

2016 ANNUAL REPORT



**Maya Health Alliance
Wuqu' Kawoq**

mayahealth.org

FROM OUR EXECUTIVE DIRECTOR

Dear Friends,

I'm thrilled to report that 2016 has been an amazing year, with remarkable progress and new initiatives across a number of our program areas.

We wrapped up our research project, Saving Brains, with some very encouraging results. With funding from Grand Challenges Canada, and working in collaboration with Watsi and Universidad del Valle de Guatemala, we tested a multi-pronged approach to addressing malnutrition and found it not only leads to improvements in height and weight but also in key cognitive areas, such as language skills.

Another highlight was launching the pilot for our new smart phone application for midwives working in the remote communities of the Guatemalan Highlands. This life saving app makes it possible for the midwives to diagnose high risk pregnancies and activate a transport and care team to get the mother and babies to more advanced medical care.

We continue to carefully evaluate our work to help us improve and share what we learn. As we approach our 10th anniversary, I am filled with appreciation for all that you and our spectacular staff have made possible, and anticipation for the great things to come. I look forward to our continued partnership.

With immense gratitude,

Anne Kraemer Diaz

OUR TEAM



**Maya Health
Alliance Staff are:**
94% Guatemalan,
85% Indigenous, and
82% Women

To celebrate our hard work, the Maya Health | Wuqu' Kawoq team and its volunteers came together for a retreat at the Project Somos Children's Village. What a beautiful team!



OUR WORK

Health Services

Pediatric Care
Women's Health
Family Planning
Women's Empowerment
Chronic Conditions
Preventive Care
Maternal Care
Primary Care
Complex Care

Maya Health Alliance transforms the health of communities in Guatemala by creating high quality health care solutions to address critical gaps in care. We enable health care providers and patients to work in a collaborative, communal manner to develop workable solutions to common health problems.

We are a global leader in research and treatment models for chronic diseases, including child malnutrition, diabetes, heart disease, and cancer. We believe that everyone—no matter where they were born or what language they speak—should have the highest quality health care.

OUR MODEL: AGILE HEALTH



Agile Health: The process of creating high quality health solutions by allowing health care providers and patients to work in a collaborative, communal environment.

WHERE WE WORK



Guatemala is home to some of the poorest communities in the Western hemisphere. Limited health care, lack of transportation, language and cultural barriers, and cost prevent many people in these rural areas from accessing basic health services.

Maya Health Alliance works in seven states in Guatemala to change these realities.

2016 IN REVIEW

Maya Health Alliance works with existing health care resources and helps build capacity by equipping local health care workers with the knowledge, skills, and tools they need to better serve their communities.

Here are just a few of the ways we made progress toward quality health care for all in 2016:

