program’s effectiveness and quality, and the process will be routinized to ensure its sustainability and integration with ongoing work.

Similarly, thanks to the innovative spirit of the MOHSS and technical assistance from CDC, Namibia now has the first and only HIV program in the world that includes TB data in its patient care booklets. Given the high rate of HIV/TB co-infection in the country, such integration will promote more comprehensive care and treatment services.

In the realm of HIV testing and counseling (HTC), in 2013 CDC supported the merger of multiple datasets to enable the first national analysis of the HTC program. The results of this analysis were used in the development of an evidence-based national HTC strategy, which led the country to change the emphasis placed on various approaches to HTC and make greater use of cost-effective models. In 2014 the MOHSS and CDC will evaluate the impact and effectiveness of the national community counselor program, which provides the preponderance of HTC services in Namibia’s public health facilities, so gain a greater understanding of potential improvements and reforms.

Since 2002 Namibia has been conducting HIV surveillance among women attending antenatal care (ANC). In the initial years CDC provided much of the financial and technical support for this biannual survey, but over time the MOHSS has taken on a greater role in all aspects of the execution—a true transition success story. In 2014 the MOHSS will begin using prevention of mother-to-child transmission of HIV (PMTCT) program data for ANC surveillance, which represents a technical evolution and move towards a more sustainable approach. These efforts will be complemented by the implementation of a PMTCT effectiveness evaluation in 2014 by CDC and the MOHSS.

Whether it’s the first integrated bio-behavioral sentinel survey among key populations, the upgrading of health information systems, the development of unique patient identifiers, or the harmonization of indicators, SI has the potential to dramatically change the way that programs are developed and implemented. By June 2014 more than 70% of regions in Namibia will have received training from CDC and the MOHSS on how to conduct data reviews, which will enable them to make evidence-based decisions at all levels, including within individual health facilities. These decisions will improve the quality of care and treatment offered and strengthen the national response to the HIV/AIDS epidemic.

Ms. Anna Jonas, Chief for Response Monitoring and Evaluation, MOHSS (2008-present): In the early years we had very few people working in RM&E and we were busy just trying to respond to the requests of Global Fund, PEPFAR, and UNAIDS. But with the support of CDC, including the SI team lead Sadhna, we realized that we needed to do more to address the basic building blocks of RM&E. This effort includes analyzing data and looking at trends, conducting surveys and surveillance, and implementing operational research activities. In addition, we realized the importance of data use at the different levels, and the contribution to data quality. To this end the MOHSS, with support from CDC, began a process of rolling out regional data reviews, which is envisioned to be conducted on a quarterly basis.

Ms. Sadhna Patel, CDC-Namibia Strategic Information Team Leader (2009-present): Over the last few years we’ve been able to support the Anna and her team to undertake a lot of critical projects. For example, CDC is helping the MOHSS analyze ten years of HIV treatment data to look at patient outcomes; that is a project which very few countries in Africa could carry out right now.

Ms. Anna Jonas, Chief for Response Monitoring and Evaluation, MOHSS (2008-present): I am proud of the importance DSP and MOHSS is placing on data and data systems. The studies and analyses that are happening right now will result in more informed decision-making, as well as dissemination of results in peer-reviewed journal articles so that the great work of Namibia can finally be recognized. Our partnership with CDC has been a big part of the success of our work in this area, as well as in building up the evidence base regarding key populations. With the support of CDC, we will be able to provide this information [on key populations] to assist with the development of targeted, high-impact interventions.

Continued on page 22
Ms. Sadhna Patel, CDC-Namibia Strategic Information Advisor (2009-present): Namibia is catching up with analyses of program data and implementing innovative surveillance methods. In addition, a lot of effort is going into developing and integrating health information systems. This is an exciting time for strategic information activities in Namibia and both CDC and the MOHSS are building up expert teams to do even more, including at the regional and district levels.

Dr. Roopal Patel, CDC-Namibia Maternal and Child Health Advisor (2011-present): Especially in the last three to four years CDC and the MOHSS have been able to build technical capacity at the national, regional, and district levels in cross-cutting areas, like strategic information. By strengthening systems for surveillance and response we have been able to improve services beyond HIV/AIDS, including for other communicable and non-communicable diseases.

Dr. Simon Antara, CDC-Namibia Field Epidemiology and Laboratory Training Program (2012-present): In just the last two years the Namibia Field Epidemiology and Laboratory Training Program (FELTP) trained over 80 surveillance officers, lab technicians, program managers, and nurses who have led outbreak investigations for cholera, anthrax, and measles, among others. They have had an impact on the control of these outbreaks but in addition have brought increased awareness of the usefulness of analyzing and using routine data in their daily work in the public health system.

