SPOTLIGHT: mHERO CONNECTS FRONTLINE HEALTH WORKERS WITH MENTAL HEALTH SERVICES IN LIBERIA

December 2015 | Amanda Puckett BenDor and Emily Nicholson

Angie Nyakoon and Amanda Gbarmo Ndorbor oversee the Mental Health Unit at the Ministry of Health and Social Welfare in Monrovia, Liberia. Though they work in tight quarters, their responsibilities are vast—including supporting the health workers who provide mental health services throughout the entire country. This has been an especially difficult job over the past two years as the Ebola outbreak ravaged the mental and physical health of so many Liberians, not to mention of health workers themselves.

MENTAL HEALTH IN LIBERIA: A PROBLEM WELL BEFORE THE EBOLA OUTBREAK

As Angie and Amanda will tell you, Liberians have tended to endure mental health suffering rather than seek care, perhaps in part due to a lack of qualified health workers who are licensed to provide mental health services. Before the Ebola outbreak, the most common mental health disorders in Liberia included depression, anxiety, psychosis, and post-

traumatic stress disorder—much of the latter a result of 14 years of civil war that killed over a quarter of a million people.

Ebola has certainly exacerbated mental health issues in the country, particularly as fear, stress, and loss have plagued survivors, their families, orphans, and health workers. However, much remains unknown. In June, the World Health Organization (WHO) announced plans to finalize a Mental Health and Psychosocial Support Minimum Response Framework for Ebola Outbreaks, while the Carter Center is investing in training additional mental health care providers to meet service gaps. So far, they've trained more than 150 clinicians this year.

Statistics on mental illness and data on services provided in Liberia are often hard to find, one reason being that they are not captured in the national Health Management Information System. Dwarfed by other health challenges such as malaria and high maternal mortality, mental health diagnoses, their management, and the data needed to better support mental health services compose a

major information gap for the Mental Health Unit. Despite the growing need for these data to be routinely captured in the national system, identifying mental health service delivery indicators, collecting and updating data, and ensuring they flow to the right team at the ministry are not easy processes—or swift.

MHERO AND MENTAL HEALTH

When Angie and Amanda learned about mHero, a new platform that enables the ministry to communicate directly with frontline health workers, they had an idea: could they use this new tool to learn more about the illnesses their mental health clinicians were seeing throughout the country? mHero combines health worker records in the national iHRIS—the IntraHealth-developed human resources information system—with RapidPro, an SMS tool that facilitates two-way text messaging, to send targeted SMS to health workers on their mobile phones.

"We were happy to learn about mHero and develop use cases to find out more information from mental health clinicians in Liberia," Amanda says. The duo acted quickly to brainstorm the types of questions they would send to health workers. They decided to pilot a simple set of messages to see *if* health workers would respond and *what* those responses would be.

Angie and Amanda developed a workflow of 14 questions about diagnoses encountered, the age of the diagnosed, and the kinds of treatments provided. Working with the mHero team at the ministry, they tested the workflows to be sure the messages were sent in the right order and that the data that came back were easy to understand. When they were ready, the mHero system sent the workflow to 39 mental health clinicians across the country.

The responses that came in from Liberia's counties revealed that depression was the most common mental illness plaguing citizens—three times as many clinicians reported diagnosing the illness than those who did not. The responses also exposed an unexpected differential in the age of those diagnosed: depression, along with anxiety, post-traumatic stress disorder and suicidal ideation were all seen more often in individuals under the age of 18 than in any other age group. This is exactly the type of information that Angie and Amanda look for, as it highlights the need to direct their limited funding toward a specific—and in this case particularly vulnerable—age group.

After receiving these SMS responses, Amanda and Angie shared their data with a group of mental health clinicians, physician assistants, and nurses from nine of Liberia's twelve countries. "We wanted their view on the mHero project as a strategy of collecting information," Angie says. "They were all very excited! These were the recipients of the texts so engaging with them about how it felt to interact with the phone, how we should modify our questions, and what other information we can collect was very interesting."

Some of the functional modifications they identified were simple, such as requesting yes/no answers to questions or adapting the context of the questions slightly.

## FROM TEST TO ROUTINE MHERO IMPLEMENTATION

Since then, Angie and Amanda have sent out monthly workflows to collect routine information on mental health services in Liberia. They are grateful that mHero has enabled them to start gathering information on suicide, a health priority in the [WHO's Mental Health Gap Action Program.](#) "We don't even know if suicide has increased or not during Ebola—there is no baseline, but we want to start collecting information now," Amanda says.

> ### "Before mHero, we were struggling to get information from the counties. Now, we get information fast and it is really working for us." —Amanda Nyakoon

Angie and Amanda are doing more than analyzing the data they receive through mHero for themselves. One of their key strategies is to regularly share information about mental health services with the National Health Sector Coordination Committee, so that crucial resources can be mobilized to better support mental health services in the country. They are also using mHero to raise awareness about mental health, sending out invitations to more than 150 health workers to participate in World Mental Health Day celebrations in October 2016.

"Ebola has affected this country a whole a lot in terms of mental health," Angie says, not to mention the civil war. She estimates that around 163,000 Liberians are at risk for severe mental illnesses. "We

know there is a serious impact and we need to have more psychosocial and mental health interventions where people will be talked to and be able to pass back into the community," she says.
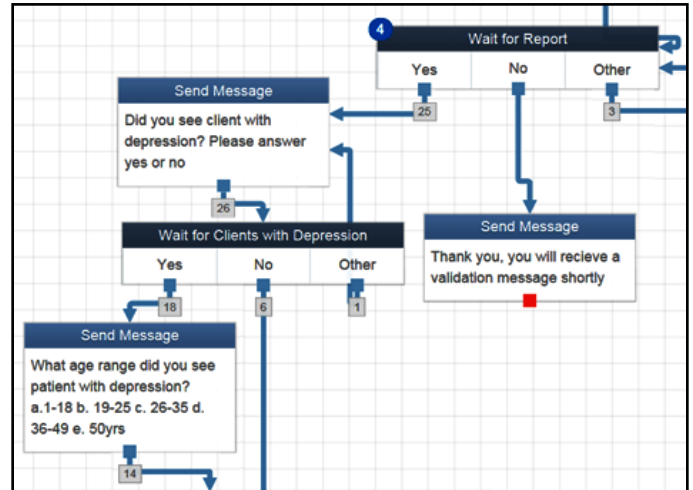
Screenshot of the mental health workflow in RapidPro.

mHero is helping champions such as Angie and Amanda at the Ministry of Health and Social Welfare connect with health workers on the front lines of care. "Before mHero, we were struggling to get information from the counties," Amanda says. "Now, we get information fast and it is really working for us."

IntraHealth would like to thank Angie Nyakoon and Amanda Gbarmo Ndorbor for participating in the interview about their use of mHero. We also thank the US Agency for International Development for their support through the Ebola Grand Challenge.

CONTACT

Amanda Puckett BenDor
HRH and Knowledge Management Advisor;
mHero Global Coordinator
apuckett@intrahealth.org