

Chapter 5

Curriculum, Faculty Development and Assessment for OBGYN Residency

Speakers:

Hillary Mabeya, Lee Learman; Moi University - Indiana University, Kenya

Joyce Browne, Renee Filius; Elevate Health, the Netherlands

Blair Wylie, Joseph Ngonzi; Mbarara University - Harvard, Uganda

Karen Adams, Diana Curran, Balkachew Nigatu; OHSU/UM/SPHMMC US & Ethiopia

Frank Anderson: From 9:00-10:30 we are going to talk about curriculum and curriculum development. We are going to hear some presentations about different ways we can have curriculum development. And again, I'll open the mic to the audience to hear your ideas and thoughts about particular curriculums, harmonizing curriculums, and bringing curriculums together. There are lots of interesting projects to hear from. We will learn about projects from Lee Learman and Moi University, Indiana University, from Elevate folks, and also Diana Curran who is working on a curriculum project with them, and Blair Wylie with his partners as well. So we will start with Lee Learman.

Kenya

Lee Learman: Alright, thank you so much, Frank. Can everyone hear me in the back? Great! Well, good morning, everyone. It is my pleasure to spend a few moments with you, providing a context for Dr. Mbaye's presentation to discuss subspecialty training in gyn-oncology. I really want to thank the University of Michigan and our Ghanaian hosts for a really historic meeting. I think one day we will be looking back on the moment of yesterday, today, and tomorrow and realizing that we were there when something special was evolving. It is just a pleasure to be sharing this day with all of you. I would like to also mention the rest of my Kenyan team here. Dr. Simon Mueke is from the Ministry of Health and it's been wonderful to get to know him better. The Ministry has recently been reorganized and he is the director of reproductive and maternal and child health at the ministry.

It is also a great pleasure that we are joined by Violet Nabwire Opata who is the Associate Dean for the Moi University School of Education. It has been wonderful to get to know them better. I think it will be instructive to talk a little bit about AMPATH because unlike some of the new programs, reproductive health has been the leading edge of the wedge of change.

In the case of AMPATH, we are the relative newcomers. We are the five year olds sitting at a table with fifteen or twenty year olds. In 1989, sort of at the same time that things were starting to happen here in Ghana, there were two leaders from Indiana University who were internal medicine physicians. They went to Kenya and established a partnership from Indiana University and Kenya to help develop the second medical school in Kenya, the Moi University School of Medicine in Eldoret, as the district hospital was becoming a teaching and referral hospital to help develop educational and leadership programs to get all of that moving and started.

Turn the clock ahead to 2001 when the HIV pandemic becomes so dramatic in this part of Kenya, the entire program morphed into an HIV prevention program with a USAID grant in 2001. From that IU-Moi partnership, the entire AMPATH consortium was born. The consortium includes Indiana University, Moi Teaching and Referral Hospital and the School of Medicine, and, in addition, nine other North American institutions. The leads for reproductive health have been the University of Toronto with Indiana University and some visitation by Brown University and Duke along the

way as well.

The HIV program was a smashing success and I think it is important to mention where things were as we started in reproductive health. By the time we came along in reproductive health in 2007, when we had some presence from Duke University, the University of Toronto and Brown. By that time, amazing things had already happened in HIV care in the western rift valley area that we were responsible for through AMPATH. By today, AMPATH provides care for 160,000 HIV positive patients. It includes medications, agriculture, food, water, ways to sustain families, ways to get people back to work, and the focus on HIV to the exclusion of other things was a very positive thing in terms of impacting health. There are 2,000 new patients seen per month in the HIV program and over a million home-based counseling and testing sessions that have been conducted and perinatal transmission has been driven to less than two percent.

By the time reproductive health comes along in 2007, we are just beginning to see some visitations from North America. In 2008, Indiana University and Toronto made a commitment to sponsor reproductive health. And by 2009, when our first field director - who is here today actually, although she has moved on, Sierra Washington - established our first year round presence in Eldoret, Kenya. By this time, the HIV program had been a huge success and we were coming along as the relative youngsters to try to develop reproductive health programs.

