

A Plan to Deliver Critical Obstetric Care:

Training 1000+ Obstetricians/Gynecologists in Sub-Saharan Africa in the Next 10 Years



"Nearing the end of her fourth pregnancy she went to the health centre and was seen by a nurse. Yet when she went into labour there was no doctor, equipment or drugs to manage her complications. She died in front of her family and the nurse." — Story of Bolumbu from the Democratic Republic of the Congo "Maternal mortality is people. It is women, women who have names, women who have faces, and we have seen these faces in the throes of agony, distress and despair. They are faces that continue to live in your memory and haunt your dreams. And this is not simply because these are women who die in the prime of their lives, at a time of great expectation and joy. And it is not simply because a maternal death is one of the most terrible ways to die ... it is because in almost each and every case, in retrospect, it is an event that could have been prevented."

Dr. Mahmoud Fathalla Chair, Who Advisory Committee On Health Research World Health Day, April 7, 1998

THE CHALLENGE

Lack of Access to Critical OBGYN Care

A woman in Sub-Saharan Africa is almost 100 times more likely to die from pregnancy or childbirth-related complications than a woman in a developed country; a 1 in 39 lifetime risk compared to 1 in 3,800. While poverty, AIDS, Ebola, malaria, and violence in Africa have rightly captured the world's attention, the lack of access to critical obstetric care has quietly devastated Sub-Saharan communities in a direct and personal way. These deaths, as well as early neonatal deaths and complications such as fistula, are almost all preventable with skilled obstetric care.

Plan Narrative

A woman in Sub-Saharan (SSA) Africa is almost 100 times more likely to die from pregnancy or childbirth-related complications than a woman in a developed country; a 1 in 39 lifetime risk compared to 1 in 3,800. While poverty, AIDS, Ebola, malaria, and violence in Africa have rightly captured the world's attention, the lack of access to critical obstetric care has quietly devastated Sub-Saharan communities in a direct and personal way. These deaths, as well as early neonatal deaths and complications such as obstetric fistula, are almost all preventable with skilled obstetric care.

Putting an end to preventable maternal, perinatal and early neonatal mortality will only be realized when the most severe maternal complications can be comprehensively addressed with known obstetric interventions. Newborn lives can be saved when an at-risk fetus is identified and delivered before it is too late. To provide the high-impact interventions of modern obstetric care and to provide leadership in women's health, skilled professional obstetricians/gynecologists are required as part of the health care team. Currently, the ability to train this level of practitioner is severely lacking in most countries of SSA Africa. However, many universities and tertiary hospitals are potential training sites for physicians who wish to become OBGYN physicians. Our experience in Ghana has shown us that it can be done; that long-term partnerships can sustainably create new capacity, and that trained OBGYNs will stay in their country. The investment in training OBGYNs also reinforces institutions for certification and professionalism, building an engaged and global network of OBGYNs - ultimately strengthening the broader public health infrastructure.

The early activities of the 1000+ OBGYNs project have stimulated the imaginations of the leaders of professional organizations and university-based OBGYN departments globally to respond to this urgent need and mobilized OBGYN departments throughout SSA to begin or increase production of OBGYN specialists. Herein, we propose a replication of our Ghana-Michigan program to encompass the first 18 African OBGYN departmental partnerships with their "high-resource" partners, and the corresponding Ministries of Health and Education. We also propose the creation of a coordinating hub for educational activities, networking, and measuring the impact of expanding numbers of OBGYNs providing high-impact, obstetrical interventions.

History

The 1000+ OBGYN project started at a planned side meeting during the 2012 International Federation of Gynecology and Obstetrics (FIGO) congress in Rome, Italy. We invited obstetricians and gynecologists from high maternal mortality/low-resource, Anglophone Sub-Saharan African countries to discuss the current status of obstetrics and gynecology training in SSA. The reports from a broad range of African participants made it clear that the ability to deliver high-impact interventions to reduce maternal and neonatal mortality is severely limited by the undeveloped human and technical capacity in many places across the continent. There is a great need for university-based programs to train physicians to become obstetricians and for African-based certification systems that embed stature and community into such systems. Such stature and community are fundamental aspects of health force retention.