20,000



patients served

10,000 +

home visits
in five
languages



midwives
using smart
phone app

5,000

hours of
staff capacity building



3,500 women
with access to
reproductive
health care

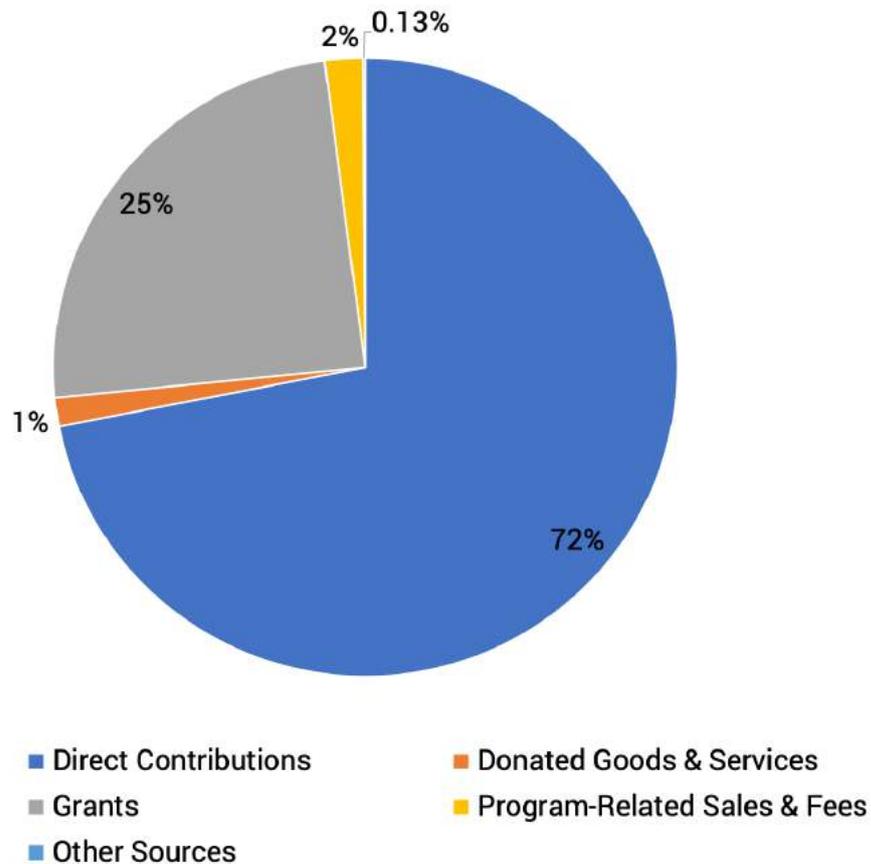


Malnutrition
treatment for
1,500
children

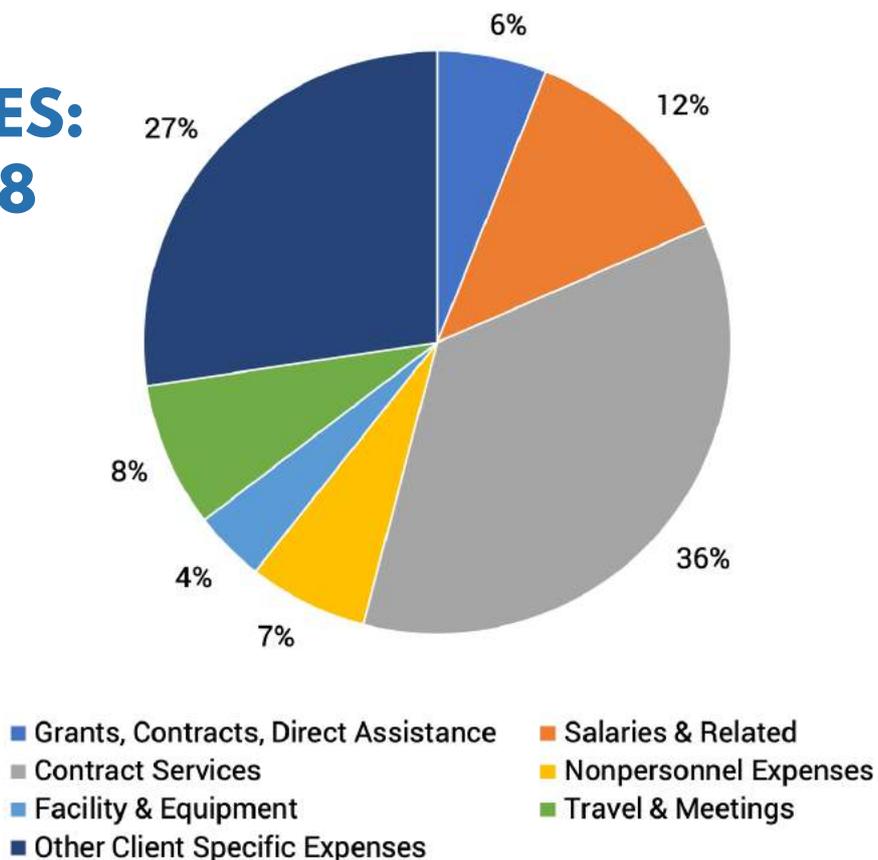


2016 FINANCIALS

**INCOME:
\$831,156**



**EXPENSES:
\$871,088**



FEATURED PROJECT

Saving Lives and Transforming Futures Improving child nutrition in rural Guatemala

Guatemala has the highest rate of child malnutrition in Latin America, and this problem is particularly pronounced in rural areas, where the rate of chronic malnutrition for indigenous children is a staggering 80%. Malnutrition not only stunts physical growth, but also contributes to developmental delays that damage children's prospects for the future. With these high stakes in mind, we have developed a program that combines education and nutritional supports to address chronic malnutrition.



Rural Guatemalan 9-year-olds stand below a line representing the international height standard for 9-year-olds.

With generous financial support from the Allen Foundation, this year, we launched an updated and improved nutrition education program in nine indigenous communities. The goal of the program is to increase knowledge and improve child feeding practices of mothers with malnourished children and reduce chronic malnutrition rates in children under five.



In our group nutrition education program, we train front-line health workers to lead active, dynamic classes for mothers. Most classes meet in the home of one of the participants, and they are conducted in the indigenous languages of the region, such as Kaqchikel and K'iche.

The classes focus on critical periods such as pregnancy, breastfeeding, and early childhood, and incorporate foods and protein sources found in the communities where the families live. Each class incorporates a cooking session to help women actively learn about food preparation, hygiene, nutrition, and easy-to-follow recipes. At the end of class, women and their children share the meals they prepared.

These intimate small group sessions enable our staff to deeply connect with the women in trusting environments, which then allow the women to talk about other issues, such as self-esteem, women's health, and violence. This makes it possible for our nutrition educators to provide support and referrals for other services, like cervical cancer screening and family planning.

Along with group sessions, we provide monthly or bi-monthly home visits for every mother in our intensive recuperation and prevention program. Nutrition staff conduct a full 24-hour diet recall, and provide an individualized education session to address dietary diversity, meal frequency, clean water, hygiene, and early childhood development as needed. Participating families also receive food and vitamin supplements, along with growth monitoring.