Now the partnership started as I mentioned in 2008 and ramped up in 2009, although we were only five years old and are the youngsters, we have been able to do some important things. You'll hear about one of them from Dr. Mbaye regarding cervical cancer screening, but there are some other things that we have facilitated: robust exchanges of faculty and students between North America and Kenya; we added a family planning module to the HIV care (imagine all of this wonderful HIV care if there hadn't been a family planning module in the various centers where this was happening!) so that was the first thing; creating emergency obstetric kits; getting out into communities with community health workers, decreasing maternal mortality in our responsible area of Kenya; and starting a MMED program, which is more relevant to today's conference.

Several years ago, we were delighted to see that approvals had been performed and we were able to help with some curriculum support to develop the first MMED program at Moi, which now still has not graduated its first class but in full form will have about 10 graduates per year. In the meantime AMPATH itself has expanded from its HIV focus to primary health care; chronic disease management; maternal neonatal and child health; and in a remarkable and very important historical event, the primary grant from USAID to transition from Indiana University to Moi a couple of years ago.

Now all along the way, there has been a culture of partnership, respect, and reciprocity so when I talk about being the child at the table amongst older siblings, I'm talking about it on the Kenyan side as well as the Indiana or consortium side. Within our infrastructure there some very good things about being one of the later programs to join.

You've heard the formation stories of new programs that lead with reproductive health; it is wonderful to hear. But when we came into AMPATH after it had been in existence for a while, we found a culture, which was a very good culture. We found bilateral leadership. Every program, every department - all of the structures that we have - have paired leadership models. However it is also very large organization. There are institutional leaders; they are distal leaders; and there are programmatic leaders. There is a School of Medicine, there is a Teaching and Referral Hospital, and there are ten other North American institutions.

Nevertheless, it has been fun to become part of this. It has been wonderful to hit the ground running with these other structures in place. The one challenge, however, has been what happens within our AMPATH families. We talked about marriage, we have talked about polygamy, but I would rather think of it as a family in a consortium. So imagine you are sitting at a table, it is family-style dining. All the food goes into the middle of the table and all of the children are sitting around and you have a 15-year-old and you have a five-year-old. Who is going to get their hands on the food?

In other words, as the five-year-old we have to advocate, we have to speak loudly in order to get the attention that reproductive health and maternal child health deserve. The parents love all of their children. They are all beloved in all of their missions are important, but because the origins of the program are in HIV care and maternal health and reproductive health have come later, it creates some unique challenges for us that some of you may be able to avoid having reproductive health lead the way. Okay, enough said about that.

I would like to introduce Dr. Hillary Mabeya. Dr. Mabeya is not only currently the chair of the academic department and chief of the hospital-based service for reproductive health at Moi, he has also been present at every step along the way of this history. He was one of our first Kenyan collaborators to join us in almost every program that I've mentioned to you today. His particular interest is in fistula repair and fistula reentry of fistula patients postoperatively. Amongst the many outstanding African leaders who inspire us today in this room, Dr. Mabeya is counted among them as an award winning fistula surgeon both in Kenya and regionally as well. His main interest, what keeps them up at night in the wee hours after he is finished with his day job, is helping with fistula repair in a special hospital that he established in Eldorat for that purpose. But he is here today to tell us about that particular program and the necessity of developing subspecialty training in gynecology as a consequence of early detection of curable cervical cancer in Kenya. It's a great pleasure to introduce Dr. Mabeya.

