

Building Academic Partnerships to Reduce Maternal Morbidity and Mortality



A Call to
Action
and *Way Forward*

Edited By Frank W. J. Anderson, MD, MPH

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**Proceedings of the
Public Health Impact of Training Physicians to
Become Obstetricians Conference
Held during the meeting of the International
Federation of Gynecology and Obstetrics (FIGO)
Rome, Italy November 2012**

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PREFACE

This book presents the collective wisdom of a group of Obstetrician/Gynecologists (OB/GYNs) from around the world brought together at the 2012 meeting of the International Federation of Gynecology and Obstetrics (FIGO) to contribute their ideas and expertise in an effort to reduce maternal and neonatal morbidity and mortality and obstetric fistula in sub Saharan Africa (SSA). The discussions focused on how to increase human capacity in the field of obstetrics and gynecology. The meeting was hosted by the University of Michigan Department of Obstetrics and Gynecology Global Initiatives program and was supported through a grant from the Flora Family Foundation.

The basis for the gathering was to learn from the successes of university-based training initiatives in Ghana, where as of November 2013, over 140 new OB/GYNs have been trained since 1989 with over 98% retention of graduates in country. These graduates are now practicing in both urban, peri-urban, and rural areas, functioning as primary care physicians, researchers, medical school/nursing/midwifery faculty, policy leaders, and community leaders. They contribute greatly to the overall obstetric capacity and provide leadership in women's health to both their country and the West African region. A departure from the "specialist" model of care, many of these physicians provide primary care to women addressing maternal, gynecologic, and reproductive health care needs.

The work of reducing maternal and neonatal morbidity and mortality to the lowest possible level will not be complete until women across the world have access to high quality and comprehensive obstetric care. Improving health care for women will not be completed until all women can enjoy a life free of gynecologic disorders and gynecologic cancer, and can choose when to reproduce and bear children. Although the obstetrician/gynecologist is not the only answer, it is only at this level of expertise can the most difficult clinical challenges be addressed and resolved. Every country deserves and requires this type of technical ability. Great progress has been made in reducing maternal mortality ratios since 1985m when Allen Rosenfield described maternal mortality as a neglected epidemic. Countless midwives and health workers have been trained to recognize and react to obstetric complications. But this is not enough. Worldwide training a cadre of OB/GYNs is the last step toward improving women's health.

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Only when the most severe obstetric complications are managed by a team of highly trained providers will maternal mortality ratios decrease to levels comparable to high-income countries.

Within the pages of this document, the current status of women's health and OBGYN training programs in 10 sub-Saharan African countries are described, with a Call to Action and Way Forward to training new OBGYNs in country. These are the words of obstetricians in the field, some who work as lone faculty in fledgling OBGYN departments. These committed people are charged with the task of not only teaching the next generation, but may be the only OBGYN per 500,000 population or more. Their tireless pursuits are recognized, and their yearning for collegial support is palpable.

These pages bring to light successes achieved and shared, and lessons learned that have already spurred new programs and given hope to those eager for a new way forward.

Every country should have a cadre of highly trained OB/GYNs to teach the next generation, contribute to policy development and advocate for progressive legislation, conduct the research needed to solve local clinical problems, and contribute to the field of women's health in general. **But most of all, it must be recognized that women across the globe have the right to access a full scope and high quality obstetrical and gynecological care when and where they need it.**

Training programs that produce OBGYN specialists at universities do not arise de-novo. They cannot be initiated with the current development model that emphasizes 3-5 year programs for targeted single health issue problems. Based on the Ghana model, we learned that partnerships with successful OBGYN training programs and professional societies, with faculty development and curriculum development with an expectation for certification and independent practice are key elements. Training this cadre of worker/leader this way will take years but ultimately both partners will benefit. What we start now may take more than a decade to have an impact, but the longer we wait, the longer it will be to the complete solution. The Ghana experience has shown that this can be done - given time, commitment, governmental support, and supportive assistance through mutual partnerships from obstetrics and gynecology departments in high-income countries who are expert in this endeavor. We must mobilize and coordinate support to provide the inputs and expertise to jumpstart the creation of OBGYN departments across SSA who can then function independently.

BUILDING ACADEMIC PARTNERSHIPS

I hope that you find the following information useful in whatever role you play in the reduction of maternal mortality, and that together we will find a way to sustainably improve the lives women, children, and the people who care for them in sub Saharan Africa.

Frank W. J. Anderson, MD, MPH
Director of the Global Initiatives Program and Associate Professor of
Obstetrics and Gynecology, University of Michigan

For more information about progress in this area, our upcoming meeting in Accra in 2014, and how to be involved, please see our website:

http://obgyn.med.umich.edu/global-initiatives/1000_OBGYNs

FOREWORD

POSTGRADUATE EDUCATION IN OBSTETRICS AND GYNECOLOGY IN SUB-SAHARAN AFRICA – THE STORY OF A DREAM

In 1989, with support from the Carnegie Corporation of New York and in conjunction with the Royal College of Obstetricians and Gynecologists (RCOG) of London and the American College of Obstetricians and Gynecologists (ACOG), the Ghana Postgraduate Training Program in Obstetrics and Gynecology was launched. This comprehensive in-country training program was established to train specialists for national service to promote Safe Motherhood, reduce maternal mortality and improve Women's Health. At the graduation ceremony for the first group of postgraduates, Doctor J.B. Wilson, a program founder, remarked that the success of the program, with the production of well qualified and internationally certified postgraduates, was a "dream come true". A decade later, at a meeting of the Ghana Management Committee, Professor Cecil Klufio declared: "The dream continues".

This monograph provides the record of a meeting at FIGO in Rome that was designed to explore expansion of training of obstetrician gynecologists in sub-Saharan Africa to provide primary women's health care using the Carnegie Ghana and other evidence-based models. It is hoped that this work and future initiatives will encourage commitment of many individuals and institutions to a collaborative, multi-directional sustained partnership with a lofty vision and mission: Safe Motherhood, comprehensive Women's Health, Sexual Rights for all and Reproductive Justice. There is much to do to demonstrate that the dream can be generalized across sub-Saharan Africa and before we can say that the dream can endure.

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FOREWORD

Addressing the menace of maternal and neonatal morbidity and mortality continues to be a daunting challenge in sub-Saharan Africa (SSA). Despite several global initiatives and interventions such as the Maternal and Child Health (MCH) programme under the Primary Health Care concept of 1978, the Safe Motherhood Initiative of 1987, the International Conference on Population and Development (ICPD) of 1994 and the targets set within the Millennium Development Goals, many women in SSA do not have access to comprehensive obstetric services. Inadequate leadership and lack of clinical expertise dedicated to maternal health care in SSA could be blamed for this situation. Thus, embarking on large scale advanced training of maternal and neonatal health care providers in these areas could be one of the ways to reverse this menace in a sustainable manner.

Learning from the success stories of existing academic and professional collaborative partnerships for advanced training in maternal health and working in like manner are opportune ways to accelerate the development of the needed human resource for maternal and neonatal health in SSA.

The contents of this book are in that direction and seek to expand the capacity of SSA countries to tackle the training of advanced human resource component of maternal health care so as to effectively deal with maternal and neonatal morbidity and mortality in these areas.

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INTRODUCTION

These pages present the work performed by the OB/GYNs from 10 sub-Saharan African (SSA) countries during a meeting held on October 9, 2012, in Rome. The meeting was chaired and conducted by Dr. Frank Anderson during the 20th Congress of the International Federation of Gynecology and Obstetrics (FIGO). Its proceedings were recorded and verbatim transcripts were made. The resulting text, slightly edited for readability, is presented integrally. Additionally, the group work resulted in a summary conference document. For greater reading convenience, the work's results are presented first, in the section titled "The Call to Action and a Way Forward," and the working processes that led to these results are presented next, in the section titled "Working Processes."

"The Call to Action and a Way Forward" is a 6-part report. The first part, "The Way Things Are," reports on the state of maternal, reproductive, and neonatal health; on obstetric capacity; and on residency training and the certification and retention of OB/GYNs in SSA. The second and third parts identify opportunities for SSA OB/GYNs and barriers to the progress of their profession in SSA. The fourth debates the question of task shifting. The fifth (from the African perspective) and sixth (from the American perspective) bring to light the concrete steps SSA OB/GYNs must take if they are to lift the barriers to their progress and benefit from all attainable opportunities. These are the two foremost prerequisites to the improvement of maternal and neonatal health in SSA.

The OB/GYNs' written and oral comments were compiled by category

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(those provided by American participants are indicated as such). A slightly edited transcription of the brainstorming session that led to the shaping of “The Call to Action and a Way Forward” appears in the “Creating the Call to Action and Way Forward” section of “Working Processes.”

The account of the working processes is presented as a slightly edited transcript of all of the meeting’s events, from the Welcome Letter mailed to the participants several days before the meeting to the participants’ Reaction Papers mailed several days after the meeting. Occasionally, the participants’ comments are linked together by commentary. Here again, chronological order was disturbed for reading convenience as the Executive Summary of the meeting was placed before the meeting’s agenda.

PART I

THE CALL TO ACTION AND A WAY FORWARD

The following document was created from the contributions of the meeting participants who were OB/GYN leaders from 10 SSA countries – the Gambia, Cameroon, Liberia, Zambia, Kenya, Uganda, Malawi, Rwanda, Ghana, and Ethiopia – and leaders from the OB/GYN departments of the University of New Mexico, the University of North Carolina, the University of Wisconsin, the University of Michigan, the University of California San Francisco, New York University, Harvard University, and the University of Toronto. The results of the work by SSA OBGYNs are always presented first.

The Way Things Are

Maternal Health

Maternal morbidity and mortality are high in SAA, where infections, anemia, and pre-eclampsia often complicate pregnancy, obstructed labor causes fistulas, and eclampsia and postpartum hemorrhage are major causes of death. The burden of complex obstetric complications is high, the obstructed labor/fistula complex is particularly onerous, and the numbers of obstetricians available to treat these complicated problems are low or exceedingly low throughout SSA.

Not only are OB/GYNs in woefully short supply, but so are the other practitioners, such as surgeons, anesthesiologists, and anesthetists, needed to care for women with obstetric complications. Moreover, the quality of

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training varies greatly among health providers.

Whereas women have access to antenatal care in many places, access to obstetric care is generally poor, with long delays in reaching the referral facility due to poor transportation systems and roads. Many women are delivered at home – and not by skilled attendants.

The district hospitals are congested and full of bottlenecks, which result in long waits for cesarean deliveries. Often, no one is trained in maternal/fetal medicine. The absence of a fellowship in maternal/fetal medicine prevents the training of staff that could handle high-risk cases and care for very ill women.

Short birth intervals, unsafe abortion, and HIV infection contribute to maternal morbidity and mortality.

Comments by US participants:

There are differences in maternal mortality among underserved populations, health care delivery systems are fragmented, and the disparities in the quality of obstetric care and obstetric outcomes are related to income, race, and ethnicity.

Along with the medicalization of birth came an overutilization of technology, such as ultrasound and electronic fetal monitoring, and overly high rates of cesarean delivery. Although home births are becoming less frequent, and midwifery is well integrated into the health system in some places, midwife care is underutilized.

Reproductive Health

Fertility rates are very high and not properly addressed in SSA. Unintended pregnancies are frequent and the prevalence of women of reproductive age using contraceptives is low. Moreover, access to abortion services is poor and the prevalence of illegal and unsafe abortions is high. The unmet need for family planning is therefore considerable. Reproductive health is key to the holistic realization of the rights of women, and of human rights in general. Yet, in most places, scant reproductive health information is provided during antenatal and/or postnatal care. The reproductive health issues faced by adolescents are of special importance and yet remain unanswered.

Although women everywhere report very advanced stages of reproductive tract diseases, those who are the most in need of care have the least access to it. There are gaps to close, and women in rural areas of SSA are obvious

examples of this situation.

The effort at training low-level and midlevel providers has produced minimal improvement in service delivery.

The most frequent form of cancer in women is cervical cancer and radiation therapy is unavailable in most places in SSA.

Comments by US participants:

The poor access to contraceptives is further limited by cost; safe abortion is unavailable in many places due to a lack of both insurance coverage and providers; and the politicization of reproductive health care still worsens the situation.

Neonatal Health

The rates of intrapartum demise and stillbirth are high, as are the neonatal mortality and morbidity rates. Neonatal asphyxia and neonatal infections are frequent. The high rates of preterm delivery lead to high rates of death from anemia of prematurity. Post-neonatal mortality is also high. Actually, mortality is high among children younger than 5 years. Mortality and morbidity in this young population are worsened by closely spaced pregnancies and the prevalence of HIV infection.

Care is poor at neonatal intensive care units. Most regional and district hospitals lack expertise and equipment, and the care is provided by midlevel providers with insufficient skills. Although project-based improvements in neonatal care exist, basic equipment, such as infant-sized supplies and surfactants for respiratory distress syndrome, are still lacking and the skill level of care providers remains low.

Birth certificates are needed to acknowledge all births.

Comments by US participants:

Neonatal health is good, but with too many disparities. Excellent outcomes are found at tertiary care facilities with satisfactory equipment and staff properly trained for neonatal intensive care. Despite the network of neonatal intensive care units, the overall neonatal outcomes are not as good as they could be. The breastfeeding rates are low, and increasing the rates might improve neonatal outcomes.

Obstetric Capacity

Post-graduate training

Whereas all graduate programs at medical schools teach some aspects of OB/GYN, several African countries do not have specialized OB/GYN training at their main university teaching hospitals. The case of Malawi is striking in this respect. Although curricula were developed 10 years ago and updated yearly, they have not been implemented. Not only have the resources been lacking, but also the accreditation and certification bodies necessary to legitimate the program and qualify its graduates. Malawian OB/GYN residents spend the last two years of their training in South Africa.

Typically, OB/GYN academic programs last four years (Ghana has a five-year program and a three-year program, the latter offering the possibility of entering a two-year subspecialty program upon completion). In the Gambia, residents are awarded a Master's degree upon completion of the training program. In some countries, only those who can afford the high fees can participate in a training program.

Faculty

In Malawi, there are only two full-time and one part-time faculty in a department where 30 to 50 babies are delivered each day and the staff is scant. In Ghana, the specialists are numerous enough for some to move into subspecialty areas. In other countries, the situation is somewhere in-between. In most countries, most OB/GYNs remain concentrated in the capital or other large cities.

Comments by US participants:

A well-developed and highly regulated system of program accreditation issuing clear requirements for the candidates, followed by board certification, are necessary for participation in professional organizations.

Faculty need protected time for research and teaching, so that they may fulfill all the functions expected from academic OB/GYN mentors. Moreover, departmental infrastructures need to be in place to support the clinical, educational, and research activities of the faculty and research funds need to be available through competitive grant opportunities from government and private sources.

Residency Training

High numbers of general and subspecialty OB/GYNs committed to medical education are needed at all levels throughout SSA. Even though residency training is well established in some countries, it is only fledgling in others – where it can be confined to just one hospital unaffiliated to the university – and nonexistent in many more.

Where training is sufficiently developed, it occurs at least in the major teaching hospitals, and residents also spend time at districts hospitals with OB/GYN facilities in place for the residents' rotations.

In some countries, medical schools have an undergraduate OB/GYN training program but no postgraduate residency programs, which make it difficult for physicians to find a way to engage in advanced OB/GYN training. They must rely on other countries to further their education.

Comments by US participants:

There is a need for an excellent system of graduated responsibility, with oversight by local and national regulation boards.

Typically, countries have very structured four-year graduate training programs (but no planned community attachment programs). (In Ghana, the rapidly evolving OB/GYN program has developed two-year fellowship training programs. The first, which already has two graduates, is in international family planning and reproductive health. Two more, in gyno-oncology and gyno-urology, are also established, and another two, in Maternal-Fetal Medicine and Reproductive Endocrinology and Infertility, will soon be established. The aim is to train more subspecialists relative to the number of generalists, and training will soon be restructured. Will there be too many subspecialist programs in Ghana?)

Certification

The questions of program accreditation and graduate certification need to be resolved throughout SSA, and there are different ways to resolve them. Provided that the standards are met, the West African College of Surgeons serves as an accreditation and certification body for the medical programs of the different countries in the region. Ghana, however, uses both the West African College of Surgeons and its own Ghana College of Physicians

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and Surgeons.

In Ethiopia, the Food, Medicine and Healthcare Administration and Control Authority, a regulatory agency under the Ministry of Health (MOH), provides a medical license, and the universities deliver credentials upon graduation. After reviewing the credentials, the ministry certifies the new specialists and allows them to practice in the country. Specialists coming from abroad also need to undergo the certification process. However, there is no regulatory body for the accreditation of medical schools in Ethiopia and no certifying board, so quality cannot be guaranteed and may be compromised.

Kenya has the Kenya Medical Board and Rwanda has the Rwanda Society of Obstetrics and Gynecology. In Uganda, certification is granted by the training universities and the license to practice is given and renewed each year by the Uganda Medical and Dental Practitioners' Board. In Malawi, the Medical Council of Malawi certifies general practitioners. OB/GYN residents, however, spend their last two years of training in South Africa and are certified by the Fellowship of the College of Obstetricians and Gynecologists of South Africa.

In other countries, certification is granted by “the University”; “the University Senate”; “the Medical Council, which also grants the license to practice”; “the Health Professions Council Specialists Register”; or “the specialty, and licensing and accreditation is done by DACA.”

Thus, certification occurs through a variety of institutions, with very little consistency across the countries. Could it be done via an SSA OB/GYN society?

Comments by US participants:

In the US, certification occurs only after completion of an accredited program and successful passage of written and oral exams overseen by the American Board of Obstetrics and Gynecology, which is a member of a larger organization, the United States Medical Licensing Examination. The latter organization also supports the other boards of medicine and surgery.

Retention

A poor working environment, a high work load, low salaries, no incentive to plan new projects or conduct research, and no opportunities for continuing medical education or capacity building contribute to a general lack of interest in specializing in OB/GYN abroad. Many of those who complete a program abroad also choose to practice abroad.

Moreover, those who stay in their countries often prefer to work in the private sector; and if they work in the public sector, they tend to remain in the larger cities. In all SSA countries, retaining OB/GYNs in rural areas is a problem.

In Uganda, where retention rates are not recorded, OB/GYNs are free to do whatever they want because residencies are self-sponsored. In Ethiopia, where the attrition rate is high among medical school graduates but only 20% among OB/GYN specialists, no retention methods are in place. In Ghana, retention is very high; in Kenya, retention is almost 100%; and in Rwanda, all who have been trained in the country are still in the country. The focus should be on providing better conditions of service for specialists, and remunerations as high in the public sector as they are in the private sector. The focus should also be on providing incentives for professional progression, which should be promoted by the existence of training programs. In Ethiopia, subspecialty programs and the possibility of training abroad will be offered as incentives.

Many OB/GYNs have expressed satisfaction for living and being useful in their home countries, a disposition that is crucial to building capacity for maternal health.

Governments need to be responsive to the OB/GYN's complaints, and government/private sector partnerships are needed to improve work environment for OB/GYNs.

Comment by a US participant:

Retention is excellent in general, but those who discontinue obstetric practice and major surgical practice contribute to workforce issues.

Opportunities

The SSA OB/GYNs agreed that even though their governments are generally supportive of postgraduate training, collaborations within SSA and with global organizations should be explored:

Associations such as the West African College of Surgeons act as regional accreditation and certification boards. This and other regulatory bodies already in place could provide a space where OB/GYNs from the different SSA countries could share their knowledge, experience, and leadership

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skills.

“Home-grown” postgraduate programs, rather than graduate programs shaped by US or European experts, are urgently needed because of the great variety of diseases specific to SSA and the large numbers of patients with these diseases. Educational and research opportunities are everywhere, primarily in rural areas. In many countries, political stability warrants the launching of such programs.

Countries with well-established programs should offer more training opportunities to physicians from other SSA countries. Rather than training in the UK or the US, where diseases and concerns are different, these physicians would then train in settings similar to their own.

Through the United Nations, the World Health Organization (WHO), the African Union, and nongovernmental agencies (NGOs), international goodwill can be garnered to support improvements that will help SSA achieve Millennium Development Goals.

Opportunities for research and education that would arise from US partnerships:

Technology

There is a strong demand for partnerships that could help better utilize and upgrade existing infrastructure and establish training programs and training centers. Technology and skill transfer will only benefit SSA. The technologies and skills transferred could include technical support when curricula are developed, programs launched, and methodologies tested, as well as telemedicine, the Internet, on-line learning, high-tech procedures, and other electronic resources such as library resources. The transfers would enhance training and innovation in clinical, educational, and research in SSA.

Trainees could also go to the USA and observe state-of-the art practices.

Funding

Funding is becoming more available in SSA, especially via the ministries of economic planning and development. This should promote collaborative research efforts within SSA. The state of the infrastructure is poor in SSA, and by improving the infrastructure, it would enhance human resources.

Roles for academic US/SSA partnerships

Collaboration can involve curriculum development, faculty development, fellowship development, assessment methods development, postgraduate training, research, and staff exchanges. Partnerships can be built at the department, university, and association levels. They will facilitate resource mobilization, capacity building, and publication while maintaining standards of excellence, mutual respect, transparency, accountability, and the desire to help one another.

Barriers to Progress

SSA Factors

The lack of resources such as supplies, communication technologies, infrastructure, and human capital are certainly barriers. Hospitals, operating theaters, and roads are the most obvious parts of the infrastructure in need of repair and improvement. Besides, trained providers are in very short supply; therefore they do not have the time to teach, do clinical work, and conduct research at the highest level that they otherwise could reach.

Moreover, too many needs compete for scant resources. For example, in SSA, a good part of the available funds have been allocated to HIV/TB/Malaria treatment and research.

The rates of attrition are especially high in the public sector, as many OB/GYNs prefer to practice either abroad, or at home in private practice or with internal NGOs. The reasons for shunning the public sector are the following: low pay everywhere in SSA; in countries without a training program, residents train and tend to stay abroad; and in SSA countries with a training program, the program is costly and residents receive little or no reimbursement by the government for the many unpaid services that they provide. The financial burden of undergoing OB/GYN training is a deterrent that greatly affects further education for young physicians – and consequently affects clinical care in the country. Some countries have a “payback years” policy that automatically delays postgraduate training. The lack of research opportunities also contributes to attrition.

An unstable political and economic environment in some countries; the lack of political commitment by some governments; and governments turning their ministries of health and their universities into unequal rivals

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discourage young physicians either to commit themselves to a specialty program or, once they are certified as OB/GYNs, to join the University. Since the overwhelming majority of OB/GYNs prefer to reside in central locations, the rural communities are deprived of services and consequently of training at all levels. Governments should give tax incentives to specialists willing to reside in rural areas and work at district hospitals.

US Factors

Some US people willing to collaborate with SSA emphasize a US agenda rather than focusing on the steps to take in Africa to improve reproductive health and family planning. They promote state-of-the-art technology so that they may concentrate their efforts on specific diseases. Too often, funding is project-based.

As there are competing programs of operations within US universities and programs enter partnerships in a noncompetitive way in SSA, this may not be the best way for us. Besides, the lack of uniformity among US institutions, compounded with the lack of coordination between US universities and African institutions, complicates things for us.

The facts that funding for HIV takes resources away from other acute needs, and that US politics influences resource allocation – there is no US funding for abortion – further complicating things for us, especially in the midst of a global recession. And when funding ends, SSA institutions are left to pick up the residual program pieces.

Foreign physicians must undergo lengthy, rigorous certification processes before they can acquire clinical experience in the US, which greatly limits their chances to spend time at US hospitals as professionals performing clinical work. Fear of litigation further adds to the frustration.

On the home front, travel restrictions and other administrative hurdles can prevent physicians from traveling to the US; besides, faculty have no protected time for it.

The Question of Task Shifting

Because of dire understaffing, task shifting is generally useful in SSA. In some countries, especially in eastern and central Africa, midlevel health professionals even perform surgical procedures. Training personnel in technical skills and defining and monitoring competency levels is

paramount, but a consensus must be reached on what adequate training, evaluation, and monitoring should consist of.

Meanwhile, what kind of professional development do midlevel providers receive? Who licenses them, who supervises them? Can they be prevented from entering private practice once they are trained? Since midlevel providers are not equipped in any way to make decisions, what are their long-term prospects for advancement? Can they become physicians? If not, what is the next level of training for them?

All these questions mean that task shifting should be considered a stop-gap measure, to eventually be replaced by a comprehensive, well-integrated training system. Countries need to invest in relevant, structured training at all levels.

What Needs to Be Addressed

At the University Level:

To prevent attrition, faculty must be appropriately compensated for their work and given time to further their education and conduct research. Moreover, with the increasing student population, infrastructure and faculty numbers must also increase. Not only should universities attract more physicians into their OB/GYN programs, they should also enhance the work conditions of faculty and residents, making the internet easily available and providing offices and research support, for example. Ensuring faculty retention necessitates capacity building; funding to make professional activity easier and more rewarding; and funding for research and mentorships, which is essential if faculty is to have a chance to reach and remain at the top of their profession.

To enhance efficacy and satisfaction, initiating or enhancing subspecialty training programs is certainly necessary, but it needs to be accompanied by training staff at lesser levels, including staff from other disciplines such as anesthesia and surgery.