Continued on page 23

Namibia Scales Up Field Epidemiology Training

Most public health threats—viruses, bacteria, mosquitoes—don’t need passports to move across the globe. In order to prevent, detect, and respond to existing and emerging infectious disease threats, CDC supports countries around the world to establish programs to build human and institutional capacity in global health security. Modeled after the CDC’s famed Epidemic Intelligence Service, Field Epidemiology and Laboratory Training Programs (FELTPs) build a cadre of highly-skilled public health professional capable of managing and controlling disease outbreaks.

In Namibia, recent outbreaks of epidemic diseases (e.g., cholera, dengue fever, anthrax, measles) have drawn attention to the limited capacity within the country to effectively respond to critical public health issues. To address this situation, in 2012 CDC-Namibia, in partnership with the Ministry of Health and Social Services (MOHSS), began training frontline health care workers in disease detection, investigation, and response. To date, the Namibia FELTP has graduated over 80 public health managers, nurses, laboratory technicians, surveillance officers, and veterinarians from an intensive three month course. Building on the successes of this short course, in January 2014 MOHSS, the University of Namibia (UNAM), and CDC-Namibia launched a two year Master of Science Degree in Applied Epidemiology. This is the first ever postgraduate training in applied epidemiology developed and implemented in Namibia. The seven students of the first cohort are drawn from the MoHSS, Ministry of Agriculture, Water and Forestry, and the National Institute of Pathology.

Because the emphasis of FELTP is on real-world application of skills, only 25% of course time is spent in the classroom. The rest of the time trainees, both in the short and the long course, conduct field work at their regular duty stations. The focus of the field assignments may include supporting regions to conduct detailed and advanced data analysis, performing outbreak investigations, and evaluating surveillance system evaluations, for example. These activities generate information which is used for evidence-based decision-making. The trainees also identify deficiencies in surveillance structures and make recommendations for how to remedy those gaps.

In an age of global interconnectedness, programs like FELTP build much-needed local capacity in surveillance, data analysis and use, scientific communication, and public health leadership and management. In addition, they strengthen Namibia’s ability to identify and respond to emerging diseases and other public health issues, and to keep the country’s people safe and healthy.

If you want to practice your own outbreak-solving skills, play CDC’s free “Solve the Outbreak” app. Learn more at: http://www.cdc.gov/mobile/applications/sto/index.html
Dr. Heather Menzies, CDC-Namibia TB/HIV Technical Advisor (2012–present): HEALTHQUAL and FELTP are both good examples of how CDC and the MOHSS have been able to support improvements to the broader health system in Namibia and promote data analysis and use in areas beyond HIV/AIDS. The national tuberculosis (TB) program is similar in that regard, although HIV and TB are twin diseases. Namibia has one of the highest rates of TB/HIV co-infection in the world—now 50% of TB patients also have HIV—so properly addressing the dual challenge has been a major focus in recent years.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007–present): When I was working at Oshakati hospital, from 2004 to 2007, almost 70% of the TB patients had HIV. Because of the shortage of human resources we had health care providers from many different countries, each of which had its own way of dealing with TB, and Namibian standards were not very clear or well-known. The diversity of treatment approaches causes problems, including increasing the incidence of drug-resistant TB. But since about 2007 the guidance has become much stronger and the management of the disease much better. The program has transformed over the years so that the link between TB and HIV services has become a lot more robust. We worked around the clock with our development partners, we put in strategies, we trained clinicians, we raised awareness.

Dr. Richard Kamwi, Minister of Health and Social Services (2005–present): Tuberculosis is one of those killer diseases and 10 years ago Namibia was second only to Swaziland globally in terms of relative burden of TB. If you were to ask me now, I would say we are below number five. We worked around the clock with our development partners, we put in strategies, we trained clinicians, we raised awareness. Our treatment success rate moved up to 85% as of 2011 and in terms of WHO metrics we reached the target. Namibia is on course to meet MDG [Millennium Development Goals] Goal 6 (on communicable diseases), in part due to our work on TB. Drug-resistant TB remains a challenge for us but we now have standardized guidelines for all forms of TB.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007–present): The advent of HIV treatment benefited the country in terms of decreasing the burden of TB. As more people were put on ART and IPT we could see the number of cases of TB decline. People who came in for TB services began being tested for HIV and there was better screening of HIV patients for TB.

Dr. Dave Lowrance, CDC-Namibia Country Director (2011–present): The I-TECH program has transformed over the years so that the link between TB and HIV services has become a lot more robust. We have increased the incidence of drug-resistant TB. But since about 2007 the guidance has become much stronger and the management of the disease much better. The program has transformed over the years so that the link between TB and HIV services has become a lot more robust.

Dr. Roopal Patel, CDC-Namibia Maternal and Child Health Technical Advisor (2011–present): Through I-TECH and our direct technical assistance, we were able to help the MOHSS scale-up critical trainings and fill needed gaps but then we needed to work with the country to focus on building sustainable training systems.

