

**Partners in Health
Neno, Malawi
October 24-25, 2011**

Partners in Health (PIH) works in 12 countries around the world, including Malawi. We visited the hospital and village health worker program that comprise part of its Malawi project. We toured the hospital, visited HIV patients' homes with a community health worker, and discussed the socio-economic support program (POSER) with staff members of that program.

We reached Neno via an hour on a very bumpy road from the small town of Zalewa (which is on a paved road). During the rainy season, this road becomes impassable because the river we drove through gets too deep, and they have to take an alternative route that takes about twice as long.

The hospital itself was much larger than the other two district hospitals we had seen (among other things, it was two stories whereas the others were only one). Nearby there were banks with ATMs, and we were told that there was also a government-built community hall and a bus station nearby and that none of these had been present before PIH arrived in Neno.

History of the program from conversations with program leadership

PIH started working in Malawi in 2007. They were invited to work in Neno by the government and the Clinton-Hunter Global Initiative. Neno was chosen because it was on the government's list of four or five districts with the greatest health needs and it was the poorest and most remote of these districts. In 2003, Neno was divided from another district to create a new district. With support from PIH, the health center in the small town also called Neno was expanded to become the official district hospital. There was a clinical officer (3 years of training and one year of internship after high school) at the clinic but no doctors. At its start, the project had received a \$10 million pledge of multi-year funding, but shortly after the project began, there was a real estate market crash and the donor was unable to fulfill its pledge beyond the \$1 million that had already been paid to PIH. The funder proposed that PIH leave Malawi, but PIH stayed. The new hospital was constructed, as was a community hospital about 30 minutes' drive from the Neno hospital. As a result of the funding shortfall, however, progress on renovations and new construction has been less than was envisioned. A planned maternity ward and surgical facilities have not been completed.

PIH stated to us that sustainability is a major focus and that leaving Malawi would be been counter to PIH's philosophy of pragmatic solidarity which is rooted in a long-term commitment to the communities it serves.

In addition to running the district hospital, village health worker network, and POSER, PIH supports 11 clinics, both government and private, around the district at which ART clinics are held monthly for patients to receive medications and other health assistance, and built a community hospital about a 30 minute drive from the district hospital. PIH provides transfers from the health clinics to the two hospitals it built and runs in the district.

PIH will remain in Neno for the foreseeable future. The long term goal is to transfer more responsibilities to Malawian staff and the Ministry of Health over time and to continue to provide financial and technical support.

Hospital tour and discussions with doctors

We first went to morning report, where the night staff tell the day staff about developments during the previous night. There were about 20 people there. The attendees included the medical director (Jonas, a Haitian who has worked for PIH for ten years, first in Haiti, then in Lesotho, and now in Malawi), two American doctors (Jason and James), at least one Malawian doctor (the

hospital has 3, including the District Health Officer and 2 PIH Malawian doctors), about 10 nurses, about 5 clinical officers, and 2 interns. The meeting took place in English.

There were four reports. A clinical officer presented a case of an HIV+ patient and a nurse presented a case of sickle cell disease. We weren't able to understand the details of the other cases. The American doctors asked a few questions. One case involved a woman who had gotten a biopsy at the district hospital in Blantyre, but couldn't afford to pay to see the results, and so had come to Neno hoping that the Neno hospital would pay for these. It was decided that they would in fact pay for these.

Then there was a presentation entitled "Female ward September death audit." These happen monthly for each ward. There are four wards (male, female, pediatric, and TB), so audit presentations happen weekly. A PowerPoint was used and clinical details were discussed. In September there were 43 admissions to the female ward, 13 of whom tested HIV+ ("reactive"), 14 tested negative, and 16 were not tested. There were 5 deaths, 3 of which were HIV+ patients. After the presentation there was a discussion involving some of the Malawian doctors and clinical officers. An American doctor asked some questions and gave some advice about diagnosis and medication regimens. The medical director noted that getting patients to come to the hospital sooner could help prevent deaths like these.

