

Can Depression Screening be Integrated into Busy HIV Clinics in Malawi? Early results demonstrate its feasibility and acceptability

In Malawi, as in many sub-Saharan African countries, depression affects between 10 and 30 percent of people in HIV care.¹⁻⁴ If unaddressed, depression can lead to poor adherence to antiretroviral therapy (ART), HIV treatment failure, and HIV clinical progression.⁴ Integration of depression screening and treatment into HIV care may prove critical to achievement of the 90–90–90 goals in Malawi and elsewhere in the region.

OUR RESEARCH

The objectives of our study are to:

- Integrate an efficient, task-shifting depression screening and treatment program into routine HIV care.
- Evaluate the impact of the program on HIV and mental health outcomes.
- Estimate the cost and cost-effectiveness of the program.

The Malawi Ministry of Health (MOH) is currently implementing the depression treatment program at two semi-urban public health clinics in Lilongwe in two phases.

During the screening phase, all new ART patients are screened for depression. The first step consists of administering a 2-question screener—the patient health questionnaire (PHQ-2) by the HIV testing counselor. If a patient responds positively to one or both questions, the HIV health care provider administers a 9-question structured assessment (PHQ-9). The HIV provider then links depressed patients to the existing standard of care—most often counseling or specialty care.

During the treatment phase, the clinic’s HIV providers are trained in medication management



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and the clinic’s lay health workers—called health surveillance assistants (HSAs) in Malawi—are trained in “Friendship Bench” problem-solving counseling.

The evaluation team is abstracting patient clinical data to assess retention in HIV care, viral suppression, and depression outcomes and capturing cost data to assess the cost-effectiveness of the program. Additionally, they are periodically conducting qualitative interviews with MOH officials, clinic staff, and patients to evaluate program implementation.

The screening phase of the program launched in April and May 2017 at the two Lilongwe sites (Area 18 and Area 25 clinics). The treatment phase launched at Area 18 clinic in November 2017. This brief focuses on initial results from the screening phase.



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THE DEPRESSION TREATMENT PROGRAM

The treatment program we are evaluating combines routine depression screening with two evidence-based, task-shifting depression treatment models into a single, stepped-care program that is offered to patients with depression who are newly initiating ART. The two models are:

1. Measurement-based care antidepressant management⁵
 - Algorithm-guided antidepressant management.
 - Designed for non-specialists.
 - Treatment decisions guided by standardized metrics (PHQ-9).
 - Evaluated in Cameroon, Tanzania, and Uganda.

2. “Friendship Bench:” Problem-solving therapy (PST)⁶
 - Developed and tested in Zimbabwe.
 - Designed to be delivered by lay health workers.
 - Psychological counseling that teaches problem-solving skills to identify triggers and effectively manage stressful life events.
 - Located outside the clinic to ensure privacy.

RESULTS

More than 90 percent of patients have been appropriately screened for depression.

Figure 2 illustrates the depression screening cascade among more than 1,000 new ART patients seen in

What tools have been developed or adapted for the program?

- The **Patient Health Questionnaire-9 (PHQ-9)** is a widely used 9-item instrument that assesses the presence of 9 symptoms of depression within the previous two weeks. This tool was translated into Chichewa and modified to better capture the local culture and common practices.
- The **Suicide Risk Assessment Screening Protocol** is used to distinguish passive from active suicidal thoughts, assess the degree of severity of suicidality, and guide clinical response in patients who screen positive for suicidal ideation on the PHQ-9.
- The **Mental Health Mastercard** is a clinical form developed to capture key longitudinal indicators of depression management in the style of HIV clinical forms (called ART Mastercards) that are used to record HIV care in the Malawi health system.
- The **clinic reference guide** is printed on posters that hang in the ART clinic rooms to remind providers how to administer and interpret the PHQ-9 (Figure 1).

