Background

Malawi is among the countries hardest hit by the HIV epidemic, with an estimated 979,000 people living with HIV and AIDS (PLHIV). By the end of September 2016, at least 662,788 (68%) of PLHIV in Malawi were on antiretroviral therapy (ART).

Blantyre District, including the heavily populated city of Blantyre, has one of the highest HIV prevalence rates in the country – 17.6% compared to the national average of 10.6%.

By March 2016, 70,662 people in the district were on ART, and nearly 30% (33,000) of them had defaulted from treatment, with 4% (1,348) defaulting between January and March 2016. Defaulting is associated with significant risks for PLHIV, including exposure to opportunistic infections, progression to AIDS, and the development of drug-resistant HIV, which can also be transmitted.

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Management Sciences for Health (MSH) has been working in Malawi through the District Health System Strengthening and Quality Improvement for Service Delivery in Malawi (DHSS) Project, beginning in 2012, to reduce overall morbidity and mortality by focusing on comprehensive HIV prevention, management and care, prevention of mother-to-child transmission (PMTCT), and tuberculosis (TB) prevention and management. The US Centers for Disease Control and Prevention (CDC) and the President’s Emergency Plan for AIDS Relief (PEPFAR) fund the project, which is implemented in seven districts.

The main focus areas have been clinical mentorship, supervision, and training of nurses and medical assistants through the Training and Bonding program. Expert clients recruited by the project support patient tracing while health diagnostic assistants support HIV testing services. DHSS also supports infrastructure and capacity-building efforts as well as other components of health system strengthening.

The Service Delivery and Quality Improvement (SDQI) Program is a main component of DHSS and aims to improve the quality of, access to, and coverage of priority HIV-related health services by achieving the following targets set by UNAIDS and PEPFAR: identifying 90% of people living with HIV; ensuring that 90% of those identified are started and retained on ART; and 90% of ART patients are virally suppressed. The Malawi National Strategic Plan (NSP 2015-2020) supports those targets.

Defaulting on treatment directly impacts the second and third targets by hindering retention and failing to reduce viral load. The 2016 Malawi National Guidelines for managing HIV did not include a patient-tracing component for partner support, which could have a direct influence on the first and second targets. In 2015, DHSS, through SDQI, introduced patient tracing forms and registers to public health facilities to reduce defaulting and improve ART patient retention. Eighteen of the 24 MSH-supported health facilities in Blantyre District received mentorship and quality-improvement support from MSH clinical mentors.

**Approach**

Through March 2016, Malawi’s HIV guidelines specified the following for patient retention and follow-up: If a patient missed appointments for more than two weeks, data clerks documented their information onto the tracing forms and registers. First, data clerks tried to initiate contact by phone, if a number had been provided by the patient. If that failed, then health surveillance assistants (HSAs) tried to reach them in person, using an address provided by the patient. The DHSS project provided support to the HSAs through

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Data clerks and health surveillance assistants faced a number of challenges during the tracing process, including incorrect phone numbers and addresses being recorded on tracing forms, or missing phone numbers or addresses. Confidentiality was also a challenge: sometimes men or women were unaware that their partners were on ART. If an HSA called the number provided by the patient and a family member or partner answered the phone, or if the HSA went directly to a patient’s house, it could be difficult to disclose the reason for wanting to speak with the client.

Results

In the second quarter of 2016, a total of 1,109 patients out of 70,662 at MSH-supported health facilities missed their appointments. For patients who missed appointments for one month or more, tracing was initiated through phone calls and physical tracing to encourage them to resume treatment. Tracing was initiated for 96% (1,069) of patients who missed appointments and had physical addresses or phone numbers, while 4% (40) of patients had no such information that could be used. Anecdotally, many of these patients said they appreciated being called or reminded to come back to the clinic. The most common reasons for missed appointments included illness, marital separation, self-transfers, stigma, and deaths.

Figure 1 illustrates the outcome of the 1,069 patients who...
were followed up based on the availability of phone or physical address. Approximately 77% of those (825/1,069) that had missed appointments or defaulted from treatment were reached via phone or physical tracing. Of those who were reached, 72% of them (590/825) were brought back to care. Patients that were brought back into care presented a referral slip to the clinic that was provided to them by HSAs upon being traced. The 28% that did not return to care were either self-transfer outs (12%), deceased (11%), too sick (1%), or stopped treatment (4%). Overall, 23% of the clients followed up (244/1,069) could not be traced because either the patient was not at home (5%) or a wrong address or phone number was provided (18%).

Conclusion
The patient tracing system improved the delivery of HIV services in MSH-supported facilities in Blantyre District. More than 50% of patients who had missed an appointment were brought back to care. Some patients who had self-transferred out to other facilities were identified and their outcomes recorded in the register. Overall, only 18% of patients could not be followed up because of poor or incomplete documentation.

The results showed that the project-supported health facilities succeeded in improving retention by having defaulter tracing mechanisms in place. With a reduced number of missed appointment dates, defaulting was prevented, and this ensured success of the program through improved adherence to ART and hence greater success of HIV treatment. These outcomes are critically important to achieving the ambitious 90-90-90 goals to which Malawi has committed.