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Partners In Health in Neno District, Malawi

In May 2012, Ophelia Dahl, cofounder and executive director of Partners In Health (PIH), an international health nongovernmental organization (NGO), was preparing for the Board of Directors' meeting. On the agenda was an in-depth review of Abwenzi Pa Za Umoyo (the translation of "Partners In Health" in Chichewa; APZU), PIH's sister site in Neno District, Malawi.

Dahl reflected on her two trips to Neno, the first in 2008 and the second in 2011. She recalled how, in 2008, she had traveled for hours along a worn-out dirt road and visited public health clinics that seemed neglected. In fact, the district as a whole seemed abandoned. In 2011, she visited Neno's lively primary school, ate at a local restaurant, and got cash out of an ATM machine.

With limited primary data from the field, Dahl wondered how to demonstrate the changes that had occurred during this time period to the Board of Directors. What was APZU's impact?

Overview of Malawi

The Republic of Malawi is a landlocked, democratic country in southeastern Africa and one of the most densely populated on the continent (see **Exhibit 1** for map of Malawi). Zambia, Tanzania, Mozambique, and Lake Malawi border Malawi's 118,484 square kilometers. Major religions are Christianity (82.7%) and Islam (13%).¹ Official languages are English and Chichewa.

History

The arrival of Scottish missionary and explorer David Livingstone in 1859 marked present-day Malawi's first significant Western contact. From 1891 until they relinquished power in 1963, the British built roads and railways and introduced cash crops such as cotton and tobacco. In 1964, Dr. Hastings Kamuzu Banda was declared President for Life, and Malawi became a single-party state under the Malawi Congress Party. Banda supported the replacement of foreign imports with domestic production to make Malawi less reliant on colonial powers and to help build its industrial base. Banda's rule was marked by strict dress

Keri Wachter, Julie Rosenberg Talbot, and Rebecca Weintraub prepared this case for the purposes of classroom discussion rather than to illustrate either effective or ineffective health care delivery practice.

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codes, censorship, corruption, and a culture of fear. Increasingly insular and fragile, Malawi suffered from rising oil and commodity prices after a global economic crisis in 1979.²

After 33 years of single-party rule, Malawi transitioned to democracy in 1994 with free and fair national elections. Bakili Muluzi served as president until May 2004, when Bingu wa Mutharika succeeded him and remained president until his death on April 5, 2012. Despite progress in food security and agriculture, Mutharika's legacy included strained international relations that left Malawi nearly bankrupt, with the equivalent of 1.1 months of imports in reserves and a reputation of being "neopatrimonial."^{3,4} Vice President Joyce Banda—a well-known businesswoman, educator, and grassroots women's rights activist—became the first female president of Malawi and the second in Africa. Malawi's 28 districts—each of which is required to have a bank, a post office, a stadium, a community hall, a primary school, a hospital, and a bus depot that meet strict regulations—reported to Banda.

Neno History

Established in 2002 after splitting from Mwanza District, Neno District was the newest and one of the smallest districts in the country. Located in southern Malawi 145 kilometers from Blantyre, the nearest commercial and financial center, Neno's total area was 1,500 square kilometers (see **Exhibit 1** for map of Malawi) with a population of 125,000, most of whom were subsistence farmers. Neno had a District Council, including a district commissioner and a district health officer, who aimed to help Neno catch up developmentally to other parts of the country.

Economy

Malawi was one of the least developed countries in the world in 2012. Agriculture accounted for one-third of GDP and 90% of export revenues.¹ Tobacco accounted for half of all exports, followed by sugarcane, cotton, tea, and other crops. Malawi's economy also relied on foreign aid from donors such as the International Monetary Fund (IMF), the World Bank, and individual countries. After a severe drought and dismal corn harvest in 2005 led to famine for one-third of Malawi's population, President Mutharika spent 3.5% of GDP⁵—including over 50% of the Ministry of Agriculture and Food Security's budget and donor funds—to distribute 130,000 tons of fertilizer through a coupon-based program to more than 1.3 million households.⁶ Despite improved crop yield, some donors, including the US government and IMF, did not support the fertilizer subsidy because of its potential impact on the private sector and its long-term unsustainability. In 2006, the Government of Malawi (GoM) launched the Malawi Growth and Development Strategy "to reduce poverty through economic growth and empowerment of the poor and achieve the Millennium Development Goals."⁷

The GoM introduced free primary education in 1994. However, only 30% of the children who started primary school completed it.⁸ From 2003 to 2008, average university enrollment was 51 per 100,000 inhabitants. Most universities provided training in agriculture and practical job skills and were highly selective. The World Food Program worked with the GoM to provide school lunches—a corn-soya blend—to 635,000 students in grades 1–8 in 13 of the poorest districts in 2009.

In 2009, due to the global economic collapse, foreign investments in Malawi fell 23% and continued to decline in 2010, causing severe economic setbacks. In 2011, after a negative IMF performance review based on Malawi's overvalued currency and other governance issues, donors suspended general budget support, which had provided more than a third of government revenue over the past five years.⁹ The aid shortage impeded Malawi's ability to pay for imports, leading to severe fuel and food shortages. One Malawian chauffeur in January 2012 explained, "I've been here [at the petrol station] three hours, and spent three days before that looking for a queue to join."¹⁰

President Banda sought to restore foreign aid and improve relations with donors as quickly as possible. She devalued the kwacha by 40%, driving up commodity prices. Britain promised the government USD 31.7 million in emergency funds to buffer the impact on the poor, purchase malaria and tuberculosis (TB) drugs, purchase therapeutic foods for malnourished children, and support the Christian Health Association of Malawi's services.¹¹

Basic Socioeconomic and Demographic Indicators*

INDICATOR		YEAR
UN Human Development Index ranking	170 (out of 187)	2012
Population (thousands)	14,901	2010
Urban population (%)	20	2010
Drinking water coverage (%)	79.3	2010
Poverty rate (% living under USD 1.25 per day)	61.6	2010
Gini index	43.9	2010
GDP per capita in PPP (constant 2005 international dollars)	791	2010
GDP per capita (constant 2000 USD)	184	2010
Literacy (total/female/male)	73.7/67/80.6	2009

Health in Malawi

The primary sources of disease in Malawi were infectious and parasitic diseases as well as nutritional disorders.⁸ Non-communicable diseases were on the rise. The 10 leading causes of death in 2011 were: HIV/AIDS (33%), lower respiratory infections (11.3%), malaria (7.8%), diarrheal diseases (7.6%), complications from perinatal conditions (3.2%), cerebrovascular disease (2.8%), ischemic heart disease (2.6%), tuberculosis (2.4%), road traffic accidents (1.3%), and protein energy malnutrition (1.0%).⁸

Health System and Epidemiologic Indicators[†]

INDICATOR		YEAR
Average life expectancy at birth (total/female/male [years])	58/58/57	2011
Maternal mortality ratio (per 100,000 live births)	460	2010
Under-five mortality (per 1,000 live births)	83	2011
Infant mortality (per 1,000 live births)	58	2010
Vaccination rates (% of DTP3 coverage)	97	2011
Undernourished (%)	23.1	2011
Adult (15–49 years) HIV prevalence (%)	11	2009
HIV antiretroviral therapy coverage (%)	67	2011

* These data were compiled from the following sources: UN, UNICEF, World Bank, UNESCO, and Malawi Demographic and Health Survey 2010.

† These data were compiled from the following sources: World Health Organization, UNICEF, United Nations, USAID, and Malawi Health Sector Strategy, 2011–2016.

INDICATOR		YEAR
Tuberculosis prevalence (per 100,000)	174	2010
DOTS coverage (%)	100	2007
Malaria cases (per 1,000)	337	2008
Government expenditure on health as % of total government expenditure	14.2	2010
Annual government expenditure on health per capita (international dollars/USD)	39/15	2010
Total annual health expenditure per capita (international dollars)	65	2010
Physician density (per 10,000)	0.19	2008
Nursing and midwifery density (per 10,000)	2.8	2008
Number of hospital beds (per 10,000)	11	2007

Health System

Malawi's public health care system, coordinated by the Ministry of Health (MOH), included community, primary, secondary, and tertiary care. At the community level, 10,000 health surveillance assistants who had completed secondary school and a 10-week training course monitored health in rural areas, focusing on the prevention and identification of common illnesses. Nurses and medical assistants staffed rural health centers and clinics offering primary care services. Twenty-four district hospitals and four central hospitals located in major cities offered secondary and tertiary care services, respectively.¹² The Christian Health Association of Malawi (CHAM), established in 1966, coordinated a large nonprofit health care system, including health centers and district hospitals that charged user fees to cover the cost of services.¹³ The MOH paid a set sum to CHAM and reimbursed it for under-five and maternal health services. Until 1987, government policy did not allow health personnel to practice privately. Since then, the private sector had been growing, primarily in urban areas.¹⁴

Malawi Vision 2020, a development strategy for 1997–2020 with funding from the United Nations Development Program, stated, "By the year 2020, Malawi as a God-fearing nation will be secure, democratically mature, environmentally sustainable, self-reliant with equal opportunities for and active participation by all, having social services, vibrant cultural and religious values and being a technologically driven middle-income economy."¹⁵ The strategy's main health priority was "to improve the availability, accessibility, and quality of health care," with a particular focus on nutrition and food security.¹⁵

In 2002, the GoM adopted the Essential Health Package to address the most common causes of morbidity and mortality disproportionately affecting the poor. The package—which included prevention and treatment interventions for vaccine-preventable diseases; malaria; TB; respiratory infections; diarrheal disease; sexually transmitted infections; and eye, ear, and skin complications as well as reproductive health services—was delivered free of charge at community clinics and health centers.¹⁶ The Essential Health Package was a central focus of a 2004–2010 health sector-wide approach Program of Work developed by the GoM and development partners to ensure that public financing for health, particularly access to basic services, was being used as efficiently as possible.¹⁷ By 2011, 74% of Malawi's public health facilities were able to offer Essential Health Package services.