The Rome meeting was premised on the success of the Ghana-Michigan partnership, where efforts to build capacity have resulted in the training, certification and retention of over 142 trained OBGYNs who have great impact in both urban and rural settings. Our second, larger gathering and conversation took place in February 2014 in Accra, Ghana. This gathering confirmed the dire need as well as an institutional desire to strengthen OBGYN departments across SSA. A shared goal of creating OBGYN communities of practice and policy influence emerged. Over 120 people, representative of academic obstetrics and gynecology programs from the USA, Great Britain and Sub-Saharan Africa, and representatives from the Ministries of Health and Education of 14 Sub-Saharan Countries committed to a shared goal of training 1,000+ new OBGYNs in the next 10 years. This Accra conference initiated the networks and plans to make it happen.

These two gatherings have put into place a transformational process. Never before has a group of academic and clinical OBGYN physicians, their national and international professional and expert clinical organizations, and government representatives been so poised to respond to one of the greatest medical and public health needs of our time. Our plan is solidly based on a successful program in Ghana and its core commitments to collaboration, mutual respect and benefit, and long-term sustainability. Our plan also addresses the problem of preventable maternal and early neonatal mortality in a manner consistent with the current, global calls for capacity-building and health system strengthening - both crucial to achieve the Sustainable Development Goals, and to provide long term and complete solutions.

The Ghana Story

The Ghana postgraduate obstetrics and gynecology collaborative residency training program started in 1989 in response to the low repatriation rate of Ghanaian physicians sent to Great Britain for training. The Ghana Ministry of Health, the University of Ghana, the Kwame Nkrumah University of Science and Technology, ACOG and RCOG and university departments of Obstetrics and Gynecology in the U.S. and Great Britain teamed together to strengthen the Ghanaian university-based training programs in obstetrics and gynecology. Its inaugural years were funded by innovative support from the Carnegie Corporation. The 1000+ OBGYN Project has evolved to be deeply embedded within strong interpersonal and inter-institutional relationships. The postgraduate program was five years in length, utilizing a comprehensive curriculum that included a three month rotation in the U.S. or Great Britain, a six month rotation in a district medical facility, and a three month rotation in a business management program. As of November 2012, 141 physicians - very nearly all of those who participated - have been trained and certified as obstetricians and gynecologists and remain in-country. There, graduates practice in both urban and rural areas, and some graduates are now leading obstetrics and gynecology departments at the two new medical

schools as the country's health infrastructure grows.

The program was made possible through academic and professional partnerships that built the context and expertise for training physicians to become OBGYN specialists. This program has a great impact as the obstetricians deliver high-impact interventions with better outcomes, more expert and standardized management, and more organized and efficient clinical case management. There were also notable increases in the number of other health care personnel in response to the presence of the obstetrician, improved teaching, and increased availability of technologies. Patients were found to have a higher confidence in the healthcare system, to report to the hospital earlier, and to feel confident about delivering at a hospital when an obstetrician is present. Each of these, in context, is a significant achievement. These achievements illustrate the impacts of what might start as relatively small investments in training cohorts of just a few additional OBGYNs. The Ghana story began the steady drumbeat of strong leadership, long-term participation, and geographic distribution of access to care at critical moments.

