A woman waits outside the on-site dispensary, or pharmacy, at one of our district hospital partners. Due to shortages in hospital funding, dispensaries are often unable to acquire the pharmaceuticals they need to treat their patients, leading to the growth of black market industries selling substandard or even dangerous counterfeit medications.
INTRODUCTION

This year has been one of incredible transformation at Ghana Medical Help. With founder Kelly Hadfield heading abroad to pursue her dream of becoming a medical doctor, and a rapid pace of organic growth, the organization needed to evolve in order to continue to serve the 2+ million people living in northern Ghana. Once a purely volunteer-based organization, GMH now has a team of 4 extremely hard-working employees dedicating their time to furthering the mission to improve rural global health.

However, this change hasn’t made our volunteers any less valuable – without the selfless contributions of individuals across North America, the UK, and Ghana, GMH could not exist. Together with our donors and supporters, the GMH family has achieved more in 2016 than ever before. Thank you for being a part of our story. We can’t wait to see what we can do together in 2017!
MISSION AND VALUES

The GMH mission is to improve the quality and availability of health care in northern Ghana and to help drive the movement for similar change around the world. At GMH, we are motivated by the conviction that where you are born should not dictate your right to a healthy life.

Our guiding principles are...

INTEGRITY
COMMUNITY ENGAGEMENT
SUSTAINABILITY
To GMH,

**INTEGRITY...**

means performing due diligence in designing and operating projects that are ethical and culturally appropriate for the setting in which they’re conducted. It means operating with transparency and accountability to our donors and stakeholders. It means engaging in regular self-reflection to ensure programs are fulfilling their intended purposes and continuously evolving based on partner feedback.

**COMMUNITY ENGAGEMENT...**

means establishing genuine partnerships within the local community to ensure our projects fulfill real needs rather than perceived needs. It means our projects are better informed and designed specifically for the settings in which we operate. It means the community is equally invested in seeing projects succeed.

**SUSTAINABILITY...**

means designing projects that consider environmental, economic and societal outcomes. It means working with government officials and community leaders to create systemic reforms that can be maintained independently by communities without GMH intervention. It means our ultimate goal is not to exist at all.
The GMH Ambassadors are permanent staff at our partner hospitals who volunteer to take on the responsibility of monitoring and maintaining equipment donations.
Medical Equipment Donation Program

Our medical equipment donation program provides health care professionals with the resources they need to be effective in their practice. At each of our 14 partner hospitals, we conduct quarterly needs assessments to identify the frontline medical equipment that will have the maximum impact. For hospitals that have joined our program more recently, that means providing the most basic equipment, such as thermometers, stethoscopes, and blood pressure apparatuses. For our long-standing partners, that means more advanced, life-saving equipment. Our on-going relationships with hospital partners enable us to respond to evolving needs and ensure that capacity to provide basic patient care is continuously improved.

GMH Ambassador Program

The GMH Ambassadors are permanent staff at our partner hospitals who volunteer to take on the responsibility of monitoring and maintaining equipment donations. They also participate in regular GMH training workshops on topics from practical equipment maintenance and repair to new clinical skills. This training is then repeated by the Ambassadors for other staff in their own hospitals, expanding the impact of the training and reinforcing the skills among the Ambassadors in an instructor role. The Ambassador program has created empowering in-country networks across Ghana that facilitate information and resource exchange between district hospitals.
The newly established Clinical Engineer Toolkit and Training Program is a major step in GMH’s efforts towards creating sustainable outcomes. By partnering directly with every clinical engineer working in the Upper Regions of Ghana, we are ensuring that our donated equipment is well maintained and regularly serviced. Maintaining our successful research-based methodology, we conducted in-depth needs assessments and formed strong partnerships with each clinical engineer to design an effective program. The outcome was a four-day training conference on topics identified by the engineers themselves and led by the deputy chief clinical engineering manager for Ghana Health Service. The clinical engineers learned to service key hospital equipment and established a preventative maintenance program for all GMH donated equipment. This conference further has created a strong network, facilitating information and resource exchange, between clinical engineers working at the northern district hospital level and the national clinical engineering level.