The room in which the morning reports took place was clean and had a high ceiling, with a strong fan but no air conditioning. In general, the hospital was clean and in good condition.

After the report we spoke briefly with two recently-hired Malawian doctors. They both said that they had previously worked in district hospitals in the northern part of the country. PIH told us that it used to be considered a punishment to be sent to Neno, but now many doctors want to come there and one medical student is currently visiting to work there for 6 weeks during his vacation time. There are now 8 doctors at Neno: 3 from Malawi, 2 from Haiti, and 3 from the U.S. There are 108,000 people in the district, which means that Neno likely has the best doctor to population ratio in the country.

We also spoke at this point with other PIH staff.

We asked whether it's common for patients to come from other districts. We were told that in most cases this doesn't happen, though there are exceptions; in particular, people come from across the border in Mozambique to receive ART, since ART is free in Malawi but not in Mozambique.

We were told that the HIV survival rate is 92%, compared to ~60-70% for the country as a whole. We asked whether PIH has a similar differential for TB, and were told that while they didn't have the figures offhand, ART clinics are likely to make it easier to pick up and treat cases of TB. At the same time, TB is not as much of a challenge adherence-wise as ART is. One of the challenges of dealing with TB is the difficulty of diagnosis: the sputum test only has about a 50% chance of picking up TB, though there is a new machine coming to Neno in early November 2011 (the GeneXpert) that's closer to 70-85%.

During our tour, we visited the second floor which houses the district health offices, a seemingly well stocked laboratory with refrigerators, microscopes, a computer, and a fume hood and a computer room with 5-10 computers. In addition to providing office space, PIH provides supplemental salaries for over 400 district health employees to incentivize their living in Neno and being committed to the work.

About 90% of the supplies at Neno are sourced directly by PIH, while the remainder come through government systems. PIH seeks to have 3-6 months worth of supplies on hand at all times and they are kept in a warehouse. Drugs and supplies cost \$15,000 per month and are sourced from IDA, an international agency. Stock outs happen occasionally if PIH doesn't order in

a timely fashion and the government systems are not functioning at the time. In one instance the basic health indicators test ISTAT was out of stock for a week or two.

Next we visited the male ward on the first floor. There were 20 beds and about 14 patients in one large room. It was a basic ward similar in appearance to the wards we had seen at the other district hospitals we had visited in the Ntcheu and Balaka districts. Each bed had a bed net that was tied up for the day. Privacy was limited to when a portable cloth screen was put around a bed, perhaps during an exam. The patients we saw briefly all appeared very ill and weak, and most appeared to be fairly young (under 50). We asked if the wards ever reach capacity and what is done in those cases. PIH said that this was rare, but had happened once recently and was somewhat common in malaria season. In those instances patients are put in other wards (for example women in the pediatric ward) or in exam rooms.

We saw a small pharmacy and then went to the pediatric ward. We saw the children receiving cups of a corn-based porridge. Attached to the pediatric ward was the nutritional rehabilitation unit for severely malnourished children. We saw a box of ready-to-use therapeutic food made by Project Peanut Butter.

All patients and their caretakers receive 3 meals a day and there are no charges for care, drugs, or food. Other district hospitals also provide free care and drugs, but private hospitals and clinics do not. There were 4 such private clinics in Neno run by Christian Hospital Alliance of Malawi (CHAM), and PIH assisted these clinics with funds to replace user fees.

We also visited the maternity ward and the outpatient department, which are housed in the old health center (as discussed above, renovations have been postponed due to a shortfall in funding). The maternity ward was very small with just two delivery beds and 8 recovery beds, and another small room for antenatal care. PIH told us that because of the lack of space it is not uncommon for women to labor on the floor. There were 40 deliveries in the month (as of the 24th). The outpatient department was very crowded, with perhaps 50-100 people waiting. We asked if all those waiting would be seen today and PIH said yes, and additional clinicians would be pulled from the hospital if needed. PIH believes that no patient should be turned away no matter how late it is.