Dr. Mabeya: Thank you so much, Professor Learman, for that wonderful introduction to our program at Moi. Good morning, everyone. When I was sending this abstract I didn't know whether they will accept it or not because it was focusing on training 1000 residents not OBGYNs, but here I was coming with a subspecialty. What prompted me to send this abstract was we kind of started the same program at the same time. Residents program and then in between before we could even graduate our first class of residents, we introduced a gyn-oncology program from nothing. We didn't have teachers to trainer fellows in gyn-oncology, we didn't have the structures in place, and I am to show you how we have managed to get our first-year fellows in their second year and almost graduating. So, this is the development of innovative subspecialty training in gynecological oncology for low-and middle-income countries. I'm predicting that Kenya and most of the other African countries are leaning towards middle-income countries in the next twenty or thirty years, I believe, maybe less.

This is one of the outcomes of partnership. Riley Mother Baby Hospital at Moi University is a modern center for care. Initially, this place was a private hospital but it has become a public hospital and I'm happy to say that I think from last year April maternity services are free in Kenya. The new government declared that. Of course there are challenges but we are working towards those challenges for free maternity care for all women walking into a public hospital.

We looked to innovate a subspecialty in gyn-oncology. We looked at previous curriculum development, clinical teaching, and assessment of OBGYN residency. We looked at why —why did we want to have gyn-oncology? We know that the pattern of female genital cancer is very high in Kenya and even in Africa as a whole, and gyn-oncology is the most preventable women's cancer in Kenya. The figures are quite high; 2,635 cancer cases every year and about 2,000 deaths every year.

At the moment we have about three gyn-oncologists in the whole country of about fourteen million women, whereas in other countries like Canada, there are one gyn-onc for 200,000 women.

This is the first kind of training in Kenya. The current masters in residency and gynecology is not sufficient enough to treat a cancer patient. The reason is that sometimes you see a patient who has been operated outside the district hospitals with advanced cancer. Maybe the gynecologist is making the wrong decision in terms of at what stage do you do the surgery. So patients are coming with advanced cervical cancer and ovarian cancer.

We started quite early in terms of introducing a strong screening program in Western Kenya. This one started from a small research fund in 2009 of about 150 HIV-positive women and then from there, after the research was done and published, we started a program of screening through the same collaboration and in 2010 we had did about 1,500, but we moved up to over 20,000 I would say towards the end of 2013. That means the number of women who are being screened within the hospital setting and in central clinics has gone over 30,000 at the moment from just 150 patients we started our research with in 2009.

This is a little older, but it shows how we have scaled up our screening program in western Kenya, where we have trained masses to do colposcopy. Initially, that was a precept of gyn-oncologists, but we think that some services can be provided by others especially our nurses who are doing colposcopy and LIMP. The purpose of the subspecialty was to train gynecological oncologists to provide the best possible care in leadership and in Kenya and elsewhere, and to create a national referral center in gyn-oncology and to establish a strong collaboration in education and research in gyn-oncology, and to maintain a cancer registry in gyn-oncology.

Of course we have challenges. Lack of trainers for our fellows. No budgets, no training facilities, and even no trainees, people interested to be trained. There are no existing standards and no relevant curriculum and a brain drain to external or internal destinations. It took us almost four years to get our curriculum approved from 2010 from the first meeting of postgraduate the committee, stakeholders meeting, all the way down to the College of Health Sciences Academic Board, the University's dean's meeting last year, November 2013.

We also looked at collaborations with the University of Toronto, Indiana University, and another. And internal operators of Moi University, Moi Teaching and Referral Hospital, where we are housed. Other institutions like Kenyatta National Hospital, which is a private hospital in Nairobi where our residents do their electives, because in Kenyatta National Hospital they have high-tech radiation where our students go to train for electives. And of course the Ministry of Health. Our curriculum was based on a model that I am going to explain shortly. Online training modules and Skype with experts, our students do exams actually online.

We looked at the training program in three phases, initially the University of Toronto was to provide a chief medical examiner. The second phase for Moi was faculty support, who are going to qualify with support from the University of Toronto and Indiana University and then finally the program would be managed by Moi University with consultation with the University of Toronto and Indiana. That means in the third phase, Moi University would take over the program, because we will have produced fellows and they will take over the program.

