

# Evaluating a Depression Treatment Program on HIV Care and Mental Health Outcomes in Malawi

Among people initiating antiretroviral therapy (ART), those with depression are a large and especially vulnerable population. Depression affects 18–30 percent of patients receiving HIV care in Africa<sup>1</sup> and is an important barrier to early ART retention.<sup>2,3</sup>

The potential for depression treatment to improve HIV care outcomes has received little attention in the region, in part because of the very limited mental health infrastructure in many countries. Malawi's Ministry of Health is working to build mental health capacity through task-sharing approaches, including training primary care providers and outreach workers in mental health screening and counseling.

Project SOAR is working with the Ministry of Health to implement and evaluate the integration of a depression management program into HIV care in Malawi—a country in which nearly a quarter of people initiating ART are lost to care within the first 12 months.<sup>4</sup> The project combines two

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**Location:** Lilongwe, Malawi

**Study Duration:** 2016–2018

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depression treatment models—algorithm-based medication management and problem-solving therapy—into a single program that is offered at two HIV clinics in Lilongwe to patients newly initiating antiretroviral treatment and who have depressive symptoms.

This study will provide critical evidence on the feasibility, effectiveness, and cost-effectiveness of an integrated depression treatment model for improving retention in and adherence to HIV care. Such evidence has implications not only for the applicability of the model in Malawi but for other countries in sub-Saharan Africa as well.

## OUR RESEARCH

The study employs a pre-post design over a 15-month period. There is an initial observation period at both clinics during which HIV and mental health outcomes are being measured among clients initiating ART and receiving standard care. Subsequently, the clinics will integrate the mental

health treatment program at different times. The study team will continue to measure HIV and mental health outcomes among clients initiating ART together with the combined mental health treatment program.

We expect to abstract depression screening data across the two clinics for approximately 1,830 adult patients newly initiating ART. We also will abstract further treatment and outcome data before and after the intervention for those patients who screen positive for mild, moderate, or severe depression. We will compare retention in HIV care, viral suppression, and depression response and remission among patients receiving the combined program compared to those receiving usual care.

## RESEARCH UTILIZATION

The research team is engaging a range of stakeholders, including health facility staff and Ministry of Health officials, over the course of the study to foster research utilization. For example, select stakeholders will present preliminary findings at a data interpretation workshop and lead discussions on their implications for programs and policy. Subsequently, the research team, Ministry officials, and facility staff will develop a data use plan that will help guide the local dissemination agenda and target audiences.

In addition to presentations at local and regional conferences, all involved clinics will receive a formal presentation regarding program outcomes and proposed next steps. In coordination with our stakeholders and partners in the Ministry of Health, we will also develop presentations that are geared specifically to local clinics that were not involved in the program, transferring relevant information and “lessons learned” from on-the-ground healthcare workers. Finally, through our identified Ministry stakeholders, we will present our results to the Ministry of Health HIV care and treatment group and the National Health Sciences research committee to facilitate discussion regarding policy implications of our findings.

## What are the study’s outcome indicators?

### HIV

- Proportion of patients keeping all HIV care appointments required to maintain their ART supply through the first six months on ART
- Proportion of patients with a HIV RNA viral load of <1,000 copies/mL approximately six months (+/- six weeks) after starting ART

### Mental health

- Proportion of patients with remission of depressive symptoms at six months
- Proportion of patients with a decrease of 50 percent or more in depressive symptoms from baseline to six months

### Cost and cost-effectiveness

- Expense associated with delivering the depression treatment program per patient and per clinic
- Cost per additional case of viral suppression achieved
- Cost per additional case of depression remission achieved

## REFERENCES

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- <sup>2</sup>Smillie, K. et al. 2014. “Mobile health for early retention in HIV care: a qualitative study in Kenya (WeTel Retain),” *African Journal of AIDS Research* 13(4): 331–338.
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- <sup>4</sup>Massaquoi, M. et al. 2009. Patient retention and attrition on antiretroviral treatment at district level in rural Malawi,” *Transactions of the Royal Society of Tropical Medicine and Hygiene* 103(6): 594–600.