In summary, at the country level, it is vital for universities to improve their relations with the national MOH and get the ministry interested in providing funds to their medical schools. It is also vital for universities to improve their financial administration and money flow, so that they may provide grants to ensure the following: postgraduate training development; expansion of the infrastructure to facilitate teaching and service delivery;

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recruitment and training of staff capable of providing service; and sufficient support for the research efforts – all the while keeping the national needs in mind and ensuring that staff are asked to perform only at their certification levels.

At the SSA level, universities must collaborate more and begin to share ideas, including research ideas, as well as manpower and other human resources.

At the Ministries of Health and Education/National Health Service Level:

Governments and ministries of health and education need to own the projects funded by outside sources. Consequently, they need to secure and commit resources to sustain projects after the outside funding has stopped. For this to happen, conflicts between ministries and universities and rivalries between university-employed and ministry-employed OB/GYNs must be resolved.

The ministries need to understand the universities' priorities. They need to understand the importance of developing a career path for graduates and implement retention strategies that will make graduates opt for the public sector and work in rural areas. Strategies could consist in increasing salaries and proposing other incentives, such as housing loans or the possibility to import a car tax-free.

To make possible the training of an increasing number of health workers at all levels, ministries and government agencies need to join forces to increase the number of training facilities and supply old and new facilities with technologies, medications, and all forms of needed infrastructure and resources.

Further, they should streamline program approval procedures; work out malpractice laws and provide proper coverage for the employees of public-sector hospitals; and support the formation of ethics committees.

At the Teaching Hospital Level:

Faculty and all other staff members of teaching hospitals must be appropriately compensated at each level of training and expertise. This is why faculty and other staff should not be overseen by different government agencies, which usually are the MOH and the Ministry of Education (MOE). And if they are, synergy should develop between the two

ministries, with a clear understanding of who makes the decisions, who is in charge of funding, etc.

Improvements in infrastructure and technology are needed for patient care, drug procurement, data management, and staff training – especially nursing, anesthesia, and support staff. The number of trainees in each program should be balanced relative to the numbers in the other programs, and the various programs should be integrated. Subspecialty training should also be developed, along with the training of the necessary supporting staff. Allowing private practice at the teaching hospital should be considered.

Training 1000 OB/GYNs in the Next 10 Years Will Involve:

“We must make sure that every SSA country is involved,” said a participant. “We feel welcome in other SSA countries like nowhere else,” another participant exclaimed, and since training 1000 OB/GYNs in the next 10 years is a population-based project, “we have to look within SSA for our solutions.”

Therefore, regional medical boards will be asked to help establish accreditation boards and other structures; standardize certification; design structured, SSA-specific health curricula; promote “best practices”; and foster collaboration and linkages between SSA countries to improve training. The Eastern, Central, and Southern African Association of Obstetrical and Gynecological Societies (ECSAOGS) will be asked to help, too.

To exchange ideas, African leaders and American universities can meet at the American Congress of Obstetricians and Gynecologists (ACOG) annual meetings. Training 1000 OB/GYNs in the next 10 years will require more training programs in all SSA countries; and if that is not possible in some countries, it is in all regions. The Consortium of American Universities can help pool resources.

Attracting more students at each level of training is essential – at relevant university departments, medical schools, and postgraduate programs. Postgraduate training ought to be decentralized by opening new programs at universities with no OB/GYN specialty programs. Recruiting from rural areas would increase the likelihood that graduates would want to practice at district hospitals.

Little will happen without leadership at the government, university, and hospital levels. We must convince governments to commit themselves to

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the training and retaining of OB/GYNs. We must engage all policy makers and encourage collaborations between MOH and MOE in each country. Exchanging site visits would bring together people from different countries. Further, it would be good to know that in times of governmental instability, SSA partners from stable countries would provide staff, including faculty. Improving salaries is the surest way to keep staff in their professions; but to remain truly professional, staff at all levels must be periodically retrained.

Concrete Steps to Be Taken (African Perspective)

1. What specific things could an American or European academic OB/GYN department provide to help you build your department?

- Help us establish collaboration between universities from SSA countries with no accreditation body and SSA Universities, which already have one. Further, help us establish an accreditation body in countries where there is none.

- Assist in developing curricula, including subspecialty curricula, and perform visitations of the subspecialty programs.

- Send visiting professors to increase the grossly inadequate faculty numbers and help increase the capacity of the existing staff. Provide continuing education. Short-term missions, of two to four weeks, would be sufficient to train residents and local faculty. However, interested American and European academics could be visiting for longer periods.

- Invite SSA OB/GYNs for visiting professorships in your department.

- Provide library resources, so that we may remain informed about our specialty. Support our research efforts, with the long-term goals of developing the research capacity of local faculty and collaborating with us in research.

- Provide technical assistance and visit out sites to acquaint us with new technologies.

- Assist in upgrading antiquated facilities. We need funds and equipment.

2. What are some elements of a site visit in another SSA country that would be important for you to see? Among the people that you could meet, who would be important for your own country?

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- The head of the OB/GYN department, the university president, university administrators, and faculty would be important for us to see during a site visit.
- Also, the head of and staff from the MOH, teaching and district hospitals, and primary health facilities; OB/GYNs from around the country.
- The president of the country. This can be easily arranged and his or her personal involvement in a program guarantees its success.

3. What administration/communications/travel/other equipment would be necessary for a more effective OB/GYN department? More personnel? More space?

All these are needed:

- Full-time faculty, the possibility to exchange teachers, and an increase in the number of medical officers and residents. A secretary to deal with postgraduate issues would also be welcome, as well as travel and lodging funds for external support staff.
- A department-level coordinating committee for the postgraduate program.
- A greater number of midwives and anesthetists.
- Expanded facilities as the interest in training grows; space reorganized for teaching; telemedicine facilities to improve collaboration with more experienced faculty overseas.
- Increased maternal/fetal medical capacity, improved equipment and logistics.
- Equipment for the operating room, diagnostic clinics, and laboratory.
- A high-dependency unit. We currently use the surgical unit, which has only 4 beds.
- Computers, Internet facilities, books, and other teaching materials.
- Vehicles to facilitate movement, including travel to facilities throughout the country and transportation of residents and other trainees.
- Participation in the activities of the African Federation of Obstetricians

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and Gynecologists (AFOG), which was just inaugurated in Rome.

- Administrative and technical help to improve managerial skills locally.

- Help with collaborative research.

4. What specific actions can an American OB/GYN department do to assist in the development or enhancement of the OB/GYN department at your university?

- Link us with potential funders to help develop maternal-fetal medicine.

- Help the local faculty reorganize the teaching setup and assist in curriculum development.

- Organize a workshop or bring all stakeholders on board.

- Provide extra staff, especially subspecialists who will assist with teaching; provide mentors for local faculty and younger doctors.

- Develop the research capacity of the local faculty; develop a program of regular site visits to ensure that standards are established and kept everywhere.

- Mobilize overseas faculty who can come over for short- or long-term visits; invite our residents for observational tours in your country.

- Sponsor established African academics who might have the time to come and help us.

- Provide equipment; provide training allowances for our students.

- Advocate for international support for African academic OB/GYN departments.

5. Apart from training OB/GYNs, what specific actions can an African OB/GYN department take to assist in the development of an OB/GYN program in your own country?

- Build research capacity among faculty and stimulate interest in the subspecialties.

- Promote research relevant to the OB/GYN problems of the country.

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- Assist in the training of anesthetics, nurses, and midwives.
- Invite those who are well established to collaborate with you in your efforts.
- Share faculty to help improve the quality of training.
- Help establish and strengthen regional colleges, help strengthen AFOG.
- Facilitate local staff participation in international forums.
- Send faculty to the US/UK for refresher courses.

6. What role do you see for ACOG?

ACOG could help us do the following:

- Develop or ameliorate comprehensive curricula – including subspecialty curricula – that are relevant for low-resource settings; train faculty; and certify and recognize our graduates.
- Maintain good levels of training and good examination processes by visiting us once we start training residents and administering exams.
- Link us with manufacturers of hospital equipment and with NGOs that can provide us with life-saving instruments at minimal cost.
- Ensure that OB/GYNs of various sub-specialties are able to provide us with technical knowledge when needed.
- Coordinate research work among African OB/GYN departments.
- Solicit funds for partnerships.

7. What role do you see for FIGO?

FIGO could do the following:

- Send OB/GYNs to various SSA countries after advocating this arrangement with the governments.
- Help regional colleges accredit programs and certify graduates.

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- Assist American universities as they are looking for funds.
- Assist the Malawian government in improving communication between primary health facilities and secondary and tertiary hospitals.
- Create strong advocacy among donor communities to meet the goal of producing 1000 additional OB/GYNs over the next 10 years.
- Develop fellowship programs to support US or European faculty who want to spend one to two years in our departments.
- Provide material and financial support.
- Help establish local branches or associations. For example, a Liberian Society of Obstetricians and Gynecologists could examine the aims and goals of FIGO in the country.

8. Other

Responses to Dr. Vwalika's comments on Dr. Anderson's 3-page report:

- The program started in 1982 and is growing, but the drawback is a lack of infrastructure. Currently, we have a total of 30 residents in years one through four.
- Rather than sponsor Africans to go overseas, can US/European faculty be sponsored to come and spend one or two years in the Gambia to serve as founding mentors/faculty in the training program being established?
- Governments in SSA countries should be more involved in academic projects. This could ensure the smooth development of the projects and motivate foreign organizations to do more for SSA.
- A strong partnership among African institutions would result in more feasible programs that would bring us closer to our goal, which is producing 1000 additional OB/GYNs in the next 10 years.

Concrete Steps to Be Taken (American Perspective)

- 1. What specific things could a US/European academic OB/GYN department provide to help you build your department?**

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- Curriculum planning; goal/expectation/mentorship setting, then designing postgraduate training and mapping out rotations, clinical time, and numbers of cases supervised.
- Highlight the differences between British/European and US training programs. SSA universities would then be able to determine which are best for them.
- Provide experienced health care providers with international experience for short, two-week to two-month stints as part of a standardized curriculum – as we have done in the past.
- Invite residents for exchange experiences.

2. What are some elements of a site visit that would be important for you to see? Among the people that you could meet, who would be important for your country?

- Logistic elements such as housing, equipment, and care facilities.
- People to meet would be residency directors, MOH representatives, and chairs of departments.
- Also, leaders of hospitals and OB/GYN departments should get a good sense of the practices and needs. If possible, health and education ministers or their representatives.

3. What administration/communications/travel/other extra space equipment would be necessary for a more effective OB/GYN department? Personnel? Space?

- Help for SSA physicians to observe training outside of their countries.
- Administrative support for postgraduate training: the director cannot be expected to run the whole program and also fulfill his/her professional obligations!
- Dedicated housing for trainees, especially if they are not paid for their participation.
- Dedicated space for the various aspects of training (e.g., for ultrasound training), as well as separate clinics for the different specialties (e.g.,

OB/GYN would be separated from Oncology).

4. What specific actions can an American OB/GYN department do to assist in the development or enhancement of the academic OB/GYN department at an SSA university?

- Review what has worked and what has not worked (e.g., look at the Rwandan Human Resources for Health program), then help develop a standardized curriculum that faculty on both sides are familiar with and agree on.

- Ensure dedicated support with clearly defined roles; avoid sending people likely to detract from the cause.

- Request that a coordinator be designated at the African site.

- Salary and/or travel support would be ideal or, at the very least, helpful.

5. Apart from training OB/GYNs, what specific actions can an African OB/GYN department take to assist in the development of another academic OB/GYN in its own country?

- Identify the amount of support needed to allow time for education.

- Find ways to motivate physicians to stay in academia.

6. What role do you see for ACOG?

- An organizational and administrative role, as ACOG helps establish rules and develop guidelines.

- A tremendously helpful role in coordinating efforts.

- Having a simple, sister university program would be difficult due to staffing limitations. It would make more sense to ask the Council on Resident Education in Obstetrics and Gynecology (CREOG) create a standardized curriculum, and then to coordinate two to four US programs to assist one African program.

7. Other ideas?

- An African OB/GYN society makes sense.

- A meeting at the next ACOG Annual Clinical Meeting would help

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stimulate US program involvement.

- A new general OB/GYN society is forming, guided by leaders of general OB/GYN academic programs in the US. There would be ways for these African and US societies to interact.

PART II: WORKING PROCESSES

Executive Summary of the Rome Workshop – Dr. Frank Anderson

October 11, 2012

Improving Maternal Health by Building Obstetrics and Gynecology Capacity in sub-Saharan Africa

The meeting brought together an amazing group of national leaders in OB/GYN from SSA and the US, all intent on discussing ways to increase professional OB/GYN capacity in SSA as a means to improve maternal health, and more generally women's health, in the region. The meeting was held in Rome, concurrently with the 2012 International Federation of Gynecology and Obstetrics (FIGO) World Congress – an event that gave a large number of sponsored participants an opportunity to update their knowledge with state-of-the-art clinical information and make professional connections. Our gathering opened the first-ever dialogue among African OB/GYNs on ways to improve maternal care by improving specialist-level obstetric care capacity, and it was very productive. The African participants expressed the imperative need to create an African solution with support from American institutions. Great momentum was created in Rome by this unique group dedicated to improving maternal health.

The momentum was created October 9, 2012, when approximately 50 people gathered to discuss the status of postgraduate OB/GYN training in SSA. Participants included OB/GYN leaders from 10 SSA countries (The Gambia, Cameroon, Liberia, Zambia, Kenya, Uganda, Malawi, Rwanda, Ghana, and Ethiopia) and from the OB/GYN departments of 9 American universities (University of New Mexico, University of North Carolina,

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University of Wisconsin, University of Michigan, University of California San Francisco, New York University, Harvard University, New York University, and University of Toronto), as well as representatives from professional organizations such as the American College of Obstetricians and Gynecologists (ACOG), FIGO, the American College of Nurse Midwives, and the Centers for Disease Control and Prevention.

The meeting's objectives were to report on the successful collaboration between OB/GYN departments from American/British and Ghanaian universities; learn the status of postgraduate OB/GYN training in some English-speaking SSA countries; brainstorm ideas on how to improve postgraduate training in SSA; and create a document, "Call to Action and Way Forward."

We heard how in Ghana, the universities and the Ministries of Health and Education created a postgraduate training program. Starting with only four or five OB/GYNs and no capacity to train postgraduates, the program now has more than 140 graduates, and all but one have stayed in the country. We heard how the graduates have been distributing themselves among more and more rural areas, and we heard of the impact they have had on maternal health. The message from Ghana was that, 20 years ago, there was no training in the country, only a handful of OB/GYNs, and no vision for a way out; but that now, more than 140 OB/GYNs are providing service, education, and research, and that many work in rural areas and district hospitals. The message from Ghana was YES WE CAN. This message was heard in other African countries, where the Ghana phenomenon has stimulated more than interest: true excitement about replicating it.

We also heard about the status of OB/GYN training in the other SSA countries represented at the meeting. Of these, four (The Gambia, Liberia, Cameroon, and Malawi) have only two to five trained OB/GYNs and no postgraduate training programs. Sierra Leone was not represented, but it reportedly has no training program. These countries are in the same situation as Ghana was 20 years ago, and this lack of training capacity parallels the high maternal morbidity and mortality in these countries.

There was a great deal of interest in seeing the partnership between the OB/GYN departments of two of Ghana's universities and the University of Michigan replicated by other African and American OB/GYN departments. The partnerships would allow for the sharing of knowledge and teaching expertise among faculty; for the assessment of existing and needed resources; and for the assessment of the infrastructure needed to build academic OB/GYN departments across SSA. Based on what we have

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seen in Ghana, such partnerships would make possible the training of faculty and clinicians able and willing to address the issues of maternal mortality, obstetric fistula, and other women's health issues in SSA.

Zambia and Rwanda train postgraduates, but their programs are small. Four of the other SSA countries represented at the meeting, Ghana, Kenya, Ethiopia, and Uganda, have large programs that have provided a number of postgraduates. Some of these programs offer training opportunities to physicians from countries with no programs and help them build their own departments.

During the rest of the meeting, we co-created a summary document. After providing written descriptions of their country situations, the participants proposed ideas for a way forward and first steps. We divided into six groups who worked for 1.5 hours to distill and further refine comments on the current situation and the steps to consider. We then gathered in a plenary session. The spokespersons for each group presented their findings, which were discussed within the larger group. Representatives from each country were then asked to give final closing comments.

After the meeting was adjourned, the comments were compiled into a document. All participants will share this document, our "Call to Action and Way Forward," with their universities, ministries of health, and other institutions in a number of ways. "Call to Action and Way Forward" will also be used by ACOG in their Global Initiatives, will be presented to the FIGO Executive Board, and will be shared with American academic OB/GYN departments to engage them in the processes delineated in the document.

It was a great meeting and the energy stayed high all day. It gave OB/GYNs who had never met before the chance to discuss these issues, with opportunities for further connection. More than 30 participants were still there at the end of the day.

Several important issues emerged concerning the next steps to take:

The Africans OB/GYNs want to create an African College or other form of OB/GYN association whose connections with the Royal College of Obstetricians and Gynecologists (RCOG), ACOG, WHO, and other organizations would help them as they attempt to improve women's health in Africa.

The four represented countries known not to train OB/GYNs are

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interested in partnerships with American academic OB/GYN departments willing to help them create functioning OB/GYN departments. Needs assessments and site visits would allow the partners to define the inputs to be provided by the American departments, determine budgets, and encourage the assistance of ministries and universities.

Other countries already have training programs, some sporadic and some well-developed. Most have or want partnerships with American OB/GYN departments not only to improve training at home, but also to be aided as they train physicians from other SSA countries.

There is an emphasis on training, but the “how to” still needs careful planning. The major SSA universities have a great need to establish OB/GYN departments able to fulfill their mission of service, education, and research.

There is also a need to establish a consortium of American OB/GYN departments interested in supporting the creation of OB/GYN programs in SSA. The ideal convener for this consortium would be ACOG, and the University of Michigan and ACOG are prepared to lead the process.

Overall, this was an exciting and very productive meeting. Some called it a “defining moment” for maternal care in SSA. “Now we have hope!” declared a participant from Malawi; a participant from Zambia characterized the meeting as “invigorating, a healthy interaction discussing successes and challenges”; another from Cameroon “learned new ways of thinking, and is anxious to discuss this back home”; and yet another from Rwanda noted, “we started talking, Uganda and me, a talk within African countries.”

We recorded the entire conference and this document represents the proceedings. The final “Call to Action and Way Forward” will be circulated among the ever-increasing number of interested stakeholders.

Thank you again for your contributions. I look forward to continuing our discussions, developing our networks, and establishing a consortium that would enable us to create the academic infrastructure needed to train 1000 OB/GYNs in the next 10 years.

Workshop Agenda

8:00 - 9:00 **Networking and light breakfast**

9:00 - 10:00 **Welcome and Introduction**

Frank Anderson (Director of Global Initiatives; Associate Professor of Obstetrics and Gynecology, University of Michigan)

Introduction of the panel: Prof. Tim Johnson, Dr. Frank Anderson, Dr. Ray de Vries, Dr. Bert Peterson, Dr. Samuel Obed, Dr. Kwabena Danso

Tim Johnson (Bates Professor of Diseases of Women and Children and Chair, Department of Obstetrics and Gynecology, University of Michigan)

Historical context from the American perspective

Bert Peterson (Professor and Chair, Gilling School of Global Public Health, Director of ACOG's Global Initiatives)

Kwabena Danso (Professor of Obstetrics and Gynecology, Kwame Nkrumah University of Science and Technology)

Discussion of how the project evolved in Ghana

Samuel Obed: (Head of Department of Obstetrics and Gynecology, Korle-Bu Teaching Hospital, Accra, Ghana)

What is happening currently: The Ghana College of Physicians and Surgeons and the West African College of Surgeons

Frank Anderson (Director of Global Initiatives, Associate Professor of Obstetrics and Gynecology, University of Michigan)

Research on retention and public health impact, task shifting

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- 10:00 - 11:00** **Country Reports**
Situation and needs in Ethiopia, the Gambia, Liberia, Malawi, Zambia, Cameroon, Rwanda, Uganda, Kenya, and Tanzania. A five-minute overview of where you see yourself in 10 years, what will help you get there, and what would prevent you from getting there (strictly 5 minutes each).
- 11:00 - 11:30** **BREAK**
- 11:30 - 1:00** **Reflections on the ethics of global partnerships (Ray de Vries, Professor, The Center for Bioethics and Social Studies in Medicine)**
- Stating the problem and brainstorming solutions exercise (Frank Anderson)**
Participants will be asked to fill in a worksheet according to the situation and needs of their particular countries and institutions
- Open discussion**
- 1:00 - 2:00** **WORKING LUNCH (worksheet compilation)**
- 2:00 - 4:00** **Creating the Call to Action and the Way Forward**
Breakout groups: Discussion and synthesis of the Call to Action
- 4:00 - 5:00** **Presenting the Call to Action and the Way Forward**
Each group presents findings
- 5:00 -6:00** **Closing remarks**
Closing remarks – all participants

Welcome Letter

I would like to welcome all of you to our upcoming meeting in Rome to discuss two major topics: the effect of training physicians to become OB/GYNs on lowering maternal mortality and the occurrence of obstetric fistulas; and the role that university partnerships can play to help increase the number of trained/certified OB/GYNs in sub-Saharan Africa. We will meet at the Fiera di Roma convention center on the Tuesday of the meeting as a private breakout session from the FIGO meeting (agenda to follow soon).

This meeting will be a gathering of OB/GYN leaders from SSA and the US interested in academic partnerships that would support the training and certification of 1000+ new OB/GYNs in SSA over the next 10 years.

During this meeting we will review the successful collaborations that unfolded, as US and British institutions worked not only with the academic departments of obstetrics and gynecology in Ghana, but also with the ministries of health and education. This program, initially funded by the Carnegie Foundation, resulted in a large number of OB/GYNs (85+) trained and retained in the country, most of whom now have leadership roles and work at least partly in the public sector, often at district hospitals, while serving as faculty, reviewers, examiners, and policy makers.

Over the last few weeks, Marsha has sent out, via the Google group, a number of articles describing the Ghana program, the factors related to retention, and the concepts on which the partnership was based. I hope you all had a chance to read them, so that the brief presentations at the meeting will serve to jog your memory and not provide new information.

The overall goal of this meeting is to chart a way forward to create new OB/GYN capacity in SSA. This meeting is for those in academic OB/GYN departments in SSA countries who have an interest in increasing the number and retention of OB/GYN specialists, and for those in academic OB/GYN departments in the US who are committed to providing expertise and experience.

During the meeting, we will introduce participants to the Ghana/Michigan academic partnership model, discuss the successes achieved in Ghana through the partnership, and receive collective feedback from leaders in SSA and American OB/GYN departments. We will develop concrete pathways and next steps, so that interested SSA universities and ministries may more effectively increase their country's capacity to train and retain

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physicians willing to become OB/GYNs. Additionally, the newly formed academic partnerships will contribute to developing the capacity needed for research on women's health at the local and national levels while providing clinical services that reduce maternal mortality, prevent and treat obstetric fistulas, improve access to family planning, and serve all other reproductive health needs of women.

With this letter, I extend my warm regards to all of you and I look forward to meeting you. In a separate e-mail, I will send you the agenda of the day and information on how we will create a "Call to Action" to train 1000+ physicians to become OB/GYNs in SSA within 10 years.

Best regards,

Frank J. Anderson, MD, MPH
University of Michigan Department of Obstetrics and Gynecology

WORKSHOP INTRODUCTION

Introduction and Meeting Overview – Dr. Frank Anderson

We have an amazing group of people from all across SSA and from American universities, whom we'll hear speak throughout the day about training OB/GYNs in the different SSA countries. So I want to offer a few thanks to all of you who have come. This meeting is funded by the Flora Family Foundation, which takes special interest in obstetric fistula. As we were discussing the issue with them, we came to the common conclusion that preventing obstetric fistulas was the first and best treatment. And to prevent obstetric fistulas, and treat the fistulas that will still occur, people are needed to take care of obstructive labor and provide appropriate gynecologic care before, during, and after labor. This is especially relevant if a woman is referred because of a fistula, and the Flora Foundation agrees.

I also want to recognize Marsha Naidoo, whom you've all been in touch with, in the corner there. Could you just wave your hand? She's worked extremely hard with the Fiera de Roma people to obtain the room and prepare the work we will do today. So thank you very much, Marsha. And I also want to recognize Gaurang Garg who has been working with us, talking with many of you about your surveys and providing us with the information you gave about your countries. What we'll have available for you later today is the result of Gaurang's surveys. You all have the PDF printout of the baseline data he collected from data sets and the result of surveys he collected from you, which included questions on your country's capacity to train OB/GYNs. Also Jocelynn Owusu, who worked with us to put together a booklet compiling all the OB/GYN departments in the US that have global programs. All their websites appear in it. During the breaks, you can flip through some of these.

Here are the main objectives for our meeting today. The first is to hear the incredible story of the American, British, and Ghanaian collaboration that started over 20 years ago, and resulted in the training of more than 85 obstetricians in Ghana. We'll hear the story, we'll hear about the context, we'll hear how it all happened. Then, we'll hear about some of the research we've done on the public health impact of training obstetricians: we'll describe the American/British/Ghanaian model of academic partnerships and the inputs the partnerships provided; and we'll see, among other outcomes, the level to which the training and retention of OB/GYNs was raised by the partnerships. We'll hear that story today.