Figure 1: Clinic reference guide

Depression Screening and Response Protocol

Goals	Symptoms of Depression <small>(Present most of the time for at least 2 weeks)</small>	When to Use the PHQ															
<ul style="list-style-type: none"> • Screen ALL new ART patients with PHQ-2 • For ALL patients with PHQ-2 > 0: Complete PHQ-9 • For ALL patients with PHQ-9 ≥ 5: Evaluate and consider treatment <u>or</u> referral • Assess any indications of suicidal thoughts 	<ul style="list-style-type: none"> • Sad • Loss of interest • Difficulty sleeping • Feeling tired • Loss of appetite • Feeling guilty, or like a failure • Difficulty concentrating • Moving or speaking slowly • Thoughts of being better off dead <p>Rule out bipolar, adjustment, psychosis</p>	<p>All new ART patients</p> <ul style="list-style-type: none"> • Complete PHQ-2 • If >0: Complete PHQ-9 <p>Repeat screening every 6 months</p> <ul style="list-style-type: none"> • Complete full PHQ-9 (not just PHQ-2) for all patients with previous PHQ-9 scores ≥5 <p>Patients receiving mental health treatment</p> <ul style="list-style-type: none"> • Repeat PHQ-9 every month <p>Store PHQ-9s with the ART Mastercard</p>															
How to Interpret the PHQ-9	Assessing suicidal thoughts <small>If PHQ-9 question 9 is >0</small>	The Mental Health Mastercard															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PHQ-9 Total Score</th> <th>Meaning</th> <th>Recommended Action</th> </tr> </thead> <tbody> <tr> <td>0-4</td> <td>Not depressed</td> <td>None</td> </tr> <tr> <td>5-9</td> <td>Mild depression</td> <td>Consider counseling or watchful waiting</td> </tr> <tr> <td>10-19</td> <td>Moderate depression</td> <td>Consider medication OR counseling</td> </tr> <tr> <td>20-27</td> <td>Severe depression</td> <td>Consider medication AND counseling</td> </tr> </tbody> </table>	PHQ-9 Total Score	Meaning	Recommended Action	0-4	Not depressed	None	5-9	Mild depression	Consider counseling or watchful waiting	10-19	Moderate depression	Consider medication OR counseling	20-27	Severe depression	Consider medication AND counseling	<p>Complete the Suicide Risk Assessment Protocol</p> <ul style="list-style-type: none"> • Thoughts of hurting self? • Made plans? • Ever attempted to harm self? • Intention to act soon? • Told anyone? • Might hurt self before next visit? <p>Classify suicide risk as:</p> <ul style="list-style-type: none"> • Passive • Active – low, moderate/high, acute 	<ul style="list-style-type: none"> • Every patient receiving depression counseling, medication, or referral should receive a Mental Health Mastercard • The nurse or clinical officer can complete the Mastercard • The Mental Health Mastercard should be stored with the ART Mastercard and the PHQ-9s
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both clinics since the start of the program (April/May 2017) until mid-February 2018.

- HIV testing counselors screened almost all new ART patients (91 percent) using the PHQ-2.
- Almost half (45 percent) of ART patients screened positive on the PHQ-2, indicating the need for further assessment.
- More than 90 percent of patients who screened positive on the initial depression screener (PHQ-2) completed the full depression assessment (PHQ-9) administered by nurses or clinical officers.
- Among the patients completing the PHQ-2:
 - Nearly a fourth (24 percent) were diagnosed with mild to severe depression and 6 percent were diagnosed with moderate to severe depression, based on their PHQ-9 scores.
 - 5 percent reported suicidal thoughts.
 - Levels of depression and suicidal thoughts were similar for men and women.

Based on a first round of qualitative interviews, the program has been well received by clinic staff and patients.

I feel it is a good program because it was one of the areas we were missing out in caregiving

at this clinic as nurses. ...we don't really have a place dedicated for psychiatric care/mental health. When this program started, I thought it was very good because we would be able to identify patients with mental health issues who we would have previously missed.