In 2009, there were over 10 NGOs working in southern Malawi on health in partnership with the MOH, including World Vision, CHAM, Clinton Hunter Development Initiative, and PIH in Neno District.

Health in Neno District

In 2006, the only hospital in Neno—Neno Rural Hospital—had three small exam rooms, four inpatient beds, a small pharmacy, an environmental health office, a room for food storage, and a guard’s office. There was an outdoor waiting area, a 10-bed maternity room, two labor beds, and a maternal and child health area for health education, family planning, and antenatal care. There was no functioning lab, and the electricity and water supplies were inconsistent. The ambulance was primarily used to transfer patients to Mwanza District Hospital 80 kilometers away—a trip of nearly two hours.

Two nurses—one who worked days and one who worked nights—one medical assistant, one clinical officer, and seven support staff worked at the hospital. The hospital was 50 kilometers from the nearest paved road, in the commerce and government center of Neno District (the “boma”). The nurses walked to surrounding villages to conduct antenatal care, family planning, and health education. They worked over 15 hours daily.

Neno had eight other government health facilities in 2006 (see **Exhibit 2** for a map of health facilities). There was limited access to antiretroviral therapy (ART), voluntary counseling and testing (VCT), and TB treatment services, due in part to limited HIV testing and microscopy. In June 2006, an MOH nurse-midwife who had been in Neno since 2004 started an ART clinic, and 94 patients started treatment.

The district health officer led the district health management team—a district nursing officer, a district environmental health officer, district medical officer, accountant, administrator, and human resources director—and the district clinical team, including clinical officers, medical assistants, and nurses.

Clinton Hunter Development Initiative

In 2006, when the Clinton Hunter Development Initiative (CHDI)—whose aim was to “spur economic development in Africa in ways that can be sustained and scaled-up”[†]—promised USD 100 million over 10 years for agribusinesses and safe water projects in Rwanda and Malawi, the Malawian MOH requested that CHDI concentrate on three poor, rural districts, including Neno.

In Neno, the five CHDI staff members worked with farmers to increase wheat production and establish export agreements with major wheat purchasers. Despite their efforts, poor health remained a barrier to commercial success.

Partners In Health

In 2006, Partners In Health (PIH), an international NGO headquartered in Boston, Massachusetts, had been working since 1987 to provide high-quality, comprehensive, community-based health care—“a preferential option for the poor.”[§] PIH began its work in Haiti, expanded to Peru in 1994, the US in 1997, and Russia in 2000 (see **Exhibit 3** for timeline of major PIH and APZU activities). The Rwandan Ministry of Health invited PIH to strengthen HIV/AIDS services in a rural area using USD 2 million annually from the Clinton HIV/AIDS Initiative (CHAI) in 2005. That year, PIH tested more than 30,000 patients, enrolled 700 on ART, and renovated a district hospital in Rwanda. In 2006, PIH opened a site in Lesotho, again with Clinton Foundation funding.

[†] The Clinton Foundation—established by former president of the United States Bill Clinton to “strengthen the capacity of people throughout the world to meet the challenges of global interdependence”—partnered with The Hunter Foundation, a Scotland-based philanthropy led by entrepreneur Sir Thomas Hunter, to form the Clinton Hunter Development Initiative in 2006.

[§] Partners In Health was cofounded by Dr. Paul Farmer, Dr. Jim Yong Kim, Ophelia Dahl, Todd McCormack, and Thomas J. White.

PIH's funding came from foundations, corporations, governments, multilateral organizations, and individual donors, and 95 cents of every one of its USD 31 million went directly to programs in its country sites. PIH raised USD 10 million in unrestricted funds—donations that could be used for any purpose—in 2006. That year, PIH allocated USD 14.1 million to its sites in Haiti; USD 3.5 million–5 million each to Rwanda, Russia and Peru; and less than USD 1 million to Lesotho and the US.¹⁸

Invitation from Malawi

In late 2006, CHDI asked PIH to replicate its model from Rwanda and Lesotho in Neno “to improve and amplify the quality of services that the Ministry of Health was delivering,” according to an early APZU manager. Cassia van der Hoof Holstein, a CHDI manager, reflected:

Neno was a natural choice for our partnership. It had almost nothing, and the challenges were similar to other PIH sites. It could be reached in a few hours from the nearest city and airport, which was crucial in the midst of the fuel crisis. We did consider going into two other districts in Malawi that didn't have district hospitals. One was too far north. We actually considered buying a plane to reach it, but it broke down before we could purchase it. The other district was close to Lilongwe and almost too easy. Neno was different; it was just right.

CHDI promised PIH a 10-year commitment of USD 2 million per year.

PIH leaders, including Chief Medical Officer Dr. Joia Mukherjee, had some hesitations. “We had limited bandwidth,” she said. Never before had PIH opened three sites in three consecutive years. Still, Dr. Paul Farmer, cofounder of PIH, and President William J. Clinton were close colleagues, and their organizations had a history of collaborating productively.

PIH began to assemble a Malawi team. Dr. Keith Joseph, a young infectious disease doctor who had spent time under Farmer working at PIH sites in Haiti, Peru, and Lesotho, was invited to be country director. Joseph accepted the role, thinking, “OK, I've never done this before, but Paul has.” As Farmer reflected, “We didn't set out to replace Malawians. We set out to be part of a process that would strengthen a public system and build capacity and leadership locally in Neno.”

In late December 2006, Farmer and Joseph visited Neno for several days to meet with local government, local and national MOH members, and CHDI. “Paul brought this design [for the hospital] he had drawn on a legal pad,” Joseph said, “and showed it to the government, who agreed to it.”

Joseph noticed that when the ministers of health visited Neno, people in the community and government bowed. The minister of health in 2006 was involved in one of the big churches in Neno. The next minister of health, previously the minister of sports and recreation, owned the biggest car dealership in the country. The ministers focused on getting donations for public structures and showing progress on the district hospital.

Partners In Health in Malawi: Beginnings

Joseph moved to Malawi in January 2007. The Neno government initially provided a small, two-bedroom house for a nominal fee that served as an office and residence. In April 2007, Jenna LeMieux joined the team as the project manager, bringing an MBA degree from Harvard Business School. Dr. Jonathan Crocker, an internist with global health experience, also joined the team in April as the director of clinical services. None of the three spoke the local language, Chichewa, although most Malawians who had attended secondary school could understand and speak English.

The amenities were limited. Neno District had one post office, a rural hospital, a police station, and an unfinished local assembly building, as well as scattered market stalls—some temporary, some permanent, and some boarded up—concentrated in the boma. There were four rundown houses for MOH clinical staff without water or electricity. Neno lacked Internet, cellular towers, and telephone wiring. No one in the District Council lived in Neno. During the rainy season, roads were often inaccessible and impeded all travel in or out of the district.

Starting PIH in Malawi included establishing personal bank accounts that temporarily functioned as the project account, purchasing from local suppliers, and applying to various regulatory authorities. The physicians obtained Malawian medical licenses. In March, the team began registering Partners In Health-Abwenzi Pa Za Umoyo (APZU) as an independent NGO, which required unexpected travel between Neno and Lilongwe, Malawi's capital, nearly five hours away. Joseph and the small team were ready "to move quickly—build, get patients on treatment, and spend, spend, spend."

From Rwanda, Mukherjee traveled to Neno and walked through the hospital with Joseph. She rattled off the hospital's immediate to-do list, and Joseph scribbled them in a notepad. "Knock down a wall here, put chairs there, put a generator here—you need power, Internet. Make sure this place looks decent—clean the floors and windows, put clean sheets on the beds," said Mukherjee. She suggested Joseph hire village health workers to locate vulnerable people in the community, that he get patients on treatment right away, figure out who the key staff were who might need top-ups, get a mobile clinic up and running, and do home visits so people knew PIH was there and wanting to help.

The APZU team began work on a community-based HIV prevention and treatment program that was integrated with public-sector primary care, as well as programs for TB, malaria, sexually transmitted infections, and women's health. Joseph aimed to have at least 90% of people with HIV/AIDS on treatment and to avoid drug stock-outs. By February, the team had hired the first Malawian staff members: a guard, a cleaner, and three translators.

Human Resources

In Neno in 2007, jobs were scarce. The MOH hired clinical staff while APZU primarily hired support staff, including a second guard for Neno Rural Hospital, three new ward attendants, a wound care specialist, an additional translator, three additional drivers, two full-time VCT counselors, and a full time information technology manager as well as two guards, two cleaners, and a full-time cook for the guest house. The MOH assigned three new staff members to the hospital: two maternity nurses and one clinical health officer.