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Next, we'll hear from you, this incredibly diverse group of heads of OB/GYN departments from SSA, what your current situation is, what your current context is, and some of the things that you will need to do.

Then, we'll follow the Ghana/American model. We'll use the worksheet in your folder, we'll brainstorm, and we'll come up with all the opportunities that exist in your different countries, and the barriers, and what the next steps forward ought to be, so that we can create, by the end of this meeting, a draft for a "Call to Action and Way Forward" that will open the way for the training of 1000 new obstetricians in SSA in the next 10 years. So if you want to look at your folder, there is an agenda for the day. We included several articles – and I'm sure some of you have reviewed those already – that discuss the Ghana postgraduate training program and some of the research we've done on factors related to retention. Also, an article about the Michigan/Ghana partnership, an article about medical schools in SSA, and a review of an outcome of the postgraduate training program in Zambia. We also included posters, color posters, of work that we presented on the impact of training obstetricians in Ghana. Also, what we call a "charter for collaboration," a 3-page collaboration document that Michigan and Ghana produced with a Human Resources for Health grant funded by the Bill & Melinda Gates Foundation. This charter document for collaboration will be a model for the document that I hope we can have at the end of the day, which would be a blueprint for our "Call to Action and Way Forward."

Now, I'd like to introduce our panel. We have a group of people here who started this work over 20 years ago. They got together in a situation similar to this one, identified a problem similar to the one we are discussing today, and created the incredible training program we will learn from today. We have Dr. Johnson, who's the head of the OB/GYN Department at the University of Michigan. We have Dr. Kwabena Danso, who's the former head of the OB/GYN Department at Komfo Anokye Teaching Hospital and former dean of the medical school. We have Dr. Samuel Obed, who is the head of the OB/GYN Department at the University of Ghana. And we have Dr. Bert Peterson, head of the ACOG Global Initiatives program. So we'll hear what each has to say and proceed from there. Dr. Johnson, would you like to start?

Opening Address – Dr. Tim Johnson, University of Michigan

I also want to thank all of you for being here, and I want to thank the people who've made this meeting possible. You're going to hear several of us who think that this is a magical time and a time of great opportunity: an opportunity for us to have an impact on obstetrics and gynecology throughout the world and – more broadly speaking – an impact on the basic human rights of women throughout the world. That's something I think you'll be hearing a lot about this week at the FIGO meeting. And we've heard about it a lot from independent NGOs and from FIGO itself, whose program called LOGIC has been building capacity.

But today we're going to be hearing about the role academic departments could play, and the role academic medical centers and professional organizations could play to advance women's health, women's rights, and the status of women in society. And I want to recognize several inspirational, visionary leaders who are looking down and looking sideways at us, expecting us to get things done. In 1985 Allan Rosenfield, the great Allan Rosenfield, wrote a paper called "Where is the M in MCH?". Dr. Rosenfield, as all you know, was one of the pioneers in identifying safe motherhood as a priority. He also played an important role in reducing mother-to-child transmission of HIV/AIDS, and was very active in family planning. For many of us, the Dean of the School of Public Health at Columbia University was a hero.

The other hero we need to recognize is Mahmoud Fathalla, who, when he was president of FIGO, focused on the advent of human rights for women, stressing that unsafe motherhood, high maternal mortality rates, the occurrence of fistulas, and the lack of family planning all stemmed from a lack of access to health services, which was a denial of the human rights of women. And for those of you who were at the opening ceremony, heard Dr. Fathalla, and saw the update of the film "The Story of Mrs. X," it's clear that we're only starting to fully hear the call to action that Dr. Fathalla made when he was president. And there is Anibal Faúndes. He led an amazing taskforce on safe motherhood for the last 6 years, doing situational analyses in many countries and developing strong programs to reduce risks associated with legal and illegal abortion. His work demonstrates what FIGO can do.

But today we're going to be talking about developing academic or hospital-

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based residency programs to train academic OB/GYN specialists. Twenty years ago, if we'd said we wanted to train 1000 OB/GYNs within 10 years, I think people would have answered, "Well, that's not really what we want to do..." If you remember, 20 years ago people were interested in training thousands and thousands of traditional birth attendants, and I think we now recognize that training low-level providers does not solve the problems if we don't have people at tertiary levels of referral. And we recognize that we need people to take care of the very sick patients and that we also need leaders. So, OB/GYN specialists need to play a double role, caring for very sick women at the tertiary/quaternary levels while serving as national leaders. And some of you may know that in the United States, we have a political party that talks about trickle-down economics. Its adherents think that if you give lots of money to the very rich, the money will trickle down to the poor.

I want to suggest, as an analogy, that if we train lots of OB/GYNs, benefits will downstream to nurse-midwives, to nurses, to hospitals, to general medical officers, to medical students in training (especially to them), to community health workers, and, ultimately, down to traditional birth attendants. The OB/GYNs – from the lessons they learn at FIGO meetings – know it's not just about safe motherhood, but it's also about family planning, it's about contraception, it's about managing surgical problems. And I actually think that rather than a trickle-down, we can have a waterfall effect, we can really have a huge waterfall cascading down if we can train OB/GYNs who assume a leading position, who actually lead toward what must be achieved. And yesterday, for those of you who were at the ACOG session, we heard about implementation science.

We know what needs to be done. We know that we need to address postpartum hemorrhage, we know that we need to address hypertensive diseases, we know that we need to make misoprostol available, we know that we need to make manual vacuum aspiration available, we know that we need to make magnesium sulfate available. We know that we need to use partograms and prevent obstructed labor. Moreover, there's no excuse in 2012 for women not to know what ought to be happening and undergo long, obstructed labors. We know that we need to address the problem of HIV/AIDS and other devastating infectious diseases. We know that we need to prevent fistulas. We know that we need to train people to do cesarean deliveries. We have demonstration projects with which we can train general medical officers and nurse midwives to do cesarean deliveries.

I think we know what needs to be done. We need to have the capacity to produce medical experts who will drive the political will, the political

process. We need OB/GYNs who will demand of their governments, of their ministries, of their educational programs that they cooperate so that what needs to be done can be done. We need OB/GYNs who use the words of the great current President of the United States, and hopefully the next President of the United States, who said, “Yes, we can!” Another great American president, John Kennedy, said in 1961 that he had the goal of reaching the moon before the end of the decade. People said, “It can’t be done,” but it happened! One of our problems is that we haven’t really said, “We are going to address the issue of women’s rights!” We’ve danced around it, we’ve done little things, but we haven’t said that our goal was to address this issue and make this right. Whether it’s access to family planning, whether it’s access to post-abortion contraception, whether it’s access to safe cesarean delivery, whether it’s access to misoprostol, magnesium sulfate, tranexamic acid, and all the things we know can make a difference: Yes, we can.

And so my goal today for this group is to give you an example of an academic partnership that’s been successful. There’s a great poster in the poster hall on a similar project that’s been going on in Eritrea. And I think that we have an opportunity to partner American universities with SSA universities to develop subspecialty training. One of the huge advantages that we’ve seen in Ghana is that the OB/GYN specialists we trained have, in turn, provided outstanding teaching to the new residents. And there’s been a substantial improvement in the overall training of medical students as well, as the other departments did not want to compare poorly with the OB/GYN departments. And so surgery became competitive, and medicine became competitive, even pediatrics is starting to become competitive. And so, training OB/GYNs raises everybody’s boat and improves the overall quality of services. And we know from the Eritrea and Ghana examples that once the Ministry of Health sees a successful program, it will support it. People in ministries are politicians and politicians support successful programs. Moreover, successful programs that improve people’s lives get politicians elected. We may need to make it clear that we’ll use for or against them whether they do or not what’s right for women.

So I’m here today to speak in favor of an opportunity to right the wrong that’s been carried out across the world, to affirm that women’s rights *do* count, that women’s health *is* a human right, that women deserve reproductive rights, and not just when they are 20 years old, but that they also deserve the right to sexual health when they are 18, 16, and 14 years old and across their entire lifespan. And if women deserve these rights, then men deserve these rights as well. So we’re really talking about basic human rights and I challenge us to think big and say, “Yes we can! How can we get

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this done?” We have the potential to get it done if we come in with a bold and broad plan to get funding. And I think there’s strong support from ACOG and strong support from FIGO for these kinds of activities as well – again, this is about partnership. But I think we need to talk today about how to engage the academic community and how the academic community will leverage the local and the international professional organizations, and leverage the NGOs, so that all together we can have an effect on this human rights problem. The problem has been neglected too long and it’s not acceptable. Professor Rosenfield and Professor Fathalla expect us to do better, and I think we can do better. So now we need to come up with specifics. We need to talk about the role that ACOG could play and we need to provide ACOG with specific examples. So I welcome you all today.

Thank you for coming, and let’s all challenge Frank to help us move this forward.

Remarks from the American Congress of Obstetricians and Gynecologists (ACOG) – Bert Peterson

“Here! Here!” Thanks to the University of Michigan, Department of Ob-Gyn for your leadership, and let me affirm that the American College of Obstetricians and Gynecologists (ACOG) is ready to stand shoulder to shoulder with you to get this done.

The College was established in 1951 and it’s growing each year - we now have over 57,000 members. The College’s global initiative work is being led by a number of people who are here in the room. Please let me introduce them to you, because they will be standing together with you as we move this forward. Jim Martin is first, he’s the immediate past president of ACOG. Jim had two signature initiatives for his presidency, one of which was global health. He created a Global Operations Advisory Group, and Tim and Frank have been instrumental in helping us to get the work going and move it forward. The new ACOG Vice President for Health Policy, Advocacy Division, is Barbara Levy; she will oversee the ACOG Office of Global Women’s Health. The Senior Director of the Office of Global Women’s Health is Jan Chapin. We have now a two-person Office of Global Women’s Health and we’ve got a strategy and a plan for increasing our core capacity so that we can act as an increasingly effective hub for this work. We’re just beginning to pull together the academic global ob-gyn centers within the US. We had our first meeting in May. On the way out here, we were talking about our plans for the next gathering.

We want the College to serve as a convening hub for organization so that the shoulder-to-shoulder work can start, with the visionary leadership of Allan Rosenfield, Mahmoud Fathallah, Tim Johnson, and others. And then, as Tim was saying, we'll do what we've got to do! We want the College to serve in an increasingly effective capacity in these roles. The historical precedent for the work the College is talking about today goes back to what we've done over the last several decades in Central and South America. Our work in Central and South America has focused on training, credentialing, and building capacity across the board for OB/GYNs and Ben Curet, who also is here today, is the College's Latin American Consultant and has been leading that work.

So let me just wrap up by saying that when we consider the College mission in global health moving forward, we're considering the three same streams of work that define an academic program. One is teaching (in a broad sense), including capacity building, and training; another is research, which, as Tim mentioned, is increasingly going to include implementation science (this new and rapidly emerging field being "the science of getting it done"); and the third is practice. And as we start thinking about what we need to do to improve policies, programs, and practices, the College plans to contribute as much as possible. So we're looking forward to working together with you today to see what we can do to get those three streams flowing most effectively.

Thanks.

The Beginning of the Michigan–Ghana Experience – Dr. Kwabena Danso

Thank you. I'm going to give an overview of the evolution of the OB/GYN residency program in Ghana. And before I start, I also want to welcome you and wish you a good morning. Good morning! Now this slide gives an overview of Ghana. Ghana is located in West Africa. Its land area is about 240,000 km², roughly the size of the United Kingdom. It obtained independence in 1957 and was proclaimed a republic in 1960. Our population was about 24.9 million in 2011. In 2000, life expectancy was 55 years for males and 60 years for females. The maternal health survey conducted by the Ghana government in 2007 reported a maternal mortality ratio of 451 per 100,000 live births, but the ratio reported by the United Nations was 350 per 100,000 live births.

The Ghana postgraduate OB/GYN project was inaugurated in 1989 as an

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innovative, comprehensive, community-based program with international exposure to address maternal health problems. It was to build human resource capacity in OB/GYN, improve OB/GYN services throughout the country, and retain OB/GYNs. These were the primary objectives of the project, born out of a collaboration of Ghanaian and external institutions.

The first institution, of course, was the Government of Ghana through our Ministry of Health; then, two Ghanaian universities and affiliated teaching hospitals: the Kwame Nkrumah University of Science and Technology School of Medical Sciences and the Komfo Anokye Teaching Hospital in Kumasi, where I work; and the University of Ghana Medical School and the Korle Bu Teaching Hospital in Accra, the capital of Ghana. Two of the external institutions were ACOG in the US and RCOG in the UK. They both provided technical support and arranged for residency electives attachment in the UK and US. The Carnegie Corporation of New York, the third external institution, provided funding for the project, which started out of a scenario that occurred some 20 years into independence. At that time Ghana faced an extreme shortage of health practitioners, with serious consequences in all health areas, maternal health especially. And by 1980, about 60% of the locally trained generalists had emigrated to find greener pastures elsewhere, mostly in the UK, US, and Middle East. Between 1960 and 1980, of the 30 Ghanaian professionals who had been sent abroad for specialist training in OB/GYN, only three had returned. Meanwhile, the British Council and RCOG were threatening withdrawal of sponsorship for non-repatriation of trainees. Really, this was a serious situation.

In 1986 a gentleman, Timothy Johnson, visited Ghana on business for Johns Hopkins University, where he was on the faculty. He learned about the problem Ghana faced, as was depicted on the previous slide, and had conversations with John Wilson, who was then the chairman of the OB/GYN department in Accra, and J.O. Martey who was the chairman in Kumasi. So I believe a lot of discussions, dialoguing, ideas, occurred. And back home, Tim spoke to Warren Pierce, then ACOG executive director, and another colleague, Thomas Elkins, who was then at the University of Michigan. Later on Tim went to Michigan, where he still is. All these wrote a funding proposal to determine what would be needed to initiate OB/GYN training in Ghana, and the proposal was accepted by the Carnegie Corporation of New York. In 1987, a consultative meeting on creating a residency program in Ghana was held at the RCOG office in London. At this meeting, representatives of all the collaborators I mentioned were present. Then in 1989, in Accra, the project – now the program – was inaugurated, and this marked the formal commencement of admission and the beginning of training under the Obstetrics and

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Gynecology Residency Program towards the fellowship of the West African College of Surgeons. So 1989 was the beginning of the local training program.

This picture was taken in 1989, at its inauguration. You can see Tim Johnson here, and here are Dr. Sciara, yes, and Dr. Lucas. This is Martey, and JB Wilson is here. So this is a very historical picture, one that really marked the beginning of the program. This second picture shows the pioneers of the program in Kumasi, where I work. You see this young man here? He's the young man now speaking to you. I went through the program as a resident, a pioneer resident in Kumasi. So if I stand here and speak to you as a former head of department, a former dean, it means the program has really been successful.

Now let me give you some aspects of the first program, a five-year program with two training centers and district hospital involvement. Year 1 used to be devoted to the basic sciences and introductory OB/GYN (now, it's only devoted to OB/GYN only). Year 2 is devoted to rotations in other disciplines essential to OB/GYN: general surgery, urology, anesthesia, neonatology, and radiology. Year 3 is devoted to advanced general OB/GYN. Year 4 is unique to this program. The residents spend 6 months in the districts, rotating their activities in the community, then are trained in management and leadership, and finally do a three-month observership in the UK or US. In year 5, residents become senior trainees. At the end of it all, certification is awarded by the Fellowship of the West African College of Surgeons (WACS), an association functioning under the wing of the West African Health Community, which was already in existence when the program began.

This training program used to be managed by a local committee assisted by an external advisory board. The committee worked toward enhancing infrastructure at the hospitals, improving their libraries and providing equipment (ultrasound machines and computers were not around at that time). To assist the local faculty, the committee also worked toward recruiting Ghanaian specialists living abroad. The training program was fashioned around structured tutorials and clinical instruction that satisfied the requirements of the West African Fellowship. And I need to mention something important, the government supported the program, which was funded between 1989 and 2000 by the Carnegie Corporation. At the end of 2000, when the funding ended, the Ghana Ministry of Health took over. By then, the program had produced 26 specialists who were all in the country (still today, all the graduates of this program are in the country).

In 2003, Ghana set up its own postgraduate college, the Ghana College of Physicians and Surgeons. The program then became absorbed into the College, whose OB/GYN faculty oversees the training of specialists for both the Ghana College and the West African College. Today, there are 30 to 40 residents at each center – that is, at Kumasi and Accra – at various levels of training for certification by the Ghana College or the West African College. In conclusion, I would say that the story of the Ghana OB/GYN project began with dialogues and meetings such as the one we are in now. And I believe that it is important that we sustain our desire to improve women's health in SSA by training 1000 new OB/GYNs in the next 10 years. Yes, training 1000 new OB/GYNs in the next years. Yes we can.

Thank you.

Current State of the WACS and GCPH – Dr. Samuel Obed

Thank you very much. I'm also very grateful to be here to talk about the success of training OB/GYN specialists in Ghana. My predecessor has described how the project, and then the program, evolved. My task this morning is to describe the West African College of Surgeons and the Ghana College of Physicians and Surgeons programs. Between 1970 and 1975, there was one physician per 12,900 – one physician per 12,900 people – and through the 1980s the situation further deteriorated to one physician per 22,900 people! The situation in our country was very, very pathetic. The medical facilities were obsolete and nonfunctional. There were very few OB/GYNs, and no OB/GYNs beyond Kumasi, as you saw on the map earlier. Kumasi is less than one-third of the way north, which meant that more than two-thirds of the country was not served by an OB/GYN specialist. The maternal morbidity and mortality rates were very high.

The structure of the training program for OB/GYN specialists at that time was that new physicians took time off practicing medicine to study for the MICUG, Part I, which tests knowledge of the basic sciences in Ghana. After that, the new physicians were sponsored by the Ghana government to go to the UK and study for the MICUG, Part II, which tests clinical knowledge. As was mentioned earlier, from the 1960s through the 1980s, about 30 Ghanaians were sent to the UK and were certified there as OB/GYNs but only three returned home. A change in direction was needed, which occurred when OB/GYNs began to be trained in the country with the specific mission of reducing maternal mortality and morbidity. The infrastructure was improved and, as already said, Ghanaian OB/GYNs working in the UK and elsewhere were enticed to come home

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and participate in the training of new specialists. The result was an increase in the number of OB/GYNs working in Ghana to reduce maternal morbidity and mortality.

Now, about the programs. There are two programs, the West African College of Surgeons training program and the Ghanaian College of Physicians and Surgeons training program. I'll talk first about the West African College program. When the program started, the first year was for physicians who had worked for one year in a district after finishing their internship. After they passed an entry exam, they underwent a selective interview. And after they were admitted to the program, their first year was dedicated to the basic sciences and introductory OB/GYN. At the end of Year 1, they took basic sciences exams but no introductory OB/GYN exams. Today we only admit into the program doctors who have already passed their basic science exams, and Year 1 is devoted to studying OB/GYN. In Year 2, they do their rotations, which include general surgery (three months); urology (two months); anesthesia (two months); neonatology (two months); pathology (one month); and radiotherapy (one month). In Year 3, they return to the mother department to study advanced OB/GYN, and at the end of Year 3, they are supposed to take the first part of the clinical exam of the West African College.

This is the picture at the main hospital in Ghana, the Korle Bu Teaching Hospital, built in 1923 as a colonial hospital. The statue you see there is the governor at that time, Governor Guggisberg. This is the main maternity block, a three-story tower building where the residents are trained. And here is the Komfo Anokye Teaching Hospital where my colleague is working, and the statue is that of a local priest called Okomfo Anokye, believed to have been very instrumental in the foundation of the Ashanti state. In year four, the residents spend six months in rural communities, which is innovative. Since there are no OB/GYN specialists in these communities, they take on all OB/GYN problems in the district in which they are located. Then they spend three months in the US or UK (in the US, they go mainly to the University of Michigan). Then, they have three months of senior health management training at the prestigious Ghana Institute of Management and Public Administration. They are now ready to prepare their case books, do research in the communities, and write their dissertation for the final award of their diplomas. Previously they wrote 15 cases in obstetrics and 15 cases in gynecology, but it has been scaled down to 10 cases in obstetrics and 10 cases in gynecology. So they start working on their research work, their dissertation, and their case books during Year 4, when they have returned from the US or the UK.

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On the picture you see one of the hospitals where residents spend six months doing community work. And here you see one of the consulting physicians in one of the rural communities – he was in the first batch of residents at Kumasi. This is the Ghana Institute of Management and Public Administration in Accra, where the residents go for their senior health management course. In Year 5, when they have finished their community work and are preparing their case book, the residents return to the maternity block in Korle Bu to do advanced gynecological surgery. They have to complete their research work and conclude their case book in the first 6 months, and then submit their dissertation and case book to the West African College of Examination for assessment; and by the end of Year 5, they take and hopefully pass their exams.

Now what is the uniqueness of this program? It is a local-content course with some external exposure. The basic difference with other programs is that the residents are trained in the community, where many of the problems occur. They also have the opportunity to learn about the health management system in the country. And as I said, the research that they conduct is community based. What are some of the modest achievements of this West African program in Ghana? The pass rate is the highest in the whole of West Africa. Of all the countries that take the West African College exam, Ghana has the highest pass rate. The program was started in 1989, and therefore the first batch took their exams in 1994. And to date, 40 have graduated from Korle Bu Teaching Hospital and 24 from Komfo Anokye. All of them are working in the country except one, who, because of family reasons, migrated to the US.

Now, what are some of the positions being held by these 64 OB/GYN specialists? You've heard that the Deputy Provost of the University of Ghana College of Health Sciences is a product of this program. As the previous speaker mentioned, as Dean of the School of Medical Sciences in Kumasi, he rose to the highest level. The Acting Dean of the School of Public Health of the University of Ghana, Professor Adanu, is also a product of this program. Hopefully, he'll be confirmed as Dean of the School sometime this month. There are two Vice-Deans at the University of Ghana College of Health Sciences, one in charge of medical education and the other in charge of postgraduate education, and they both are products of this program. Since 2001, all the heads of the OB/GYN departments at Kumasi and Accra have been products of this program. One chair – an endowed chair – at the College of Health Sciences of the University of Ghana, in Korle Bu, has been occupied by a product of this program, Yao Kwaukume. The Chairman of the West African College of Surgeons faculty – the examining body – is a product of this program. And

we've also produced a Minister of Health, a person at the highest level of policy making in the country. This program has also produced six professors at the Ghana medical schools. Two new medical schools were built since the program started, one in Cape Coast and one in Tamale, and their heads are products of this program.

Now let me talk a little bit about the Ghana College of Physicians and Surgeons. As mentioned earlier, the College was established in 2003 and began admitting residents for training in 2005. The entry requirements are no different from those for the West African College, and prospective trainees now have to pass their basic science courses before they can apply. In Years 1 and 2, the program is the same as the West African program. The difference comes in Year 3. In the West African program, residents go to districts where there are no OB/GYN specialists after passing the first part of their clinical exam. In the Ghana program, residents go to districts where there are OB/GYN specialists before they take their clinical exam. And when the residents in the Ghana program come back after six months, they stay in the department for a further six months, and receive membership in the Ghana College of Surgeons as gynecological surgeons after passing their clinical exam. They qualify as specialists at this stage. Furthermore, there is a subspecialty route, a two-year gynecology fellowship training program. The entry requirements are to pass the clinical exam and receive membership, and having worked for one year in the community. Presently, this program offers international family planning and reproductive health, gyno-oncology, and gyno-urology, disciplines that are now well established in the Department. And we hope that, in January 2013, we will also offer minimally invasive gyno-surgery, reproductive medicine/infertility, and fetal/maternal medicine.

What are the achievements of this membership program since 2005? We realize that the turnout is far higher at the Ghana College of Physicians and Surgeons, because we now have a lot of people at this teaching institution who participate in the training and make the program attractive. A total of 71 OB/GYNs are graduates of this program. If they are added to the 64 from the West African program, you get 135, not 85 as was previously reported. Right. As for the fellowship program we started two, three years ago, it already produced 3 subspecialists in international family planning and reproductive health. I think you can see that within a short time, about 20 years, Ghana has moved very fast with respect to training OB/GYNs. And as we are looking forward to training 1000 more within 10 years, I believe it's actually feasible.

Thank you very much.

History and Overview of the Public Health Impact of Training Obstetricians Project – Dr. Frank Anderson

Wow. That's incredible, to hear what's happened – I think you can relate – to hear what is happening in Ghana, considering where Ghana was 20 years ago. And to see that Ghana was using the West African College, and that now the country has its own college, and can create its own subspecialty programs in maternal-fetal medicine and in any other needed subspecialty. I feel fortunate to be a part of the Department, which has enabled us to have a look at some of what we heard, and I want to share with you some of the data and results that we looked at, very briefly as there're some articles in your packet about it. But let me get back to my original presentation.