Dr. Dave Lowrance, CDC-Namibia Country Director (2011–present): In 2008 CDC started considering other ways of supporting the pre-service training of health care workers, including at the University of Namibia (UNAM) and the Polytechnic of Namibia. Our cooperative agreement with Polytechnic started in 2009 and is focused primarily on the training of laboratory technicians. Our agreement with UNAM started in 2013 and covers training of medical officers, nurses, field epidemiologists, pharmacists, public health managers and other key cadres. These relationships were a big step forward for CDC and our ability to support a more sustainable approach to human resource development.

Prof. Sylvester Moyo, Dean, School of Health and Applied Sciences, Polytechnic (2010–present): We are where we are today because of the CDC grant. Had it not been for that grant, I don’t know where we would have been. From the time that we got the CDC grant and we have been able to add value to our training programs. We have used the grant effectively to upgrade the qualifications of our staff, our curriculum, and the physical infrastructure of our teaching facilities.

Dr. Richard Kamwi, Minister of Health and Social Services (2005–present): Five years ago we opened the first medical school in Namibia. We have had teething problems but five years from now we will be seeing great progress.

Prof. Peter Nyarang'o, Dean, Faculty of Health Sciences, UNAM (2010–present): Training healthcare workers, both in pre- and in-service settings, is immensely ambitious for a country that has not trained doctors or pharmacists before. We need expertise to educate the future graduates and health care workers of this country about the quality of care that is required to meet the Namibian health challenges. CDC, through PEPFAR funding and their technical support, is providing not only monetary assistance but also a pool of expert resources, connecting us with national and international experts to help train our health workers.

Prof. Sylvester Moyo, Dean, School of Health and Applied Sciences, Polytechnic (2010–present): I really can’t express enough appreciation for what CDC is doing to us. Their support has made a huge difference to us as a

Continued on page 25
**TB/HIV Integration Improves Diagnostics, Treatment, and Patient Outcomes**

**Tuberculosis (TB)** is a leading cause of morbidity and mortality among people living with HIV globally, and in Namibia. With a TB case notification rate of 545/100,000 (in 2011), Namibia has a relatively high burden TB, in addition to a generalized HIV epidemic, with 92% of TB patients having a known HIV test result. Although down from a peak rate of around 67% in 2006, currently 45% of TB patients in Namibia have HIV as well. With support from PEPFAR, the Ministry of Health and Social Services (MoHSS) has scaled-up care and treatment for TB and HIV patients, with a special emphasis on those who are co-infected. More than 98% of co-infected patients now receive cotrimoxazole preventative therapy to avert additional opportunistic infections. Currently 80% of TB/HIV patients are on antiretroviral therapy (ART), and this number will increase this year with the adoption of new guidelines mandating ART for all dually infected individuals. With PEPFAR support for scale up of TB treatment, Namibia reached the global target of TB treatment success rate of 85% in 2010; the target has now been revised to aim to reach at least 90% treatment success rate, which is within the country’s potential.

Over the past ten years PEPFAR support has enabled the country to improve laboratory TB/HIV diagnostic capacity, strengthen health facility and community-based TB/HIV care services, generate data for evidence-based programming, and enhance monitoring and evaluation systems. In responding the MoHSS priorities, since 2004 PEPFAR has provided approximately US$63.4 million to scale up TB/HIV programs in Namibia. Over the next few years PEPFAR will continue to assist the MoHSS to implement the three I’s for TB/HIV: intensified case finding, isoniazid preventive therapy, and infection control for TB.

Namibia’s 2008 TB drug resistance survey (DRS) showed multidrug-resistant (MDR) TB prevalence rates of 3.8% and 16.5% among new and previously treated TB patients, respectively. In 2011, 192 MDR-TB cases, including two extremely drug-resistant (XDR) cases were reported. To address this issue, PEPFAR and the Global Fund are helping the MoHSS roll-out a new technology known as GeneXpert. This transformative diagnostic tool will enable individuals with suspected cases of TB or MDR-TB to receive their results within two hours, rather than waiting for up to six weeks. GeneXpert does not require significant laboratory infrastructure or highly skilled health care workers, which will enable the test to be performed in district hospitals, instead of centralized laboratories. In 2014, PEPFAR will support the MoHSS to conduct a second DRS, which will include GeneXpert testing of all eligible specimens and will provide new figures on the rates of TB and MDR-TB in Namibia.

**TB Tests being conducted at NIP Namibia**

**Ms. Lempi Shoombe, NIP Lab Technologist working on TB Tests**
We have a very good treatment in the country's hospitals and clinics health sector, continuing the provision of HIV care and institutions, which is what CDC is doing health coverage but that will require the support for local TB, in our lifetimes to see elimination of HIV and related diseases, such as healthcare providers of the nation.

Our relationship has really opened up a lot of things to us and that's why we were able to improve the program and the curriculum. We have the best students and I think that is a reflection of the work CDC is helping us with.