The hospital does not yet have surgical capacity. We saw an unfinished surgical wing. It was undergoing renovations to meet government requirements. PIH does not yet have a surgeon on staff but is hoping to hire one and open the surgical wing soon. Currently all surgical cases are referred to the Mwanza district hospital, which is about a hour and a half drive from Neno. For non-surgical cases, PIH often sees patients who pass by the Mwanza hospital and come to Neno instead. Neno has many more ambulances than most district hospitals (at least four; others tend to have ~2) and makes many referrals to Mwanza and the national hospital in the city of Blantyre. Fuel shortages are a problem, though PIH keeps back up fuel supplies.

Neno is the only district hospital in the country that provides 3rd line chemotherapy treatment, which is very expensive.

We asked how payment of medical staff works. PIH pays all the PIH doctors, and stated that they are able to pay more than the government would. PIH also supplements the government-paid salaries of medical assistants and nurses.

We asked PIH about their data collection. They said they have a well functioning electronic medical records system for tracking patients on ART, and that the databases for other patients exist but have problems. The best records are on paper charts. PIH does not have data on health conditions before it started its work in the district. The newest American doctor is trained in epidemiology and will work on this in the future. PIH could produce reports on what people came in for, but due to imprecise initial diagnoses, this information likely wouldn't be very informative.

Patient home visits

We met with Henry, the head of the Village Health Worker (VHW) program, one site supervisor, and one VWH at the Chifunda clinic in a part of the district that was about an hour's ride from the Neno hospital over very bumpy roads. They had just completed a VHW training session and took us to visit 5 patients' homes.

PIH employs nearly 700 VHWs (674), who report both to 1 of 12 PIH site supervisors (who each cover about 10 villages) and the government's Health Surveillance Assistants (HSAs). VHWs receive 7 days of orientation and monthly trainings for one morning each month. PIH employs VHWs to work in the vicinity of 8 of the 10 health clinics in the district.

The number of VHWs per village varies depending on the number of patients in the village but there are often multiple VHWs in one village, while an HSA will often cover a few villages. VHWs visit patients regularly (some daily) and go with patients to the hospital or clinics when they have appointments or are sick. In a few areas, PIH is piloting a "household chart" system in which VHWs have a list of questions to ask patients when they visit them and report results monthly. This is meant to be an active case finding tool and support the health of everyone in the household rather than just the HIV patient.

VHWs need to be able to read and write, need to have lived in the village for a few years, be over 18 years old, and be judged to be trustworthy. The site supervisor sits down with the village's HSA and head to choose VHWs. Only physicians can fire VHWs.

The site supervisor periodically visits patients with or without the VHW to ask if they are being visited regularly and how the VHW is doing generally. The site supervisor we met is a college graduate and oversees VHWs for 247 patients. We went with the site supervisor to visit 6 patients in 5 households (two were siblings living in the same compound). In each case the houses were among the poorest looking we've seen in the country, with mud bricks, thatched roofs in disrepair, and children whose clothing was in poor condition. All households told us that they make charcoal for a living and said that they struggle to get enough to eat.

Household #1. The patient appeared healthy and said she was feeling fine. She was diagnosed with HIV in 2006 (she decided to get tested because she had been experiencing a lot of illness) and has been on ART since then. When she was diagnosed she told her husband to get tested but he refused. Before PIH started providing ART at the Chifunga clinic, she was going to Mwanza. Both are four hours away by foot but she said that she prefers Chifunga because they provide food and have monthly meetings for patients. She had some side effects, including swollen legs, when she first went on ART, but the doctor changed her regimen and now she is fine. She is visited three or four times a week by the VHW. She has a child. POSER has visited her but hasn't given her any support yet. PIH told us that she would have answered questions on a vulnerability assessment and then been compared to other patients in need to determine support to be offered.