The Concept

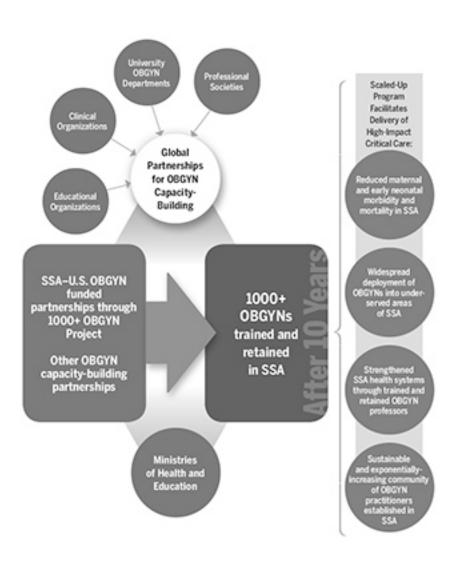
To train 1,000+ new OBGYNs to deliver the high-impact interventions proven to reduce maternal and neonatal mortality, African OBGYN departments must be supported in such a way that the trainee-physicians deliver high-impact care while participating in the three to five year OBGYN training and certification program. Our program will "re-invent" obstetrics for the African context and will connect African doctors, universities and hospitals to each other, and also to U.S., Canadian, European or other established-partner universities. It will also have positive impacts on district level and rural hospitals, improving treatment, referrals, and interventions.

The 1000+ OBGYN Project leadership and management team will lead the development of "guidelines for participation" for the original eighteen African OBGYN programs based on the ten Critical Components that emerged from prior meetings. Eighteen programs in fourteen SSA countries will be phased in over three years — six at a time. Eligible OBGYN departmental partnerships will create comprehensive plans that respond to guidelines, key criteria and commitments. New partnerships and institutions can enter as the program unfolds. The 1000+ OBGYN Project leadership team will organize the network of participating university-based OBGYN departments in both high and low-resource countries, with support of national and international professional organizations.



CRITICAL COMPONENTS of comprehensive OBGYN training, as identified during Rome (2010) and Accra (2014) meetings of the 1000+ OBGYN PROJECT partners.

1000+ OBGYN Project: The Vision



1000+ OBGYN Project: Logic Model



The Plan

The 1000+ OBGYN Project is designed to deliver care in fourteen countries across the African continent both in the present and for the foreseeable future. We will do so by replicating at universities across Sub-Saharan Africa (SSA) a unique, culturally sensitive and sustainable model, already proven successful in Ghana. This approach works, and the will to implement it is present. Partners on both sides of the Atlantic — universities, professional societies, and expert clinical organizations — have responded. All that's missing are the means to put this game-changer into action.

This project will train hundreds of OBGYNs each year who will deliver critical care in their communities from the day they begin their residencies. It will create a pipeline resulting in 1,000 certified OBGYNs over the projected status quo within a decade and at least 1,000 more every five years thereafter. Eighteen African medical schools will leverage the strengths and commitments of seventeen U.S. partners to infuse mutual respect, expertise, curricula, and mentoring into African OBGYN training programs. These training partnerships will respond to the unique needs of the African context, building the in-country capacity to lead high-impact OBGYN programs in SSA.

Increasing the number of OBGYNs enriches a health infrastructure that not only provides for essential medical treatment, but also for training and sustaining community health workers, midwives, doulas, and other health care workers. Such a range of expertise becomes the backbone of a system that dramatically changes health outcomes for mothers, children and families.

The leitmotif of the Accra conference was simple and striking: This is not pie in the sky; we can do this. We can launch programs that train and certify more than 1,000 OBGYNs in fourteen African countries within a decade. Those programs can become largely self-sustaining through engagement with Ministries of Health/Education and medical schools, insuring that more than 1,000 new OBGYNs will graduate the system every five years.

1000+ OBGYN Project: Launch Partners



University of Pennsylvania
University of Arizona
TBD
University of Michigan
University of Wisconsin
Northwestern University
Oregon Health & Science University
Washington University in St. Louis
Drexel University
University of New Mexico
University of Michigan
University of Michigan
Indiana University (as part of AMPATH)
Icahn School of Medicine, Mount Sinai
Baylor University
University of North Carolina
Albert Einstein, Yeshiva University
Brigham and Women's Hospital,
Harvard
The Johns Hopkins University
University of California, San Francisco
Massachusetts General Hospital, Harvard
University of North Carolina

Participants at 1000+ OBGYN Accra Conference, 2014

The Training

Each of the African OBGYN departments in the partnership is in one of three stages of development:

- 1. They have no current OBGYN training program and can build upon the experiences of other partnerships to grow their own
- 2. They have a nascent OBGYN training program that has the potential to expand significantly with support
- 3. They have an established OBGYN training program that has the potential to scale up to new sites

Phase One

The first phase of implementation will include six African OBGYN departments and their U.S. partners; two at each of the three stages of development. Ghana, for example, could be one of the first to engage in a scaling program, doubling capacity by adding twenty-five new OBGYN residents per year at new sites. Phase one will see the recruitment of six partnerships through an RFP and seed grant process in 2015.