**Prof. Peter Nyarang'o, Dean, Faculty of Health Sciences, UNAM (2010–present):** UNAM is a national, embedded entity that is part of the future of sustainable healthcare training in Namibia. With the support of our partners, including CDC, we are training the future healthcare providers of the nation. Ultimately, we want to see elimination of HIV and related diseases, such as TB, in our lifetimes. This can be a reality with adequate health coverage but that will require the support for local institutions, which is what CDC is doing. The health care workers we produce are going to be serving in the public health sector, continuing the provision of HIV care and treatment in the country's hospitals and clinics.

**Prof. Sylvester Moyo, Dean, School of Health and Applied Sciences (2010–present):** We have a very good relationship with NIP and that is where most of our graduates are working. We also have private laboratories and they also call on us. It has been quite a pleasant experience to see these young people graduate and take up positions across the country.

**Mr. Souleymane Sawadogo, CDC-Namibia Laboratory Advisor (2005–present):** When I came here more than 50% of technical staff from NIP where hired from Zimbabwe; NIP would go there and just hire them. Now we have a much better and more sustainable system. In 2013 Polytechnic graduated the first cohort and many of the students took up employment at NIP. The second cohort is going to be fully absorbed by NIP as well, which is exciting to see.

**Dr. Dave Lowrance, CDC-Namibia Country Director (2011–present):** Health care workers are the foundation of the health system so investing in their education and training is a priority for CDC and PEPFAR. We view our partnerships with Polytechnic and UNAM as two of our most important and vital to our ability to support Namibia's continued success in the fight against HIV/AIDS.

---

**Innovative Strategies to Support the Health Workforce**

The Namibian government is faced with a shortage of high quality health care providers in public health facilities, a situation that was inherited at independence in 1990. This has resulted in substantial dependence on foreign health professionals to fill positions at public health facilities, as well as inflated vacancy rate.

To address this issue, in 2005, at the request of the Ministry of Health and Social Services (MoHSS), CDC established an innovative partnership with Potentia Human Resources Consultancy to recruit and retain health care workers. Along with the Global Fund to Fight AIDS, TB, and Malaria (GFATM), PEPFAR supported the hiring and deployment of thousands of staff, including foreign health professionals, to health facilities in every corner of the country. This approach was highly successful, so by 2012 Potentia alone had cumulatively hired more than 820 clinical and non-clinical staff (including doctors, nurses, pharmacists, data clerks, and study administrators). These staff delivered comprehensive and integrated HIV testing, care, and treatment services in Namibia's public health facilities, allowing for the rapid scale-up of life-saving programs.

Recognizing the need to adopt a more sustainable approach to health workforce management, in 2012 the MoHSS began a multiyear process to absorb critical cadres into the national staff establishment. Beginning with medical officers and continuing with nurses and pharmacy staff, the MoHSS has transitioned more than 200 positions to the government payroll—the first such systematic transition in PEPFAR globally. The process is still in progress, with the upcoming absorption of community counselors (who provide HIV testing and counseling in public health facilities) and monitoring and evaluation officers.

In addition to supporting the transition of staff, CDC has intensified its support for pre-service education of health professionals. Along with the provision of bursaries/scholarships directly to students, CDC initiated financial and technical assistance to Namibia’s two public health science education institutions—the University of Namibia and the Polytechnic of Namibia. Support is directed at building institutional and individual capacity within the schools to enhance the quality of instruction, research supervision, and management offered by faculty and staff. PEPFAR assistance will allow the schools to increase the number of students included in future intakes and to increase the skill-level of graduates. Together, these various interventions have allowed Namibia to establish a sufficient health workforce in the short term, promote the sustainability of past investments, and ensure a robust cadre of health professionals far into the future.

---

*Ambassador Goosby, with Medical Students at UNAM*
Ms. Ella Shihepo, Director, Directorate of Special Programs, (2003–2013): Over the past ten years we have established the national response and helped people regain their health, thanks to additional resources the Namibian government has received from PEPFAR and the Global Fund. We have been successful in terms of getting people on treatment so that now almost 90% of people in need are on treatment, at the CD4 ≥ 350 threshold. The prevention of mother to child transmission is over 90%, and that is great. We can see the change so that now you walk around and everybody looks healthy. Having HIV is now like just having hypertension or diabetes.

Dr. Ndapewa Hamunime, Medical Doctor (1986–present): I have seen many people who were on their deathbed coming back to thank me for having given them the gift of a healthy and normal life. The economic impact of treatment is really enormous, with less morbidity and mortality, and a dramatic reduction of the burden on the hospitals. The death rate from HIV/AIDS has arrested, which allows the health sector to concentrate on other equally important illnesses such as cancer, diabetes, and hypertension, for example.

Ms. Maggie Nghatanga, Primary Health Care Director, MOHSS (1997–present): Namibia has been extremely successful in terms of treatment. People are not dying anymore in large numbers and are instead going back to work. Treatment has made a big difference at the national and individual levels.