Before we get started, let's set the context regarding implementation science, evidence-based medicine, and the human capacity to implement the things that we already know how to do, such as reducing maternal mortality. I want to start with this graphic. On the horizontal axis, you see the effect of coverage, from zero to 100%, in the population; and on the vertical axis, you see the combined efficacy of basic interventions, also from zero to 100%. Ideally, we would like 100% of our interventions to be 100% efficacious, that'd be great, right? In certain settings, there is a large coverage of population. If want to find out how the efficacy of the interventions might be increased, or how particular problems might be reversed, here is how to proceed: Here, we have a representation of the current mix of vertical interventions with their population coverage. To get more coverage per population, we would look at the percentage of veritable improvement, then do research on health systems and policies to find out what would improve efficiency. To get 100% effective coverage, we would look at the existing but non-cost effective vertical interventions, and then do more research and development to reduce the cost of all existing interventions, including those that seem permanent.

This is the frame we're talking about, by which we can know how to reduce maternal mortality using high-tech equipment and lots of staff, and roads, and things, and what kind of research we need to do. Research on fetal monitoring is one of the first, but there are other areas of research, certainly, that will lead to more knowledge on how to reduce maternal mortality. We're talking about researching health systems, we're talking about intervention science, which indicates (1) how we need to use what we already know to – for example – reduce maternal mortality and adapt; (2) what we need to learn; and (3) where more people and resources are needed. That's what we're talking about today. Here are some of the most recent maternal mortality data, and you can see there's been a trend

downwards in maternal mortality and maternal mortality ratios. And I know that the WHO and the UN data that we've provided are not the same as those we got from you during the interviews: you know what your maternal mortality ratios are. Although it's great to see the numbers down in either case, both maternal mortality ratios are still way too high. And to get these numbers down further, you know too well that it means being up in the middle of the night doing the obstructive labors, taking care of the eclampsias and the HELLP syndromes, and things like that. Of course, a lot of the interventions will reduce maternal mortality at the community level. But if we're going to get those levels down even further, it will be due to the obstetric practice.

So just to get a sense of the countries that are represented here today, the article in your folder about SSA medical schools identified 48 countries that have medical schools. But from the surveys we have from countries with few English-speaking medical schools, the maternal mortality ratios are high. You can look at that graphic in your chart. From the Ghana postgraduate training program originally funded by the Carnegie Foundation, we learned that evidence-based implementation programs require an operating system. On Dr. Johnson's slide explaining how we implement the evidence-based interventions that we know will reduce maternal mortality, we see that the operating system integrates the needed human capacity with the needed technological and infrastructure resources. This represents the 85 obstetricians and gynecologists retained in Ghana. And I want to point this out, in 1991 one person was graduated as a specialist via the Ghana College. But I want you to notice the slope! The lower line in blue represents the West African College training program. That's the 5-year program that was first established in the region so that people could pass their exams and be certified. And after the Ghana College was established, you can see how the slope went up quickly. Are there now 126 OB/GYNs trained in Ghana? By the way, the slope has gone up again. So you see how the initial input into building the capacity to train faculty, and then into establishing a Ghana certification board, has led to this tremendous increase in the number of OB/GYNs in the country, and the huge effect that that's going to have.

Here are some maps that we got recently – I got these last week. Do you remember that Dr. Obed said there were no obstetricians beyond Kumasi? Here's Kumasi. The bubbles represent the number of obstetricians at the different sites. So here you can see that there is one obstetrician in Tamale. And here, in the surrounding areas of Accra, is the large Korle Bu teaching hospital. And this is a University of Ghana hospital, a military hospital. And this is Komfo Anokye Teaching Hospital and areas around it. So you can

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see that, as the number of obstetricians in the cities was increasing, some started moving out into the districts. We did some research and interviewed residents and graduates, asking why they remained in Ghana. And we found that the most important factor related to retention was the presence of a program *in* Ghana that people could actually join and complete, and become certified. The interviewees were highly motivated, highly intelligent, they wanted to become OB/GYNs, and a program was in place in Ghana. Many said that had the program not been available, they would have gone on to something else. Before their time, there was no program in Ghana and it is still the case in many places. Over the years, it became economically feasible to practice in the public sector in Ghana. We could get more details from our Ghanaian colleagues, but a commitment of the Ministry has made it possible for Ghanaians to stay. And then the new OB/GYNs have a social commitment, and they love their country: our interviewees want to stay in Ghana, with their families and friends.

We also asked our interviewees what the Ghana obstetricians have achieved, and here are qualitative results: better clinical outcomes with decreased maternal and perinatal mortality; better-organized and more standardized management, and therefore more maternal mortality audit committees; better-organized and more efficient management of cases, protocols, and records. So you can imagine: a new obstetrician arrives at a new site and says, “Now we need to do maternal mortality reviews, now we need to have magnesium sulfate in place, now we need to have oxytocin in place....” A climate is created where the site becomes an emergency obstetric facility, so to speak. More personnel, nurses, doctors, residents, house officers are then hired.

We heard earlier that residents now go out to work in district hospitals that have obstetricians, and Dr. Danso has worked on having medical students also go out to district hospitals. So you can imagine the ripple effect, with technology, new services, colposcopies, CytoScans, electronic fetal monitoring, laparoscopy. And then teaching improvements, updated medical school and postgraduate training; better community education, including about antenatal care and infertility clinics; better midwifery training; improved access to care, with fewer referrals to the teaching hospital. We see that over and over again when a new obstetrician goes to a district facility. All patients are referred to the facility and very few are further referred to a main teaching hospital. And the quality of service is improved. Obstetricians working in the districts draw patients from a large radius; and the patients being better informed and more aware, they are more often delivered at the hospital than at home and report to the hospital earlier than before.

Of course, there were also complaints: no changes occurring, worsening hospital conditions, too many patients, increased congestion, and always the problem of nursing shortages. These are the comments we got from the graduates about the benefits they enjoy and the problems they face when they move from the city to work at district hospitals. And when we interviewed doctors, nurses, and administrators at district hospitals, they also reported more referrals from the communities, fewer referrals to the teaching hospital, a greater patient load, and overworked staff. But they also reported updated protocols, new drugs to treat emergencies, and new OB/GYN equipment to accommodate the specialists. This is what a hospital administrator said: “Yes, he’s here now, now he wants an ultrasound, now he wants this machine and that machine...”

So new obstetricians have the effect of improving the facility, and they start training the midwives, and they... actually, we haven’t looked at this yet, but my suspicion is that new obstetricians also have started to have an effect on the health centers that are referring patients to them. They must say, you know, “treat this with this before you send someone,” or “don’t send someone so late” – you know, this back-and-forth can happen because the health centers are closer to the district hospitals than to the teaching hospitals. And new gynecologic services are being offered, Dr. Johnson made reference to that before, because we’re not just talking about obstetrics and young women. We’re talking about sexually transmitted diseases, we’re talking about urinary tract infections, we’re talking about pelvic prolapse and fistulas, all these other health issues that these OB/GYNs also take care of. But to return to obstetrics, better management of labor and elective cesarean delivery procedures were reported, as well as better documentation, increased self-confidence among the staff, and more robust antenatal care clinics.

Over the last couple of summers, we worked at both teaching hospitals with faculty interested in maternal and fetal medicine. The routine at both places was not electronic fetal monitoring, but listening with a fetoscope for the presence or absence of fetal heart beat. So we teamed up the faculty with our fetal assessment center at Michigan, and electronic fetal monitoring was implemented. Then we looked at the before-implementation outcomes for 160 women and the after-implementation outcomes for 164 women. When we assessed outcomes for the women with pre-eclampsia, the rate of newborns with a low Apgar score dropped from 15.7% to 3.1% following the adoption of electronic fetal monitoring; and the rate of stillbirths – unexpected stillbirths among women with pre-eclampsia admitted to the hospital with a live fetus – was reduced from

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5.2% to 1.9%. Perinatal death and overall poor outcome show the same type of trend. Therefore, with the ability to use technology for fetal assessment, obstetricians now prevent stillbirths and perinatal deaths at the two hospitals.

So this really brings up the role of academic partnerships. We heard that the Carnegie Foundation funded the original partnership with ACOG and RCOG, and when this funding was exhausted, the University of Michigan continued to work with the University of Ghana. And we've done a number of resident exchanges. The residents from Ghana come over for 3 months and met our medical students. Our medical students get interested in going to Ghana, they get grants, they get to do research projects, and they spend summers in Ghana. The Emergency Medicine Department at Michigan also got involved, and they helped the hospital at Kumasi start a new Emergency Medicine Department with emergency residency. We've been giving lectures at the engineering school, and teams of engineering students now are going to Ghana to interview the doctors about the technological improvements that would equip them to face maternal mortality issues.

So we're talking about academic partnerships that have rich extension and growth. Engineers are working there, coming up with new devices. These academics offer sustainable infrastructure. Clearly, the university is always going to be there. I know Queen Elizabeth Hospital and the University of Michigan is always going to be there no matter what, we're always going to be there no matter what. So a sustainable infrastructure will always be present, and our missions do not vary: service, education, and research. And by doing service training residents and providing education to medical students, we're providing service to the people of Ghana. And we also have the opportunity to do operations research and implementation research with patients and organizations.

As I said, at the University of Michigan, it started in the Department of Obstetrics and Gynecology and spread to other departments, other schools. Even the president of our university has been to Ghana and signed MOUs with the two Ghana universities to do projects in museum science, art, and other things.

I want to bring up the issue of task shifting, when non-physicians are doing tasks that are part of what physicians do. You are probably more familiar with it than I am, but I think it's something we also need to think and talk about later on today. Task shifting is happening in obstetrics and surgery, with non-physicians doing cesarean deliveries, and I'd be really interested to hear what you think about that. Obviously, different people have different

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feelings about it, but my question is, who provides the training and who provides supervision? What happens when there are complications? I think that's another aspect of public and global health that we need to think about. And what is the role of obstetricians in that movement, and how do we provide leadership and support if that's what we choose to do?

Our obstetrics/gynecology relationship with Ghana led to another thing. We had a project funded by the Bill & Melinda Gates Foundation to build human capacity, and it wasn't just in obstetrics, it was going to be in the entire medical schools. During that time we developed what we called the "charter process." The charter process was a way of having an open dialogue among partners to insure that the Ghanaian priorities had been clearly identified; that the policies and procedures under the pending collaboration had been considered; and that mechanisms of communication, such as websites and newsletters, would be established. We developed overarching principles to provide clarity and transparency, with the issues of compensation and authorship addressed at the beginning of the project, so that the group could go forward in their programmatic and research collaborations. And we used the charter to guide the implementation of pilot projects, and also the writing of development proposals and the writing of a proposal for a learning grant, to ensure that a broad, sustainable capacity-building approach would emerge from the process. You have a copy of that charter for collaboration in your packet.

In that spirit, I would like to say that when academic partnerships are considered not just for clinical training, but for the wide-ranging sorts of collaborations that evolved from the Ghana/Michigan partnership, everything must be done from the very beginning to ensure that the needs of both sides are clearly expressed. Only then can the different stakeholders move into an authentic type of partnership, one that will be transparent and allow equality among the partners – despite the inherent inequalities stemming from the differences in financial systems, resource availability, communication technology, and many more things. If you get some of all that out at the beginning, then you can work from there. Otherwise, if you don't talk about your communication problems at the beginning, communication will be difficult and the project will be affected. We're talking about being very transparent about such things as budgets and authorship.

In your packet, there are quotations that we've collected from our charter process. Please look at them. And as we move along, in the next few months, I'd like you to let me know how the activity of expressing your views went, so we can learn from it and replicate it. And later today, we'll

use a similar process during our brain-storming sessions to come up with our Call to Action and Way Forward.

Follow Up Remarks – Dr. Timothy Johnson

So let me just make a couple comments to sum up. Today, we're really talking about academic partnerships and academic institutions. And if you think about it, there are two great organizations in our modern civilization: One is church and religion, and the other is universities. And because these organizations are deeply embedded in society, think of the role that universities can play! If I were a priest, I would do what priests do. But I'm an academic, and so I do what academics do, which is teach. And it's pretty satisfying to sit up here and see Kwabena Danso and Samuel Obed. They were young, young residents when I was a young assistant professor, and now that I'm old and gray-haired, I've got a dean and a department head sitting in front of me! And Emma Morhe is sitting back there. In the room we have one of the first subspecialists – *the* first subspecialist, the first of the first 3 subspecialists trained in SSA. Emmanuel Morhe was trained in family planning and reproductive health and obtained a fellowship and an MPH. The thinking was that in SSA, the first critical subspecialty should be one that focused on family planning, with access to contraception and safe abortion services. And so we're very happy that we have people in the pipeline training for that.

Clearly, you see the waterfall effect when you look at the people in this room. But I want to talk for just one last moment about one of the key principles at the basis of this program, and it is the importance of a curriculum. It's very important that we set forth what the curriculum should be. As Professor Obed mentioned, it is the pass rate that ensures the success of the West African College program for Ghanaians who finish the program, as the rate exceeds 98%. The pass rate is about 40% if you're Nigerian, but if you're Ghanaian, it's higher than 98%. Why is that? It's because in Ghana there's a set curriculum and because people test according to the quality of the curriculum they are offered. You know about the traditional British system: "We made the test very hard and we failed a lot of people": We say that if a lot of people have failed, then we as teachers have failed. So we need to recognize that our role as teachers is to clearly tell students what we expect them to learn, and then make them successful learners and make them pass their tests.

So as we think about an SSA program today, our job is to develop one that can work, one that has a clear roadway; and then we, the teachers, need to

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make sure that the residents graduate as specialists. And if we do it right, I think we'll have a very, very successful outcome. Failure's not an option. We need to have a clear sense of where we want to go. Then, as teachers, we'll know what we need to do to make our students successful. So the key is: clear path, clear curriculum, clear competencies, clear outcomes; and if we have that set up ahead of time, then it's pretty clear that we'll be successful. And I'm going to stop, as we'll hear more examples of how we might be able to move this new SSA project forward.

COUNTRY STORIES

Current State of OB/GYN Training in Cameroon – Dr. Thomas Egbe

Thank you very much. I am Dr. Egbe, from the University of Buea in Cameroon. Situated in the west of the Central African region, Cameroon is bounded on the west by Nigeria and on the east by the Central African Republic. On the north is Chad and on the south are Gabon, Equatorial Guinea, the Atlantic Ocean, and the Equator. Cameroon has a population of about 20.3 million inhabitants, and as I always say, it is locked between the French and the English languages. One-fifth of the population, including me, live in the English-speaking part. There are 5 state-owned medical schools in Cameroon. The first was opened in 1969 in Yaoundé, the capital. It is bilingual, although bilingual there means about 80% French. Later on, university centers were created but they were mere extensions of the University of Yaoundé. Eventually, the government became committed to turn these centers into full universities. In 1992, the University of Buea in the English-speaking part of Cameroon and the University of Douala in the French-speaking part were open. Since then, two more universities were open, in Bamenda in the English-speaking part and in Dschang in the French-speaking part.

The only OB/GYN specialization program in Cameroon is at the Faculty of Medicine and Biomedical Sciences of the University of Yaoundé. The 4-year program started in 1988. At first, about two students per year were accepted but the number has increased to an average of six. So, about 78 specialists must have been trained since 1988. And the certificate awarded is called a Certificate of Specialization in Clinical Sciences with option in

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Obstetrics and Gynecology. The University has only one awarding body, and the dropout rate is about 10% because the studies can be very, very difficult and students can just leave and go on to something else.

The first-year residents study the basic sciences, with hospital training every four months. Four of the major hospitals in Yaoundé are used for training, and I did rotations in those hospitals. In the second year, residents now start general pathology and OB/GYN, with pre-eclampsia and all those things. And they rotate among the services every three months, they train in specific units depending on what they are doing. The third year is when they start getting into more complicated things in the fields of obstetrics and gynecology. They learn how to perform forceps deliveries. They are introduced to advanced immuno-gynecology. They assist in surgical procedures such as vulvar, vaginal, and rectal repair, and therefore in fistula repair. They learn how to provide gynecologic treatment to women with malignant diseases, and while assisting in the surgical treatment of cancers of the reproductive tract, and they are introduced to laparoscopy. They also assist in mastectomies.

When the program started, there were partnerships with French and Swiss universities. During the fourth year, the residents who were sponsored had scholarships, they spent 6 months to 1 year in France or Switzerland. But these partnerships are not working well any longer, so it's a hospital-based preparation, the residents mostly return to hospitals in the fourth year. They also prepare their casebooks and their thesis. And they do extensive surgery, usually assisting. They have log books for each field and the log books are signed by their mentors. In the fourth year, they also have their subspecialty postings. Not that they become subspecialists, but they have to do postings in infertility, urology, internal medicine, oncology, and radiotherapy. They can go to Douala, at the hospital where I work, for diagnosing, radiology, ultrasonography, colposcopy, and social obstetrics. The number of doctors presently accepted in the Yaoundé training program, six per year, is small for a population of 20 million. And because of that, many still go out of the country for their specialization, to universities in Italy. Such programs had already started when I was first involved with my specialization. So, many doctors are still going out of the country to see how they can be trained as OB/GYNs. Many of them go to the US but cannot pass the board exams and just give up – it's a big loss for us.

At the university where I am teaching, the Faculty of Medicine was created in 1992. At that time, medical students were mostly taught and trained via a program at the Faculty of Health Sciences. Then, at the beginning of the

2006–2007 academic year, the Faculty of Medicine began offering its own, 6-year medical studies program, and our first batch of medical students will be graduated this December. We think we have to start involving everyone in this program to start thinking about where we want to go, how we want to move. Because of all the new students, we need to train many more specialists who will then share in the teaching load: in OB/GYN, there are just six of us running the service and teaching the medical students.

As we need to expand our capacity to operate, we might have to look for training programs with foreign exchange. Would they be short- or long-term? Would there be formal teaching assistance? We also have to upgrade the existing hospitals in Buea and Yaoundé to better meet our needs. Medical students train in these two hospitals and then go to Douala, so we use these three hospitals to teach medical students. As I said, Cameroon has two official languages. Since the English-speaking part is about one-fifth the population, the number of English-speaking students who get into specialization is not really significant. Still, our university in Buea is mostly English speaking, and the people in Yaoundé speak mostly French, so we have a problem, we have staffing problem. What we have to do, as fast as possible, is to develop our own specialization program in Buea, and have our own OB/GYN residents come and teach in the medical school. But to reach this goal, we need to lobby for the government to step in. At this time, even if we had a fully staffed department, we still would have to address the problem of insufficient staff able to teach in English. I'm very happy to be here today to hear from the Ghana experience what we have in mind to do. I think we are going to see how we can implement some of these ideas in the English-speaking part of Cameroon.

Thank you very much.

Current State of OB/GYN Training in Ethiopia – Dr. Kassahun Kiros Gessu

Good morning. So I will take you now to East Africa – we were in the West. My name is Kassahun, I'm from Ethiopia. The surface area of Ethiopia is about 1.2 million m², we are 5 times larger than Ghana. The population is more than 80 million, we are the second most populous country in Africa, Nigeria being the first. The overall male-female ratio is 89 to 100, and it is 100 to 100 for those younger than 35 years. We are a diverse people, with more than 80 languages spoken in the country. We live in a federated system. And before we discuss medical education, I better give you highlights about higher education because they're interrelated in

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Ethiopia. Without seeing the overall picture of higher education, it's difficult to understand the medical education system.

We used to have only two universities but the number has increased to 32, 30 of which are public universities dependent on the Ministry of Education. Moreover, there are four institutions of higher education under different ministries, those of Secret Service, Defense, Telecommunications, and Health. The number of private colleges has flourished also, and 38 of the 59 colleges are in Addis Ababa, the capital. Of these 59 colleges, 33 are teachers colleges. The enrollment rate for all institutions of higher education is 4.5% of the age-appropriate population, far behind the African average of 6%. And the enrollment ratio for public and private institutions is now about 40 to 100, the goal in the coming 5 to 10 years being 60 students in private to 100 students in public institutions. Of 25 medical schools now in Ethiopia, two are private (one is an army school that enrolls students directly from high school) and 13 are new. The 12 older schools follow the traditional teaching methods but innovative curricula have been implemented at the 13 new ones. For one thing, these schools take only students who have completed a degree in natural science – a bachelor's degree in nursing midwifery for example.

Of these 13 new medical schools, 10 are part of a university and the other three are regulated or run by the Ministry of Health. The government recommendation is to reach the goal of one general practitioner per 10,000 population, but currently we have one per 35,000 to 40,000 people. As for postgraduate training in OB/GYN, three medical schools, at Addis Ababa University, Jimma University, and Gondar University, have set up a postgraduate training program, and St. Paul Millennium Hospital Medical College will start one soon. At Addis Ababa University, which has the oldest medical school, the postgraduate OB/GYN training program was started in 1981 and the enrollment has been 10 to 15 residents per year. This is only an average, as the number increases each year. In 2011, 300 OB/GYN specialists had completed the program.

In fact, a large majority of the specialists are products of the training program at Addis Ababa University. Established at the end of 1999, Jimma University is relatively young and so far 14 physicians have graduated from its medical school. A postgraduate training program in OB/GYN was established in 2005, with a maximum enrollment set at five. Gondar University is only two years old, and it has not graduated any medical students. There were four medical students in the first batch and ten in the second. At this University, the postgraduate program in OB/GYN will be started next year. Finally, the St. Paul Millennium Hospital Medical College

was started this year and they have seven medical students.

The postgraduate training focuses on emergency surgical obstetric training. In anesthesia, there is a diploma program, a bachelor's degree, and a Master's degree, plus a specialist program in anesthesiology. All are important to OB/GYN services. The direction of the government is that all universities will have a medical school, and eventually also postgraduate training in OB/GYN. After the next 5 to 10 years, the government's plan is to produce 10,000 doctors each year. And each medical school will have postgraduate training. At the Ministry of Health, there is a special department responsible for human resource development at institutions partnering with the Ministry. So, all the medical schools will be provided in human and material resources. And the Ministry is ready to facilitate the partnership. There is also a human resource policy and strategy on the ground. So, better collaboration among the partnerships is expected.

Remarks from St. Paul Hospital Millennium Medical College, Ethiopia – Dr. Lia Tadesse

Thank you. St. Paul Hospital Millennium Medical College is a new medical school, about five years old, so we haven't graduated our first medical students. A year ago, we started a collaboration with the University of Michigan Department of Obstetrics and Gynecology to start a residency program. And with the support of Dr. Tim Johnson and Dr. Senait Fisseha from the University of Michigan, we developed a very good competency-based curriculum. Last July, we launched a 4-year OB/GYN residency program with seven residents and we're hoping to enroll more residents every year. Briefly, that's what we're doing.

Thank you.

Current State of OB/GYN Training in the Gambia – Dr. Patrick Idoko

Good morning once again. My name is Patrick, from the Gambia. I'm going to be talking about the current state of gynecology training in the Gambia. Usually, when I say I'm from the Gambia, people ask where that is. So, the Gambia is a very small country in West Africa, completely enveloped by Senegal except for a window onto the Atlantic Ocean. So, kind of sandwiched by Senegal. The population is 1.7 million. Of this 1.7 million people, about 60% live in rural areas. Women represent slightly

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more than half of the population and we have nine OB/GYNs in the country, all nine living in this area near the coast. Surprisingly, we have a very high antenatal coverage, 98% of pregnant women are seen by a doctor or midwife. But when it comes to delivery by a skilled birth attendant, it's not good.

We have a medical school, which was established in 1996. We graduated our first class in 2007. To date, the school has graduated 87 physicians, 56 of whom are working in the country. These 56 are all working at the Royal Victoria Teaching Hospital, the main teaching hospital on the coast. Among the rest, some are scattered about the country, 12 or 13 are doing postgraduate training in Ghana, and the rest are foreign graduates who've gone back to their respective countries. Currently, we have no postgraduate training in the Gambia. But owing to a collaboration between the Taiwanese and Ghanaian governments, three of our doctors are being sponsored by the Taiwanese government to train in Ghana. And it's a privilege and a pleasure to meet Dr. Obed and to say thank you for training our residents in his country. We have eight doctors currently working at the OB/GYN department of the Royal Victoria Teaching Hospital who are interested in doing postgraduate training. The prospects of their training in OB/GYN depends on the availability of funds, however. As I mentioned earlier, we have 3 doctors in Ghana who are being sponsored by the Taiwanese government.

So what are the challenges for local training? We have just two full-time and two part-time faculty at the university. Of the nine obstetricians practicing in the Gambia, only four are locals. And of these four, only one is faculty. As I mentioned earlier, we don't have any OB/GYN specialists in any of the rural areas. Besides, we have a problem with the definition of who a specialist is. We have somebody who did his undergraduate training in Russia, plus two years of postgraduate training after his medical training. So when he came back to the Gambia, he wanted to be designated as a specialist. But the Medical and Dental council was a bit confused, they were not sure how to certify him and what to do about it. We have a few of such cases. We had somebody who was trained in Cuba. Right now, the Council has decided not to recognize him as a specialist because we are not sure of the kind of training he got. And then, we do not have faculty in the supporting fields. You know we've talked about looking at the curriculum in Ghana. We do not have a urologist or anesthetists, or any of the other people who are necessary for proper postgraduate training. The University of the Gambia had some special accreditation by the West African College of Surgeons to start some formal training here, and then send the residents to Ghana or Nigeria to complete their training. But in 2008 we lost our

accreditation, partly because of the high faculty turnover and partly for some or other financial reasons.