—Health provider

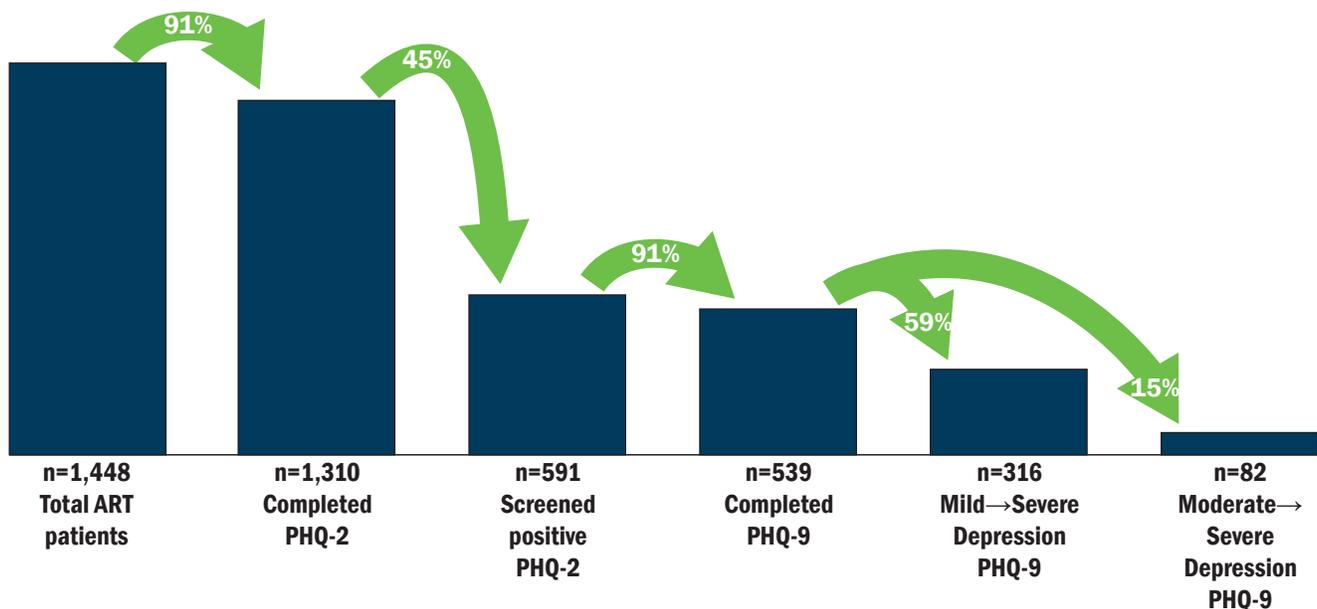
I went from VCT to ART, where I met the doctor who talked to us about depression.... I can say it was a wise thing and that saved my life. I would have probably had thoughts of taking my own life because it was a thing I had not expected. I never expected to be on ART. Depression is real but my husband was encouraging me and now I can live normally. I am grateful to the hospital staff and my husband for all the encouragement.

—Female patient

I feel I was helped and it gave me hope for the future because the way things are going now is different from how it was that time. I had some anxieties but they told me that when one feels depressed it's like an illness. So I try to avoid getting depressed and my life is good... This program is acceptable to me.

—Male patient

Figure 2 Depression screening and diagnosis cascade



CAPACITY BUILDING

A core aspect of the program is building capacity in depression screening and management among clinical and lay staff. This includes:

- Sensitization meetings for clinic staff.
- Depression screening trainings for HIV testing and counseling (HTC) counselors and ART clinic staff.
- Refresher trainings for HTC counselors and ART clinic staff.
- “Friendship Bench” PST train-the-trainers for PST supervisors.
- “Friendship Bench” PST training of HSAs by supervisors.
- Management-based care (Phase II) training of Area 18 ART clinic staff.
- Ongoing clinical supervision of “Friendship Bench” counseling and management-based care.

KEY LESSONS LEARNED

The design and implementation of the program has been facilitated by:

- Investigating clinic infrastructure, patient flow, and staff responsibilities prior to program design.
- Encouraging collaboration between all key stakeholders and organizations involved in the provision of HIV care at Areas 18 and 25 clinics, including non-governmental organizations who send staff to support HIV care at these clinics.
- Holding weekly meetings with clinic staff to discuss progress and concerns. By creating this space to elicit feedback from the clinic staff and encourage an iterative learning environment, the evaluation team has been able to trouble shoot and address challenges that arise.
- Fostering local ownership by developing careful messaging that emphasizes that the program is a government initiative, ensuring MOH representation at clinic meetings, engaging with the Lilongwe District Health Office, and identifying clinic staff to champion the implementation of the program at their respective clinic.

- As the clinics are understaffed, providing ad-hoc support and multiple refresher trainings to make it easier for the clinicians to attend trainings.
- Working closely with the local clinic pharmacists and MOH and District Health Office collaborators to ensure that antidepressants are stocked at both clinics.

NEXT STEPS

Data abstraction and review are ongoing. We will launch the treatment phase at Area 25 clinic in March 2018. Data collection will continue through spring 2019.

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