Madame Penehupifo Pohamba, Namibia’s First Lady (2005–present): PEPFAR has done a lot of things for this country, including financial support for the HIV/AIDS response, especially to our government. PEPFAR has enabled our government to cater for its people so we could fight the epidemic effectively. PEPFAR has helped Namibia to care for and treat for the children who are positive. If it were not for PEPFAR, these children would still be not counted in the response. I think that’s why you see Namibia being recognized for its achievements, because we are achieving our goals. PEPFAR has done a lot for us and we have a lot to thank them for.

Dr. Richard Kamwi, Minister of Health and Social Services (2005–present): Namibia is on course now to meet MDG 6 but there are challenges that we should not leave out. We should not just be talking about rosy things as if everything is well. Over the last ten years we have seen high maternal and child mortality, since did not have skilled health personnel, especially medical doctors and registered nurses.

Dr. Kalumbi Shangula, Permanent Secretary, Ministry of Health and Social Services (1997–2007): Another danger is that as people realize the effectiveness of treatment they may become complacent with prevention and may not seek health services. This may happen with TB and HIV/AIDS, such that people may start to relax and lose focus.

Ms. Ella Shihepo, Director, Directorate of Special Programs, (2003–2013): People with HIV need treatment, but they also need to have safe drinking water, proper nutrition, and adequate sanitation, but unfortunately these are still challenges facing us. Gender inequalities, cultural beliefs, and behaviors are some aspects that contribute to...
the situation. We cannot forget the social aspects of the HIV response and the need for multisectoral coordination to share responsibilities, so we really need to work together on this.

Ms. Maggie Nhatanga, Primary Health Care Director, MOHSS (1997-present): Combatting HIV/AIDS in Namibia is complicated and there are still a number of factors that impact the response, including the high cost of living, poverty, the need for more parental engagement with their children about healthy sexual behaviors, male dominance, and stigma.

Dr. Libertine Amathila, Minister of Health and Social Services (1995-2005): Personally I’m worried about the young people because even though we have been talking and talking, preaching and preaching about this, you still find number of teenage pregnancies on the rise. That worries me a lot.

Ms. Kirsten Moeller Jensen, DAPP Country Director (2006-present): I believe that Namibia can achieve an AIDS-free generation but more needs to be done in schools to mobilize youth. Parents need to accept that young people are sexually active and they need to be supported to be safe. Socio-economic factors are separating many families, such as husbands working in the south while the family is in the north, having multiple partners, and the lack of gender equality all need to be addressed.

Dr. Ndapewa Hamunime (1986-present): We must concentrate on children and adolescents who are HIV-positive in order to prevent a new epidemic in the future. We should not be complacent but rather work relentlessly to achieve a transmission rate of zero and to prolong the lives of those already infected. If we let up in the fight against HIV the disease will regroup and come back stronger; it may undo all the good work we have done and successes we have achieved.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): The one thing that needs to be done right now is to sustain the success that has been achieved. Coverage for those in need is close to 90%. Moving forward our key focus is that we do not reverse our progress, as that can easily happen. We hope that all the key stakeholders will protect the success that has been achieved and advance the response even further.

Ms. Adolfine April, Nurse in Charge Katutura Hospital ART Clinic (2013-present): In the future I want to see continued reductions in new HIV infections. And we should, because we are enrolling new patients in treatment on a daily basis, but this is why we need continued community mobilization.

Dr. David Lowrance, CDC-Namibia Country Director (2011-present): When I arrived in Namibia in 2011 I felt strongly that

Continued on page 28

Pediatric HIV Care and Treatment
Helping Children Lead Healthy Lives

The youthful Dr. Ngoni Rukato has been providing treatment and care to HIV-positive children from zero to 19 years old at the Katutura ART Clinic for the last three years. He enthusiastically explains how the success of the prevention of mother-to-child transmission (PMTCT) has positively impacted his clinic. “While in the past we would enroll more than 10 new children on a monthly basis, now we only register two or three new children per month; fewer children are being born with the virus, which is wonderful.”

But services are still needed for those who were not so lucky. “For those children who are HIV-positive we provide with holistic services from counseling to care, from treatment to psychosocial support, all with an emphasis on keeping them healthy,” explains Dr. Rukato. In 2009 the clinic established a disclosure program for children as young as six years old, helping them to understand their status by providing them with age-appropriate information. Through the process by the time they reach 10 years old they fully understand their HIV status. Dr.

Rukato underscores the importance of telling children the truth. “Often the parents or caregivers do not tell the child that they are HIV-positive. Sometimes they tell them, ‘You are taking this medicine for asthma’ or ‘You are taking this medicine because you have TB’. In the disclosure program we don’t lie to the child because if you lie to him or her now, when they find out the truth they won’t trust you. You lose the trust of the child, which is not productive or fair.”

