



AMPATH Ghana 2022 Year-End Report: Advancing Health Equity in Northern Ghana



Introduction

The AMPATH (Academic Model Providing Access to Healthcare) global network builds cross-cultural partnerships between universities and academic health centers to strengthen health systems and tackle health disparities, train future global health leaders, and foster healthcare innovations to improve health worldwide. AMPATH provides unique opportunities to health professionals, trainees, and scientists to study and serve together through care, training, and research programs that are designed to respond to the needs of the populations served.

AMPATH Ghana is a partnership amongst the University for Development Studies (UDS-SoM) and Tamale Teaching Hospital (TTH), both in Tamale, Ghana, and the AMPATH Consortium led by the NYU Grossman School of Medicine (NYUGSOM) Section for Global Health. The AMPATH Ghana partnership specifically works towards improving the health and well-being of people in communities in and around Tamale, Ghana; training tomorrow's medical experts worldwide; and jointly researching breakthroughs that will inform improvements in population health around the world.

AMPATH Ghana's Impact

With the lifting of COVID-19 travel and inperson meetings restrictions, the U.S and Ghana-based teams transitioned from working virtually to working in-person. Ghanaian faculty have made several trips to the U.S., and AMPATH Ghana's Executive Field Director, as well as Obstetrics/Gynecology and Medicine Team Leaders have begun their long-term faculty assignments in Ghana.

Together, they are leveraging the strengths of Ghana's existing healthcare system and serving as a resource to Ghana's health and education leaders as they expand the healthcare system to communities in and around Tamale.



Vice Dean UDS-SoM, Dr. Gideon Helegbe, and AMPATH Ghana Medicine Team Leader, Dr. Claudia Leung

PROGRAM HIGHLIGHTS Care

<u>COVID-19</u>

Due to the urgency of the COVID-19 pandemic, AMPATH Ghana facilitated a donation of Protective Personal Equipment worth \$3 million to TTH, in partnership with New York City Department of Citywide Administrative Services, Cal Bank, Afya Foundation, UDS-SoM, and Ghana Health Service. Items included N-95 masks, face shields, protective gloves and gowns. Other areas of COVID-19 engagement included:

- Exchanging best practices for clinical COVID-19 management
- Supporting enhanced COVID-19 diagnostics

Infectious Disease Molecular Diagnostics Laboratory

AMPATH Ghana has begun to establish an Infectious Disease Molecular Diagnostic Laboratory at TTH. The lab will expand capacity for diagnosis, surveillance, research, and teaching in northern Ghana through:

- Enabling quicker turnaround of test results for clinical and public health decision-making, particularly related to COVID-19, HIV/AIDS, tuberculosis, and chronic disease management
- Providing an essential training avenue for the next generation of medical laboratory scientists with respect to state-of-the-art molecular techniques
- Serving as a hub for groundbreaking research, creating sustainable impact for generations to come



Tamale Teaching Hospital will expand its current Infectious Disease Center to house the new Infectious Disease Molecular Laboratory.

Chronic Disease Management Program

AMPATH Ghana is partnering with Ghana Health Service to co-design a comprehensive, integrated Chronic Disease Management program focused on: hypertension, diabetes, cervical cancer, and mental health. Together with stakeholders, the team worked to co-design a comprehensive program that includes:

- Risk factor reduction, early disease screening, and access to timely and appropriate care
- Health system level-appropriate protocols for disease screening, treatment and behavior change
- Facilitation of medication and laboratory supply for those with chronic diseases
- Interventions that bridge multiple sectors including education, finance, and agriculture

Education

Lectures and Trainings

AMPATH Ghana established numerous new training and mentorship opportunities at UDS-SoM and TTH:

- The team launched a series of virtual lectures during the COVID-19 pandemic for Ghanaian medical students taught by NYUGSOM and AMPATH Consortium faculty members, which transitioned to inperson lectures with the arrival of Team Leaders in Ghana this year.
- Subjects included Anesthesia, Orthopedics, Surgery, Emergency Medicine, Hospital Medicine, Gastroenterology, Psychiatry, Otolaryngology, Reproductive Health, and Chronic Disease Management.



AMPATH Ghana Education Team Leader, Dr. Amanda Klinger, and Medicine Team Leader, Dr. Claudia Leung, with UDS-SoM students

Strengthening Medical Education

- Facilitated free subscriptions to AMBOSS, a digital medical education software provider, to medical students.
- Co-funded the acquisition of the Anatomage Table, a computerized anatomy dissection table to help medical students at UDS-SoM better study and understand the human anatomy.