GMH is now including clinical engineering tools in our annual equipment donation shipment. The engineering toolkits are based on needs assessments conducted with the clinical engineers to ensure that have the most necessary resources to maintain equipment. By establishing a strong partnership with clinical engineers, GMH is instantly aware of any equipment breakdowns, can provide spare parts and tools to ensure equipment longevity, and has increased capacity to evaluate donated medical equipment for durability and robustness.
With support from Chris and Helene Hadfield of Chris Hadfield Inc., GMH expanded the Sheep, Health, and Economic Empowerment Program (S.H.E.E.P.) to 25 additional families. Participants receive high value pregnant female sheep, whose offspring can be sold at the market to provide a stable source of income. Fourth generation offspring are returned to GMH for donation to new beneficiary families, allowing the program to expand in a self-sustaining manner.

To complement the income-generating component, participants attend bi-monthly public health and asset management workshops.

The workshops, led by S.H.E.E.P. program manager Joe Abobtey, have proven to be as valuable as the sheep themselves, educating community members on topics such as family planning, health insurance, and disease prevention including cholera, meningitis, and malaria. S.H.E.E.P. participants aren’t the only ones to benefit from the workshops – they are open to the whole community, attracting an average 175 people per session.
Bongo hospital, which serves a population of nearly 90,000 people, suffered a devastating electrical fire in 2012 that destroyed the facility’s operating theatre. This year, GMH and its partners were able to finish the construction of a brand new operating theatre.
SPECIAL PROJECTS

Bongo Hospital Infrastructure Project

GMH collaborated with Rotary clubs across Ontario, as well as expert electrical technicians Sion Jones of Trydan Systems Inc. and Chuck Zylstra of Klaas Power Systems, to make major improvements to the safety and infrastructure of Bongo Hospital. The hospital, which serves a population of nearly 90,000 people, suffered a devastating electrical fire in 2012 that destroyed the facility’s operating theatre. Together, GMH and its partners were able to finish the construction of a brand new operating theatre, providing access to safe surgeries for the community, as well as facilitate the rewiring of eight priority hospital wards to ensure the safety of the hospital and prevent future fire outbreaks.

Kadema Borehole Project

Together with the Rotary Club of Guelph Trillium and Operation Groundswell, GMH supported the construction of a new water source for the people of the Kadema community. This desperately needed borehole, or well, will eliminate financial and geographic barriers that have historically restricted the community’s access to water. It will provide clean water for over 350 people living in the rural, remote Upper East Region of Ghana, to be used for drinking, cooking, livestock, hygiene and more.
This map shows GMH partner hospitals in Ghana. Programs are operated in the Upper East and Upper West Regions. Circles mark the location of a district hospital partner. The size of the circle corresponds to the size of the population supported by that hospital. The shade of the circle indicates the year that the hospital became a GMH partner.
MEDICAL AID

**14**
- No. of hospital partners

**150**
- Average no. of patients seen per day

**41,000:1**
- Average ratio of people to doctors where we work

**$135,000**
- Value of equipment donations in 2016

**75,000**
- Average population served by district hospitals

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**Figure 1.** The correlation between reported job satisfaction and reported equipment efficiency by hospital staff at our partner hospitals between 2011 and 2016. Greater equipment efficiency corresponds to greater job satisfaction (Spearman’s rank test, n=208, r=0.54, p<0.05).

**Figure 2.** A comparison of the level of equipment requested over time in the Upper East (UE) and Upper West (UW) Regions. Requests for basic equipment increase to a peak in 2014 and then begin to decrease, while requests for advanced equipment increase each year. As the need for basic equipment is met, hospitals are seeking more specialized equipment.
**Figure 3.** Frequency of equipment requests in 2015 by type in the Upper East (UE) and Upper West (UW) Regions. The most requested items were basic DMT (diagnosis, monitoring & treatment) equipment, followed by patient management equipment, surgical equipment, hospital infrastructure and life support equipment.

**Figure 4.** Frequency of equipment donated by GMH in 2015. Most frequently donated items were for patient management, emergency & life support, and basic diagnosis, monitoring and treatment.