For children between 10 and 19 years old the clinic has established a support group, known as the Teen Club. The club serves a forum for those who have fully disclosed their status to discuss the social problems they face. At the Teen Club, they can share their experiences and problems, and work together to develop solutions and coping strategies. The group promotes the adoption of healthy lifestyles and positive attitudes, and keeps them motivated to stick to their treatment. They also discuss topics related to HIV, such as teenage pregnancy, gender-based violence, TB, and reproductive health. The program has been so successful that it has become a challenge to

transition those who have reached the age of 20 years to adult services, as they refuse to leave because they feel like they have become members of a family. “The children love this clinic. We see them on days when they are not supposed to be here. We just see them around, they just come to say hi,” says Dr. Rukato. Thanks to the work of Dr. Rukato and his colleagues Namibia is closer to achieving an AIDS-free generation, full of young, healthy people.
Namibia had the potential to become the first country in sub-Saharan Africa to eliminate HIV transmission. Obviously this is an ambitious and highly aspirational vision for any country, but I still feel that way about Namibia today. Strong political leadership combined with substantial financial resources and health infrastructure, evidence-based programmatic focus, and a relatively modest HIV-infected population all give Namibia a unique opportunity to do something unprecedented—halt the transmission of HIV.

Ms. Deqa Ali, I-TECH Namibia Country Director (2008-present): The Government of Namibia is very engaged. Expectations are high, and in everything we do there is always room for improvement but nonetheless I don’t see Namibia going back, only forward. We have involved and committed leaders. I am not Namibian but I feel I am part of a team and I see that Namibians are committed to make a difference in the health system. They have high standards that I haven’t observed in many other African countries that I have worked in and I feel that these standards and political commitment are what put the country in the strong position it is in today.

Dr. Richard Kamwi, Minister of Health and Social Services (2005-present): We are seeing our own GPs (general practitioners) coming back from foreign countries, so we see a glimmer of hope there. And while we are self-sufficient when it comes to the training of enrolled nurses a deficit remains for registered nurses, especially in remote areas like Kunene. We see burnout and overwork, and a reliance on expatriates but I remain grateful for the partnerships that we have with PEPFAR and the Global Fund to help us address these issues.

Prof. Peter Nyarang’o, Dean, Faculty of Health Sciences, UNAM (2010-present): An AIDS-free generation is a real possibility in Namibia but this can only be achieved through a coordinated effort of high quality health care personnel working in teams through multidisciplinary care, creating a culture of patient-centred and evidence-based care, rather than eminence-based medicine. We need strong supply chains, sustainable health financing, and effective governance of the health sector. Underpinning all of this is a strong, burgeoning, and high quality health workforce. Helping produce this workforce is how UNAM, with the support of CDC, will contribute to an AIDS-free generation in the country.

Prof. Sylvester Moyo, Dean, School of Health and Applied Sciences (2010-present): To fill the gaps which exist in the workforce we are thinking of mounting post graduate diplomas and certificates, including Masters and PhD qualifications. Currently if you go into most of our labs, most of the staff in charge are foreign individuals but we would like to build a crop of Namibian laboratory leaders. We live in a global village so it is naïve to think that all of them will remain in Namibia but we think that they will have an allegiance to this country and if there are jobs available they will stay here to serve and improve the health system.

Dr. Gram Mutandi, CDC-Namibia HIV Care and Treatment Team Lead (2007-present): Recent scientific evidence demonstrating that ART is a highly effective HIV prevention intervention has re-energized our efforts to expand treatment eligibility to many more people. For example, all pregnant and breastfeeding women, all children under the age of 15 years, and all HIV-positive persons in sero-discordant relationships are now eligible for treatment on a test-and-treat approach. This brings new programmatic challenges—how to expand services, keep people retained, link systems, maintain quality, prevent HIV drug resistance—but ones that we are ready to face and overcome in the next few years.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): The future depends on the local capacity to sustain the gains and implement high impact interventions informed by science and evidence. The health system needs to be flooded with well-trained and motivated human resources who are proud to sustain the gains the government and partners have so far made and take them to even greater heights. Decentralization of HIV services to primary and community level is vital to increased access, sustainability, and ownership.

Ms. Dawn Broussard, CDC-Namibia Deputy Country Director (2006-2010): The eyes of the world have always been on Namibia to lead the way in the fight against HIV/AIDS. PEPFAR continues to emphasize that the future is about country ownership and sustainability; Namibia has always been way ahead of that curve. I’ve seen the graphs showing that Namibia is beyond “the Tipping Point” (the ratio of new HIV infections to people newly started on HIV treatment), which is encouraging and exciting. The strong commitment to the national response has always been there; no one is interested in returning to the awful early days of the epidemic. I think everyone looks forward to hearing about the successful and innovative prevention programs coming out of Namibia. I’m hoping that when I’m a little old lady—which isn’t that far in the future!—I’ll be reading about an AIDS-free generation in Namibia.