To serve the planning needs of all eighteen partnerships during the first phase, the project will also launch the "Global Partnership for Capacity Building in Obstetrics and Gynecology in SSA." Activities will include a curriculum support phase of work, including a focus on delivery of teaching and learning materials. Simultaneously, project partners will design processes for data collection, measurement, and evaluation. Project partners will also work to strengthen certification processes for SSA OBGYN departments, working with African-based/regional support systems. These are only the first two of ten "Critical Components for Comprehensive OBGYN Training in SSA" (see graphic page 4) that will be implemented during the course of the project. All partners will gather at FIGO's biannual conference in Vancouver in October 2015 to finalize the 2016 plan for launch, when the first "classes" of OBGYN residents will begin training.

Phase One (con't)

No current OBGYN	Nascent OBGYN	Established OBGYN
training programs	training programs	training programs
University of Botswana University of Buea, Cameroon Université Évangélique en Afrique, Democratic Republic of Congo University of The Gambia University of Sierra Leone	St. Paul's Hospital Millennium Medical College, Ethiopia Hawassa University, Ethopia Mekelle University, Ethiopia Liberian College of Physicians and Surgeons University of Malawi University of Rwanda Université Cheikh Anta Diop/	Kwame Nkrumah University of Science and Technology, Ghana University of Ghana, Ghana Moi University, Kenya Makerere University, Uganda Marara University of Science and Technology, Uganda

Phase Two

One year to eighteen months after the launch of OBGYN training in six sites, the project will be implemented locally within six additional African OBGYN departments. This cohort also will include partners at each stage of development.

Curriculum adoption and certification process conversations will be well underway and should move more efficiently. All partners will gather on the African continent for a partnership meeting in 2017.

Phase Three

The final phase will embrace the remaining suite of partnerships from the initial pairings identified in the Project Launch Partners Diagram (page 2) as well as possibly integrating new partnerships formed during the first two phases.

We propose that it will take five to six years to fully realize the eighteen partnerships with their full cohorts of M.D.s training to be OBGYNs; some will ramp up more quickly than others. At a steady state, more than two hundred M.D.s will enter the pipeline to become OBGYNs each year, and more than two hundred M.D.s will graduate the OBGYN program each year. This does not include the addition of more partnerships in more countries, as might be expected to occur.

OBGYN training strengthening the health system

As highlighted in the landmark Every Newborn Action Plan (WHO, UNICEF, 2014), a combination of community-based interventions, trained health workers, and midwives is one important step in improving care for pregnant women and their infants. However, many complications cannot be effectively addressed unless they are referred up the chain of care in the health system to an available medical obstetrician/gynecologist immediately upon diagnosis. The current system fails so often because the expertise required to diagnose and then address serious or emergency cases is either unavailable or inaccessible. There are too few places to which health workers can refer critical cases for lifesaving care.

When obstetricians are placed in a health care facility, referrals into the facility increase and referrals out decrease because women and newborns are receiving the level of care they need right there. As an example, when obstetricians trained to employ fetal assessment techniques care for women with preeclampsia, perinatal mortality falls by 75%. This level of training is only available where academic departments of obstetrics and gynecology have the educational capacity to produce this caliber of health worker. The number of OBGYNs must be sufficient to cover rural districts, with committed support from Ministry of Health for maternal mortality reduction and neonatal survival.

The women of Sub-Saharan Africa, like women everywhere, deserve the best level of care available. This program will trigger the development of an ever-growing cadre of highly skilled OBGYNs to deliver it - even to those women with the most perilous pregnancies, and to their newborns.