About the prospects: The government is becoming aware of the need to train specialists. The university administration sent us last week to have a discussion about training specialists in the Gambia as the way to reduce the problems with returning specialists. Also, there's a lot of hope and expectation regarding the three being trained in Ghana. And the government had them sign a bond that they were going to work in the public sector on their return. Now in our setting, this is very important. In the past, people got trained abroad, and either they didn't come back, or when they came back, they ended up in the private sector. I could tell you many of those kinds of stories. Unfortunately, more than 60% of the Gambians cannot afford private health care, so the problem is with us. And the main issue is, it will be very difficult to have specialists return to the Gambia if salaries here are not similar to those they would get in other West African countries. The fact is that most West African countries are looking for doctors. And you have those people training in countries outside of Africa. They're not going to come back. And if they did come back, they would either go into private practice or soon return to wherever they were trained. We're hoping the ones being trained in Ghana will come back and stay in the Gambia. And when we have our own system, we can probably encourage them to stay.

Thank you.

Current State of OB/GYN Training in Malawi – Dr. Ennet Chipungu

Good morning. I'm Ennet Chipungu. I'm a part-time lecturer at the College of Medicine in Malawi, a small country in East Central Africa bordered by Zambia, Tanzania, and Mozambique. We have a population of about 15 million and our maternal mortality ratio is about 670 (although the UN reported it at about 430). Our total fertility rate is about 5.7 births per woman and the percentage of women of reproductive age using contraception is about 46.1%.

Malawi is divided into three regions, which are further divided into 28 districts. We have only one medical school, the College of Medicine of the University of Malawi, which is located in Blantyre, the capital. We have four central hospitals: Mzuzu Central hospital in the city of Mzuzu, in the northern region; Kasungu Central Hospital in Lilongwe in the central region – one of my colleagues, Grace, works there; Zomba Central Hospital

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in the city of Zomba, in the southern region; and Queen Elizabeth *Central Hospital*, the hospital affiliated with the University of Malawi in Blantyre, also in the southern region. *The main teaching hospital in Malawi*, Queen Elizabeth *Central Hospital*, also uses the other central hospitals as teaching hospitals.

We have nine obstetricians in Malawi, nine obstetricians residing in the country. Of these, three are lecturers at the College of Medicine, two full-time and myself part-time. Others work full-time in the private sector and others work for the Ministry of Health. Those working for the Ministry of Health are helping us at the hospital in Blantyre and also at Kasungu Hospital in Lilongue, where the Ministry of Health has a partnership with the University of North Carolina. The College of Medicine started in 1991, and since then has graduated about 350 physicians. The Departments of Pediatrics, Surgery, and Medicine have started their own postgraduate programs, but the Department of Obstetrics and Gynecology has not. We always thought that three OB/GYNs are not enough on the ground because we have to teach 52 undergraduate students each year. We felt that the three of us might not be able to produce quality specialists. So, most of the postgraduate training in OB/GYN is done in South Africa. You find a sponsor and then you go and train there for three to five years. I trained in Cape Town. The problem is that the training is supposed to last from four to seven years. Some have been there for seven or eight years and we don't know what the problem is. We don't know when they're coming back. It's difficult to know what is happening, whether they are traveling or whether they have left the program – nobody really knows. And the College of Medicine has about 11 obstetricians training at the moment in South Africa. I'm hoping to have them back, if all goes well.

As I said, other departments have started their own Masters in Medicine, their own M-MED programs, but we never started one because we thought there were not enough of us on the ground. When I left for training, there were four obstetricians working at the College of Medicine. When I came back, there were three. So at the rate we are going, I don't think there will ever be enough obstetricians on the ground to start our own M-MED program. And yet, what we need is more OB/GYNs. As you know, our maternal mortality is too high and we still have a high incidence of obstetric fistulas. So I think the need is to start local training, local M-MED training, and with what we have on the ground, everybody might not be trained at the College of Medicine. But if we come together, I think we should be able to start our own M-MED training. It has taken me to meet Grace Chiutzu here in Italy to find out that three years ago, at Kasungu Central Hospital, they were going to have a partnership with a Norwegian university, and receive funding, to train some OB/GYNs locally. However, this

partnership hasn't taken off. My colleagues are still waiting for an examination body so that they can start the program. A curriculum was developed about 10 years ago, and it has been updated every year. Apparently, if we start our own program, it will offer four years of training, two years in basic medical science and two years in clinical medicine, with a dissertation at the end. As I said, there are 28 districts in Malawi and we're planning to have at least one specialist at each and every district hospital. And it means we need about 30 to 40 obstetricians in the next 10 years if we are to improve maternal health in Malawi.

Thank you.

Tim Johnson: You mention that you have a curriculum, but that you are not sure how you are going to accredit and certify people. In Malawi, is there a certifying body? When people are certified as specialists, as OB/GYNs in Malawi, who is the professional society, or certifying body, or organizing body? I mean, Cameroon and Ghana have the West African College of Surgeons. And I have the same question for Ethiopia: who's going to certify in your countries that the specialists are qualified to be specialists?

Ennet Chipungu: For those who've specialized in surgery, certification is done by the African College of Surgeons. And for the ones who've specialized in medicine and pediatrics, it's done by the University of Malawi. They do two years in Malawi, two years in South Africa, but they come back and write the Malawian exam.

Dr. Grace Chiutzu: Just to add: in Malawi, we don't have a certifying body for obstetrics and gynecology because we don't do in-country training. Currently, we send our people to South Africa, and it's the Fellowship of the College of Obstetricians and Gynecologists of South Africa which certifies.

Dr. Tim Johnson: What kind of accrediting bodies do you have to accredit the postgraduate training programs? What kind of certifying bodies do you have to certify the graduates from the programs? And then, what kind of a professional body do you have for those specialists to become part of... You've got the Malawi OB/GYN Society, right? Malawi is a member of FIGO through its professional society. And another question is, in some countries, could the professional society be the accrediting society or the certifying society? Like the Royal College of London, which accredits the postgraduate program and certifies the graduates, who are then incorporated into the professional society.

Dr. Grace Chiutzu: That would be the future. That would be the direction which we would want to take in the future. But currently, we do not have the power, we do not have the potential. We need somebody to push us up.

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Dr. Gessu: In Ethiopia, the residents sit for the exam after four years of training. When they pass the exam, their respective universities issue the diploma. But to practice in the country, the accrediting body and the regulatory body is the Ministry of Health. The specialists are certified and allowed to practice in the country after the Ministry accepts their credentials. If they come from abroad, they also need to pass the certification process.

Current State of OB/GYN Training in Zambia – Dr. Bellington Vwalika

Good morning ladies and gentlemen. I'm coming from Zambia. It's in Central Africa, and we are neighbors to the previous speaker. And I'm happy to be here. In Zambia, like in any other SSA country, we have one of the highest maternal mortality ratios, 591 per 100,000 births. And our population is 13 million.

Our university was opened in 1966. And just like Ghana, we used to send a lot of our people abroad for their specialist training. But then, realizing that most of the people who went abroad never came back, we started a local program in 1982. It was a Masters of Medicine in Obstetrics and Gynecology underwritten by the University of Zambia. Known as M-MED like its counterparts at most other universities in the region, it's a four-year program that has produced 35 specialists since its inception. Of these, five have died and we now have 30. The program started very slowly. One of the reasons was that people did not have confidence in it; they preferred to go to the UK or other such places. But the good news is that with the local program, almost 100 percent of the people have returned. And currently there's a renewed interest in the program. Some of the motivating factors are that the program is better organized, the social needs of the specialists are better met, and their income has improved.

Right now we have about 30 candidates spread across the four years of training, and we hope that this number can be sustained. One of the drawbacks of this program is that the university, as I said, was opened in 1996, and there's been no improvement in the infrastructure. There's a limit to the yearly enrolment, we can only enroll 10 candidates per year. Another drawback is a lack of interest in teaching at the university, because in our system university salaries are lower than government salaries. No matter how many specialists we produce, they won't want to be teachers because they will be paid less. But over the last two years, three new universities were established. We hope that if they can quickly start the postgraduate program, it can help us turn out more specialists in the next 10 years.

Thank you very much.

Current State of OB/GYN Training in Rwanda – Dr. Stephen Rulisa

Thank you very much. I'm Dr. Stephen Rulisa, from Rwanda. Rwanda is in Central East Africa. It's a country of around 11 million with 35 OB/GYNs. We have one medical school in the country, which is government run. The undergraduate medical program has been in operation since the 1950s but the OB/GYN training program started in 1996. Since then it has been on and off, we would start training one cohort but not incorporate the next for maybe three years. It was a sandwich program when it started, with the trainees working for two years in Rwanda and then sent to other countries with which we had partnerships. But these partnerships were on and off for many reasons. The residents in the first cohort went to Belgium and France, and I think also to South Africa. They all came back, so we had ten specialists to send all over the country after the genocide.

Since 2000, or rather since 2003, it has been more consistent. The first cohort became trainers and we've been running this program ever since. But since there is only one medical school and two teaching hospitals, we have not been able to enroll a large number of applicants, not more than six to eight per year. And I forgot to say, we instituted an associate-specialist level maybe three years ago. We were around 20 OB/GYNs, now we are 30 to 35. A medical council does the certifications and the Rwanda Society of Obstetricians and Gynecologists is now part of the regional body. And three years ago, we also started partnering with East African countries – Kenya and Uganda, especially – where we send our final-year residents so they may have an exposure to the regional bodies.

The specialist training program takes four years to complete. The first year is basic science and the other years are clinical. Beginning this year, and for seven years, our university will benefit from a Human Resource for Health partnership between our government, the American government, and the Clinton Foundation. Through this HRH partnership, our government receives funding from the US government and the Clinton Foundation to train specialists in different fields. This year we recruited 16 residents for the OB/GYN training program, a large number, and we expect to keep a pace of 10 to 14 per year. Surgery enrolled around 20 residents and Medicine around 25 this year, and pediatrics also recruited more than we did. I insisted on not recruiting more because it was not viable. The OB/GYN program enrolled the smallest number because we could not get

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US faculty to come to Rwanda to train residents. It was not the same for the surgery and the pediatrics programs. More than 20 faculty from the US came to train residents in pediatrics but in OB/GYN, we did not get any. So I said that when I got a large number of faculty, then I would recruit more residents. So if there are any US faculty waiting to come, you are most welcome to this program.

The HRH partnership will run for 7 years, so within these 7 years we intend to recruit as many residents as the program can train. We have 3 teaching hospitals and, as I said, we have 35 postgraduate OB/GYNs. However, almost all of them work at the teaching hospital in the capital, we do not have any OB/GYNs in the rural hospitals. As for retention, we do not have a retention problem, as far as I know. I don't know anyone in OB/GYN outside the country. Even those who train out of the country come back. We have money to survive for the next 15 or so years because we can attract neighbors to come to help our system. They're the ones who trained our brothers in the country to run our OB/GYN program. So, quite a number of our OB/GYNs have actually come from our neighboring countries to work in Rwanda and we do not have a problem of retention. Our maternal mortality has been going down, I think it is now around 350. I think that is all that I have for my presentation.

Thank you.

Current State of OB/GYN Training in Uganda – Dr. Joseph Ngonzi

Thank you. Good morning. I'm going to try and be quite brief. I'm from Uganda, an OB/GYN from the Mbarara University of Science and Technology Medical School. And I've been a specialist for close to 5 years. I'll just give a few statistics about the state of OB/GYN training in Uganda. Uganda is located in East Africa. The population is about 34 million people and the maternal mortality rate for 2011 was 438 – still very high. But at least we have progressed in strides. This is one of our most important concerns, as each woman is a beloved woman in Uganda. There are four medical schools in Uganda. The medical school of Mbarara University of Science and Technology was started about 23 years ago to train medical students, but residency training in OB/GYN started in 2002. We've trained about 20 specialists so far, and we have 17 in the program. The first few years were quite challenging because we could not recruit more than one resident each year. But we recruited our largest class this year, seven residents, which for us is a success. And the oldest medical school, Makerere College of Health Sciences, has had a residency training program

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for over 20 years. So far they've been able to train 110 specialists, and they have 35 in training. As I speak, the total number of specialists in Uganda is 135, 80% of whom live in Kampala, the capital city. Since the other medical schools have not established residency training in OB/GYN, only two medical schools are training OB/GYN specialists in the country.

Just a few interesting statistics. As I said, 80% of the specialists live in Kampala. Reasons that are usually given for this situation is that one can find more services and earn a little more in the capital. And with 96% of the districts in Uganda lacking an obstetrician or gynecologist, over 95% of our population is without services for this very, very vital component of health care.

Regarding accrediting bodies in Uganda, the Uganda Medical and Dental Practitioners Council certifies you upon completion of the first bachelor's degree. They certify you again upon completion of the residency program, but with recommendation from the Association of Obstetricians and Gynecologists of Uganda. Once you have these two certifications, you are able to practice in the country.

Well, just a few things within the next two minutes. It's a priority for the Government of Uganda to include maternal/newborn health in the core elements of the Ministry of Health implementation programs. Here are a few other data. Many of these data are not accompanied by rates center by center, but I am showing them to highlight the fact that there's a need to train more OB/GYN specialists to be able to bridge many of the gaps that are prevalent in this country. And a few more things: the contraceptive use in Uganda is 30%. The total fertility rate is astronomically high – 6.2 – and just 57% of Ugandan women are delivered at a health facility. This means that the others, you know, are delivered at home by traditional birth attendants, and so many things can happen. And interestingly, many of these home deliveries are taking place in the middle of the districts that have no obstetricians or gynecologists; and given the complications that come with deliveries – we do not have sufficient data, but our take is that so many women are continuing to die for lack of professional care. Many of these things are known, but these are recent data from our 2012 demographical survey: only 59% of our women are delivered under skilled care. And so, I wanted to highlight a few of those facts so that some of us may know, so that all can appreciate the need for training many more OB/GYNs. And actually, 45% of these 135 OB/GYNs are not in government service. They're doing their own things in private practice, they are doing private business because that brings them better returns. In Uganda, the average salary for an OB/GYN in public service is \$480 per

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month, OK? And so, you may not blame these OB/GYNs for preferring options that will give them better returns. Residency training in Uganda is private. You have got to find your own funding to be able to go for residency training. And you're not paid for that. So, not many people are motivated to go into residency training for three years, and then not be able to take care of personal needs that they have got to meet.

Thank you.

Current State of OB/GYN Training in Liberia – Dr. John Mulbah

Good afternoon everyone. I'm going to quickly talk to you about postgraduate medical education in Liberia. Of course we do not have a program now, but we are trying to set up one, and we want to let you know so that, together, we see what we can do for Liberia. This is the map of Liberia, a very small country in West Africa. It's limited by the Atlantic Ocean, the Côte d'Ivoire, Guinea, and Sierra Leone. The population is 3.5 million. The maternal mortality ratio is very high, 994 per 100,000 live births. Infant mortality and the home delivery rate are also very high, as up to 57% of our women are delivered at home. And only 11% of the women of reproductive age use contraceptives. Combined with this, we have an acute shortage of manpower. Would you believe that for the entire country, we have five obstetricians – five obstetricians! And of these five obstetricians, only one teaches at the medical school, which I am. I'm here now and the medical students are waiting for lectures. And the only staff assisting the lecturer is Dr. John Dada, who is also here.

And what is the vision for our program? It's to produce specialist manpower to tend to every OB/GYN need in Liberia. This is what we need now. And our mission statement is: "The provision of health specialist manpower development through appropriate curriculum development, education, accreditation, examinations, research, in equality with other stakeholders in similar organizations." That is our mission statement. We know that we cannot do everything by ourselves, that we need to collaborate with others. And what is the rationale for wanting to establish an OB/GYN training program? At the moment, we do not have any sort of postgraduate training in Liberia. Therefore, the training programs are currently offshored, medical graduates have to travel and stay in other countries for protracted periods, from four to six years. To specialize in our country, you must go outside. This means that during the training period, the services of these doctors are not available to Liberians. In addition, most do not return home after specialist training. Most train in the US, and

at the end of their training, if you have sent 100, maybe one or two will return. So we need to train the people in Liberia for these reasons, and for another obvious one. Training manpower in a foreign country is very expensive for the government. I know how much it took for the Liberian government to train John Mulbah abroad, compared with what it will be to train OB/GYNs in Liberia.

Considering all the needs of this country, and considering the problems caused by training people above, it seems justified, even imperative, to develop an in-country postgraduate training program capable to produce specialist manpower. We need to build our case because we will be asked to. So what would the real advantages be? One, Liberian graduates will be able to undergo postgraduate training *in* Liberia, they wouldn't have to go somewhere else. Two, the residents will be able to provide services in Liberia during their training. While attending to their postgraduate program, they will be working in Liberia, providing services. Three, the resources that are put in place for the first batch of residents will remain in the country and be available to train others. What you will help us put in place to train will remain there, and we will use those same resources to train other doctors. After they graduate, they will be able to treat conditions that are common in our country. I remember doctors trained in the US or Europe who were not familiar with the diseases in Africa when they returned. But when you train them where they will work, they will know what they need to know. Because they will be involved with treating these conditions during their training, they will be more likely to stay in the country. I remember encouraging a friend to stay. He came from somewhere else and after two months he told me, "Look, Dr. John, I don't think I can work in Liberia. But if you were training Liberians for four, five, six, seven years, they would get used to the work and more likely to stay."

Providing manpower for undergraduate and postgraduate training also means providing manpower for the training of other health workers. Once trained, specialists would not only be training postgraduates, but they would also train undergraduates and students in other health programs so that they can provide specialized services. The sustainability of the OB/GYN program would be ensured by the graduates of the program. If we're too dependent on foreign trainers, if we we're too dependent on other countries, our program will not be sustained. But I know that if we are able to train 10 Liberian specialists *in* Liberia, those will replace the trainers from the International Rescue Committee and this program will be sustained. In summary, the general objective of the postgraduate training program is to produce specialists who can effectively manage a specialized program in Liberia, and who can promote and advocate for quality health services in

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Liberia. The first thing I did when I met the professor from Korle Bu is ask for his card. After we go back, he'll soon be tired of me sending him patients. At this time, we are sending patients not only to Ghana, but all over the world. But once we treat people in our own country, the transfer of patients to other countries will be minimized. We cannot say it will be zero, but it will be minimized.

We also have specific objectives. First, the graduates of the OB/GYN training program will be able to professionally manage all categories of conditions found in Liberia, except those requiring the services of subspecialists. We won't mind transferring patients who need the care of a subspecialist, but those who need specialized care will be managed in Liberia. Then, the graduates will work at the district level and the tertiary referral centers, that is, at the teaching and regional hospitals. At present, the only obstetrician, who I am, is working in Monrovia. Just a few days before I arrived here, we took some time to reach out to other parts of the country. The graduates of the OB/GYN program will be able to train enough obstetricians to serve the entire country. They will also be able to train the other sorts of health workers needed to provide specialized services to patients where they live – and not only to patients needing to be transferred from regional centers to Monrovia. And the graduates will be able to identify ethical and larger issues related not only to OB/GYN.

Because I'm an obstetrician, I have written about this. And the graduates will have the communication skills and the motivation to promote and advocate for good sexual and reproductive health for all women in Liberia. They will promote family health education at the community level. They will be able to identify the problems requiring specialized care in the community, and they will work out preventive measures and treatment schedules. They will live in the community; they will be able to identify problems and work along them to find solutions and prevent them from recurring; they will identify the mortality and morbidity factors and be able to design measures to avoid them; and finally, they will encourage and mobilize community leaders to initiate and promote community activities which will improve the health of all community members.

Our program is aimed at producing two categories of specialists, one at the membership level and one at the fellowship level – two categories. The members will be mid-level specialists and the fellows will be conferred specialist teaching authority. Before we started all this, we made a study tour to Ghana. We are using Ghana as a model, as our grandparents. Anytime we want to start a program, we'll be calling upon the Ghanaians. So we have the membership and the fellowship. With this in mind, what have we

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achieved so far? Maybe when I describe it, you'll know how far we are and how much farther you can take us. First, we advocated effectively with the government. We were able to advocate because we first made sure that we convinced the government of the need to establish a postgraduate OB/GYN program in Liberia. We were able to achieve that. In fact, the president of Liberia was present at a working group meeting that was held in Liberia in February of this year, and she promised that the government would give us 100% support. We also were able to advocate with the West African College of Surgeons, the West African College of Physicians, the Ghana Postgraduate College, and organizations in the US. There are Liberian doctors in the US, and they have the Liberian Association of Doctors in America. So they are also collaborating with us toward the project. We had a study tour in Accra in Ghana. And we had a seven-day study tour with a graduate program in Ghana, we visited Korle Bu, we visited all their other hospitals, to see what they did to establish the Ghana College. And upon our return from Ghana, what did we do? Because everybody is not able to do this sort of work, we assembled a technical working group that is working on a daily basis. And this group has drafted an acting constitution. They were able to do that. And based on this act, we will now develop a work plan and a strategic plan that will be guiding us. We will also develop an operational plan.

The act drafted by the technical working group was submitted to both houses, to the legislators and the senators. We presented it to the Government, it had to be approved as a matter of policy. And thank God it was approved by both houses – it's already been approved. And we also developed the various training curricula. We intend to start with four disciplines: OB/GYN, pediatrics, internal medicine, and surgery. We are thinking of adding anesthesia, because if we train obstetricians and general surgeons, why not anesthesiologists? But we have the problem of manpower. Then again, we might be going back to Ghana and say, look, we're thinking of adding anesthesia, you need to help us, OK?

So we organized a consensus-building workshop with various stakeholders. At this workshop, we invited the West African College of Surgeons and The General Secretary of the West African College of Surgeons was present. The West African College of Physicians was present. The Ghana College was present. And the American Association of Liberian Physicians, they were present. Other stakeholders in Liberia and UN agencies were also present. It was a five-day consensus-building workshop, so that we could all see how best we could do it. And it was very, very successful. The recruitment of candidates and faculty/staff is now in progress. We have sent out letters and we have received applications. We have also sent letters

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in and out of the country for the recruitment of staff. What I am also doing now is an S.O.S call to you who are here: We Need Staff! The professor from Kumasi is here, OK?

And just before I came, we were in the process of forming the council, the college council, and also seeing how best we could organize the founding fellows. This is a photo taken during the consensus-building workshop. Back here, you can see Prof. Nwawolo from the West African College of Surgeons. They all were there, at this meeting. Thank you very much.

Question & Answer Period

Dr. Josaphat Byamugisha: *Thank you. I am Josaphat Byamugisha, from Kampala. I chair the Department of Obstetrics and Gynecology at Makerere University. We must thank you for this presentation. I was not here this morning, I had to present something elsewhere. I could make very many comments, but I will start with "manpower." If you could use "human resource," especially when you are dealing with obstetricians and gynecologists, so that you would include the ladies. They care about the gender issues, and when you say "manpower," you are leaving out these others— Just be something to consider. And I have a few other comments. Maybe about the curriculum: since you have very limited staff, you could either use the semester system or use modules, so that when you need support, somebody can be moved from another Liberian university and teach for one semester or teach the module, and then return to his or her university. That may be something to consider as you move on. And maybe about anesthesia: at our institution, one of our biggest problems is with anesthetists, so you have to seriously consider whether you want to contribute to their training or if you want to have an anesthesiology department. Because if you train as an OB/GYN, it's very difficult for you to say, you know, I am also going to give anesthesia. There are many issues, including legal issues. If something comes up in terms of risk.... this is something that you may consider. Thank you.*

Dr. Frank Anderson: *This is something that you can bring up too as we do our next activity. But thank you, John, that was really interesting. I wish you could have been here to hear some of the other presentations, but we are going to have all the presentations typed up into a transcript and we're going to have proceedings from this meeting. So, we'll have everything that's spoken transcribed. And we'll have all the PowerPoint presentations, background articles, and then our deliberations today. That will all be available to our Google group. And I think most of you are probably on that Google group. And if you're not, we have your e-mail address and we can make sure that you're on that group in the days to come.*

Dr. Kwabena Danso: *One contribution I want to make to Liberia is about the issue*

of anesthesia. I think you need two levels of anesthesia. Skilled people who can provide anesthetic services to the surgeons, and also high-level anesthetists who can provide training. And for the first level, Ghana has a nurse-anesthetist training program where nurse-anesthetists and student nurse-anesthetists can be trained, and they will support service delivery in the districts and even at the main hospitals. But of course, the training program that you are setting up needs to have an arm for training anesthetists at the level of membership or fellowship, so they can sustain the training of other persons.