Dr. David Lowrance, CDC-Namibia Country Director (2011-present): In the coming years Namibia will move closer to a universal “test and treat” model than virtually any other country in the region. To achieve this Namibia will need to further develop a culture of data use and research, and hard decisions will be required in order to sustain the current commitments to public health. But the future will undoubtedly be appreciated by an AIDS-free generation of Namibians!

Continued on page 30
Voluntary Medical Male Circumcision (VMMC) is a one-time, low-cost medical intervention which has been shown to reduce a man’s risk of acquiring HIV infection by 60 percent.

The World Health Organization (WHO) strongly recommends VMMC as part of a comprehensive package of HIV prevention services. In 2007, WHO and the Joint United Nations Program on AIDS (UNAIDS) recommended that countries with a generalized HIV epidemic and low male circumcision prevalence scale up VMMC as an HIV prevention strategy. Namibia falls in the category of countries with a high HIV prevalence rate, generalized HIV epidemic, and low male circumcision rates and has joined the group of countries prioritizing VMMC as an important part of an effective HIV response. The national VMMC rate in Namibia is low, estimated at 21% in the 2006/7 DHS, but this varies by region and cultural context. In regions where traditional circumcision takes place, the circumcision rate is over 50% (e.g., Kunene 52%, Omaheke 57%).

Namibia launched its first ever National VMMC Strategy and Impalement Plan in September 2013, covering the period 2012-2017, to circumcise approximately 330,000 men aged 15-49 years by 2017 in order to attain 80% national VMMC coverage among the target population. The strategy is comprised of a catch up phase targeting men, which will be followed up by a focus on institutionalization of Early Infant Medical Male Circumcision (EIMC) once the VMMC coverage target of 80% has been attained. The strategy identifies seven of the country’s 14 regions as priorities for rapid and dedicated scale up of VMMC, based on the criteria high HIV and low MC prevalence estimates. The strategy advocates for a mixed VMMC service delivery model driven by the use of dedicated MC service provider teams through fixed, mobile, and outreach sites, complemented by special campaigns. The strategy also advocates for a nurse-driven VMMC surgical approach back-stopped by a few dedicated regional VMMC medical officers to support quality assurance, expeditiously addressing of adverse events and any complications, and mentorship. PEPFAR will support the Ministry of Health and Social Services (MoHSS) with VMMC implementation in two of the seven identified priority regions (targeting about 50,000 circumcisions by 2017), while the Global Fund to Fight AIDS, TB, and Malaria intends to support the remaining five priority regions.

To be more effective, VMMC will be combined with other approaches such as HIV testing and counseling, screening and treatment for sexually transmitted infections, correct and consistent condom use, and reducing multiple and concurrent sexual partnerships. While VMMC focuses on men, it has equally important implications for women, such as reduction of cervical cancers and sexually transmitted infections. The implementation of the National VMMC Strategy will help Namibia to significantly reduce the future burden of HIV and achieve maximum public health impacts.
effective combination prevention programs! Being a unified force is the key so we shall continue working as a team to combat the disease, which makes mem very optimistic about the future in Namibia.

Madame Penehupifo Pohamba, Namibia's First Lady (2005-present): My vision for the future is to see all children being born without HIV/AIDS. That is the reason why I have been engaged in the PMTCT campaign on male involvement, so that both partners—the mother and the father—can unite to ensure effective prevention of HIV infection to their newborn baby. I think we in Namibia have done a lot, but there is more to do. Even though we have achieved some major goals, we still need to prioritize treatment, testing and counseling, and all the supporting services because HIV/AIDS is not really a hundred percent gone.

Dr. Roopal Patel, CDC-Namibia Maternal and Child Health Advisor (2011-present): There has been remarkable progress in the reduction of mother to child transmission of HIV. Over the years, the estimated risk of transmitting HIV from an HIV-positive mother to her infant reduced from 32% in 2002 to 4% in 2013. With the government's leadership, technical and financial support of their many partners, and the commitment and dedication of the many hard working health care workers, HIV-positive pregnant women are able to access PMTCT services and deliver babies who are free of the disease. With the continued collaborative efforts, we only see the successes continuing and look forward to the day when we can say that Namibia has met its goal to eliminate maternal to child transmission of HIV.

Ms. Mary Grace McGeehan, Chargé d'Affaires, U.S. Embassy (2013-present): Namibia is among just a few countries that took responsibility and took ownership from very early on. This is something we hear about from President Pohamba, the Prime Minister, and others—that the issue of HIV/AIDS and the health of its population is the responsibility of the Namibian government. Of course, this is done in partnership with donors, but they see it very much as their responsibility and their issue. That's something that's very impressive and has been true from very early on. It will also be a key to Namibia's continued success in the future.