The Implementation

The 1000+ OBGYN Project activities will be headed by Dr. Frank Anderson of the University of Michigan, along with a steering committee of OBGYN educators and public health specialists from both high-resource and SSA universities. Dr. Anderson is an Associate Professor of Obstetrics and Gynecology and Health Behavior/Health Education at the University of Michigan, as well as the OBGYN department's Director of Global Initiatives.

The University of Michigan is uniquely qualified to coordinate such a project, given its long history of international commitments in general and, more specifically, its track record in comparable endeavors in Ghana. The Ghanaian partnership has evolved into a deep collaboration and friendship. The partners have developed a Charter for Collaboration that spells out the ethical and professional commitments necessary to a mutually respectful and long-term relationship (see Charter

document in Appendix).

The 1000+ OBGYN Project will be supported by the Global Partnership for Capacity Building in Obstetrics and Gynecology in SSA. This group is comprised of OBGYNs within the 1000+ OBGYN Project, as well as members of a range of interested professional societies with expertise in OBGYN/medical training, education, and Sub-Saharan African health system innovation. Launching the Global Partnership will be one of the first steps to implementation.

The academic, professional society, and technical partners involved in the 1000+ OBGYN Project are dedicated to providing high-quality, efficient, and innovative support to OBGYN training programs in Sub-Saharan Africa. In short, virtually the entire specialty is poised and ready to respond.

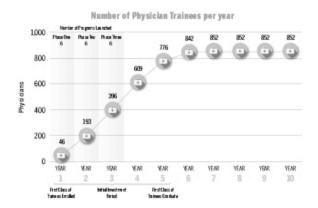
Moreover, our emphasis on mutually beneficial partnerships between high-resource OBGYN departments and Sub-Saharan African OBGYN departments demonstrates our dedication to open knowledge and resource-sharing, another key component of the long-term protection of the health of women and newborns.

The Investment

Expanding OBGYN programs will seed an exponential and sustainable growth resulting in the output of OBGYNs across Sub-Saharan Africa. With the right investment, this process will replicate the success of the partnership in Ghana.

This plan calls for a significant investment to launch a dynamic system. The business case is simple: Investment in leadership and launch over the first five years and diminishing over the next five, will result in a largely self-sustaining system of OBGYN training programs that will decrease maternal and infant mortality. The presence of 1,000+ additional OBGYNs across the continent will also strengthen every midwife, health worker, and community health worker training program and, thus, the urban and rural clinics and hospitals they serve.

Ours is a vision of empowerment and critically important OBGYN care — a vision guided by a shared ethic of respect for the wisdom of people and practitioners on both sides of the Atlantic. The phased implementation plan is based upon the eighteen partnerships that emerged in the course of the Rome and Accra meetings. Phase 1 will bring six partnerships online, Phase 2 includes six more, and Phase 3 will incorporate all eighteen of our current partnerships, plus potentially more partnerships that are developed in the interim.



Cumulative Number of Physician Trainees 5,418 6,270 Physician Trainees in Service After 10 Years

11

Data derived from reports descripped during Accra Conference, 2014.

8,000 7,000

6,000

5,000

4,000

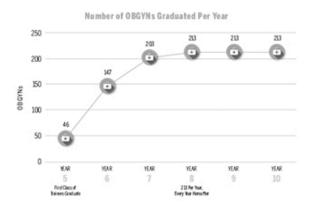
3,000

2,000

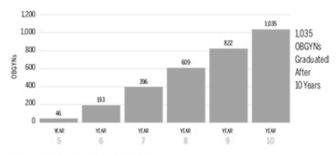
1,000

1000+ OBGYN PROJECT

Implementation Outcome: OBGYNs Graduated



Cumulative Number of OBGYNs Graduated



Data derived from reports developed during Accra Conference, 2014.

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Budget Components

Funding the 1000+ OBGYN project will require support in three major domains to create the framework to which other funding and programming can be attached.