The program has two structures: year one and two. The admissions requirements is a Masters of Medicine and special recognition from the board, and membership in the Kenyan Obstetrics Society. The training program will have earned a degree in Masters of Science in Gyn-Oncology. Initially we thought of putting it as a PhD, but we thought the advantages in clinical training. There were issues around turning it into a PhD, then we said it would take another four years for approval, lets move

towards a masters in gyn-oncology for now. Then this one will address the women's cancer in Africa because we intend to admit students from neighbors. We might start from our immediate neighbor Uganda, maybe. It is innovative in design and implementation. This is a cancer unit that just came out of the collaboration. It is under construction and I think in a year and a half we should see a modern center for both chronic disease and cancer management with radiotherapy and other facilities.

This is Moi Teaching and Referral Hospital entrance. When I was coming from the airport, I was amazed by the organization of public transport vehicles, which is different from my city. There is a lot of congestion, a little bit. That's what I have learned during my short stay in the beautiful city of Accra. There is a lot of space, and a lot of organized public transport systems as opposed to my town which is congested. Thank you so much.

Frank Anderson: Thank you, that was quite amazing. It seems like fistula surgeons always stay really busy clinically and with their education programs. We notice of there are a lot of fistula surgeons that do this kind of work. It is also interesting that the MMED program - we'll talk about certification tomorrow - the idea that you can pass the curriculum through your university to create a masters degree or a degree in gynecological oncology versus say in the Ghana College we create a certification in gyn-oncology perhaps or the West African College where they have to get approval for all the West African countries just like the American Board may have to do that or the Royale College. It is interesting for us to think about how a person becomes a specialist in something and who says they are. I showed you the definition of an OBGYN yesterday. The level we are talking about is an academic level, but on the certification level, we have to think about what is it that indicates that this person is an obstetrician gynecologist who can train other people and do sub-specialty training. Because I think that is related to retention. If a person has those credentials, that leadership capacity, that ability to function in the country fully, then that is a very attractive thing. And that is what we have found in Ghana as well. So let's keep that thinking.

The next group that is speaking is a group called Elevate Health from the University of Utrecht in the Netherlands. We met at a meeting where we were talking about fetal monitoring and also in relation to OBGYN training the fact of having obstetricians allows next level of care. We were interacting by email when the World Bank grant became available to do some reproductive health training. They contacted me and in conjunction with the activities at this meeting, the World Bank awarded us one of ten grants to do a pilot project to on reproductive health education. They are here to tell us about it. You've heard about them through their preeclampsia course and all the interviews, so they will give you an update on that and then we will hear from Diana Curran about a curriculum project that is also funded through that grant. Thank you.

Elevate Health Presentation on Online Curriculum

Joyce Brown: Thank you for the introduction. I would also like to express our gratitude for being here. It feels like a very special honor and flies very close to the vision that Elevate was founded with to be here. So we're very excited to introduce you to what we do, what we hope to be able to establish within a consortium for the consortium and led by a consortium, as well as the methods that we do. We will also introduce the World Bank grant that Frank has introduced already.

Elevate is an online Academy that provides e-learning for postgraduate level and continuous medical education. It is an organization that was founded by academic partners, three partners within the University of Utrecht, the University Medical Center Utrecht, and a third academic partner with in Utrecht. The foundation and a strong nesting within academic settings also means that we offer accredited courses for ECTS that really are equivalent to the Masters courses we provide like a Masters of Epidemiology. From last September, we established a social enterprise model that would

allow us more flexibility to move quicker parallel to the university bureaucracy. But still the same founding partners are steering Elevate so that is good to realize. What is unique about Elevate is that we only focus on health sciences, both graduate training and also continuous medical education.

This is a website. The end of the presentation we also have a slide so you can access the website's virtual learning environment. We will provide you with the username and password to you can just have a look and feel around and have an introduction to the tools that we are using. And we will also go more in-depth on Saturday during the online education session.