Unidentified female: *I actually have a question about that. In Ghana, as you ramped up the OB/GYN training program, was there a parallel ramp-up in anesthesia training?*

Dr. Kwabena Danso: *Yes, there is a fellowship program in anesthesia. But we also have a nurse-anesthetist training school, which has even been upgraded to a diploma level. And the graduates are mid-level anesthetists who provide service.*

Unidentified male: *Recruiting physicians to do anesthesia for five, six years is quite difficult in Ghana. So we have a 1-year, 18-month program for physicians to get the diploma. Then the membership, three years, and then the fellowship, five to six years. So the diploma course is very popular among physicians. Some of those who enter the diploma program have practiced for some time, and may even have been referred to other areas. So I recommend that you look at that possibility, too, a diploma in anesthesia for physicians. Once they have the diploma, I'm quite sure they'll be able to handle most of the cases at your regional and teaching hospitals.*

Dr. John Mulbah: *OK thank you very much for those comments. We do have two training institutions for nurse-anesthetists. And just before I came here, the government had a scholarship for one or two persons to do a diploma program. And two persons have just passed the interview. We will be looking for placement to always have at least one or two persons in the diploma program. But we were wondering if it could be possible to do the diploma program during the regular OB/GYN training program. Thank you very much.*

Health Indicators of Kenya and Tanzania – Gaurang Garg

Good afternoon. So, as Dr. Anderson mentioned in his introduction, we did a desk survey of numerous sub-Saharan countries in the hope of learning numerous things. There were two main questions that we wanted answered: (1) Do they train undergraduates in OB/GYN? and (2) Do they train postgraduates in OB/GYN? So we surveyed three medical schools, two in Kenya and then one in Tanzania, and I'm just going to give some highlights based on their responses. Dr. Anderson mentioned that the

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entire survey is in PDF form, and that PDF was mailed out to many of you. It is available to you if you want more information on these two countries, or similar information for other countries. So in Kenya, according to the WHO statisticians, maternal mortality was 360 per 100,000 live births in 2010. The first medical school we received the survey from was the Moi University, and Dr. Mishra there was kind enough to help us out. So they do train in OB/GYN at both the undergraduate and postgraduate levels, and their postgraduate training started in 2010. So they are two years into it right now, and none of their residents have completed the program. However, they have six residents in both of their first two years. And they have nine OB/GYN faculty in their medical school plus two at the Moi University Teaching and Referral Hospital, for a total of 11 OB/GYN faculty.

The second school that we surveyed in Kenya was the University of Nairobi Medical School. Dr. Rubin Koigi Kamau, who works here and also has a clinic in Nairobi, was kind enough to participate as well. At the University of Nairobi, the OB/GYN postgraduate training program started in 1970, so it's been around for a while. Currently, there are around 65 residents the program, with about 15 to 20 per yearly batch. One of the questions we asked was that since the program started, did their graduates stay in the country or did they move out. And he said that most were still living in Kenya, but working at private clinics or, for some, with NGOs. And both Dr. Mishra and Dr. Koigi Kamau said that there were 400 OB/GYNs in Kenya, which is great, but that most were located in Nairobi – over 70% were located in Nairobi. They didn't give any information as to how the remaining 30% were spread out.

Next we have Tanzania. The school we interviewed was the International Medical and Technological University. Dr. Kudra Chobanga was the head of the OB/GYN department and we had a chance to speak with him. They are also training both undergraduates and postgraduates, and their program also started in 2010. So they have two years going right now. They have two residents in the first year and they have 1 in the second. Therefore, no one has completed all four years. In Tanzania, there is a total of 150 OB/GYNs. So thank you very much. Hopefully that provided a little bit of a picture.

End of Introduction and Country Reports – Dr. Frank Anderson

Welcome back from the break. I hope you're refreshed. Thank you all again for being here. It's just fantastic to have such a broad scope of experience and practice, and to be here at FIGO with all the obstetricians and gynecologists, and the energy, and we can already start to see themes and patterns of issues, of problems, of solutions. So I'm very excited for us to keep working together today, for working on this problem. Before we start with Ray de Vries, I would like to invite Dr. Dalton and Dr. Morhe to come and give a brief overview of the subspecialty program that they're working on.

Overview of the First Family Planning Subspecialty Training Program in Ghana – Dr. Vanessa Dalton and Dr. Emmanuel Morhe

Good – I guess it's afternoon. I know many of the people in the room but not everybody. I'm Vanessa Dalton, one of the faculty members at the University of Michigan. My colleague should walk over here, I was told, so that we could get this recorded. We just wanted three minutes to report on another sort of follow-up program at the University of Ghana and Kwame Nkrumah University of Science and Technology – one that has really built on the postgraduate training program that was discussed this morning. It is the first subspecialty training program introduced in Ghana and it is in family planning. That was very much intentional, as it was truly consistent with some of the key strategies that had been identified to reduce maternal mortality.

And I'll briefly tell you the three components of this competency-based curriculum, which was modeled after the fellowship program in the United States. Three arms: The first one is obviously clinical activities, because one of the first things to take into consideration is that in a lot of contexts, particularly in developing countries, mid-level providers are really the first-line providers. But, and I think Tim said this earlier, these providers need to have leadership. They need to have somebody who can advocate for new services for them, and get funding and resources, and start the new services. And one way to do that is through specialized OB/GYNs. The second arm is research, and we really focused on implementation science. We taught the fellows how to conduct research geared toward being informative in order to promote policy or service change effectively. And the third arm is teaching.

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At this point, I'll pass the microphone over to Dr. Morhe, who will talk a bit more about his experience. He was one of the first fellows of the program, which was started in 2008.

Dr. Emmanuel Morhe: Thank you very much, Dr. Dalton. The Fellowship Program in Family Planning and Abortion Care started in 2008 at two teaching hospitals in Ghana – the Komfo Anokye Teaching Hospital, affiliated with the Kwame Nkrumah University of Science and Technology, and Korle Bu Teaching Hospital, affiliated with the University of Ghana Medical School. There was an urgent need for postgraduate training in, or advanced training in, family planning and abortion care because of the need. And the need was as a result of the fact that we had OB/GYN training in the country, but there were areas where abortion care was not available. Because of the stigma attached to it, a lot of practitioners do not want to be associated with it. So there was the need to train people with passion to speak about abortion care and family planning; people with the knowledge, experience, and evidence-based information required to persuade all the people who matter – especially politicians – so as to influence policy. The program was started with the collaboration of the University of Michigan.

Two OB/GYNs were recruited from Komfo Anokye Teaching Hospital and two more from the University of Ghana Medical School, and the training center was at Korle Bu Teaching Hospital. We were taken through advance training in clinical care, family planning, research, leadership, and advocacy. It was a two-year program, the first year was spent earning a master's degree in public health, and the second was spent doing clinical training in research. After which, we took an exam that was organized by the Ghana College of Physicians and Surgeons. We officially completed the program in 2010 and were certified by the Ghana College of Physicians and Surgeons in December 2011.

And during the training, I must admit that at the beginning it was quite difficult. Some had to deal with the problem of stigma. And so, with regard to family planning training and abortion care, what I need to state here is that there is a need for value clarification, and that is very, very important. And I want to acknowledge the immense contribution of the University of Michigan. In fact, they put us up there, we attended all the international conferences in family planning, which gave us the opportunity to learn a lot of things. And since we've graduated, I think we have contributed a lot just within one year of completion.

All of us are in leadership positions. Myself, I'm the head of the Family Planning Unit at Komfo Anokye Teaching Hospital. One of my colleagues

is a founding member, the founding head of the Tamale Teaching Hospital. And of the other two, one is the Assistant Director of Family Planning at Korle Bu Teaching Hospital and the other is the Head of the Family Planning Unit at the regional hospital of the greater Accra region. And we are being involved in so many activities in Ghana: We are involved in teaching medical students and residents and we serve as direct mentors to the new fellows recruited into the program; we take part in midwifery activities; we teach midwives and we also take part in a lot of in-service training; and we carry out research projects at the various hospitals to see how best we can implement – put to use – policies that have been in our books for many years. And I would say that the experience has been very, very wonderful.

I will end by saying that we are very grateful to Professor Johnson and his team from the University of Michigan and to the whole Michigan faculty. Not to leave out Kofi Gyan, who is the program coordinator. And in fact, I've also worked with the American College of Nurse-Midwives, who tried to introduce post-abortion and comprehensive abortion care services in midwifery programs in Ghana. And I'm very grateful for their support.

Thank you very much.

Reflections on the Ethics of Global Partnerships – Dr. Ray de Vries

Dr. Frank Anderson: OK. Thank you for that update, and again, you can see this ripple effect. You don't have the family planning person until you have an OB/GYN that's trained. Only then can you go through these types of fellowship programs. And by having the Ghana College of Obstetricians and Gynecologists, Ghanaians can decide what kind of fellowships they'd like to make and what's the priority for them. So it's interesting, again, to keep seeing the threads, how one thing leads to another, and another leads to another. The waterfall effect, I heard somebody talk about before – Dr. Johnson.

So now we're going to move into our brainstorming activity, and I introduced to you earlier the Charter Process and the Charter for Collaboration. And one of the key members of our team who helped us with that was Ray de Vries. And Ray is a sociologist from the University of Michigan at the Center for Bioethics. And the way our project worked, having a sociologist on board gave us an opportunity to have another perspective on our technical work. Ray has been instrumental in helping us work things out and make the project real. And Ray is going to give us a

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brief reflection on the process that we're working on. Thanks so much, Ray.

Dr. Ray de Vries: Good afternoon. Thanks, Frank. I'm really honored to be here and I'm really feeling the potential that exists in this room. I think back over what has happened earlier, and I am elated by the fact that there is a kernel of people here that can move this project forward and spread it through Africa. I'm usually behind the scene, so it's a little odd that Frank asked me to say a few words here. As he said, I am a sociologist. I work at a center for bioethics. I also work part-time in the Netherlands at a school for midwifery. So I'm working between these two worlds of maternity care and ethics. And in particular, with regard to this project, Frank has asked me to talk a bit about process and we're about to get involved in a process here.

In my work in ethics, I've been struck by the fact that we who live in North America are something of moral imperialists. We're trying to share ethical ideas with people in other parts of the world, but we often think that we've processed these ideas for centuries, starting with the Greeks and through the Catholic Church and all the way up. And when we interact with people from other countries, often the implicit assumption is, "Look at what we have. We've organized all this. We'd like to exchange ideas, but aren't our ideas better? Don't you really want to use *our* ideas?" You are familiar with the fact that in a lot of African countries, you have things called IRBs – institutional review boards, which are a direct export from Washington, D.C., and may or may not fit with the moral tradition of your country. In that part of my work, I've always been impressed with how it *doesn't* work together. This is what has gotten me interested in this project, working with Frank, working with Tim: In this project, I see a real effort to avoid that kind of problem, where one country comes into a partnership, really wants to help, but more or less has the idea that, well, we've been doing this for quite a while, we have something to teach you, why don't you just learn from us...

Now the kind of partnership we're about to engage in can be really difficult. I watched when we started our charter project in Ghana – you have that charter in your folder – and saw a genuine effort from people from both parties to work together, people from Michigan, people from the various universities and ministries in Ghana. But I also saw that we have centuries of relationships with each other. And it was really difficult to overcome patterns that we've fallen into and how we interact with each other. So of course, we people from North America, from Michigan, wanted to help. But we also had some ideas about what you all need and how we should go about the project. From the other side – the people in Ghana – I saw that there was this idea that, "Wow, we really need your help and we appreciate

you being here. And even though we think you might have some ideas that won't work, it would not be in our interest to say something that would alienate you because we want the cooperation to work, because we need your help. And we've just more or less gotten used to the idea that you're here to help, and whatever you'd like us to do, we'll do for you." So, being a sociologist, I actually did things like counting, in our meeting in Ghana, how many times people from Michigan spoke, and how many times people from the Ghanaian ministries and universities spoke. And it wasn't a surprise that there were more people from North America talking and fewer people from Ghana talking.

And I think this is part of how such relationships build up. If you read that charter document, you'll see that what we're trying to do with the charter is to escape this situation. Because we learned from working in Ghana that these kinds of projects fail because we don't communicate well enough, and we're not willing to put on the table that we have a history and need to be honest about that. When we talk to each other we have to acknowledge that history, put that history on the table, and work with it, and work together. And I think this is a difficult process.

The charter – Frank didn't know I was going to say this – the charter has been a powerful document, and it's helped the cooperation and the University of Michigan. But the fact is that its idea was born in Michigan and brought to Ghana. And although we did everything in our power to say that we were trying to have an equal collaboration, it was still *we* from Michigan who were bringing the idea. And we're still constantly struggling with how can we be equal partners in this relationship. But I think that if you look at some of the products of our collaboration between Michigan and Ghana, there've been surprises. You've already seen some of the fruits of that collaboration. But regarding the charter document, we did some of the research Frank talked a little bit about, on how people regarded what the charter did, on what difference it made. And for me, as a social scientist, one of the most surprising things was not that it improved communication between Michigan and Ghana, but that we heard from people in *both* Michigan *and* Ghana that the document improved communication *within* each nation! Ghanaians were saying, "We never used to be able to talk to the Ministry of Health. But after the charter, we can just go in there and have a conversation!" And colleagues in Michigan were saying, "I knew somebody in engineering was interested, but I didn't know who they were and I'd never talked to them." But the charter opened up these new doors. So this is sort of the social/ethical background of what we're doing here, and I think this is a great process. I think we have to be aware of how we collaborate and don't collaborate.

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But I do sense the potential in this room today, and I do think 10 years from now we'll look back and say, "Remember Rome? And there was just a kernel of people there. But we had some good ideas and we found a way to work together, and now we have *more* than 1000 OB/GYNs working in Africa!" So I welcome you to this process. Frank's going to tell us exactly the nuts and bolts, and there will be some work here you have to do today. It's not all fun. And I look forward to us working together and I'll be watching.

Thank you.

Stating the Problem and Brainstorming Solutions Activity

Overview – Dr. Frank Anderson

Thank you very much, Ray. What I'd like for you to do is open your packet and find a document that looks like this. And does everyone have a pen? Everyone will need a pen. And also if you can find the charter, just to have it out. And first, let's look at the charter together. Does everyone have their charter? So when we made this document, we had the following heading – you see the Roman numeral I, recognize that? “Human Resources for Health” has all the statements related to things that we recognized in relation to human resources. And then Roman numeral II? Here we talked about opportunities that were available in the global community for human resources, for health development, and we had a lot of ideas about partnerships. Section IV is very interesting, it has all the different barriers that we identified, including barriers to communication, cultural and financial barriers, etc. – So under Roman numeral II, “Conscious of the Need to,” we articulated some of the things that we collectively felt that we needed to do, all good things. We also articulated principles that we wanted to use. And then, under Roman numeral III was “Institutional Commitments.” These are not set-in-stone types of commitments: they're commitments to the ways that we wanted to work together. We'll be using this document as a model.

And so, what we did over the last few weeks is come up with a worksheet that has a similar structure but different words. You can see it has the word “Country” under the title, so I'd like for you to write down the country that you're from, whether it's the US or any other country. And then, there's a section called “Recognize the Following,” with “Current health status” and “Maternal health status,” and I'd like for you to write statements about the current status of health in general and of maternal health in your country. Then “Reproductive health status,” “Neonatal mortality,” and “Health in your country.” You know, write statements about these. These would be the first section of our paper. They would set the stage for some of the problems. So, the first section would be about general health issues.

And on the next page, we're talking about the current obstetric capacity, and you can write about the academic OB/GYN programs and the residency training programs in your country. I think that the issue of certification is very important, and that we need to really understand its importance before the end of the day. I see that West Africa has

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certification, I see that East Africa has graduation, tuition, societies, so I think that we will be able to differentiate what's in place in the different countries. And then there is the question of retention. These are some areas that I came up with. If you have other ideas about obstetric capacity, please include them in your discussion.

The next page is about opportunities in sub-Saharan Africa. So, in your country, in your SSA country, what do you feel are the opportunities, what are the positives, what things are moving in the right direction for you? The next page is also about opportunities but for the US: what opportunities do you think there may be for people from the US? People from the US can also write what they feel are opportunities in SSA for them. In other words, what opportunities would a US partner have by working in a SSA country, from an African perspective or from an American perspective. And then, what would be a role for a US/SSA partnership? So I'd like to hear statements about what you think would be benefits for SSA and US partners.

And the next page is about barriers. I'd like to hear what the barriers to progress are in your country. They could be financial barriers, they could be institutional barriers, barriers from the university, barriers from the ministries, barriers from local issues... But whatever you might think are barriers to what we're talking about today, which is developing postgraduate OB/GYN training programs. I'd like to hear about it. And there's also a section on task shifting. I know there're varied opinions about task shifting, so if we could include a section on that? And then, the US institutions are also going to come with barriers, so we'd like to hear about that as well: issues with faculty release time, financial issues, and things like that. OK?

And given all that, the last two pages are what we're going to do next. So given the current circumstances, the following areas must be addressed at the university, ministry, National Health Service, and teaching hospital levels. So again, you can put in statements about that, so that we can start to fill in and consolidate all these documents. And then the last page, which got torn off of mine, is going to be about... what, what exactly does the last page say? Yeah. "Training 1000 obstetricians/gynecologists in the next 10 years will involve..." So we'll start with that statement, and hear from your statements what we need to do in the next 10 years to get this accomplished, training 1000 *new* OB/GYNs in SSA.

Question from the room: Based on the presentations we heard, and also on the state of other communities that we didn't hear from, do you know how many OB/GYNs are currently being trained in SSA? Because along these lines, I see 1000 *in addition* to what we're already: so do you know how many

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are being trained? Because, based on what we heard today, I wouldn't be surprised if there's somewhere between 500 and 1000 OB/GYNs... But we want *more*, 1000 more?

Dr. Frank Anderson: I think it's a general idea, 1000 obstetricians – we won't actually count them out. But I'm thinking, how are you going to do OB/GYN training? What are your ideas? Some of these countries have no program or a very minimal program, other countries have a program with a few residents but they want to beef it up... and so I think that for each particular situation, you know, just brainstorm and say what needs to be done. We need to have more space, we need to have technology, we need to have faculty input, we need to have ways to test residents.

I want this group to come up with whatever they can think of. Just write it all down. And we're going to have a short discussion about it before lunch. And after lunch, we're going to get together in small groups, and I'm going to collect all the sheets and then hand them back out to you as you sit in small groups. And then we're going to look at each other's sheets and process them, and each small group will come up with a new, single sheet. After which, we'll get presentations from those groups. At the end of the week, we'll come up with a consolidated document that will convey the main thrust of the ideas we will have generated from this meeting.

So does everyone agree that this would be a good process for today? Is everyone on board with me on this? Do people have questions, or would you like to talk a little bit more about this?

Question from the room: Talking numbers is a mistake...I think you sort of said that. There might be 750...current capacity, because not all the countries in SSA are reflected here.... You're presenting a vision with numbers as important as the increase in capacity...

Dr. Frank Anderson: Sure, exactly, good point. Right. But I would say that monitoring an evaluation system is extremely important as we move forward, so we can look at the impact. Because getting indicators and ways to monitor the impact would be important. Yes, Kwabena?

Dr. Kwabena Danso: At the onset the numbers are small, right? Just as when you are producing the first product. But with the years, the numbers are rapidly increasing. It's not a uniform gradient.

Dr. Frank Anderson: OK, so I think we'll take some time now to fill the forms out, if you could start working on your worksheets? Based on what

you've heard today, based on the situation in your country, whether it be in Africa or the US, start putting down all the things that you feel would be useful.

Follow-Up Discussion

Male speaker: Pretty good. But as we start compiling the various submissions by individuals, we must be open to the possibilities of expanding or even imagine some areas if the need arises. I suppose we are going to look at each item and see what people have written down under each section. I suppose that's how we are going to do it?

Dr. Frank Anderson: Before I explain our next steps, I want to check with everyone and see how they feel about the document. Does it cover everything? Any comments? Could you make a comment about whether the document contains everything that you need to say? Just any comment? I'm just asking, in terms of this sheet that we just filled out, are there any aspects of the things that we talked about that were not included in this sheet? Yes, Felicia.

Dr. Felicia Lester: One area that came to mind was the funding sources. Who's funding programs? And in larger health systems, who decides, for example, how money gets moved to HIV and away from other things? I think there's plenty of room to talk about funding here, as a specific category.

Dr. Frank Anderson: So that's a good question: should the document include some information about future funding sources? Actually, this document is meant to be given to funders, you know, and to people who are interested in creating requests for applications or for projects that would include this type of activity. So yes, it should be more generic than specific. But I think that as one of the ways forward, funding is a huge issue.

Male speaker: This is a question for clarification: On the second page, regarding the current obstetric capacities, there is a first statement: Academic OB/GYN programs. What is the difference between an academic OB/GYN program and residency training? We don't have separate OB/GYN training for the undergraduates, so does it mean this is a program for GPs? Or...

Dr. Frank Anderson: It means for the medical students.

Male speaker: For the medical students... OK. The other one is...

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Dr. Frank Anderson: That could also be interpreted any way that you want... general academic programs or otherwise...

Male speaker: OK. On the fourth page, about task shifting, should we write it as a barrier or as what it is? It also can be taken as an opportunity...

Dr. Frank Anderson: Right. Unfortunately, it's in-between the two barriers sections, which exposes my bias a little bit, I think. Yes, anything about task shifting. It doesn't have to be a barrier. Sorry. Anyone else? So lunch is going to be ready in a few minutes. We'll be going across the hall to get our lunch. But before we do that, I'd like to talk about what we'll do after lunch. We'll all get together as a group again after lunch, but what I'd like to do now is collect everyone's sheets if you're finished working on them. And when we come back, we'll break into groups of five or six.

Now my thought is, I will give you sheets from other people, not give you back your own sheets. And I would like for us to be in groups where people of the same country are not sitting together, so that we have people from different countries in each group. You will get some of the sheets, maybe one sheet, maybe two or three. And each group will read through the sheets they receive, and then they're going to discuss each section and find themes common to all of their sheets for each section. And then we're going to give you a new sheet to write these down. So at the end of our small-group work, instead of having, you know, 40 of these sheets, we'll have 5 of these sheets, and each one will be the collective information from all the sheets in that group. Does that make sense? Then, each group will present its sheets.

Finally, over the next couple of days, Marsha, Gaurang, and I will put it all together and get it back to you for final approval. Ray, do you have any final comments?

Dr. Ray de Vries: No, not really. My only comment would be remembering what I said earlier about being completely open about issues that you have, and being willing to express those issues in both directions, from an SSA point of view and from a US point of view. And you know, keeping this idea of mutual respect and mutual attentiveness to what the other person brings to the table. But I think we already started that process, so it's simply a reminder.

Creating the Call to Action and Way Forward

Presentation of the brainstorming session

Dr. Anderson invited the 23 African OB/GYNs who had filled out the sheets to arrange themselves around five tables in a specific way: two participants from the same country were not to sit at the same table and at least one woman was to sit at each table. He then collected and redistributed the sheets to minimize the chances that participants would cite their own comments, and asked that a recorder be named for each table. The recorder was to listen to all the comments that came to his/her table, group them by category, and present them later on orally. Dr. Ray de Vries, the ethicist, asked the recorders not to simply act as secretaries, but to include the thoughts and remarks expressed at their tables. Finally, Dr. Anderson asked that the reports not be country specific, but pertain to SSA in general or comparatively, as in West versus East Africa.

The categories were (1) the opportunities already available for OB/GYN professionals in SSA, as well as the opportunities likely to arise for them if new partnerships were to be formed between OB/GYN departments from SSA and the US; (2) the structural and other barriers that might hinder these opportunities; (3) the question of task shifting; (4) the improvements needed at the university, Ministry of Health, and teaching hospital levels; and (5) what should happen for the end goal of the meeting to be met, i.e., the presence, 10 to 20 years from now, of 1000 additional SSA-trained OB/GYNs.

When the group work was done, Dr. Anderson asked the recorders, one at a time, to report on the issues discussed at their tables according to category.

Small-Group Reports

Dr. Frank Anderson: I think we should start with a table to initiate this process. The recorder could give us the feedback, the consolidated feedback from the first section. And after the recorders from the other tables have spoken about the comments that belong to the first section, new things will come up. OK? We can start with one table; for the next section we can start with another table, and we will go that way through it all. So we'll get that whole collection of ideas from the whole group. OK? Does anybody have

any questions or any issues they'd like to share? So, let's start looking at opportunities from sub-Saharan Africa and let's start with this table. So could you present?

Opportunities

Table 1 rep: (male speaker) OK thank you. Our group has come up with the following points: an opportunity in sub-Sahara Africa is that there already are established training programs and centers, and there is already collaboration between countries in some sub-regions. For example, the West African College of Surgeons is doing accreditation, examination, and certification for countries in the sub-region, and this is an opportunity to work on. And some countries have their own regulatory bodies in place. There is also the opportunity for trainers from abroad to come to SSA and learn, in low-resource settings, about disease patterns unknown in their countries. Also, there is already an infrastructure in SSA that can be upgraded and used, and a pipeline of students who can be trained as OB/GYNs because there are now more medical schools, and therefore more medical doctors, and these doctors can be trained as OB/GYNs.

Next table: (male speaker) We have the following points under this topic. The first is that governments are generally supportive of setting up new postgraduate training institutions. Ghana is an example of that. Then, collaborations among SSA countries are already going on. And there's generally international good will toward these programs in Africa. And then, there are plenty of educational opportunities for US OB/GYNs to learn about diseases in this part of the world. It's also a great opportunity for them to reach out to deprived communities in SSA.

Next table: (male speaker) Yes, there's a high number of patients who could become prospective clinical cases, or who would provide opportunity for open surgery, etc. Besides, successful existing SSA training programs can be used as models for new programs. And there are many research opportunities relevant to better training and practice, and opportunities for visiting faculty members...

Next table: (male speaker) For the first one, many countries have a huge patient load and good political stability, and they need to start a training program. These countries have the opportunity to explore and take advantage of the leadership and training experience that other African countries can provide. Besides, having so many patients creates opportunities to pursue research. And then, the creation of a unified African College of Obstetricians and Gynecologists will bring together

groups from the different SSA countries.

