MSH supported the roll-out in 2011 of an ambitious and pioneering public health program in Malawi known as Option B+, a test-and-treat strategy for pregnant and breastfeeding women. Under Option B+, all HIV-infected pregnant and breastfeeding women are provided with lifelong antiretroviral therapy (ART) regardless of their CD4 count or World Health Organization clinical stage.

In 2012, MSH launched the District Health System Strengthening and Quality Improvement for Service Delivery in Malawi (DHSS) project, which supports the ministry of health's continued commitment to prevention of mother-to-child transmission (PMTCT) of HIV. The project, which is funded by the United States Centers for Disease Control and Prevention (CDC) under the President's Emergency Plan for AIDS Relief (PEPFAR), aims to strengthen health service delivery in seven districts. As of March 2015, these districts have enrolled over 30,000 pregnant HIV-infected women on ART.
In addition to supporting the delivery of health services, DHSS is evaluating the effectiveness and impact of Option B+ in Malawi through the National Evaluation of the Malawi PMTCT Program (NEMAPP).

A woman fills out a NEMAPP screening form at an under-five clinic at Mbabvi Health Centre, a peri-urban health facility outside Malawi’s capital, Lilongwe.

The study will examine mother-to-child transmission rates and HIV-free survival rates among 3,400 HIV-exposed infants whose mothers are on ART. NEMAPP will follow the mothers and their babies until 24 months of age or weaning. Researchers will also follow up a subset of 1,300 mothers and babies for a period of up to 48 months to determine longer term survival and virological and clinical outcomes.
The mothers and babies enrolled in the study take antiretroviral (ARV) medication, which reduces the risk of transmitting HIV during pregnancy, labor, delivery, or breastfeeding from as high as 45 percent to under 2 percent [1].
NEMAPP screens mothers for possible participation in the study when they attend under-five clinics at select health facilities.

The aim of the DHSS project and the NEMAPP study is to help improve Malawi’s already impressive response to the HIV and AIDS epidemic. Over the years, HIV prevalence has steadily declined in the country, from 14 percent in 2003 to 10 percent in 2011, according to UNAIDS.
Angie, a mother of three, waits to undergo HIV testing at Kawale Health Centre in Lilongwe as part of the NEMAPP screening process.

MSH is helping to bring HIV testing directly to a variety of clinics within health facilities so that patients can be tested in the same place where they receive other health services. Health providers not previously involved in HIV services are trained in counseling patients about the test and administering it. The expansion of this provider-initiated counseling and testing has helped many people get tested that may not have sought to do so on their own.
The expansion of HIV testing has coincided with Malawi’s rapid ART scale-up. Initiated in 2004, the scale-up has been largely successful. One out of every 20 Malawian adults is now on ART, and the Government of Malawi estimates that the treatment has helped to avert 275,000 deaths. However, with an estimated 34,000 new HIV infections each year, stepped-up action is needed to control the epidemic.

In addition to Option B+, Malawi’s PMTCT plan also focuses on HIV-prevention interventions; addressing the unmet need for family planning; scaling up pediatric HIV care services, with a focus on early infant diagnosis; and improving the availability of HIV-related health commodities.
Riders for Health (R4H), a DHSS partner, transports blood samples from health facilities to the NEMAPP warehouse using motorcycles. After samples are sorted and repackaged, they are shipped to the Joint Clinical Research Centre, a regional laboratory based in Kampala, Uganda, for processing. R4H also ensures that results are promptly returned to the relevant health facilities.
Angie goes through the next step of the screening process when details on the forms, including addresses and phone numbers, are confirmed. If the HIV test for Angie comes back positive, providers must be sure they are able to contact the mother and her son if they do not return for scheduled visits.

One of the biggest challenges that health workers face is trying to keep HIV-infected mothers and their children in treatment and healthy. Because of HIV-related stigma, mothers fear that they and their children will be ostracized from their communities if their HIV status becomes known. Sometimes mothers will stop taking medication because they feel healthy or don't want others to ask questions if it's discovered.
Option B+ has given hope to mothers across Malawi that they can remain healthy for their children, and that their children will be able to live HIV free. However, their good health hinges on early uptake of PMTCT services, good adherence, and long-term retention in care - all of which the DHSS project and NEMAPP study are helping to address.

*Photographs by Cindy Shiner/MSH*


**Links:**