The World Bank proposal had four main objectives and I will quickly run through all four of them. The first one was really strongly linked to this meeting. It is to develop a blueprint for the online academic education that could be provided within a consortium. Ideally, as we just saw with gynecological oncology that has been so well developed in Kenya, it could be perhaps a waste of resources to do it all over again somewhere else if you have a good model, a functioning model elsewhere. And that is where we could imagine online education to be a part of. The second one is to consolidate and evaluate existing and available online resources for OBGYN training, evaluation, and certification. This is what Diana I will explain later. It is to analyze the collection of resources that already available so we don't reinvent the wheel; we want to use what is already there.

The third point is to develop an online pilot course. And that is a pilot course we have been emailing you about on many occasions. And we also started the first recordings yesterday. That was really exciting because it shows that through videos, interviews, and lectures that we record online can have a very nice foundation to develop courses. That is what we will develop in the course of this year; the deadline is July of this year to have the first pilot ready and then we will also happily share that with you. The fourth point is to create a guiding document and a Charter for Collaboration, so that is actually Raymond de Vries project that was also embedded in a World Bank grant.

What Renee will introduce to you now is the online pilot on hypertensive disorders that we are now preparing. This is a pilot - many members can wave to indicate if they were part of it - and we have Dr. Danso who is part of it, Meg Autry, Lee Learman, Karen Adams, and Diana Curran who provide the content and provide leadership in making sure the course objectives meet targets that should be part of the training course for residents and OBGYN. This course will be about eight hours of study material in addition there will be other self-study materials like readings etc. Renee will introduce more of the course.

Renee Filius: Hello, my name is Renee Filius and I will just to you briefly the steps of the will take in order to develop the pilot course. The first step is formulating the learning objectives and the topics that will be included in the pilot course. This is just a work in progress so feel free to add any remarks on anything and we will continue working on this next Saturday. Like Joyce already told us, we're still looking for lecturers and if you would like to be interviewed please contact us, and again we don't want to reinvent the wheel so if you feel that you have any appropriate content please contact us so that we can include it. We will make sure to identify the appropriate learning tools.

We have an online toolbox and a virtual learning environment and you can see four categories. The first category include more traditional tools like reading materials and lectures that you can watch. The second one includes assignments that you can do and you also have quite a lot of learning materials and learning tools that you can use to interact with each other and collaborate with each other. The course will not be self-paced, it will not just be self-study but you can also interact with each other and with the teacher who can teach a course with a start date and end date with a lot of interaction. This is just a screenshot of the virtual learning environment that we will be using. What you see here are the icons of the type of learning activity and in the second column him right here is the name of the topic and you can see whether it is a required learning activity or just an optional

one. And you will also see how long it will take to do this specific learning activity and whether or not it is possible to interact with each other. If you select one of those learning activities, you will start the learning activity.

This is what it looks like but again as Joyce told you, you can try it for yourself. There will be a lot of interaction possible if you want to, so you can go to the base where you can contact each other. This is just an example of the online discussions that are possible. We also have a tool for web lectures. It's not just watching, we can also include multiple-choice questions if you needed feedback. Below you see the questions and then if the video reel stops and you have to answer the question, and after answering it you get immediate feedback whether it is correct or not, why it is correct, or why it is incorrect. Then at the end you get a summary of all the questions and whether they were correct or not. You can also click on the correct or incorrect things at the end, you can go back to the explanation. We also have modules to teach students or residents how do clinical reasoning that we will be using. We have a tool to develop online modules but again if you have appropriate content that you think we should include, just contact us.

This is how we would like to do it. Here is where we're at right now in February. We started developing the pilot course a while ago and we hope to deliver the pilot in July of this year. We would like to include all of the suggestions of the experts and we would hope to include and collaborate the physical structure that will be formulated here. So we will use both downloadable tools and tools that are available online. With these contact details, you can look for yourself online in the virtual learning environment and try the links. We will also circulate these details so that you can do it from your hotel or from home next week and you can have a look and just walk around in the virtual learning environment. If you have any questions or if you would like to add anything, just contact us. And then coming Saturday, we'll have an educational meeting and we will discuss the development of the pilot course. We will also demonstrate more teaching tools in more detail and we will also show you some examples of other courses to get more ideas. If you are able to visit the Saturday workshop, please do so. Thank you very much.