APZU targeted patients in advertising its positions. As more locals heard about APZU, applications poured in. "How do you choose from among hundreds of incredibly poor people for low-skill positions like cleaning?" reflected LeMieux, who could not go anywhere without receiving applications for work.

By October, APZU had hired 39 new people, and by the end of the year, nearly 100. In addition, over 250 village health workers (VHWs) helped APZU identify HIV and TB cases, oversee medication adherence, and understand the needs of vulnerable patients. Crocker worked with Joseph to establish the VHW program, visiting local villages and working with village chiefs to explain the program and identify potential VHWs. APZU selected VHWs from the village health committee or community-based organizations. VHWs had to be 18 years old, literate, able to respect patient confidentiality, willing to accompany patients to clinical visits, and a trusted member of the community. APZU provided VHWs training, food and monthly stipends of 2,500 kwacha (USD 16), plus another 500 kwacha (USD 3) for each patient. Crocker and Joseph also helped support the small ART clinic with additional staff and administrative procedures to prepare for an increase in HIV patients.

In 2007, APZU received more than 1,000 applications for support positions and approximately 50 for skilled jobs. The MOH posted two clinical officers, two medical assistants, three nurses, an environmental health officer, eleven health surveillance assistants, and a laboratory technician to Neno. The APZU payroll increased from 187 payroll recipients in March 2008 to 244 in April 2008. Joseph reflected:

We looked at MOH salaries, and they were terrible. Every clinical person that we knew—nurses and clinicians—was farming on the weekends. We were trying to get it so they wouldn't do other things, and they'd be on call. We were trying to make reasonable salaries.

In April 2008, Joseph asked the government for approval to give salary top-ups to all MOH employees so all staff, both those hired by PIH and by the MOH, would earn equivalent salaries. Employees hired by the MOH included nurses, clinical officers, medical assistants, lab assistants, health surveillance assistants, statistical clerks, and mortuary attendants. The minister agreed so long as the top-ups were performance-based. The performance measures included arriving punctually and fulfilling basic job responsibilities. Neno's district health officer agreed to participate in the evaluations.

An MOH nurse recalled, "Nurses wanted to come to Neno after the introduction of the top-ups. They promised us that life would be simpler with the top-ups. Some people even asked the government if they could be posted in Neno after the introduction of top-ups, the building of more structures, and the availability of transportation."

Within a few months, the performance evaluations were abandoned, but the top-ups remained.

Infrastructure

In 2006, CHDI, with the Ministry of Public Works, planned to build three homes and 20 duplex units close to the hospital to house all project staff. APZU hired a contractor, who quickly began renovating the rural hospital. A groundbreaking ceremony on April 23, 2007, marked the transformation of the rural hospital into Neno District Hospital. Joseph secured permission from the district commissioner—the highest local government post—to begin renovating health centers in the three most populous villages.

In October 2007, Joseph noticed the houses on which CHDI had spent USD 365,000 had problematic sewerage and water systems. Paper cement bags connected pipes instead of plastic joints. Joseph and LeMieux had to set aside other funding priorities and invest USD 200,000 in retaining walls and drainage.

In early 2008, the district nursing officer visited Neno and alerted Joseph to the many unmet requirements to officially open a district hospital. It cost another USD 100,000 to meet the regulations. As Joseph explained:

If you go to the rural districts where they have bilateral hospitals—Thyolo district, Khotakhota—these are massive USD 25 million–50 million structures. This is what the government expected. They knew Neno District Hospital was going up and never said anything. The minister saw the plans when it was just on the ground. We'd gone to a planning office with plans that were approved, but the central planning office wasn't the MOH planning office ... This whole dynamic was confusing because the Malawi government wasn't accustomed to partners like us. They assumed we were a donor. And our philosophy was to move fast. I admit—we didn't consider government regulations and requirements for district hospitals.

Procurement

As it navigated the public supply chain in Malawi, APZU used a package of startup supplies from PIH Boston. Worth over USD 130,000, the startup supplies—bought from International Aid, a medical supply recovery organization—included 75 manual beds, 7 stretchers, 1,000 rapid HIV tests, 3 wheelchairs, 5 exam

tables, various surgical and lab kits, and more than 120 other pieces of equipment. PIH Boston also sent a container of manual beds that were being discarded by a nursing home.

“It is hard to find the medications that we need in the Central Medical Store, so it’s hard to build a budget around what we may or may not need based on what may or may not be stocked in the public supply chain,” said a PIH procurement specialist. When the Central Medical Store did not have a drug in stock, APZU notified PIH, who researched private suppliers to fill the order. PIH sent both durable equipment and consumable materials from the US.

Not all procurement went smoothly. Guided by the PIH Boston team, Joseph bought a used x-ray machine for Neno District Hospital that broke after a few months. The government’s Physical Assets Management team sent a technician on his motorcycle to the hospital, where he identified a missing part. Joseph and PIH searched for the part and finally found one in New Jersey. But, even with this part, the machine remained broken.

In 2009, when renovating another health center, Joseph bought a new portable x-ray machine for USD 25,000. Joseph realized he should buy the same machine for the Neno District Hospital, since it had now been without a machine for a year. But by that time, a new district health officer had been posted to Neno, and he did not authorize Joseph to buy the x-ray machine. Instead, the MOH bought a big, fixed x-ray machine that was still not installed by 2010.

Services

Joseph met with the national head of the HIV/AIDS Unit, who was supportive of APZU’s work and requested protocols for the proposed HIV pilot projects. By midyear, APZU hired more than 20 HIV testing counselors from Neno and trained and deployed them at health centers throughout the district. APZU and the MOH established an electronic HIV registry. At the end of 2007, there were 406 HIV patients on therapy in Neno, and PIH was testing 1,400 patients per month, up from 400 per month at the beginning of 2007.

The head of the National TB Program allocated new funding to Neno’s TB program. Once APZU applied for a TB registration number from the National TB Program and had the new ward in place, patients that previously had to travel to Mwanza to initiate TB therapy were seeking treatment at Neno District Hospital. There were 70 people on TB treatment in Neno by the end of 2007.

Over 350 APZU patients from various programs were receiving a monthly food subsidy, including all HIV patients on therapy, pregnant women with HIV, and TB patients. APZU bought its food supply—including Likuni Phala, a corn-soya blend used to make porridge, and cooking oil—from a plant based in Blantyre. Food support was given for three months, after which the patient would need another doctor assessment to remain in the food program. Joseph and his team deferred to CHDI to carry out prevention of mother-to-child transmission of HIV (PMTCT) and infant and child nutrition programs.

In early 2008, because of high rates of the HIV-related cancer Kaposi’s sarcoma, Joseph and Crocker worked together to initiate a chemotherapy clinic for Kaposi’s sarcoma patients one day per week. Patients with less advanced disease received a modified version of the standard MOH protocol. By mid-2009, more than 50 patients had received treatment. Soon, APZU was able to procure chemotherapy medicine regularly through a reliable, cost-effective supply chain from India. Neno was one of the only districts in Malawi treating the cancer.

Program on Social and Economic Rights (POSER)

Ellie Feinglass, previously employed by CHDI, joined APZU in October 2007 to lead the Program on Social and Economic Rights (POSER). APZU envisioned a program similar to PIH's Haitian POSER. Feinglass and her team met with the district social welfare officer, local primary school representatives, a community-based organization offering vocational training, and various other potential partners about the lack of access to clean water, nutrition, education, job opportunities, and home environments.

In November 2007, Feinglass and her team introduced a system of patient referral and follow-up focusing on the most vulnerable families and individuals living with HIV and/or TB, using VHWs to guide decisions. APZU completed the construction of one family's house by the end of the year and began construction on two others. Through POSER's school support program, children received school supplies and uniforms. Though not required, the POSER manager explained, "When children wear school uniforms, you cannot differentiate the poor. They are all equal." POSER contracted a local tailor to make the uniforms. APZU's presence also encouraged children to stay in school. "They would say, 'I'd like to work for PIH, but for me to qualify, it means I need to finish school,'" the social welfare officer explained. The social welfare officer helped POSER identify community organizations to assist, including a clothing business, a women's tailoring group, and communal garden.

Other forms of social assistance included granting priority status for jobs at APZU. The APZU human resources specialist explained, "We go through the interview process to evaluate fit for position. If we see [a candidate is] too weak to work or has some other complication, then we refer back to POSER to say that the person can't perform the jobs we have now. You can't take someone who is really weak to work as a guard."

Relations with the new district health officer became strained in late 2008, but the team's relationship with the Social Welfare Department stayed strong. "It was good for them because we had resources. It was good for us because they could make official the programs we were doing and follow up with community-based organizations and make sure they were using resources accordingly," said Joseph.

Building a Name

When PIH began working in Neno, "The first thing people said was it was a fake project, and we had discovered gold in the mountains and were using this as a front to mine the gold," Joseph recalled. Then community members began noticing changes. "People would see people come to the health center who had HIV, and they're carrying home a huge stack of corn every month," explained Joseph, "Then these people started getting healthy and getting jobs. As we spread out to health centers, renovating them, people made more connections."