Dr. David Lowrance, CDC-Namibia Country Director (2011-present): Maintaining the high level political and technical commitment demonstrated by Namibia's leaders will definitely be a key factor, as will data-driven decision-making and the adoption of innovative policies and strategies. CDC is always ready to provide the technical assistance requested by the country to tackle these tasks.

Ms. Kirsten Moeller Jensen, DAPP Country Director (2006-present): At the request of the MOHSS, we are busy rolling out a home-based testing and counseling program to seven regions in the north and in Khomas. We are paving the way for something innovative, something that has not happened before in Namibia. We are doing this so that we can reach more people in need and more communities and get them linked to treatment; there is so much life-saving potential in this approach. We are working very closely with the MOHSS and CDC as we move forward with this new approach, as well as with our work to assist health facilities to trace those who are lost to follow up in communities and to link them back to care.

Ms. Mary Grace McGeehan with DAPP field officers

Dr. Richard Kamwi, Minister of Health and Social Service (2005-present): Global Fund and PEPFAR have come in so handy in the response. I mean that in the sense that for the Namibian government they have provided the resources we needed when we needed them most.

Ms. Ella Shihepo, Director, Directorate of Special Programs, (2003-2013): We have been successful in part because we have had dedicated CDC teams come on board. They have brought in a wide variety of expertise—in epidemiology, administration, prevention, treatment—and have worked hard with us for more than ten years. They are interested to know what assistance we need.

Ms. Dawn Broussard, CDC-Namibia Deputy Country Director (2006-2010): I think the relationship between CDC and DSP/MOHSS has been

Continued on page 31
outstanding. CDC is there to do what we can to support the Ministry’s vision and I’m very proud of our involvement in such a successful national response. I learned a great deal from working with Ms. Shihepo and all of the terrifically dedicated people in DSP, not only on the professional side, but the personal side as well. I especially appreciate that DSP is graciously willing to let CDC share their building. I think we are able to get so much more done through our many hallway and parking lot conversations than we would if we were across town and had to schedule a meeting every time we wanted to talk.

Dr. David Lowrance, CDC-Namibia Country Director (2011-present): It is a true privilege for CDC to be co-located with the MOHSS. It greatly enhances our relationship and facilitates so much of our work. With our shift to a technical assistance program, this ability to sit together every day will be more important than ever.

Ms. Mary Grace McGeehan, Chargé d'Affaires, U.S. Embassy (2013-present): Our PEPFAR partnership started as an emergency intervention at the height of the epidemic and has shifted towards more of a technical assistance response. This evolution is a product of Namibia’s leadership and strong ownership of its HIV/AIDS response, which has been lauded and highlighted in a number of ways. Namibia was represented by Minister Kamwi at the 10th anniversary celebration of PEPFAR in Washington, D.C. last July—the Minister was asked to speak at the event. Most recently, Namibia was one of just three countries designated for the first wave of Country Health Partnerships.

Ms. Ella Shihepo, Director, Directorate of Special Programs, (2003-2013): We have achieved so much and have stabilized the epidemic, but we still need assistance to build our capacity. Financial support is helpful but the most important thing is to create local capacity so that we can continue to move forward. Training takes time and we only gained independence 24 years ago so we are still putting structures in place. Namibia still needs long term assistance from PEPFAR and the Global Fund to ensure the capacity of our institutions and the sustainability of our response.

Ms. Naemi Shoopala, CDC-Namibia Maternal and Child Health Specialist (2006-present): The impact of CDC and PEPFAR in Namibia has been enormous. We used to read stories about people in developed countries who lived for five or ten years with HIV and we were doubtful we would see the same. Today we have our own story, of people thriving for decades and a country coming back to life. Today we have our own story, of joy, hope, and success to tell.
CDC Stacks Shares Public Health Publications

CDC Stacks is a free digital repository of publications produced by the Centers for Disease Control and Prevention (CDC). CDC Stacks is composed of curated collections of peer reviewed articles, CDC guidelines and recommendations as well as other publications on a broad range of public health topics. CDC Stacks provides the ability to search the full text of all documents, browse journal articles by public health subject, and explore the curated collections of over 11,000 publications. Articles stored and shared through CDC Stacks will help CDC to further its mission to save lives and protect the health of citizens of the U.S. and of international populations.

You can explore CDC stacks at http://stacks.cdc.gov.

Upcoming Events

World Health Assembly, May 19-24, Geneva, Switzerland
World No Tobacco Day, May 31
PEPFAR Annual Meeting, June 1-4, Durban, South Africa
World Blood Donor Day, June 14
20th International AIDS Conference, July 20-25, Melbourne, Australia
World Hepatitis Day, July 28
World Breastfeeding Week, August 1-7
United States—Africa Leaders Summit, Aug 5-6, Washington, D.C., USA
Opening of the 69th Session of the United National General Assembly, September 16, New York City, USA
World Handwashing Day, October 15
World Pneumonia Day, November 12
World Diabetes Day, November 14
World AIDS Day, Dec 1