Joyce Brown: To give you a little update on what we did yesterday, we started with the recording for the pilot course. We had the Cameroon team sit together at one table and have a very interactive case discussion. The case is about a preeclamptic patient, preterm at 32 weeks. And the idea was that the resident would have different learning moments in this one interview. So they discuss the case, then the resident would need to think about when we import it in the virtual learning environment, think about how if I saw this patient what would my investigations be? What would the questions be that that I would ask? What would be my management goals and objectives? The similar thing we did also in the afternoon as a very nice example of the Rwandan partnership. Dr. Rulisa and Dr. Hill were unavailable to sit down and be interviewed and they also discussed the case. So that was a very nice example of how you can create material in a conference, parallel to a conference like this when everyone is here together. We will give you more updates about that.

What I also want to recap is to really encourage you to visit the website and visit the online virtual learning environment before Saturday. On Saturday we would really like to dive in to the role of online education within this consortium and would like to invite you to think about this. What do you see in a role for online education? What could that role be? What courses could be created and developed? So that's what I would like to invite you to on Saturday.

Diana Curran: I just have a few things that I want to say. Good Morning. My name is Diana Curran. I am at the University of Michigan; I am the residency program director. I am just incredibly honored to be here. I can't echo enough what Dr. Learman said; I think we will all look back on this and say wow what an incredible few days and I am incredibly honored to be here. And it wouldn't be here if it wasn't for Dr. Senait who approached me in July 2012, and I don't think she

got all of the sentences out of her mouth before I said, “Yes, yes, when can I go and help in Ethiopia with my wonderful friend Dr. Balkachew?”. It's just been a wonderful experience and I look forward to many, many years of mutual friendship and learning together. That being said, I also want to say congratulations to Dr. Danso and Dr. Anderson, this is really a great meeting and a wonderful facility. What I have here - I tried to print this this morning but I apologize, the printers were malfunctioning this morning; but you will be provided this - is my initial list of resources that I have found. By no means is this comprehensive but I have provided also the websites and I hope Dr. Waxman is happy that I provided the ASCCP website for people. But there is a lot out there and I am still in the process of working with one of our librarians at U of M to get open access for people, because I have two jobs to Dr. Anderson gave me. One is to help develop curriculum, and I am enjoying working with the Elevate people and I think with all of your help, which I hope anyone who is here Saturday will come and help us. That part I think will be really tremendous. But the second job that I have been given is online access for all of us. I think that really is key so that when all of you are in the middle of the night working in your hospitals and sub-Saharan Africa you can access up-to-date information. And I found quite a bit, more than I thought I was going to but some of this is websites where you can get more information.

If I have left things out, it is an error of omission, so please me know. And if I left something out, I am happy to include it. Again, this sheet will be with all of the stuff that Madeline sends out. And I'd like to give a big shout out to Madeline; good job organizing this event. Thank you.

Uganda

Mbarara University – Harvard MGH Curriculum

Frank Anderson: Blair Wylie and Joseph Ngonzi from Harvard-Mbarara University in Uganda are speaking today on their curriculum project.

Joseph Ngonzi: Good morning. I will try to project my voice a little bit because I am trying to fight off some Ghanaian bugs. We will try to make a presentation quite brief and our collaboration we made with Harvard, particularly MGH, started at a wider level with University leadership. I usually want to say that it unfortunately started off in other non-obstetric departments but later on, when we saw the need to bring the mothers and also other partners on board, we made a little bit of noise locally, and thankfully we had.