Research

Areas of Investigation

AMPATH Ghana aspires to conduct rigorous, relevant, and responsive research to address pressing health challenges, strengthen health systems, and improve population health outcomes. To date, we have successfully developed and submitted proposals in the areas of:

- Climate change and health outcomes
- Infectious diseases research training
- Human-centered design for integration of diabetes, hypertension, and mental health services
- Mental well-being of youth

Community-Based Needs Assessment

AMPATH Ghana is undertaking comprehensive analyses and surveys of existing health systems to identify priority areas for programming. This year, we:

- Conducted a Rapid Ethnography Assessment to understand health conditions and perceptions of clinical care within our catchment area
- Initiated a Chronic Disease Epidemiology and Environmental Health Survey to help guide priorities for chronic disease management among the communities in and around Tamale



AMPATH Ghana Executive Field Director, Dr. Laud Boateng, and Education Lead, Dr. Victor Mogre

Research Capacity Building

AMPATH Ghana is developing a robust research and grant support infrastructure at UDS-SoM and TTH, building on its strengths and addressing gaps in training and infrastructure. This year, we:

- Assessed the mechanisms for proposal development, pre- and post-award administration, and regulatory review at UDS-SoM and TTH
- Strengthened formal faculty mentorship program between UDS-SoM and NYUGSOM
- Offered research capacity building opportunities to several UDS-SoM and TTH faculty and staff

Looking Ahead to 2023

We are looking forward to another exciting year in 2023 as we work to achieve our vision of greater health equity in northern Ghana and around the world. Our initiatives include:

Additional Faculty Leaders

Additional U.S. faculty will arrive in Tamale and serve as Team Leaders in their respective fields. They will work alongside their UDS-SoM and TTH counterparts to develop impactful initiatives in their respective clinical areas.

Clinical Skills Laboratory

To address the wide disparity of health human resources in northern Ghana, AMPATH Ghana will modernize and transform hands-on clinical training for health workers.



This project includes:

Dean of UDS-SoM, Prof. Stephen Tabiri, speaks with the AMPATH Ghana team.

- A Simulation Center to provide Ghanaian students and trainees opportunities to connect with expertise of faculty from around the world
- A Human-Centered Design lab for trainees, faculty and staff to foster creative problem solving and collaborative thinking
- A Project ECHO lab, a tele-mentorship model that utilizes a Zoom platform to connect experts at academic centers or referral hospitals serving as the "hub site" to healthcare workers at "spoke sites" in remote areas
- Live streaming capability to facilitate remote surgical and procedural learning for students, medical trainees, and provide continuing medical education opportunities for surgical and interventional faculty
- Multipurpose spaces for local and external educational collaborations, ranging from medical lectures to global education initiatives

Bilateral Student Exchange

Within the first half of 2023, North American medical students and residents will study and work alongside Ghanaian counterparts in Tamale. Likewise, Ghanaian students will enroll in clinical elective rotations at NYUGSOM. All trainees will gain an invaluable global health experience and learn how to be better clinicians.

Ultrasound Training

To address the gaps in formalized ultrasound use by obstetrics/gynecology clinicians at TTH, an ultrasound training program will be implemented as part of routine clinical education. The aim is to develop a culturally appropriate curriculum in basic obstetrics/gynecology ultrasound for all physicians.

Chronic Disease Management

Analysis of the community-based needs assessment will identify gaps and areas of needs for the treatment of chronic diseases in northern Ghana. This analysis will inform implementation of the Chronic Disease Management program with the Ghana Health Service in the Tolon District of northern Ghana in early 2023. We will continue to advance our discussions with various stakeholders to ensure optimal implementation of a multi-level, integrated chronic disease management program.

Research Administration Strengthening and Research Training Opportunities

Training researchers with the tools and resources necessary to conduct and manage research supported by extramural funds is a priority area in order to provide career advancement trajectories and improve retention of faculty in northern Ghana. AMPATH Ghana will continue to share funded training opportunities for researchers, trainees, and students. We will also continue our initiatives related to strengthening grant administration, contract management, and research infrastructure.

Conclusion

This past year, UDS-SoM, TTH and NYUGSOM successfully transitioned from working virtually to in-person. Together, we have established the foundation to provide healthcare for patients in northern Ghana, educate tomorrow's medical experts, and generate research breakthroughs that will truly change the health of the world. We at AMPATH Ghana are excited to continue this impactful work in partnership with collaborators, supporters, and stakeholders.

> To learn more about our work, please visit: nyulmc.org/ampathghana

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