A patient who visited the ART clinic at Neno District Hospital every two weeks for treatment described his experiences:

Before APZU came, it was very hard. The hospital was there, but there wasn't any medicine in there. So the medications could have been written, but we were supposed to buy the medicine, so it was very difficult. Right now, it's like everything is here. You're given the treatment and it's always fine. There will always be medicine. And for the treatment I do get here, I can only get that treatment here in Neno.

Local MOH staff also appreciated APZU and its ability to provide support where the government could not. As an MOH rehabilitation specialist described, "Our friends from APZU lend us support when you ask them. They provide transport so we can accomplish operations."

Working in partnership with the government also meant "time, formality, and expenditure," said Joseph, who went to many formal meetings with the minister of health his first year and was often told to

follow up with others. APZU completed the official process of registering with the NGO Board in December 2007.

Slowly, APZU made an impression at higher levels of government. Joseph and his management team were required to meet regularly with the heads of different government departments and NGOs. All NGOs were mandated to present their activities and receive feedback. “It functioned really well for us,” recalled Joseph, “especially when we had difficulties with the district health officer. It functioned to disseminate what we were doing.” Each donation APZU made—desks for schoolchildren through POSER, for example—was welcomed with a ceremony in the local community.

In January 2010, an MOH clinician for whom APZU had helped secure a medical school scholarship advocated for a new district health officer who would better support APZU. “That was one thing that showed me despite the challenges, the Malawians could recognize clear benefits to having APZU there,” said Joseph.

APZU Finances

During fiscal year 2007–2008, the APZU team allocated its budget of USD 3.56 million to infrastructure, personnel, trainings, operations, medications, lab supplies, and socioeconomic programming (see **Exhibit 4** for the top four PIH expenditures in Malawi from 2009–2012). The budgeting process involved a lot of assumptions, and the budget included cash reserves. Because the government’s budget needed to be finalized and approved centrally far in advance, the local MOH district health management team often turned to APZU to fill in gaps. Joseph reflected, “Sometimes we’d show them our budget, but ... it’s complicated because we don’t know the inner workings of their budgets. Sometimes they’d say they had something and come back and say, ‘We don’t. We have this huge gap.’”

As the hospital accountant said, “We know our goal is one. We consult each other and most times we meet with management of APZU and MOH. We meet regularly and sync the budgets.” APZU also had to get approval from PIH Boston for all projects or changes to the budget. As LeMieux reflected:

The demands and pressures on every dollar were intense, given the patient needs. While we needed to build our offices and create processes for managing our finances, human resources, and supply chain, we also needed to be agile and respond to the daily clinical demand while being flexible and working with the MOH. The challenge from the beginning was always to balance the immediate clinical needs with the need to invest in the operational management of the project.

In late 2008, CHDI informed Ophelia Dahl that it would no longer be funding APZU. This was the first time a donor had cut off funding for a PIH project. Dahl presented the issue to the PIH board, which agreed PIH Boston could fund the entire APZU 2009–2010 budget, USD 3.66 million. As Farmer recounted, “There was never any doubt for me, although a lot anxiety, about keeping our promises. There wasn’t any chance we could back out, unless we abandoned our pledge. It was very painful.” PIH felt committed to “never leave the poor,” as Dr. Jonas Rigodon, APZU’s deputy director, explained. Rigodon had recently transferred to APZU from PIH sites in Lesotho and Haiti.

Workforce

By mid-2009, eight people, all expatriates, comprised the APZU management team. “We had an incredibly talented group,” said Joseph, “and we all did a little bit of everything.” Several local staff members who had started as ART clerks or translators were promoted to officers.

Yearly contracts, often renewable, became more common over time as APZU undertook grant-funded, time-limited projects. Salaries were based on position level (support staff, coordinator, officer, manager),

education, certificates and training, and years of experience. By mid-2009, there were 550 VHWs, 229 APZU staff members, and 152 MOH employees receiving top-ups.

Employment benefits were common in Malawi and included a pension, a funeral benefit, a wedding benefit, life insurance, workers' compensation, annual holidays, and sick time. APZU provided prepaid minutes for phone use if the employee's position required communication. Beyond the free medical coverage at the district hospital, APZU paid for care at facilities to which employees were referred and offered an optional health insurance plan for private health care coverage.

Prior to APZU, most employees had never held a job, and if they did, they had been paid in cash. APZU decided to subsidize the fees associated with opening a bank account. "Opening bank accounts for employees was better for us because we didn't have to pay people cash or write checks, and we could just direct deposit into their accounts. People who never had bank accounts had bank accounts," Joseph explained. Joseph proposed fertilizer loans and housing loans for professional MOH staff. "I think overall if you create an atmosphere where people feel taken care of, they're going to be more invested," said Joseph.

At times, however, Joseph did get discouraged. The procurement officer who had been groomed within the organization was fired for stealing, as was the transport officer. Joseph explained:

When I looked for the air conditioner in the car, it was gone. The condenser was taken out, vehicle identification number plates missing. It's hard to stop corruption in an organization whose principal work is not to monitor resources. It's really hard to stop somebody if their goal is to break down your system. There were networks of several people, in many cases, engaging in whatever the corruption was. Without somebody blowing the whistle, it was really hard. We can't monitor that all the time and do the work we're supposed to do. So I think part of my thought process was that if everybody is doing better, somebody will blow the whistle. People did alert us.

Budget Surplus

In late 2009, Annemarie Ackerman succeeded LeMieux as project manager and joined the project with her husband, Dr. Paul Pierre. LeMieux and Ackerman intensified resource tracking after noting leakages and wound up with a budget surplus of USD 200,000. Though Joseph wanted to spend the money repairing the hospital's laundry facility or guardian shelter, buying more vehicles, and building more houses, he was unable to get approval from the district health officer.

Joseph decided to investigate a 20 km dirt path from the Neno boma to the nearest community hospital that was much shorter than the 85 km road most people used. Joseph and his team explained to the PIH office, "Building a road [along the path] would make patient care better and aid in the transport of complicated maternity cases. It would make our trips everywhere easier. It would be great for the community—people could sell their mangoes, oranges, or other wares easily by paying a truck driver instead of walking, and it would also strengthen our relationship with local government."

Joseph paid the Roads Authority in Malawi to bring builders and engineers to Neno. They completed the road that soon became known as "Keith's Highway" in early 2010. Joseph reflected, "Building is satisfying because you have something to show in the end." Who would maintain the road was unclear because it was not considered a government road and not part of the APZU budget.

Feeling slightly burned out from being away from the US and working "24-hour days," Joseph decided to leave Neno in July 2010. As he prepared to leave, it was clear to him, even in the wake of tensions with the district health officer, that PIH had made an impact.

Data and Progress Report

The APZU team reviewed the scant data available, including the 2000, 2004, and 2010 Malawi Demographic and Health Surveys (DHS), a questionnaire conducted in developing countries around the world approximately every five years and supported by the US Agency for International Development (USAID). APZU also looked to the 2008 Malawi population and housing census, administered by the National Statistical Office. The DHS and census captured data on household characteristics, asset ownership, education, employment, and health.

While the 2000 and 2004 DHS data were limited, 2010 DHS data included district-level information (see **Exhibit 5** for Malawi Health & Socioeconomic Trends, 2000–2010). Similar to rural averages throughout the country, Neno experienced a significant uptick in insecticide-treated bed nets and an increase in vaccination coverage. The 2010 employment figures suggested greater improvement in Neno compared with rural national averages.

Realizing the DHS and government data were insufficient, APZU launched an active case-finding tool in three health centers, called the Household Chart in 2009. Using the tool, VHWs tracked 30–40 households each month, monitoring a range of issues, including family planning, sanitation and water, TB, HIV/AIDS treatment and testing, immunizations, and nutrition status. The tool helped APZU identify household members who might need care.

By 2010, APZU had implemented an electronic medical record system (EMR) to track ART patients. Six health facilities in Neno were providing ART to nearly 3,000 patients (see **Exhibit 6** for scale-up of ART services, 2006–2012). In Neno, VHWs visited ART patients three times per week for the first three months of treatment to administer ART, to monitor other household members, and to bring food packages given to all patients as an incentive to follow up. The MOH did not allow APZU to report on clinical data involving MOH facilities, including Neno District Hospital. This limited APZU's ability to communicate progress to funders.

Neno District Hospital had been expanded into a two-story, 120-bed facility with inpatient wards for male, female, pediatric, and TB patients, a pharmacy room, a computer room, offices for the district health management team, and a conference room for morning rounds. The outpatient department, family-planning room, and maternity ward did not change. According to MOH records, the hospital saw 150–250 outpatients Monday through Friday, with fewer outpatients over the weekend. A hospital officer explained, "We don't know if more people are getting sick or whether they're more aware of coming to the hospital when they're sick." Patients were coming from as far as Mozambique to receive treatment, according to one district manager, because "people know that when they're here, they'll get the health services they're looking for."

The lab had expanded to do blood chemistries, blood counts, TB microscopy, and gram staining. By mid-2010, the government did not officially recognize the hospital due to the lack of a functional operating theater, laundry facility, kitchen, mortuary, and guardian shelter. Prenatal care was available, but the hospital lacked the ability to do caesarian sections. Some health centers had been renovated and had solar power and water.