Household #2. She learned she was HIV positive when she was tested as part of antenatal care. She received PMTCT to prevent transmission to her child. She still has swollen legs as a result of her medications. She has three children and they are HIV-negative. Her husband divorced her after she found out that she was HIV-positive; she reports that he stole a chicken so that the village would throw him out (as a way of running away). Before she started receiving ART at Chifunga, she was receiving it from Mwanza. She prefers Chifunga because of the supplementary services like feeding programs and because the lines are shorter (she waits about 2 hours after arriving, instead of 4; she says that Mwanza is very crowded, partly due to people coming over from Mozambique for treatment). She has received exercise books and uniforms for her children from POSER. Her VHW visits about four times per week and reminds her to go to her next appointment and will walk with her to a clinic if she gets sick (walking the full four hours with

her, unaccompanied by anyone else). She doesn't have a bed net. She got one when she was pregnant with her last child but that was five years ago and it wore out.

Household #3. She was diagnosed with HIV three years ago at Chifunga. She got tested because she was getting sick often. She feels fine now. Her husband got tested six months ago and was negative. They use condoms which they get from the Chifunga clinic. A PIH staff member told him he should go get tested again. They care for their granddaughter whose mother passed away six years ago. She goes to school nearby and has received exercise books and uniforms from POSER. They hope that their granddaughter will finish secondary school (the closest secondary school is 10km away; if she went she would board nearby) and become a nurse or doctor. She makes charcoal and occasionally weaves baskets; her husband does the same. They suffer from a lack of food and clothing.

Household #4. At this household we met a male and a female patient who are siblings. She was diagnosed in 2003 and he was in 2007.

He got tested because he had swollen eyes and had lost his appetite. He dropped out of school in standard 8 because he was sick. He has thought about going back to night school but doesn't have enough money. He was tested at Mwanza. He got treated and now feels fine. His wife is negative. He transferred to Chifunga so he would get assistance from the VHWs. His VHW comes twice per day, and for appointments walks with him for the full four hours to Chifunga (accompanied by no one else). If the VHW comes only once in a day, the VHW apologizes; the two have a good relationship. He has not been visited by or received support from POSER. He said the medication makes him very hungry and it's hard to find enough money to buy food. He would like to get a small loan to start a business. In his spare time he likes to spend time with his wife. He has a cell phone which he charges at a trading center and uses to coordinate with his wife.

His sister decided to get tested on her own at Mwanza. She was not on medication for the first five years after she was diagnosed. She has one child in standard 8 and asked POSER for help paying for school fees but hasn't received it yet. She has a bed net but her child doesn't. She hopes her daughter will go to secondary school and become a nurse. In her spare time she likes to read; she gets books from Women's Forum, a nearby NGO. The books are about how to live with HIV.

Household #5. She was diagnosed in Chifunga in 2010. Her husband divorced her before she was tested. Her five year old child is also HIV positive and is receiving ART. Her VHW visits her every day and goes with her to the clinic. She has been visited by POSER, but has not received support from them. They came once to give her cash but she wasn't at home. She has a net that she reports using regularly and sharing with her children. When we went in her house she showed us the net and a second net that it still in its packaging (she is saving this one until the other one wears out) that she received during her last pregnancy. She hasn't had any side effects from the ART. She has access to a borehole close by. She suffers from lack of food and she doesn't have her own house but stays in a house owned by her sister. She thinks her young child (currently in the 1st standard nearby) will go to secondary school and become a nurse or a doctor or maybe a teacher. The child's school is a 30-minute walk away. We asked her what people do for money in the area besides making charcoal and she responded that many men sell fuel on the black market.

POSER

We met briefly with Victor, the director of POSER, before we had to leave on Tuesday morning. On the ride back from Neno to Zalewa, we further discussed POSER with Edwin, a POSER staff member.