The first domain is strengthening the coordinating, advisory and monitoring & evaluation efforts of the 1000+ OBGYN Project.

An international advisory board will be created to guide project activities. The project will develop the guidelines to ensure all ten critical components are addressed in project plans. This domain would manage the grants and RFA process based on the ten Critical Components. The project will develop and pilot a comprehensive monitoring/evaluation system for all partners to measure impact on maternal and newborn health. The network will be sustained through our webpage (www.1000obgyns.org) and the organization of a consortium-wide yearly meeting, alternating between the bi-annual FIGO conference and a meeting on the African continent. The budget includes consideration for a communications/marketing consultant for branding and internet presence.

The second domain is building a freely-accessible and sustainable resource center for global OBGYN teaching and learning materials. To do so, the project will coordinate a network of professional societies and organizations to support the consolidation of the global OBGYN knowledge base. This resource will make available state of the art, validated materials to all African OBGYN departments and will be implemented in conjunction through our close association with the International Federation of Obstetricians and Gynecologists, the American College of Obstetricians and Gynecologists, the Association of Professors of Obstetrics and Gynecology, the Global Library of Women's Medicine, and a number of other international professional organizations that have committed to this initiative.

The third domain is supporting the African/American OBGYN departmental partnerships, in their clinical, educational, rural outreach, and monitoring activities through a grants program administered by the 1000+ OBGYN Project. The initial eighteen partnerships will be developed and funded through a competitive process, six per cycle across three to five years of launch. Funding will be based on responses to an RFA process to be derived from our comprehensive analysis of the needs identified by all partners. Partners will be expected to secure commitments from Ministries of Health & Education and in-kind contributions from the local OBGYN departments as well. The coordinating center will also assist African OBGYN departments with funding individually and regionally from Ministries of Health, bilateral and multilateral donors, and other governmental, program and foundation sources.

Each partnership would receive start-up grants through the 1000+ OBGYN Project to provide high-impact, OBGYN care mentored by experienced OBGYNs in the context of capacity-building for long-term sustainability. Budget items include faculty support (both African and U.S.) travel support for bilateral learning and leadership building activities, departmental staff on the ground in Africa to coordinate and monitor educational activities and clinical outcomes, and to coordinate networking, resources, and programs.

The Impact

The long-term goal is to serve maternal health across the continent, thus creating significant public health gains and eliminating preventable maternal and neonatal morbidity and mortality. It is important to note that the trainees themselves will also be providing care to the community in hospitals as they train; those gains will begin to be realized almost immediately. The project's success

will be measured by whether this group of country-based partnerships can successfully increase access to maternal and infant health interventions and demonstrate measurable reduction in maternal and early neonatal morbidity and mortality.

Sustainability

Reducing maternal mortality is a key priority for many of these countries. Thus, engaging their Ministries of Health and Education is integral to supporting local OBGYN departments through long-term funding and policy for building capacity and improving health care delivery. Ministries have been and will be actively engaged as participants at each project site. Without their commitment, sustainability for the 1000+ OBGYN Project is impossible.

Creating a cadre of Sub-Saharan African OBGYN specialists creates an opportunity for advancement and distinction within their own countries' medical communities of practice, which helps to explain why doctors who receive advanced OBGYN training locally are more likely to remain in their communities. The OBGYNs that this program trains and supports will have the opportunity to engage with the global community of OBGYN faculty and practitioners, become leaders in their nations' health systems, advocates for women's health, and influential in the formation of local and national health policy. Most importantly, each class of OBGYNs will be a source of faculty and mentors for the next class of OBGYNs, saving the lives of mothers and their children.

Across a decade, this partnership can build the skills needed to deal with crises in urban hospitals, as well as clinics in rural communities, and will develop to be self-sustaining. The engagement of U.S. and other high-resource country partners in each local SSA OBGYN department setting will help doctors stay in their own countries by building a global academic community for research, friendship, mentorship, and collaboration.

The University of Michigan and the 1000+ OBGYN Project seeks your support to make this vision a reality. Within a decade. **Starting now**.

For Further Information:

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