Joseph gradually noticed more vehicles, houses, and businesses. Two national banks opened branches in the Neno boma. Neno's bus depot was complete but remained closed because the hilly road would break axles. The local market committee asked the district development office for an extension of the market, based on requests they were receiving from vendors. The government built cement kiosks and wooden market stalls and installed toilets. "Sometimes we talk about the beauty shop index," explained Farmer. "It's short-hand: we're talking about the increase in economic activities in a village beyond agriculture. Or call it a cell tower index."

A commercial provider installed a cellular tower in the district, and APZU had brought free Internet access to all in the Neno boma using a provider who managed access at other PIH sites. There were 60 computers connected to the network in 2010.

In 2010, USAID had given APZU five years of funding as part of TB Care II to improve TB diagnostics and treatment. This allowed APZU to procure more motorcycles, Land Cruisers, medical materials, generators, printers, and other materials and hire a Malawian clinical officer specializing in TB at Neno District Hospital.

New Leadership

Farmer had mentored Haitian physician Jonas Rigodon in Haiti and Rwanda and recalled their first flight over the mountains of Lesotho in 2005: “Jonas looked at me accusingly and said, ‘Paul, you never told me it snowed in southern Africa.’ I knew he was adaptable and would deal with all the unknowns.”

Rigodon transitioned fully into the role of APZU country director in mid-2010. He prioritized strengthening APZU’s relationship with the MOH. He learned from watching Joseph that in Malawi, “the government is strong. If you are here, you are to work with them.”

Rigodon was soft-spoken and discreet when voicing his opinions. When the MOH told Rigodon that APZU’s newly renovated community hospital in the lower part of the district could not be opened because there was no kitchen and no mortuary, he traveled to the capital. Rigodon agreed to make the suggested changes despite not yet having the money to do so. “It was a matter of diplomacy,” he said. In early 2011, the MOH agreed to open the facility while the changes were underway (see **Exhibit 2** for map of health facilities).

Rigodon explained, “We are strengthening the system with the government. The social welfare officer said, ‘everything you guys are doing, this is something we [the Social Welfare Office] are supposed to do. Now we can deliver better because you assist.’” APZU would distribute goods to individuals with government officials present, as Rigodon pointed out, “so people feel it’s not only APZU, but that it’s a good relationship and that the government is leading.”

Under Rigodon, APZU programs expanded and hiring increased. Ackerman and Rigodon worked together to expand the clinical and operational management team members, who were gaining responsibility for their own departments and started to meet biweekly in an air-conditioned conference room to discuss management issues. The finance, operations, and human resources teams reported to Ackerman, while the clinical team reported to Rigodon (see **Exhibit 7** for the APZU management structure).

Each January, with allocations from PIH, Ackerman and Rigodon notified all APZU directors and managers of their funding for the fiscal year. They then worked with them to pull together a comprehensive budget for the organization for the year before sending it back to PIH Boston for approval. In doing this, they hoped to empower managers and make them feel responsible for resource decisions.

In October 2010, Ackerman launched a loan program to enable staff to pursue personal projects that would improve their economic stability. To be eligible for a loan with APZU as the guarantor, staff needed to have worked with APZU for at least two years and have a clean human resources record. In exchange for lower interest rates for employees from the bank, APZU had to pay back the loans of any participants who were laid off if their termination benefits could not cover the outstanding debt. An APZU driver and father of seven took out a loan to build a bigger house closer to town and rented out his old home. In November 2011, 105 staff members were receiving lower interest rate loans thanks to APZU.

One of Rigodon's biggest challenges was understaffed health facilities. MOH workers spent 30–40% of their time in local and national trainings on various clinical topics. APZU could not prohibit their participation and did not fill in the shortage. Rigodon reached out to PIH Boston for staffing strategies but did not get any specific guidance. Farmer reflected on his mentoring role:

When you're a program leader like Jonas and Keith, and your mentor starts talking about epistemology, culture change, structural violence, or accounting cultures, you might sometimes want to throttle him. You don't have time for that. But this kind of mentoring, when complemented by time in the field seeing patients—that's why they both tolerated it and still do from me. We are collegial; that's the way we roll.

New Means of Support

Rigodon worked "to win more partners." He hired a former patient to speak on APZU's behalf around the country and the world to create partnerships and developed a close partnership with the new district health officer, Dr. Felix Chingoli, who arrived in Neno in August 2010. Chingoli focused his early efforts on an emerging typhoid epidemic, utilizing the Geographic Information System (GIS) mapping tool that APZU had introduced. He arranged an emergency meeting with the US Centers for Disease Control and Prevention (CDC), MOH officials, APZU, USAID, and others to discuss next steps. He educated the community on keeping homes clean, worked with APZU on keeping the water clean, and taught hygienic behaviors at primary schools. The CDC helped Neno District Hospital acquire the lab test for typhoid.

Chingoli helped APZU improve the district hospital by serving as a liaison with the central government and supervising the construction crew. Chingoli also requested government funding for health services in Neno District. He had been told, "No, you have APZU there funding, so we're not funding you. You don't need more funds." As Chingoli explained, "The other problem was that when Clinton Hunter left, it wasn't well communicated, it wasn't well understood. We have ministry officials who still believe that Clinton Hunter is still here."

The MOH contributed over USD 200,000 toward construction. "I think [they helped with funding] because of the good relationship," said Rigodon. "Once we started working with them and building trust between APZU and the MOH, we started to build the kitchen." The hospital's 300-meter-radius Wi-Fi connection helped government and APZU employees communicate. As new infrastructure was created, more personnel had to be recruited.

In early 2011, Chingoli noticed that the MOH allocated Mwanza District more than double its USD 785,000 allocation to Neno, even though Mwanza's population was smaller. Chingoli invited officials from the local government's finance committee to come see Neno's needs. The following year, the MOH doubled Neno's funding to USD 1,400,000, increasing it for the first time in two years (see **Exhibit 8** for APZU, MOH, and local government funding over time).

In mid-2011, Ackerman decided to return to the US, and Tara Loyd became the new project manager, bringing experience in public health and her husband, Dr. James Keck, a physician with training in epidemiology. Loyd's goal was to "mentor [her]self out of a job, so that the next project manager could be a Malawian."

After months of negotiating, in February 2012, Rigodon and Keck brokered the first data-sharing agreement between APZU, the MOH, and the Ministry of Justice. According to the Memorandum of Understanding, the MOH agreed that "Partners In Health needs to share clinical program information with potential and current funders to substantiate the health impact of their work." The agreement allowed APZU to report on clinical service data, such as the volume and outcomes of patients seen and treated by clinical condition, as well as population-level data, such as the proportion of children under five and the

percentage of female patients. In 2012, Rigodon agreed APZU would help fund the Socio-Economic Profile (SEP) of Neno the government needed to develop a district development plan. APZU would be able to use the SEP findings and compare them to the 2007 SEP findings for quality improvement and fundraising.

Budget Cuts

In the midst of a global financial crisis, multilateral and private funders saw immediate losses to their investment portfolios. PIH's fundraising suffered. In December 2011, the PIH Board agreed to a 20% budget cut to all sites. APZU's budget decreased from USD 3.42 million to USD 2.7 million. Dahl visited APZU to help the team strategize how to implement the cuts and to boost morale. She met APZU employees who were former HIV patients. She visited the Kaposi's sarcoma clinic, where patients from other districts were receiving treatment. She was excited to learn that prominent businesspeople wanted to move to Neno to open a filling station and build more houses. Assemblies of God built a private school. The government expanded the market further by constructing wooden kiosks (see **Exhibit 9** for profiles of local vendors). Given this, Dahl was surprised more people did not return to PIH from Neno trumpeting its progress. "Imagine if we'd made more investments earlier on. Instead of making cuts to certain parts of our package, which would make us like any other NGO, we need to invest more," Dahl reflected. "We have to be really visionary, creative, and careful. I felt sad that we were constraining at a time when we should be investing," she said. When she returned to Boston, she managed to reinstate USD 400,000, over half of the original cut, for renovations to the maternity ward.

Loyd and Rigodon thought carefully about how to implement the remaining cuts and communicate with managers and government officials. They decided to implement the cuts over 18 months, instead of having an abrupt shift the next fiscal year. Rigodon and Loyd asked managers to submit revised budgets. Their priority was to protect staff and patient care, and make cuts first to operations, then programs, then staffing as necessary. No new staff loans were allocated; POSER reduced school support; and VHW compensation was reduced. Rigodon cut 53 support positions and reduced 47 positions to part-time. Rigodon reduced top-ups for MOH clinical staff and eliminated top-ups for MOH support staff immediately. MOH workers were upset and unmotivated. The MOH instructed APZU to reinstate top-ups until the money ran out. "What happens after June? It was up to them," said an APZU human resources specialist. Many thought the budget cuts were a first step toward PIH pulling out fully, and Rigodon's team had to work hard to convince them otherwise. APZU was dedicated to making vast renovations to the maternity ward, finding more partners for POSER projects, and helping the hospital attain official District Hospital status.