POSER was created to address patients' non-health needs, especially the problem that patients

lose income when they spend time in the hospital. It provides support both to patients and their families, as well as Community Based Organizations (CBOs). Patients are identified for assistance through home assessments during which they receive a poverty score based on both income and assets; POSER seeks to target people at higher levels of poverty (as well as medical need).

This year POSER's budget was cut from 33 million kwacha to 12 million kwacha.

POSER works on a variety of intervention areas:

1. Housing: POSER works to improve living conditions for people living in conditions it deems unhealthy. It costs 450,000 kwacha (about \$2,700) to build a new house. POSER built new houses for some patients in the past but has stopped this program and now only renovates houses due to budget cuts. From the two before-and-after picture sets we saw, the replaced houses seemed to be made entirely of straw (most of the houses we've seen had walls of mud or brick) or had broken roofs. New houses appear relatively spacious, are made of brick and have metal roofs.

2. School support: POSER supports 2000 students in primary and secondary school. They receive books, school supplies, and uniforms (uniforms are required in secondary school but not in primary school; POSER may give uniforms to primary students too if they lack clothing to wear to school). Schools have received furniture (260 desks donated to 13 schools). POSER also paid a teacher from Blantyre to come to the district.

3. Vocational and literacy training: POSER provides trainers and daily meals for a year for people being trained in carpentry, goat farming, knitting, or running a restaurant (this may not be an complete list). The trainees are typically young adults orphaned by parents lost to HIV/AIDS.

4. Microfinance. POSER supports 2 restaurants owned and operating by vulnerable women in Neno and Zalewa. Many of the women are former sex workers who were given literacy and business management education through PIH. Start up fees to open the restaurants as well as ongoing monthly stipends for the women are provided to get the restaurants up and running. Ongoing support will be offered in the form of money management support and sending all PIH visitors to take their meals at the restaurants.

5. Agriculture support. In the past PIH supported 17 community demonstration gardens as well as other permaculture activities. In July 2011 these activities were ceased and the gardens handed over to the CBOs due to budget cuts.

6. Community-Based Organizations (CBOs): both last year and this year, about 25% of the budget went to support 6 local CBOs, chosen mostly by getting suggestions from the local government. CBOs support people living with AIDS, orphans and vulnerable children, the elderly, and those receiving home-based care.

POSER also gives out one-time cash grants, usually of 3000, 5000 or 10000 kwacha (about \$18, \$30, or \$60).

Evening discussion with staff

We had dinner with staff (Project Manager, Incoming Clinical Director, TB CARE Coordinator, and Physician Epidemiologist) and spoke further with them about PIH's work.

- We further discussed tuberculosis. The government isn't sure whether there is MDR-TB in Malawi and is currently conducting a survey, but PIH believes that there is MDR-TB in Malawi. PIH stated that adherence to TB regimens is usually strong.
- PIH emphasized that much of the work they've done across countries was believed to be very difficult before they did it, and is now looked back on (by those outside PIH) as

having been easy. For example, achieving high adherence rates in resource-poor settings; conducting a successful program in Lesotho, where the only access is by plane; and most recently, working successfully in Neno, a resource-poor setting with no advantages of note.

- The Malawi site has an annual budget of about \$3.4 million and has been getting nearly all of this from the national office in Boston. There is a goal to raise more Malawi-restricted funds so that it is on more stable footing funding-wise.
- If they had more money at the Malawi site, they'd like to finish the infrastructure building they had planned, such as building a new maternity ward. They think that doing this, and inviting in the Ministry of Health to officially open the new infrastructures, would be positive for both PIH and the Ministry of Health and potentially result in more available funding down the line, more opportunity for training of Malawian medical students and interns in a social justice approach to health care, and could be used to expand other PIH interventions such as POSER.
- We asked if they had any sense of what the national office would do if it received more unrestricted funding. They said that support for the Malawi site was a possibility. Another likely area for expansion would be the program on maternal mortality in Lesotho.