Next table: (female speaker) We had many similar points, but the main point is that there are many opportunities for partnerships. It is easy to come and practice in some SSA countries with qualifications from abroad, and this facilitates collaboration.

Frank: You want to start now with the next section, so why don't you combine opportunities and the role of partnerships?

Same table: OK. Opportunities from the US would be financial support, logistic experience, and other sorts of support. Also, US experience in medical education, technology transfer, evidence-based medicine, and best practices. Our US partners would help us establish OB/GYN colleges or societies, help us develop curricula and assessment methods for education and training, and facilitate the mobilization of resources and capacity.

Next table: (male speaker) Regarding opportunities from the US and other countries, one is that SSA countries could receive financial support, help with running programs, and provide training about how to best use the Internet, e-learning, and high-tech processes. Visiting US professors could teach special skills and SSA trainees could go and observe modern practices abroad. And we could also receive research funding and be provided with online medical education resources, such as library resources. Regarding the roles of partnerships, one would be to promote mutual respect, transparency, accountability, and the desire to help everyone adjust.

Next table: (male speaker) We also have the following points: For us, there are opportunities for technology and skill transfer, especially when partners from the US come to work and operate with our partners here. When we go there, there are so many restrictions to what we can do – I mean, to practice or to see patients – that we emphasize they coming to us rather than we going to them. And then funding is available, especially from governments that look favorably on committing themselves to help African countries. With their help, a collaborative US-SSA research effort becomes possible. With technology transfer and relevant training, joint case-management with colleagues in internal medicine (as an example) also becomes possible. So these are points we have for the roles of US-SSA partnerships. Curriculum, research development, they are all about collaborating. Help with staffing would also be useful.

Next table: (male speaker) For opportunities from US partnerships, we have visiting faculty as well as help with curriculum development, testing of

methodologies, transfer of technology and skills, establishment of sub-specialization programs, and financial resources.

Next table: (male speaker) The role of partnerships between the US and SSA countries would be to provide the countries with funding, training, better research capacity, and help with publishing and maintaining standards. With raising standards, rather, when human rights and all those other major things are concerned. Thank you.

Next table: (male speaker) Clinical, educational, and research faculty from the US can help train people in SSA. Partnerships with the US can also bring in research funding, help with curricula and infrastructure, and help SSA colleagues to become involved in research. Other roles for US-SSA partnerships would be funding opportunities, postgraduate training, fellowship development, and development of SSA faculty, so they become able to train residents themselves. There are many roles for partnerships at the university and training hospital levels, and also at the association/membership/fellowship levels.

General barriers to progress and the question of task shifting

Same table: The barriers we identified in SSA include a lack of political will and governmental support in some countries, as well as a lack of financial investment. Then, the low pay for doctors, especially specialists, and the high, high rate of attrition – we think these two factors are interrelated. And in some African countries, postgraduate training is very costly and the residents' services to patients and hospitals can be unpaid. And then in some countries, there are gap years between medical school and postgraduate training, when doctors must work as general practitioners for X number of years before they can start postgraduate training. This influences how many will go for training, and how many of those who eventually choose to train will be able to succeed. Another barrier is the very low number of OB/GYNs who provide training. And those who do must divide their time between clinical work, training, and research: one area or the other will get neglected. In task shifting, we felt that in order to staff district hospitals, it could be necessary to provide good settings for doctors willing not only to work in these hospitals, but also to train nurses, for example, to do some of the procedures that have been traditionally reserved for doctors. Part of the problems we had with that, though, is that we can teach technical skills to nurses, but it takes a much longer time for them to acquire the decision-making processes that are also vital in our subspecialty. So we felt that it was better to invest in accredited programs that would train quality staff than to invest in task shifting.

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For barriers to our progress in the US, there is limited opportunity for foreign-trained doctors to acquire clinical experience the US. And we mentioned the fact that there's a rigorous certification process for foreigners in the US. So when SSA doctors want to train in one of the subspecialties, the best they can get in the US is permission to *observe*. They cannot *do*. Finally, there's a need to coordinate US and SSA universities, to prevent too many US universities from concentrating their efforts in some places, leaving many other places neglected. So the processes need to be properly coordinated, with the opportunities spread around evenly. There is a need for SSA regions to share among themselves.

Next table: (female speaker) Again, we had similar points. Regarding the barriers to progress in Africa, we had issues about faculty retention, as OB/GYNs often choose to practice outside their countries or to practice for NGOs within their countries. And because of the high clinical work burden, those who choose to teach lack the time to do their academic work. The clinical burden is also excessive for the specialists at the district hospitals, who have little time to train because of the lack of OB/GYNs in the communities. We also talked about the very poor overall state of the infrastructure, the structure of the health system, and the fees paid by medical trainees. They are not compensated for their services, which affects clinical care and education.

As far as task shifting is concerned, different countries have different approaches and we had varying opinions about it. Shifting some procedures to clinical officers was deemed necessary as a stop-gap measure, to staff rural areas where there are no physicians. It was felt to be feasible if doctors could be engaged in the process as direct supervisors, with restrictions on the practice patterns and work locations of the staff they train, so the trained staff would not go and practice in the private sphere. And there was also a reframing of thinking about task shifting, possibly as a mode of professional development for midlevel providers, to allow for a parallel training system.

As far as barriers to our progress in the US, money was again at the top of our list. Sustainability goes along with money. It is very difficult for SSA faculty to spend time at teaching hospitals in the US. Even though education is very US-specific in the US, relying on the technologies that we have here to treat the disease states that we see can be a challenge.

Next table: (male speaker) We have the same points as other groups for most of the barriers to progress in SSA, and the most important ones are low incentives and poor working environments, environments that lack

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tools and equipment, lack supporting staff and, in some countries, lack training programs. And lack research opportunities and lack of government support – and there is no political will to make our governments support us.

Concerning task shifting we found that, especially in East and Central Africa, some countries are working at developing task shifting, but we didn't discuss it much because we felt that task shifting issues would not affect the scaling up of OB/GYN training in these countries.

Concerning barriers to progress in the US, one of the problems that we have seen are policy changes over time, especially when changes in SSA governments result in changes in the partners' commitments. And because of the global recession, the funding problem has grown worse.

Next table: (male speaker) The number one barrier to progress noted in SSA is a general lack of resources, which undermines the infrastructure. In some places, not only the teaching facilities and hospital theaters may be inadequate, but also the transportation and communication systems. The number two barrier is the neglect of the human resources. There is a lack of political commitment, which is reflected in the allocation of funds. Governments are supposed to commit fifteen percent of the education budget to medical education, and expect these funds to cover training as well. Number three is that there is too much competition for the scarce resources. The participants have indicated that HIV/TB/malaria have absorbed too great a portion of the resources, and that it is affecting training. Number four was an unstable political and economic environment in some countries. And that may be an issue, although generally the instability is less than it was.

Task shifting? It was observed that in countries where staff is scarce, task shifting may be a good idea, but that it would require training, evaluation, and monitoring. However, in other countries, more doctors could be recruited and trained as specialists, and ways could be found to keep them in the country.

About barriers to progress due the US, number one is the issue of funding. Most of the US funding has been committed to HIV. Number two is that the US may have an agenda and may push for family planning. Number three was politics and the influence of politics in fund allocation. For example, one of the points raised was about abortion funding. And number four was a fear of litigation in the US and the US imposing stricter travel restrictions. Number five was that too many project-based funding

requirements may hinder the larger picture. Number six was the lack of information flowing between institutions – information and planning and coordination between institutions. And number seven was what has been observed, that when funding ends for the projects, SSA institutions are left holding all the pieces. So it was considered very important that these projects be taken on by the government and integrated in the medical education system, so that when the outside funding ends they don't just collapse. Thank you.

Next table: (male speaker) Thank you. Yeah, for the barriers to progress in SSA, our number one was the lack of political will: if the governments would back things, things would get done. Number two, the lack of human resources. Then, a lack of integrated services. Infrastructure is on our list. And also a lack of cooperation between ministries, and here we used Ghana as an example. Here we had the MOE training doctors and the MOH coming to hire them, and yet the two ministries were not talking until not so long ago. And also brain drain is on our list. And also a lack of leadership. And the last thing on our list was a lack of priority setting.

When we came to task shifting, we really had a very good discussion because Cameroon was represented in our group, and Uganda was represented, and Ghana was represented, and Malawi was represented, and me, I'm both from the US and Ghana. We heard that it depends on where you are if you will do task shifting. So the conclusion was individually explored, and consensus is yet to be built when it comes to task shifting. And finally, the competency of the level of who is going to do what should be paramount.

On the barriers to progress from the US, the number one on our list was legal issues. And also competing obligations, the problem of protecting time, as somebody mentioned. And the lack of core competency was mentioned. And finally, remuneration: the person going to the US, is he still going to be paid by his own institution? These were the things that we covered.

Barriers at the university, ministry of health, and teaching hospital levels

Same table: (male speaker) At the university level, we said our faculty should be well paid. There is a rumor that some faculty members do not provide the best care because their salaries are too low, and that they do other things to make up for it. And we understand it used to be like that in the US. Also, we need to increase capacity: I mean staff, I mean human

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resources. Academic OB/GYNs need to devote enormous time to their institutions and need supporting staff. Anesthetists need to be trained. About the MOH, number one on our list was policy formulation. And this concerns everything. We used Ghana as an example, where the MOH came up with a policy to eradicate malaria and the health service had to implement the policy. So we need policy formation, which has to do with ethics. About the teaching hospital, a better working environment is needed, with research possibility at academic teaching hospitals (for now, we just have two).

Next table: (male speaker) So at the university level, we said faculty remuneration and faculty motivation need to improve, and motivation would be raised by capacity building, research mentorship, and funding opportunities. And then training and subspecialty programs need to be expanded, as well as the infrastructure for teaching and service delivery. And African universities must collaborate. For the MOH, it must increase the number of health care personnel and commit funding dollars, dollars, dollars for infrastructure and training. And then provide attractive packages for specialists to move from urban areas to rural districts, and the packages may include housing and increased pay. At the teaching hospital level, synergy between MOH and MOE is needed, and a clear understanding of who is in charge of what, for example, plus funding, etc. Thank you.

Next table: (female speaker) We had similar issues at the university level, but we also talked about eliminating the differences in salaries and promotion structures between the university, the MOH, and the NGO hospitals. Also, we tried to figure out how the financial administration of these collaborations could work, especially with grant funding or other outside funding sources. At the MOH level, we discussed the financial support some countries provide for postgraduate training and also the provision of resources, including medications, medical technologies, and infrastructure. We also discussed malpractice and standards of coverage for malpractice lawsuits. At the teaching hospital level, we discussed the need to improve the infrastructure and technology for medical education, patient care, provision of medications, and data management. We also talked about balancing increasing numbers of providers with appropriate support staff such as nurses and anesthetists, including at the trainee level. And we discussed the possibility of allowing some private practice at the teaching hospital, so that physicians may find a better balance.

Next table: (male speaker) At the university level, human resources must improve in the postgraduate training programs. Universities should be committed to implement postgraduate training in OB/GYN and work on

developing human resources. And they should improve their relationship with both MOH and MOE, as it is important to tailor programs to meet national needs. And universities must also recruit staff that are capable of providing service. The MOH and the National Health Service must commit resources for health training programs, and the MOH should challenge the universities on priorities concerning national health issues. And there must be support for the graduate in terms of continuing education, appropriate salary, and incentives to deploy in the districts. And teaching hospitals should be prepared and committed to train OB/GYN specialists. We noted that initially, most hospitals are not at all prepared to become teaching hospitals. When they must become teaching hospitals, they need to adjust themselves, and provide training resources and recruit staff capable of providing training.

Next table: (female speaker) At the university level, our number one was that the lecturers must be appropriately compensated for their time. It was felt that in some countries, within the university, lecturers who provide clinical teaching at the bedside are compensated differently from those who are spending most of their time doing research. We felt that they should be compensated equally. Our number two was that SSA universities must cooperate more, and share research ideas and human resources. We also pointed out the need to adequately support the faculty in terms of offices and Internet and research support. We said that the governments, through their MOHs, need to own the projects funded by outside sources if these projects are to be sustained in the long term. And secondly, we said that there was a need for incentives that encourage rural placements, such as higher salaries, or tax-free imported cars, or loans for housing. There is also a need to increase facilities for training. And there should be policies to retain providers in the country by providing them with incentives. At the teaching hospital level, apart from the issues I mentioned when discussing the university level, the hospital should make resources and supplies available for teaching and patient care. And staff members from the university and the teaching hospitals must be equally compensated. In some countries, government staff are better compensated than university staff for equal qualifications, but it was felt that they should be equally compensated. Thank you.

Training of a thousand obstetrician/gynecologists in the next 10 to 20 years.

Same table: We said yes, we can, and we should actually aim for going beyond these numbers. What we need to do is make sure that every SSA country is involved in the training process. And we also need to involve

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regional medical boards in SSA to help standardize certification, so that we can learn best practices and make SSA-specific health curricula. We also said that we already have our own associations, the West African College of Surgeons and the Ghana College of Physicians and Surgeons, but the College is not actually functioning at the moment. And strengthening the functioning of this college would actually help in standardizing certification in the region. There is also a need for medical training programs in countries and regions that rely on RCOG, and a need to recruit from rural areas to increase the likelihood that new specialists will settle in rural places. We also have to look within SSA for our solutions. We've heard that we are rich in SSA, and we feel welcome in other SSA countries like nowhere else. Thank you.

Dr. Frank Anderson: Do you have anything else for the next steps?

Next table: (male speaker) Yes, on the training for 1000 obstetrician/gynecologists within 10, 20 years, we also said, "Yes!" this can be done. But we agreed that the first and foremost thing is funding, so the number one thing is to see the money on the table or hear that the check is in the mail. After that we need to identify the accreditation and certification body or bodies that will organize the program. The number two priority is faculty development: Who will do the teaching? I mean, does the faculty need some special development course before the program can start? And then there is curriculum development and OB/GYN training, then there is research to implement, recruitment to conduct, etc. And finally, we thought that the countries should own the programs. This came about because of what Michigan did for Ghana after two years of partnership. Ghana went "This is good," and Michigan let Ghana take over the project, which was a very nice thing. Yeah. And an additional note: after we have money on the table, then follow new faculty members, training institutions, trainees, and a certification authority. Thank you.

Next table: (male speaker) The first point we have here is also money, so we won't talk more about that. Then we also said it will involve collaborations on the part of the university. And collaborations should be established first be within the country, as was mentioned, with the MOH and other groups, other professional bodies and institutions. And then collaborations should be established between universities from African countries. For those of us in the Gambia, we can work closer with the Ghanaians and the Liberians and even our neighbors in Senegal, for example. Then also collaborations with Western countries like the US, for instance. And the new collaborations will involve investment in faculty. We think that training faculty is very important if we're going to accomplish the goal of training

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1000 OB/GYNs within 10, 20 years. And then the collaborations will lead to creating residency training programs with common standards throughout Africa. Also to consider, what are the opportunities at the end of residency training? When residents are trained, they probably will move away if there are no opportunities for them. And we also wondered whether the training should be paid for or free. I think we think it should be free.

Next table: (female speaker) Again, our points started with financial resources. We also mentioned having more trainees at each level – university, medical school, and postgraduate. We mentioned that the financial commitments from governments and other partners must be clearly stated and in writing. And that the coordination of leadership at the government, the university, and the hospital levels is critical, as well as the coordination of mentorships. About faculty, a specific point was to consider increasing the retirement age, which would allow for faculty to continue teaching past... well into their prime, shall we say. And then, as a few specific next steps, we wanted to engage with government officials directly, but also find other partners besides the government as a way to anticipate for times of government instability. We wanted to try and take advantage of small-scale connections and collaborations, maybe with individual physicians or NGO programs, and work on scaling up these small-scale connections all the way up to department levels. And having other reunions LIKE THIS ONE, to bring people together and facilitate collaborations.

Next table: (male speaker) First of all, our group felt that training 1000 new OB/GYNs in 10 years -- the number was too low, and that we must raise our target. Second, we felt that governments should commit themselves to train and retain OB/GYN specialists. And we felt that decentralizing postgraduate training by opening new training programs at new universities is important. And as has been mentioned, collaboration between universities, the MOH, and the MOE must be strengthened. And we feel that there is a need to for linkages or collaborations between SSA countries, so that training programs can be improved.

Dr. Frank Anderson: OK. Wow. That's a lot of information and a lot of collective wisdom. So if we can work on consolidating this – it may be central to our final document... But I think the next question we have before our closing comments is what about some concrete next steps? You know, we've come together today, we've listed to a tremendous number of issues, we've talked about what we need to do. So what is the "next step"? I'm hearing, "a consortium of SAA institutions." How do we do that? Kwabena, do you have a suggestion?

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Dr. Kwabena Danso: How do we do that? Even before this meeting, there were some links, linkages here and there. So the next step that we need to take is to try to identify all such linkages and concretize them or bring them together, so that we know that we are all working towards this common agenda of producing 1000 new obstetricians – which some of us feel a little bit on the low side, except if we qualify it: 1000 new, additional obstetricians and gynecologists, you know, above what would have been produced at the current level, that's challenging enough! I thought we must also identify all the donors, all the NGOs that are supportive of maternal health, because this agenda is being driven by the need to improve maternal health in SSA. So all the agencies, donors, NGOs that are working towards improving maternal health should be brought on board so that we can achieve our goal. Because if we look at the events that are happening so far, a lot of interventions have taken place, and we all seem to agree that those interventions have not been enough. So we need to bring in, or bring on board, other things; and since human beings are the operating systems of any interventions that we do, we need to have people who are really qualified. So we have to bring in all the agencies, all the groups that are supportive of improving maternal health. I think that would be the first important next step. And then, of course, the training institutions in the southern region – sub-Saharan Africa – also need to be brought on board.

Certain organizations besides ACOG and RCOG also have global initiatives, and some American universities also have global initiatives. So I think they could be stakeholders that we need to bring on board. And then, of course, our governments. We must get a bridge to our governments because if the political world is not there, no matter what we do, we're not going to make any headway. So I will say that all the agencies working for maternal health, all the training institutions that have global health initiatives, and our own governments need to be brought on board. I think these are steps that we should take.

Male speaker: (faintly) I will just say what I want to say. You know, training institutions are not homogeneous in SSA. Some are high up, some are in the middle, and some are very low, and there are areas where there are none. There are none in southern Sudan. What I'm suggesting is that if we want to achieve this goal of 1000 new gynecologists in 10 years, we should encourage those institutions that have greater capacity to allocate certain residency positions to the more disadvantaged areas. For example, a few doctors from Sudan could go to institutions in Ghana. Not that Ghana would pay, most governments would pay for the training of their own specialists. In Nairobi, we have five positions in our program for residents

from other African countries. They get rigorous admission vetting, just like any other person, and they pay, of course. But they can be trained there. So I would encourage, I would like us to encourage other SSA institutions to rely more on cooperation among themselves and to look less outside for solutions. Thank you.

Frank: OK. So let's, let's keep talking concrete next steps in the next year? Next six months?

Male speaker: Yeah, yes in light of the previous speaker, we're all at different levels. So I think that we should identify countries that are well endowed and pair them off with countries such as Liberia and Sudan, which are in acute need of specialists. I think it's about time we tackle ourselves the question of training OB/GYNs in SSA. If we do that, then all things can come on board when we meet as a regional/continental association of OB/GYN specialists, and raise issues, and see which countries are well endowed and which are less well endowed, which countries can do more training for other countries and which countries cannot... And retired senior colleagues from SSA can help set up training institutions in the countries that I just commented on. You said you have a reason for a continental body of OB/GYN specialists: I think it will do the continent a lot of good when it comes to meet the training needs of the continent. And during the present meeting, maybe at the end of the whole discussion, we'll just set up – I don't know where the idea actually came from, whether it came from the US or from Africa or from Africa and the US – but maybe we'll just set up an African committee to look how we can implement some of the things that we have discussed here. As a well-functioning agency, it would report back and not leave everything hanging in a vacuum. It would not be let's do this, let's do that, and nobody is responsible. So, I propose that a committee from African countries be set up, which will then meet and decide on which immediate steps can be taken to address some of these human resource challenges in our countries.

Male speaker (American): Yeah, just real quick. I think it would be helpful, as representing one of the universities in the US, to have a needs assessment or a listing of what is needed. This is a very heterogeneous group. I mean, Ghana sounds like they could be very much assisting other places at this point. And there are several other countries at the other end of the spectrum, which are just getting started. So to know what each country needs would be very helpful. And then, I think American and European universities could do the same as Ghana universities. I mean, the University of Michigan has an extensive array of resources that they could provide. At the University of New Mexico, we're more limited but we still

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could have a lot to offer. And that would begin the process of, OK, what's needed? and potentially pairing people or institutions.

Male speaker: For us, you know, the main portal of entry is to convince our governments. The governments should own these types of initiatives. They should understand them clearly. Without convincing the governments, there is nowhere the initiatives can go. I'm not saying that's difficult: We understand the importance, the need is there, so we come up with a program and try to explain what the intention of this program is. Once the government is on board, then everything will be understood and can be implemented. The second point that is important, I think, is the need for auxiliary staff, such as anesthetists, midwives, and the like. Without the support of anesthetists and midwives, obstetricians cannot be trained, nothing that can be done. So the training of obstetricians should go hand-in-hand with the training of anesthetists and other supporting staff. Alone, an obstetrician cannot do anything.

Male speaker: (female) I think I concur with the previous speaker. I think there should be a needs assessment for each country. So I think the way forward would be for us to go back to our countries, do the needs assessment, and then convene at another place where we can pave the way forward. From today's meeting, I don't think it would be possible for us to actually come up with a concrete way forward.

Male speaker: OK. Thank you. I am just thinking that when we say 1000 in the next 10 years, you know, we could only start training next year. That would mean our first products would come out after three or four years -- our training program lasts three years. So how do we phase it? If we need to have 1000 more OB/GYNs in 10 years, do we train 100 per year, or would fewer be trained in the first few years and then, as we adjust, we would be able to train more? But at my current university, for example, we have very many applicants. And if we say we admit 20, 10 to 15 percent are not likely to come because of a lack of sponsorship. They don't have the funds -- governments pay for very few -- but there's room for private sponsorship. So the first aspect of training 1000 OB/GYNs in the next 10 years will be to see that as many admitted candidates as possible are sponsored. Then, curricula can differ widely in duration. In developing new programs, we need to consider which existing programs work best and which ones would be accredited sooner, and adapt new ideas to tried and true ways of doing things. But my main point, here, is sponsorship! Thank you.

Male speaker: Well thank you very much. I would like to concur. The document we are producing today will maybe help us meet with our various governments and start preparing for what we are about to do. Secondly, it

seems we have been talking here a lot about curriculum development, and it would be good to harmonize the programs – they last three, four, or even five years! Let's have a system where if one country develops a curriculum, it should be harmonized in such a way that all the African countries will accept it: I can go to Uganda and work, you can come to my country and work. Somebody said here that somebody came from Russia with a two-year certificate that was worthless as a credential, and that he was prevented from practicing. Those power problems would not arise if credentials were harmonized in SSA, hence the importance of having standards. Thank you.

Male speaker: Well thank you. For me, I would like to concur with my brother from Uganda. We should first see how best we can set up a working group that would pioneer the creation of a national association. Two, at the end of the needs assessment that has been proposed, I'm suggesting that we define some priority areas. Experience shows that at the end of the day, we see folks going into countries where the needs are vast compared with other countries. I did my CES in Morocco, and in my department we had more than 15 obstetricians -- in one department! Here, we're talking about one obstetrician for an entire country! So if we are looking for project allocation, we should be looking at areas where the needs are greater.

And my last thing is an appeal to a country like Kenya to be a little bit more relaxed about the number of students or residents it will be accepting from other countries, because we suffered this year. We had prepared some residents to go to your country, we had funding from our government, but Kenya eventually told us that it was not possible this year. And I've just found out that only five positions were actually allotted to foreign residents. Liberia was prepared to sponsor more than two or three to train in Kenya, and those doctors are still on a waiting list. Who knows when they will be accepted? So if you are taking five or ten foreign residents, you should also look at priority areas. Thank you very much.

Male speaker: You know, if we are going to take students from countries, we can't just say, as a university, that we are going to take 20 from one country. I don't know where you are coming from... Nigeria? But Nigeria... – Liberia! OK! We have 1 from Liberia. Yeah, I know we have 1 so don't think we didn't take *anybody* from Liberia.

From the audience: It was last year....

Same male speaker: But what I'm trying to say is that the government has a hand on this. It becomes a diplomatic problem, to say you can take so many

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from the outside. But at least it's a beginning. Yeah, it's a beginning. At least we are looking after our neighbors. Yeah, there are other countries that don't bother about neighbors, but we are looking at our neighbors, yeah? Now, my colleague from Uganda, I'm just wondering whether you are absolutely... the way I understand this thing [producing 100 OB/GYNs in 10 years], I don't know whether it's a program we're to start at a given time. If it's not, then I believe that by next year, some will have qualified and will be included in the Kenya training program. But 1000? It's not after three years. (Someone speaks from across the room) Well, well, but they are trained, they are trained. It depends how we look at it. I think it's not good to be too rigid. I, personally, I don't like programs which are very rigid. I like programs that are rather loose, because when they're too rigid, they have a very dramatic end, sometimes.