**Figure 5.** A Wordcloud representing the most commonly requested equipment items between 2011 and 2016. Larger words are items requested more often; smaller words are requested less often.
HUMANITARIAN AID

- No. of families now enrolled in S.H.E.E.P. 43
- Average no. of attendees at public health education workshops 175
- No. of people with access to safe surgical care due to GMH-sponsored reconstruction of Bongo Hospital operating theatre 90,000
- Average no. of people with access to water through GMH, OG + Rotary-sponsored borehole 355
- No. of educational workshops GMH conducted in 2016 15
Spot Vital Signs devices are one of the most requested items from GMH, allowing Dr. William Gudu to efficiently monitor the vital signs of this new mother at Bongo Hospital.
Figure 6. Financial Summary for GMH in 2016. Revenues were generated primarily through donations and service organization funding. Projects and project-restricted funds for use in 2017 were the greatest expense, totalling $211,000 or roughly 60% of our total expenses. Administrative costs were the second largest expense, at $102,000 or roughly 30% of our total expenses. Of these, 86% went to salaries, which average $15,00 per hour for full time staff. We are implementing plans to minimize our operating costs and maximize project spending as we continue to grow, to ensure your donation has the greatest possible impact.
UPCOMING PROGRAMS

Electronic Knowledge Sharing Platform (eKSP)

In 2017 GMH will launch an electronic knowledge-sharing platform (eKSP) at our partner hospitals. Using tablets and cell phones, this novel communication and collaboration network will enhance hospital access to medical reference material and training developed specifically for rural African health care workers. The platform will allow hospitals to communicate and share resources, while streamlining our critical research process. GMH will be further working closely with health care application developer Figure 1 to connect our partner hospitals with their global network of medical professionals and expertise.

3D4MD

To become truly sustainable, GMH’s programs must evolve to operate independent of external intervention. However, access to medical equipment and repair/replacement parts is limited for our hospital partners due to financial and geographic barriers. As an innovative solution to this problem, GMH is partnering with the organization 3D4MD to test the application of 3D printers at our partner hospitals. Soon, they may be able to make their specialized hospital equipment using 3D4MD’s cutting edge 3D printing technology and open source catalogue of medical equipment items.

Eye care

In 2017, GMH is partnering with Orbis Africa to strengthen eye health service in the Upper West Region of Ghana. In this area of health that is often overlooked and neglected, we are going straight to the source by strengthening the capacity of the health care workers at the most rural and decentralized level of Ghana’s health care system. By training community health workers to promote preventative education as well as screen and refer eye conditions, we are ensuring that the most vulnerable and isolated villages see a brighter future.
Partnership with University of Limerick & University of Limerick Hospital Group

GMH has established a ground-breaking partnership with the University of Limerick and University of Limerick Hospital Group (UL/ULHG) in Ireland to enhance the baseline education and training of health care workers in the Upper West Region of Ghana. Six representatives from UL/ULHG travelled with GMH to the Upper West Region in July of 2016 to conduct an initial needs assessment with the Upper West Regional Health Directorate. From this visit, priority areas were identified and a partnership formed for designing an emergency management clinical training program, which integrates both maternal & child health and trauma at the community level, to strengthen the health care system as a whole. This program will pilot a distance-learning platform followed by an intensive 4-day training symposium in June 2017 that ‘trains the trainers’, ensuring the knowledge will be propagated through the local medical community.
Big or small, your every gift to GMH helps to equip, educate and empower local health care workers supporting over 2 million people in the most underserved part of Ghana.
DONATE!
Big or small, your every gift to GMH helps to equip, educate and empower local health care workers supporting over 2 million people in the most underserved part of Ghana. Help us keep our projects going and growing by donating today. Learn more or donate at www.ghanamedicalhelp.com.

GET INVOLVED!
Volunteers are the heart and soul of GMH and we could not do what we do without our very dedicated international team. If you would like to get involved, we have a wide variety of opportunities for any level of commitment. Get in touch to talk about the role that’s right for you at info@ghanamedicalhelp.com.

TELL OTHERS ABOUT US!
Encourage others to join the GMH global movement and connect with us on Facebook, Twitter or Instagram to learn more about the impact of our work and the truly remarkable people in the communities of northern Ghana. Our greatest strength is in the connections and partnerships we develop. Help us bring our message to the world!

HOW YOU CAN HELP
Together we can transform lives and communities in rural Ghana!
THE GMH FAMILY

Aaron Bird
Aaron Tamachi
Adam Arthurs
Amy Cameron
Andrew Abercromby
Asli Sumen
Avi D’Souza
Ayedzi Delanyo Khiki
Ayine Francis Awuni
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- University of Limerick/UL Hospital Group

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Ghana Medical Help improves health outcomes sustainably in rural Ghana by innovative, scalable and culturally appropriate interventions.

GMH is a Canadian registered charity.
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For more information about GMH projects or making a donation, please email info@ghanamedicalhelp.com or call us at 416.428.9506.

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“Special thanks to our on-site photographer Curtis Comeau for using his talents to capture the essence of our programs and our mission”