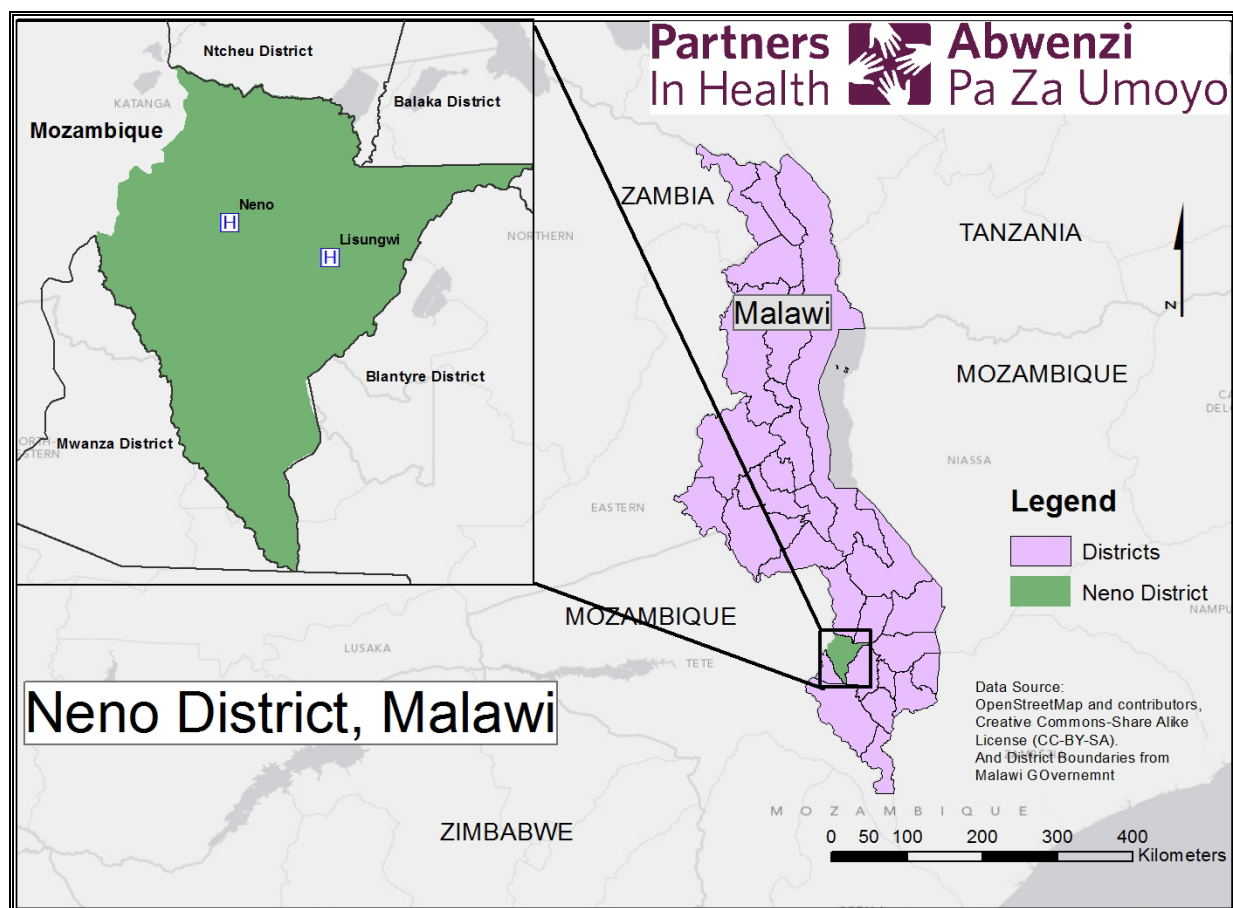
In April 2012, the kwacha was devalued 40% in order to attract foreign aid, causing inflation. "We did all these layoffs and planned to continue the food package, and then the selling price of food doubled, so we had to reduce food by half," said an APZU manager. Between January 2012 and April 2012, the cost of getting from Zalewa to Neno (40km) nearly doubled due to fuel shortages. Rigodon had to grapple with issues of procurement and which vendors he could pay in dollars. "The devaluation also may lead to tensions within APZU," reflected an APZU manager, "because we have access to dollars."

Neno in 2012

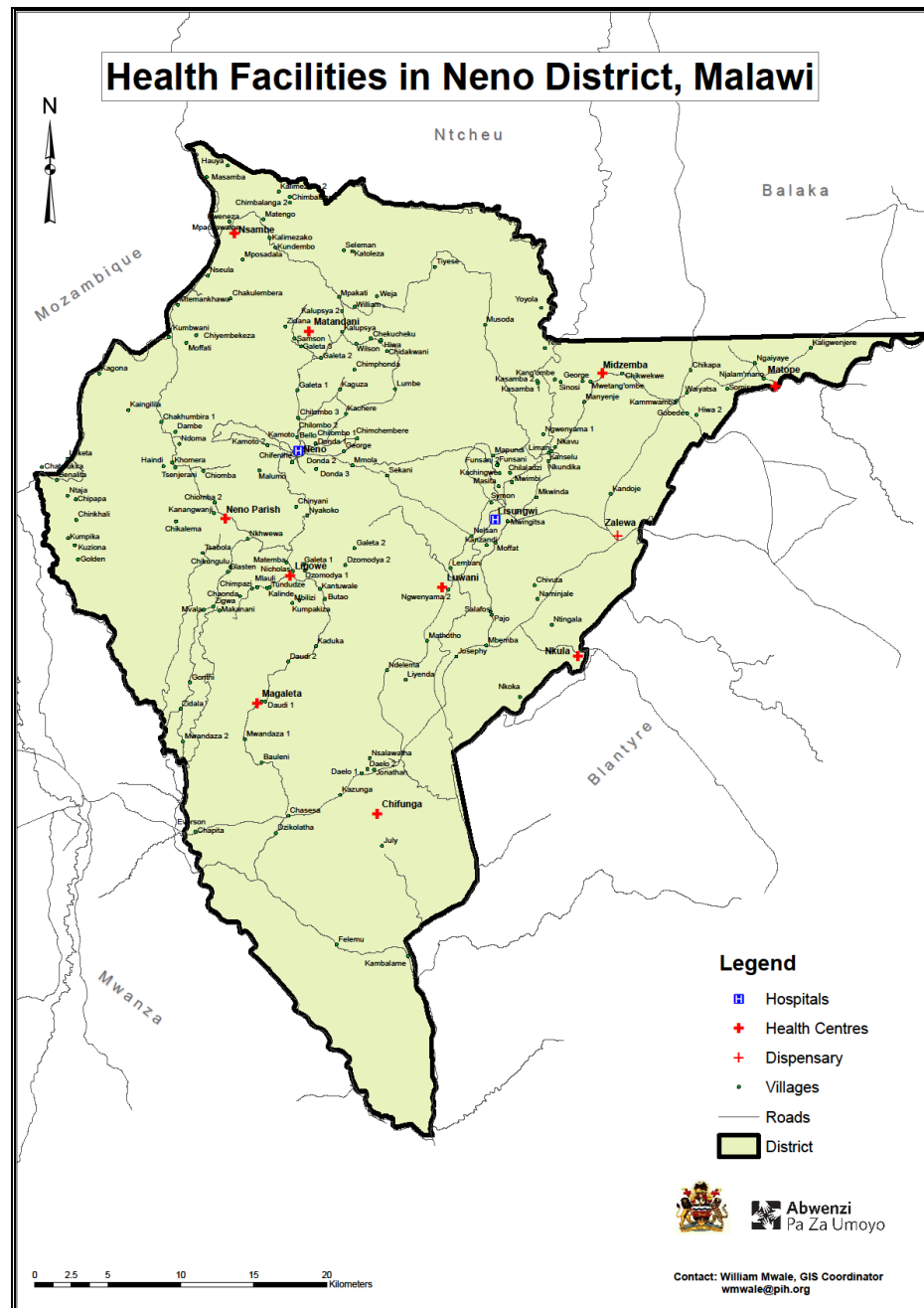
As Dahl prepared for the Board of Directors meeting, she reflected on her 2011 visit and new information from the APZU team. As of May 2012, there were 411 MOH employees posted to Neno and over 20 nurses. ART services had expanded from one health facility in 2006 to 13 facilities in 2012 with 5,042 patients on ART, and the maternity ward managed 70 deliveries per month. POSER supported 1,600

students and over 3,000 individual patients, and had built 70 homes for patients. There were 647 VHWS overseen by a supervisor in each of 11 health facility catchment areas. APZU was looking to fill positions in accounting, procurement, and human resources (see **Exhibit 10** for a 2012 photo of Neno District Hospital).

Dahl was proud of what APZU had catalyzed in the midst of a global financial crisis, the pull-out of a core funder, a severe fuel shortage, a devalued currency, and a budget cut. She was also hopeful about what the transition of power within the national government could mean for APZU. Rigodon and Mukherjee had just published an article in the *Huffington Post*, describing President Joyce Banda as a “grassroots activist and civil servant, as a mother and a leader, as a firebrand and a pragmatist,” and described her connection to PIH: “Our organization serves the public sector in the rural district of Neno, the kind of place oft forgotten by leaders everywhere. Yet Neno, and many other forgotten places, are squarely on President Banda’s radar.”¹⁹ Dahl described to the Board APZU’s potential as a district health care model under Banda’s presidency.