Overall, reducing chronic child malnutrition takes years of focused work, but already, we are seeing meaningful reductions. In one community, we showed a reduction in the rate of chronic malnutrition (defined as low height-for-age) from 46% to 40%; in another, the rate dropped by 30% percent. We expect to see even better results in future years and in other communities.

In communities with high rates of malnutrition, many children never have the chance to meet their development milestones on time, but due to support from the Allen Foundation, many more children are meeting their milestones, growing, and taking steps to change the harsh cycle of chronic malnutrition in Guatemala.



STORIES FROM THE FIELD





Meet Jillian, a research intern who is helping us improve palliative care services for patients.

Jillian is between her 3rd and 4th year of medical school, here to visit patients receiving palliative care and to learn from them how to improve the services Maya Health offers.

"The symptoms we alleviate - the pain, the nausea, the weakness - are not only symptoms of bodily disease but also of structural inequalities and broken systems, where certain bodies are less likely to be able to access proper medical care and more likely to endure chronic and terminal illnesses," Jillian says. "It is a privilege to work with an organization committed to developing a quality community-based palliative care program, an organization that refuses to disregard those very sick patients who have otherwise been marginalized and forgotten."

We believe that everyone—no matter where they were born or what language they speak—should have the highest quality health care.



Meet Maria, a Maya Health patient with diabetes who has learned to manage her condition at home. Maria lives in Guatemala with her husband, mother-in-law, and son, and her family will soon be one member bigger because she is 23 weeks-pregnant!

When Maria is not caring for her family or taking care of her health, she weaves hüipiles and tends to the few animals that they keep at the house, mostly rabbits and chickens.



SMART PHONE APP SAVES LIVES

Many women in remote communities lack access to basic medical facilities during pregnancy and childbirth, so traditional midwives continue to play a critical role, much as they have for thousands of years. We have sought to work within these realities by giving midwives the support they need to perform their duties safely and effectively. Our groundbreaking smart phone app allows midwives to run tests and send diagnostics to doctors, all from the homes of pregnant women. This enables the midwives to identify more serious issues, and allows our team of providers and patient advocates to help women receive life-saving care when they need it the most.

A woman in Guatemala is 10 times more likely to die in childbirth than a woman in the US. Maya Health is tackling this problem by helping mothers get help when they need it.



Just one example is Juila, a mother with diabetes who four years ago lost her last pregnancy due to diabetes-related complications. Because of her diabetes, Julia has a high risk of developing pre-eclampsia, a syndrome that affects three to five percent of pregnancies. It is usually diagnosed when a pregnant woman has dangerously high blood pressure, and typically requires hospitalization to make sure the mother and baby survive. A trip to the hospital often takes two to three hours from the rural areas where we work, and once at the hospitals, indigenous women are likely to face discrimination, long wait times, and providers who do not deliver care in their native Mayan languages.

Julia's midwife regularly checked her blood pressure and condition during her pregnancy and eventually determined that Julia had developed pre-eclampsia. The midwife and our women's health manager explained the risks of preeclampsia in Kaqchikel, Julia's native language, but still she was scared to go to the hospital, where she feared she would be treated poorly, as she had been before. We explained that we would accompany her and be in constant communication with her husband and the doctors, and pay for any necessary lab testing.

Although she was still terrified, Julia agreed to go to the hospital. After a few days, her blood pressure was controlled, labor was induced, and she delivered a beautiful, healthy little girl weighing 6 pounds 6 ounces with no complications.



OUR FRIENDS FROM CINCINNATI

Visiting residents from the University of Cincinnati provided instruction and demonstrations on wound care and spent time with our patients in clinic during their two-week visit. We are grateful for their passion and dedication!

2016 PUBLICATIONS

Stroux L, Martinez B, Ixen EC, King N, Hall-Clifford R, Rohloff P, Clifford GD. (2016). An mHealth monitoring system for traditional birth attendant-led antenatal risk assessment in rural Guatemala, *Journal of Medical Engineering & Technology*.

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Flood F, Chary A, Austad K, Kraemer Díaz A, Garcia P, Martinez B, Lopez Canu W, Rohloff P. (2016). Insights into global health practice from the agile software design movement. *Global Health Action*. 9:29836.

Austad K, Chary A, Colom A, Barillas R, Luna D, Menjivar C, Metz B, Petrocy A, Ruch A, Rohloff P. Fertility awareness methods are not modern contraceptives: defining contraception to reflect our priorities. *Glob Health Sci Pract*. 2016;4:342-5.

Flood D, Mux S, Martinez B, García P, Douglas K, Goldberg V, Lopez W, Rohloff P. Implementation and outcomes of a comprehensive type 2 Diabetes program in rural Guatemala. *PLoS One*. 2016; 11:e0161152.

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