Female speaker: I was just going to bring up an example of a program to support trainees for whom the cost would be too much. You said 20 could be admitted, but maybe 15- percent won't go because they can't afford it. Two things: one, maybe those positions could be given to another country where the government is already sponsoring the trainee. Maybe there could be a system like that; and two, there's a group called Global Partners in Anesthesia and Surgery, and they're in a couple of different places but primarily at Mulago, in Uganda. And their first initiatives were to try to train more anesthesiologists. I think they were graduating one or two, maybe, in five years, and they realized it did little to ameliorate the critical shortage. So they resorted to philanthropy, US philanthropy, to sponsor postgraduates during their training years. And to me, if a lack of funding is recognized by the present group as a barrier, well, funding can be found: it's not a huge amount of money to sponsor a trainee.

Frank: OK. So any other... can anyone think of some other concrete steps? What we should do next... I know one thing that we can do with this document. I know that Bert Peterson, who was here before, is very interested in assembling the consortium of American obstetrics and gynecology programs that will focus on global health. And I think a needs assessment is also a very good idea, to see what different places need. Clearly, there are some places that can train a lot of obstetricians, and there are other places that can train none, you know that. If they develop an academic office of obstetrics and gynecology, those places – Gambia, Liberia, other places that haven't trained any obstetricians – can start training their people, can start doing research, can start linking with the ministry, and can share research that will affect policies in their country.

So I still think that there's an idea of capacity building in particular

countries, whether the implementation will be facilitated by other SSA countries or outside institutions. I'd still like to figure out how we may make that happen as well. I think there's a tremendous amount of opportunity and a tremendous amount of funding potential for this, from the US and probably from other higher income countries. But we have to present it in the right way, because this is a core group of SSA countries – we're missing people from Nigeria, and Sudan, and Zimbabwe, and some of the other countries that have a lower maternal mortality, such as South Africa (well, actually, South Africa's a little higher, so Namibia).

We're going to work on this document for the next couple of days and consolidate all of the yellow sheets that we've collected, and also look at all the white sheets and come up with another document, hopefully by Thursday? You know, so we can have a look at all this. There's a core group of us that will be looking at and finalize the document, and then we're going to e-mail it to everyone. So that you can have a look at it and have some time to make comments about it and then use it however you feel like using it. And I guess we'd have to come to a consensus about that document.

Obviously, we'll be including all of the comments that people have made, but I think that if there's any outstanding issues that people can't live with, we also need to know about that. But let's set a deadline when we would have a final agreement on this document.

Male speaker: Something that I want to add is that this document, or this strategy that we are advancing, I think we have to push it along the path of advancing maternal health. If we push it along *training per se*, it will not fly. But if we push it along the path of maternal health, a lot of people will buy into it. I think it is something that we have to take into consideration.

Frank: That's right. That's right. Maternal morbidity and mortality, maternal and neonatal morbidity and mortality, I think, it what we're talking about... Ray, do you have any comments for us?

Dr. Ray de Vries: I don't really want to have the last word. But I would just say that from my point of view, this went well, especially the ending where Liberia was talking to Kenya. I mean these are the kind of things that can happen at a meeting like this. And it's a rare opportunity to bring all you people in one room and to think together about the future. No, I'm serious about that. I mean, there might have been a little tension, but this is the kind of conversation that has to occur and I'm really delighted to see that occur. And I do think this is an important first step. We can talk about schedule later on but I'm feeling tired. I can't imagine you all are not feeling

tired. But it was an energy well spent today, I think. So thank you all for your attendance.

Frank: So we'll be establishing a time when this document is finished. We should be able to have it done in two months. So I would like to open the floor up to any final comments that people would have. Some closing words and things like that? Who would like to say some closing words? Dr. Obed?

Dr. Samuel Obed: Well, I think we've had a very fruitful day. And as you rightly put it, this is not going to be the end. We hope that we can get the document and look at it and then fine-tune it, and probably by a year's time we should have started putting into place measures to produce 1000 new OB/GYNs. That's all that I want to say. Thank you.

Male speaker: What I want to say as a closing remark is what I put up when I was giving my presentation, you know, the Ghana project that we use as an example. The way it started was just dialoguing and discussing, throwing in ideas here and there. So certainly we are also on the right path. And what has been done before can be done again and better. So I think we must keep the flame burning and hold on to the thought that yes, 1000 or probably more than 1000 OB/GYNs in 10 years, yes, we can do it. And nobody will do it for us. Our collaborators will help us do it, but we have to set the direction. So we can do it, and we will do it.

Male speaker: I was not supposed to be here. I just heard about this meeting and I decided to gate-crash. I had to gate-crash because I'm a trainer, and I wanted to hear what this meeting was discussing. I don't have interest in Kenya, but there are many things we do in Africa, sometimes very quietly, nobody knows. And a forum like this one can influence positively some of the things we do. You now know from Liberia that we are trying to train further. But we are not training for Liberia only. For example, we were training for Uganda when they were in bad times during the Amin days. We trained for Tanzania, we trained for Malawi, and we are now trying to focus on Sudan. People are saying we want to make Sudan a colony but that's not true. We're focused on Sudan because we want to train for them. And I think that's the way we should be doing things. Africa should be looking at and *within herself* first. And we must do what we can do, and ask others from outside to help us only with what we cannot do.

Frank: As long as you can train faculty members that can go back and train in their country, train more people... Someone back here?

Male speaker: OK. I wasn't hoping to make any final comments, but just to say that it's been a privilege to be here and to listen to people like Professor Danso and Professor Obed Samuel. I think that we still can do a lot within African countries. And our US partners can help us create collaboration and support. I find that a lot of times, African countries do not talk much among themselves. We prefer to run to the US, to Europe for help, even though many African countries can help each other. And I think that is an area that we can exploit. For example, it should be feasible to get partners from the West sponsor faculty members from Ghana to come and spend time in Uganda, for example. Rather than having our people go over to the US for an exchange, why not choose Ghana for a place of exchange, for example? I think we should look at such partnerships, I think long-term studies would be much cheaper in Ghana.

Male speaker: I'll be very concise. Sometimes having a one-on-one conversation yields very much. Seeing someone who has got people to be trained talking to someone who has got the capacity to train two, three, four, five people can be very important. I'll just give you a life example: I was doing consultancy work in Cuba some time back, and I met a doctor who said, "You know what? I've got four people who I want trained in obstetrics and gynecology. I've tried many of the established training schools and I've been let down." And I said, "OK why don't we keep in touch? We shall be able to take about three of your trainees in the next intake." And this did not occur through established systems. You know, having to sign MOUs to bring established systems on board... So just as an encouragement, there are some people here who are representing medical schools that have the capacity to train for you. And so, even as we leave, it's important that we establish one-on-one collaborations so that, when intake for the future training is near, someone can say, I can influence the placement of your three trainees. When the time comes, they can be trained. So let's use the contacts that we have been able to establish here, and keep in touch. Let's not go and sleep and keep our trainees in limbo. Thank you.

Male speaker: Thank you for giving me the opportunity to say a last word. Not my last word, not the last word I'll speak. It's my first time attending this type of meeting. It's my first time really sitting close to so many African countries, sharing ideas. I think I've got a lot from being here and it will help me to put some of these ideas through at my university, and also through my country's minister of health. In Cameroon, we have a dual system, and our system is smaller than the other system. So we need to push a bit harder to get things through. My university has a partnership with the University of Ibandan in Nigeria, and I think that at this university, a coalition of African surgeons worked out a way to let the whole medical

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system know when things got through. Thank you very much for the information we gained together. And I hope we'll continue collaborating. Thank you.

Frank: Anyone else? Ethiopia?

Male speaker: I have not much to say. I think this type of training program must really come to our country. In fact, our Minister of Health, explaining the position of the Government, said that it is ready to engage in such collaborating programs. There are resources there that can facilitate this type of collaboration... So I think that if I return with the document and the agenda, then things will be implemented.

Male speaker: Thank you very much. This is definitely a very welcome idea. Here is what one of the steps could be: There are students in sub-Saharan Africa who have problems at the universities. They do a second year, a third year, almost finish, but have trouble doing research. These are people who could be recruited. This way, they might stay in the system. The other thing we need to consider, of course, is that in 10 years' time, the population of Africa will be much greater. So we definitely need to see how many more than 1000 new OB/GYNs can be produced. And these new OB/GYNs will themselves be able to train people, so I think we are really moving in the right direction. The idea is good, we need to see how we can push it all the way through implementation. Thank you.

Frank: Anyone else? Malawi?

Female speaker: I want to thank the University of Michigan and everybody here for the ideas which you've given us. We had been talking about examining our training processes, but I think we were not serious enough. But this meeting has kind of kicked us (laughter around room) in the back and we now know where to start. We were anxious, but from all the examples that have been given and all the success stories we've heard from all these SSA countries, now we have hope. And we know we're going to get somewhere. Thank you.

Frank: Two countries left. Rwanda...

Male speaker: Thank you very much. I am excited about the program. And we are open in Rwanda to any opportunity that may come up. It's a very good opportunity for us who have big needs, we are ready to jump into the work and help until we can fully reciprocate, we are open for any cooperation. Speaking one-on-one with my colleague from Mbarara in

Uganda, I told him that he lives closer to me who reside in Kigali, Rwanda, than to Makerere University, his sister university in Kampala. I also said that he should have more collaborations with my university than with his sister university. So we've already started talking. I think we can collaborate in something. I insist that partnerships among African countries should be reinforced because they can yield much, much more than the US–individual SSA country partnerships. That's my personal opinion. And I think we can solve many of the problems that exist because we can already partner with other African countries. It is cheaper, it is feasible, it will help us. I mean, if a student from Gambia goes to Ghana, he/she gets real-life experience, an experience more “real” for his/her future profession than going to Michigan, for example. Ghana is nearer, has the same environment, and tuition and living expenses are much less costly. In many ways, I think it is much, much, easier to go to Ghana than to cross the Atlantic. So I think we should strengthen our bonds here. Of course, without forgetting to continue collaborating across the seas. Thank you very much.

Frank: How about Zambia?

Male speaker: Thank you very much. This was a very invigorating meeting. And from the interactions that we had this morning and part of this afternoon, we are able to commit ourselves to following the SSA countries that preceded us on a path of challenges and successes. So it was a very healthy interaction. Thank you.

Closing Remarks – Dr. Frank Anderson

Did I leave anybody out? I don't think so... OK. I personally would like to thank all of you for coming and staying the whole day and giving so much of your energy and your thoughts and your commitment to working this together. I am honored to have the opportunity to help bring everyone together like this. And I'm committed to taking whatever actions I can to help this project be realized.

When we worked in Ghana, we found that when we got the ministry and the universities together, they started working together more. Today we got all the African OB/GYN departments together and I have the same feeling, a great feeling. And so we're committed to getting this document together, present it to our funders, and see what response American universities have when asked to support what I think would be a fantastic, well, an SSA obstetrics revolution.

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So it's really been a fantastic experience to be part of this group today and be part of your energy, and I wish you all the best for the rest of the conference and for your jobs and your departments. Again, thank you all for coming and safe travels.

APPENDICES

Post-Workshop Thoughts

October 11, 2012

Report on our “Training 1000 new OB/GYNs in 10 years” meeting held on October 9, 2012,

Improving Maternal Health through Obstetrics and Gynecology Capacity Building in sub-Saharan Africa

At this meeting, we were able to bring together an amazing group of national leaders from Africa and the US to discuss how to improve maternal and women’s health care by increasing capacity in Obstetrics and Gynecology in sub-Saharan Africa (SSA). Having the meeting concurrent with the International Federation of Gynecology and Obstetrics (FIGO) meeting in ROME gave a large number of potential stakeholders an opportunity for attendance, and provided our sponsored participants with state-of-the-art clinical OB/GYN information and an occasion to make strong professional connections. The meeting was very productive. During our previous Charter Project, we found that the University of Michigan, as conveners, helped open the dialogue between African universities and ministries.

At the Rome meeting, we facilitated the first-ever African-African dialogue among OB/GYNs. They were all intent on improving maternal care by improving obstetric care capacity, and this was the most surprising and the most creative aspect of the meeting. The African participants expressed the imperative need to create an African solution, albeit with support from American institutions. Great momentum was created in Rome, at this unique meeting of so many people absolutely dedicated to maternal health.

The objectives of the meeting were to hear the story of a successful collaboration between American/British OB/GYNs and Ghanaian OB/GYNs; learn the status of OB/GYN postgraduate training in some English-speaking SSA countries; brainstorm ideas on how to increase postgraduate training in SSA; and create a document, “Call to Action and Way Forward.”

The meeting started at 8:00 AM with a gathering, initial introductions, and a

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light breakfast. From 9 AM to 11 AM, we heard how Ghana succeeded in creating and running a postgraduate training program over the last 20 years. Starting with four or five OB/GYNs and no capacity to train postgraduates, they now have more than 120 program graduates, and all but one have stayed in the country. We heard about the distribution of the graduates to more and more district hospitals, and the impact this is having on maternal health in rural areas. The message from Ghana was that, 20 years ago, there was no training, only a handful of OB/GYNs and no vision for a way out. Now, more than 100 OB/GYNs provide service not in cities and in rural areas, educate according to their levels of training (Ghana now has subspecialty programs), and conduct research. The message from Ghana is YES WE CAN. This message was heard in other African countries, where the Ghana phenomenon has stimulated interest and excitement about replicating it.

We then heard about the status of training in the other represented countries.

Sierra Leone was not present, but it reportedly does not have a postgraduate training program. Four countries, Gambia, Liberia, Cameroon, and Malawi, have two to five trained OB/GYNs but do not offer postgraduate training. They are in the same situation as Ghana was 20 years ago, and this lack of capacity is consistent with the high maternal morbidity and mortality in these countries.

There is a great interest to replicate the Ghana-Michigan partnership with OB/GYN departments from other American and African universities. The partnerships would share faculty expertise, teaching and assessment resources, and the infrastructure needed to build academic OB/GYN departments across SSA. Based on what we have seen in Ghana, the result of these partnerships would be competent faculty and clinicians eager to address the issues of maternal morbidity and mortality, obstetric fistula, and other women's health issues in SSA.

Four of the SSA countries, Ghana, Kenya, Ethiopia, and Uganda, have large programs that have produced a number of graduates. Zambia and Rwanda also train postgraduates, but their programs are smaller. Some of the larger programs offer training opportunities to physicians from countries without training programs as a way to help them build their departments.

During the rest of our meeting, we used our "Charter Process." All participants provided written descriptions of the situation in their individual

country, as well as ideas for a way forward and the next steps to take. We broke for lunch, and then divided into six groups for a lively discussion. After receiving the completed worksheets from other participants, each group worked for 1.5 hours to distill and further refine the comments and the next steps proposed. We then gathered in plenary session. The group leaders reported their findings, which were discussed among the larger group. Finally, representatives from each country were asked to give closing comments.

After the meeting was adjourned, our team compiled all of the comments into a single document. The first and very rough draft of our compiled document has been provided. We will be refining it over the next few weeks using a participatory process. A group of 20 participants will be reviewing it tonight and discussing other concrete next steps. Please have a look at it to get the general gist, but we will be creating a refined copy and will submit it to a special edition of the *Lancet*, to be published in conjunction with the Women Deliver conference in May 2013. This document, our *Call to Action and Way Forward*, will be used in a number of ways by all participants to share with their universities, ministries of health, and others. It will be used by ACOG in their Global Initiatives, will be presented to the FIGO Executive Board, and shared with our American academic OB/GYN departments to engage them in the processes delineated in the document.

It was a great meeting and the energy stayed high all day. It gave OB/GYNs who had never met before the chance to discuss these issues, with opportunities for further connection. More than 30 participants were still there at the end of the day.

Several important issues and next steps emerged:

1. Africans want to create an AFRICAN College or other OB/GYN association whose connections with RCOG, ACOG, WHO, and other organizations would help them as they attempt to improve women's health in Africa.
2. Four of the countries represented at the meeting DO NOT TRAIN OB/GYNs and are interested in partnerships with American academic OB/GYN departments. The partnerships would provide the inputs to create functioning OB/GYN departments and specialist training programs in SSA. Needs

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assessments and site visits will allow the partners to define the inputs, determine budgets, and persuade universities and ministries of the importance of the project for the overall health of their country's population.

3. Most countries have training programs, some sporadic and some well-developed, and most countries want partnerships with American academic OB/GYN departments to help them improve their programs. Aware of the vast extent of the needs in many SSA countries, they are discussing ways to train physicians from these countries.
4. There is an EMPHASIS ON TRAINING – but the “how to” still needs careful planning. The major universities have a great need to establish OB/GYN departments able to fulfill their mission of service, education, and research.
5. There is also a need to create a consortium of American universities OB/GYN departments interested in supporting the creation of OB/GYN programs in SSA. The ideal convener for this group would be ACOG, and the University of Michigan and ACOG are prepared to lead the process.

Overall, this was an exciting and very productive meeting. Some called it a “defining moment” for maternal care in SSA. “Now we have hope,” declared one of the participants from Malawi. A Zambian participant characterized the meeting as “invigorating, a healthy interaction discussing successes and challenges”. The Cameroon participant “learned new ways of thinking, and is anxious to discuss this back home”. The participant from Rwanda noted, “We started talking, Uganda and me, a talk within African countries.”

We recorded the entire conference and will be producing a transcript and the proceedings. The final *Call to Action* will be circulated among the ever-increasing number of interested stakeholders who have joined our Google Group.

Thank you again for your contributions. I look forward to our continued discussions, to developing our networks, and to establishing a consortium that will enable us to create the academic infrastructure needed to train 1000 OB/GYNs in the next 10 years.

BUILDING ACADEMIC PARTNERSHIPS

PARTICIPANT LIST

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Dr. John Taban Dada	Director of EmONC Department	Redemption Hospital	Liberia
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BUILDING ACADEMIC PARTNERSHIPS

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Participants' Reaction Papers

(Please note that the following reaction papers represent individual reactions from participants, hence the lack of standardized formats)

Cameroon Reaction Paper

Dear Frank, Marsha, and fellow Google group members,

It is with great pleasure that I am writing to the group. First and foremost, I would like to inform you that I arrived in Cameroon safely. I would have communicated earlier with you but we had network problems.

It is noteworthy that our meeting in Rome has been a very good initiative from the University of Michigan Health System. This was one of those rare moments for medical practitioners and leaders in obstetrics and gynecology from over 10 African countries, to sit down together with representatives from four Medical schools from the USA to discuss the crucial problem of maternal and neonatal mortality in sub-Saharan countries on that august Tuesday, October 9, 2012. Indeed, this meeting helped me to learn how to collect valuable information during a meeting just by analyzing questionnaires filled by the meeting participants.

Furthermore, the figures presented by all the participants from Africa during that meeting speak for themselves with regard to the gravity of the problem. Now, how could we come together as one to alleviate the situation by training 1000 more OB/GYNs in 10 years?

My humble opinion is that the University of Michigan has done a wonderful thing bringing all of us together from different African countries. This group should stay together to form a team of trainers who could be called upon to intervene in centres where training is taking place. In that light, the University of Michigan will act as the overseer, to make sure established programmes/curricula are being followed or taught as planned. The other handicap may be how to sponsor these trainers as they move to the various training sites. I believe that this eventuality could be studied and budget figures could be projected. Then, we could see what could be done.

Finally, it would be good if experts from the University of Michigan visited potential training sites. This would help them know what is on the ground and determine what could be upgraded.

Dear colleagues, accept my best regards and warm greetings from Cameroon.

Sincerely yours,

Dr Thomas O. Egbe, MD

The Gambia Reaction Paper

On October 9, 2012, a meeting on “The Public Health Impact of Training 1000 New Obstetricians in sub-Saharan Africa” was held on the sidelines of the 2012 FIGO World Congress in Rome, Italy. Participants were drawn from 11 English-speaking SSA countries and OB/GYN leaders from several American universities.

A. LESSONS LEARNT

- I. The lack of adequate manpower (obstetricians) in the Gambia is not unique, as several other African countries are faced with similar challenges.
- II. I could relate to the Ghana experience, as we are in the position they were in 20 years ago. The success story from Ghana was inspiring. It gave me the courage to think big in our small country.
- III. It is possible to change the situation in the Gambia. We need to think outside the box. We are being challenged about accreditation by the West African College of Surgeons, for example, but we can design a Masters’ program in Clinical Medicine, as most East African countries have done. The University of the Gambia can be the accrediting body.

B. NEXT STEPS FOR MY DEPARTMENT

- I. Share the vision of a Masters’ program in Clinical Medicine with the head of our Institution and get the leadership to buy into it.
- II. Write a proposal for the program. Will need some input from East African participants whose universities have similar programs. Will get in touch With Marsha Naidoo and Frank Anderson to help facilitate the process.
- III. Get the University leadership to organize a meeting between the Ministry of Health, the Ministry of Higher Education, the Gambian Medical and Dental Council, and the University of the Gambia to discuss the proposal.

- IV. Get above points I to III done by March 2013

C. IDEAS FOR OVERSEAS PARTNERSHIP

- I. American universities can assist with curriculum development and the initial implementation of the program.
- II. At the onset of the program, American universities can assist as sources for volunteer faculty interested in short-term stays in the Gambia to mentor students and local faculty.
- III. Partnerships with American Universities can also be developed in the areas of e-learning, video conferencing, and telemedicine where there are inadequate human and material resources.
- IV. American Universities can collaborate with us in research.
- V. American Universities can assist in fundraising for the Master's program.

D. IDEAS ABOUT HOW TO BRING AFRICAN OB/GYNs TOGETHER

- I. Use the 2012 FIGO Congress registration list to locate the participants from Africa. Communication lines can be started via e-mail based on this list. It can be facilitated by FIGO and ACOG.
- II. See how FIGO can assist African countries with no local OB/GYN associations in establishing one.

After communication among us is established, an inaugural meeting of African OB/GYN representatives can be held somewhere in Africa by 2014. FIGO and ACOG can assist in facilitating this meeting. Regional African bodies, such as the West African College of Surgeons, can also be engaged to facilitate this meeting and the subsequent formation of the African OB/GYN association.

Malawi Reaction Paper

Hello Marsha,

I will write a proper report when I get back home, I am currently in Bangladesh attending the Obstetric Fistula conference.

I did not get back to you earlier because initially I was waiting to present

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what we discussed in Rome to the head of my department. We discussed it as a department, and with the examples of other successful programs, such as those in Ghana and Kenya, we feel like we are ready to start our own program.

There will be a meeting with all OB/GYNS on the 7th and 8th of December, at which we are going to discuss when we are starting and how many residents we can start with. As a group, we are also going to review the curriculum, which is available, and decide on the accreditation body.

Apparently, there are some funds already available for training, from the Norwegian Government. However, it is being managed by one of the central hospitals and not by the College of Medicine, which has made it impossible for the project to take off.

The main problem will still remain resources, human resources, equipment, and drugs, for which we will need support from the partners.

I thank you guys again for inviting me and supporting my visit in Rome. The visit and the meeting have made us rethink the need for local training and encouraged us. We now know that it is possible to train specialist locally with minimal staff, and we are so looking forward to start.

I will update you after our meeting in December.

Regards,

ENNET CHIPUNGU

Zambia Reaction Paper

Improving Obstetrics and Gynecology Capacity in sub-Saharan Africa

A Call to Action and Way Forward to Train 1000 new Obstetricians/Gynecologists in sub-Saharan Africa in the next 10 years – Reaction

I enjoyed my participation in our last meeting in Rome and it was a great honor to meet all those great leaders from sub-Saharan Africa and the USA. I learnt quite a lot, in particular that most problems regarding the training and retention of OB/GYNs were similar in many of the countries. Service

delivery problems and disease burden were equally similar. The idea of having a certifying body for new OB/GYNs in the country seems very nice and inviting.

The next steps for my department will be:

Engage the Dean of the School of Medicine and encourage him to help foster co-operation between the Ministries of Education and Health. These ministries need also to harmonize physicians' salaries between the university and the ministries. In the current situation, specialists working for the Ministry of Health receive higher salaries than those who are faculty members. This has made them shun faculty positions at the University, and yet both ministries are funded by the same Government.

Continue to solicit research opportunities and try to attract grants to the department. It would be greatly appreciated if the University of Michigan could help us by linking us with grants.

If possible, replicate the training model used in Ghana.

As was well articulated at the meeting, the high disease burden in SSA provides departments with an opportunity for partnerships in the form of research and exchange programs, and not only with American universities. If we have the resources, the possibility of partnerships within SSA ought to be explored. I would suggest the formation an interactive forum, which could be internet based, for Universities in SSA. An inventory of activities related to the training of OB/GYNs could then be carried out at the country level and shared on the forum. This could begin by writing to all Universities in SSA and inviting them. I know that this information is already on the websites of some of the universities, but there is no one to drive this agenda.

To produce a high number of new OB/GYNs in SSA, regional medical boards urgently need to help standardize certification. Eastern, Central and Southern African Association of Obstetrical and Gynecological Societies (ECSAOGS), for example, could take the lead and conduct periodic examinations for candidates in residency programs already in place in their countries. The College of Surgeons of Eastern, Central and Southern Africa (COSECSA) is already doing this with great success. Examinations are held at regular intervals in different member countries.

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