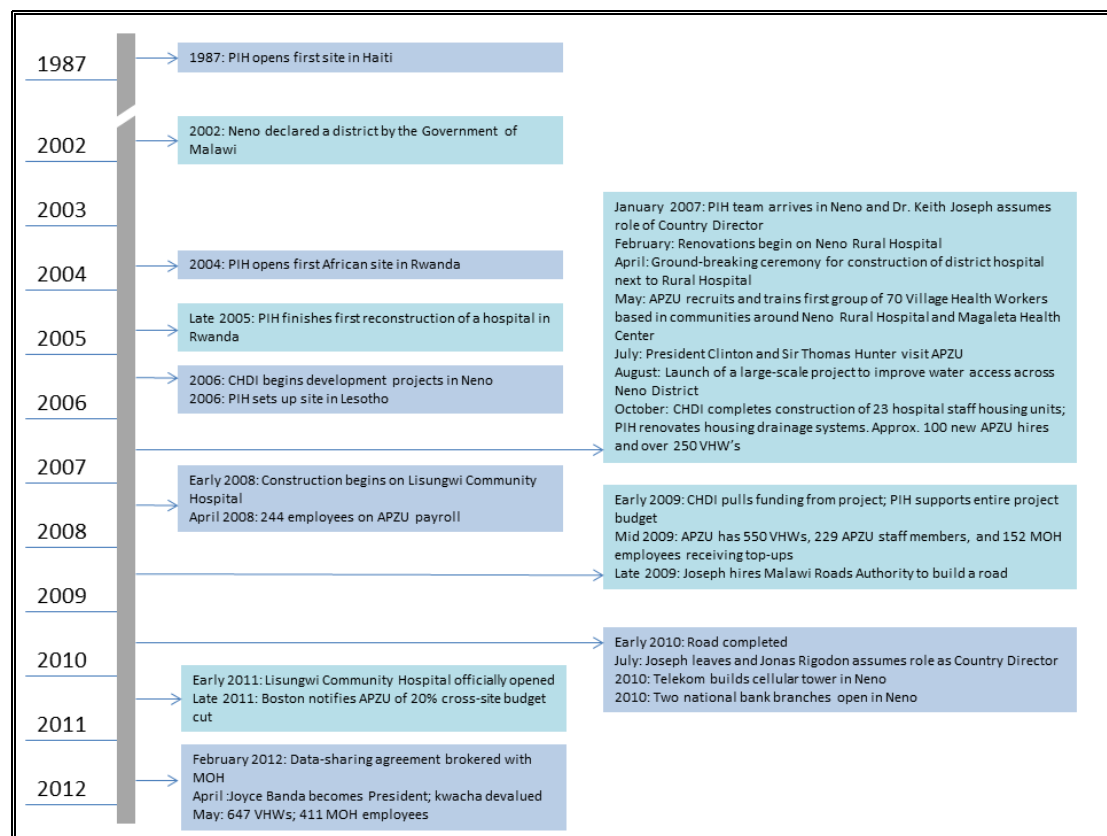
Exhibit 1 *Map of Malawi, 2013*

Source: Partners In Health.

Exhibit 2 Map of Neno's Health Facilities, 2012

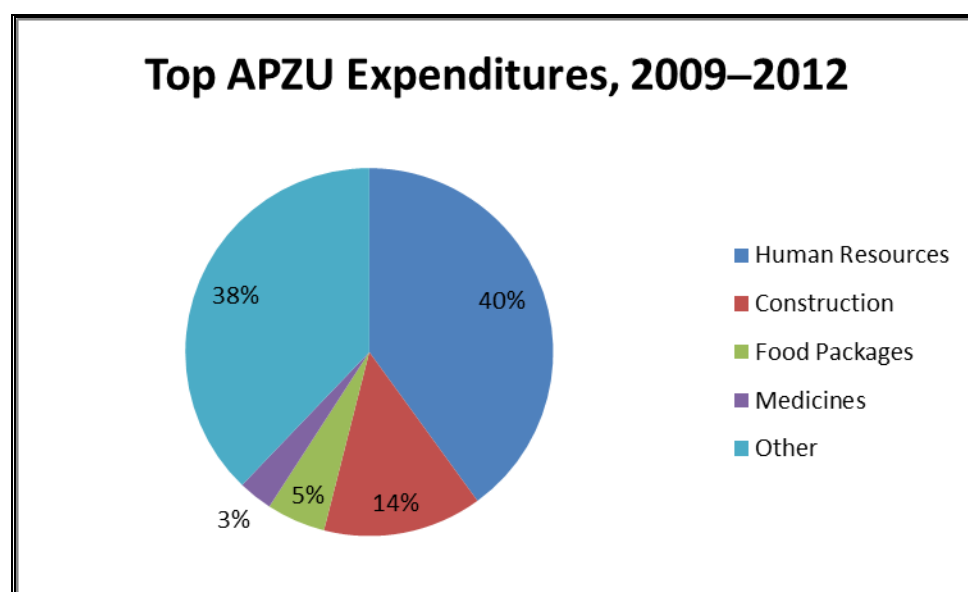
Source: Partners In Health.

Exhibit 3 *Timeline of PIH Activities/Major Events in the Case*



Source: Case writers.

Exhibit 4 *Top APZU Expenditures, 2009–2012*



Source: Created by case writers with data from Partners In Health, 2013.

Exhibit 5 *Malawi Health and Socioeconomic Trends, 2000–2010*

INDICATORS	RURAL MALAWI AVERAGE			NENO
Health	2000	2004	2010	2010
Infant mortality (per 1,000 live births)	117	98	73	78
U5 mortality (per 1,000 live births)	210	164	130	118
Adult HIV prevalence ¹	15.0%	10.8%	8.9%	n/a
% of households with at least 1 ITN ²	10.1%	24.8%	55.4%	55.6%
% children 12–23 months receiving basic vaccinations ³	68.7%	63.5%	81.8%	87.1%
% pregnant women receiving no ANC ⁴	4.6%	4.6%	1.6%	1.2%
% women delivering in health facility	51.6%	66.7%	71.0%	68.2%
Socioeconomic				
% of households with electricity	1.0%	2.2%	3.5%	3.8%
% women literate	51.6%	57.7%	64.1%	70.9%
Primary school attendance ⁵	78.2%	82.0%	86.8%	88.9%
% females with secondary education or higher	6.2%	8.3%	10.6%	9.3%
% women not employed in last 12 months	35.9%	39.0%	24.4%	13.0%
% men not employed in last 12 months	n/a	21.1%	9.2%	5.1%

Notes

1. Only estimated national prevalence is available for 2000; data not available for Neno district.
2. ITN=insecticide-treated bednet; IRS=indoor residual spraying; 2000 report does not distinguish between ITN and bednets in general; figure for Neno includes either ITN or IRS.
3. BCG, measles and three doses each of DPT or pentavalent (DPT-HepB-Hib) and polio vaccine (excluding polio vaccine given at birth).
4. Among women who had a live birth in the five years preceding survey.

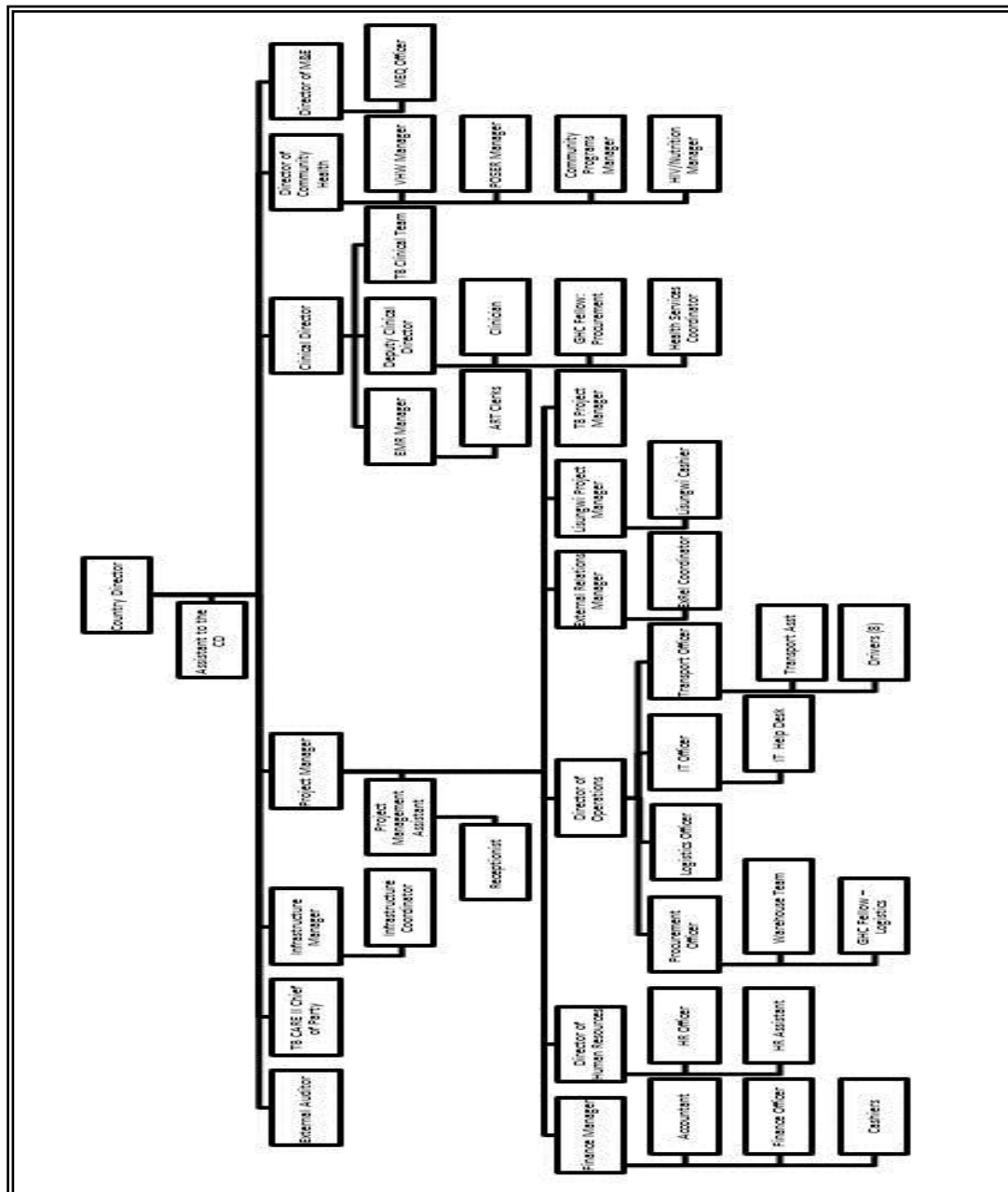
Source: Malawi DHS, 2000, 2004, 2010.

Exhibit 6 *Scale-up of ART Services in Neno District, 2006–2012*

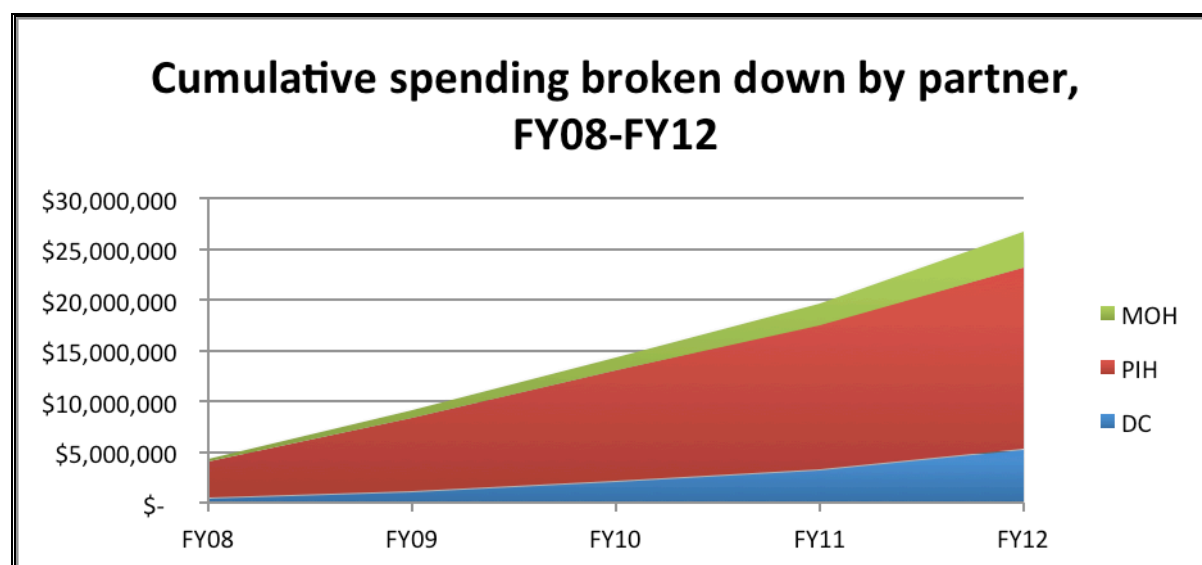
Year	Number of facilities providing ART	Number of patients on ART
2006	1	90
2007	1	524
2008	2	1367
2009	3	2160
2010	6	2986
2011	12	4016
2012	12	5042

Source: Partners In Health, 2013.

Exhibit 7 *APZU Organizational Chart, 2011–2012*



Source: Partners In Health, 2012.

Exhibit 8 *Total Spending by Partner over Time***Annual Spending in USD**

Fiscal Year	Local Govt (DC)	%DC	PIH	%PIH	National Govt (MOH)	%MOH	Total Spending
FY08	462,428	11%	3,562,991	83%	252,964	6%	4,278,383
FY09	648,953	14%	3,620,000	76%	517,454	11%	4,786,407
FY10	1,003,601	19%	3,663,545	70%	584,789	11%	5,251,935
FY11	1,085,731	20%	3,445,000	65%	784,658	15%	5,315,389
FY12	2,054,277	29%	3,570,000	51%	1,414,844	20%	7,039,121
Total	5,254,988	20%	17,861,536	67%	3,554,709	13%	26,671,233

Note:

DC: District Council

Source: Partners In Health, 2012.

Exhibit 9 *Profiles of Neno Boma Shop Owners and Market Vendors*

The Neno boma market has tripled in size since 2007. In 2009, the market committee asked the local government to extend the market, based on requests from vendors. The government built cement kiosks and wooden market stalls and installed toilets. In 2012, the government was considering expanding it further onto adjacent land. Market stalls rent for USD 6 per month, and each shop owner pays an annual USD 45 tax to the local assembly. Ground seating for fruit sellers is available on a first-come, first-served basis for USD .12 per day. The market is open seven days per week from roughly 7AM–7PM. The stories below provide a glimpse into the impact that the expanding market has had on individual sellers.



Lee Cuthbert (APZU Community Programs Assistant and Translator) and Aunt Love at Aunt Love Food Shop & Take Away.

In 2001, Loveness Chingwalou (“Aunt Love”), was in her 40s, living about 3 km from the Neno boma. She farmed beans, maize, and Irish potatoes to sell. In 2006, she had earned enough to open a bottle shop in her community. In 2010, desiring more time to rest and go to church, she moved to the Neno boma “for a new beginning” and lived with her sister, brother, and brother’s wife. She rented a corner shop in the Neno boma and started selling Fanta and Coke. She bought an electric pan from Blantyre to roast chips, and soon offered nsima (finely ground maize), rice, chickens, beans, mustard greens, and sausage (which she bought from Blantyre). She occasionally bought Irish potatoes and chicken in the Neno boma market to cook and sell. Gradually, she gained customers among “azungu,”—

the Chichewa term for “foreigner,” hospital workers, APZU staff, and locals. In January 2012, she bought local timber to make benches, tables, and a fence for an outdoor seating area. She covered the seating area with a sheet-metal canopy and put up curtains. She employed three people to cook, clean, get water, and wait tables.

Biswas owns B & G Neno Best Tailor, a shop he started in 1998. He has four sewing machines to make handkerchiefs, trousers, and shirts, and he also does screen printing and logo design. He has approximately four customers per day and grosses about USD 12, from which he buys fabric and pays his assistant. One year, POSER contracted him to make school uniforms. Biswas supports his wife, three children, and his sister, who is in secondary school. He commutes by bike 15 km from his recently bought home to the boma. He said, “When PIH comes here to support business and the new hospital, there’s a lot of things—now it is growing.”

A mother of six has grown her business of selling bananas in the Neno boma market since 1995 when she brought 10 bunches from her local village to 2012 when she brought 27. She travels 15 km daily. Surrounded by at least a dozen other banana sellers, she often brings her two-year-old son. She makes a one-banana profit on every three that she sells. She averages 700 kwacha (USD 2) per day.



Kondwani owns a hardware kiosk in the market. He says that people come from Neno and neighboring districts like Balaka and Blantyre because of the hospital. He grosses about 3,000 kwacha (USD 9) per day, and pays a fee of 40 kwacha (USD .12) per day for his permanent stall. He buys some supplies, such as brake tires, from Blantyre and other items, such as brooms, locally.



Yulita has been selling vegetables in the Neno boma since 1974. She sells tomatoes that she grows in a small garden and that she purchases from a friend. She also grows okra, cabbage, and mustard greens. Yulita walks 10 km from home and makes about 2,000 kwacha (USD 6) per day, but it varies. She calls business a “game of chances.”



Source: Keri Wachter, 2012.

Exhibit 10 *Neno District Hospital, 2012**Front of hospital*

In the foreground: One-story original structures of Neno Rural Hospital used for outpatient and maternity services. *In back:* Two-story building constructed by APZU and partners used for inpatient wards, meetings, computer use, laboratory work, and government offices.

Back of hospital

Counterclockwise from left: Laundry, new kitchen, and old kitchen facilities. *Not shown:* guardian shelter and mortuary.

Source: Keri Wachter, 2012.

Appendix*Useful Abbreviations*

APZU	Abwenzi Pa Za Umoyo
ART	antiretroviral therapy
ARV	antiretroviral
CHAM	Christian Health Association of Malawi
CHAI	Clinton HIV/AIDS Initiative
CHDI	Clinton Hunter Development Initiative
MOH	Ministry of Health
PMTCT	Preventing mother-to-child transmission
POSER	Program on Social and Economic Rights
VCT	voluntary counseling and testing
VHW	village health worker

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