One of the bigger goals of the Mbarara University-MGH collaboration is to include all of the departments within Mbarara University, and specifically with the obstetrics and gynecology department. It talks to us fulfilling this big vision of bringing on board this very important species called the mothers started in 2010. I remember that time I was the residency director and we had a discussion with our residents and we discovered that there is a lot that we are unable to offer locally but yet some of our partners at Harvard were positioned to offer some expertise that we did not have. That kind of noise-making of course resulted into a team from Harvard, especially from the department of obstetrics and gynecology. When they made a trip to Mbarara and we discussed the way forward, of how to move the obstetrics and gynecology collaboration. I was privileged to be part of that meeting, and by the time, I was able to meet a team lead by Dr. Blair from the division of fetal maternal medicine at Harvard, and I'll ask to give Blair and the team a hand of applause.

We generated a document that spelt out our goals of collaboration and we also discussed on the roles and responsibilities on either side. We had had a little bit of uncomfortable partnership in the past, and this time we did not want to go wrong. This time we started off with paperwork and as much as we wanted to have hands-on, we said no, let's first have the writings on board before we can move forward. Some of the core areas of the partnership document included faculty involvement,

educational training for both residents and also faculty. Our department is a very young department and initially when I was acting chair, I used to complain a lot that I myself need mentorship but I am learning through the hardships of leadership, but nevertheless it is paying off at the end of the road, and the third component was actually research involvement and grant co-application with our partners at Harvard. We are beginning to see some of these things paying off.

Last but not least, we decided to include a component of health service delivery locally. This included equipment and supply support of simple things like emergency cupboards getting stocked with drugs and salaries. To be able to curtail the erratic supplies that usually accompany many of our medical supplies processes in our country. In terms of MUCT-MUCT is the Mbarara University of Cells and Technology-in terms of teaching responsibilities, we are faced with such a great burden of teaching responsibilities despite the small number of faculty available, we have an average of about forty medical students that run through our department every ten weeks and we have quite a number of residents. Currently we have 18 residents in training and this skyrocketed from just one resident in training during my time over the past not-so-many years. And so we are seeing the need and burden becoming greater every other day, and we have decided to bring faculty on board by training them, be equipping them so that they will be able to handle the great responsibility of teaching that is ahead of us. On average we have about four medical student lectures every week and about four resident tutorials every week. We have so many other responsibilities: bedside teaching, operating room commitment, and ward rounds, just like any other center but here the numbers are very few.

Mbarara University's Department of Obstetrics and Gynecology is very small. Seven faculty and nineteen midwives are there to register 11,000 deliveries every year. So the burden is quite great. So we say to Harvard, as you are coming in, in terms of teaching responsibilities we have to leverage this partnership so that you can be able to take off some of the burden. We are delighted and are very happy to have that there. They have been involved in the supplementing our teaching, especially resident teaching. This has helped us increase the number of teachers and the number of examiners. Quite often on their own saving a time, they come over when we are having our final resident exams. They come to beef up the team to be able to to graduate a number of specialists. We have been having teleconference teachings and these have been mainly case-based. We have had lessons learned from one of the older Mbarara University-Harvard collaborations, especially in the department of anesthesia. They did start a teleconference teaching mechanism and they had quite a number of papers published out of this. So we tried to see if we could have this duplicated in the department of obstetrics and gynecology. We started off with the teleconferencing. At this juncture, I invite Blair to give us the details of how this has gone.

Blair Wylie: Thank you, Joseph. And I would like to also thank Dr. Danso, Dr. Anderson, and to everyone else for bringing us all together. It is inspirational and aspirational. The panel today is on curriculum so we are focusing just one small part of our partnership. As Dr. Joseph mentioned, in 2010 we started this collaboration and we created a document that was aspirational. But we wanted to get started as we raised funds. This idea is low-cost, no cost in some respects, so we wanted to get that idea out there. We borrowed it from the anesthesia department who had been running teleconferences, and just to point out back here - you can't read the small writing - they looked at pre and post-test results. They tested the MGH anesthesia residents as well as the MUCT residents, and the MUCT residents did better and learned more than the MGH residents. I just wanted to point that out; it is buried in there.

For the last 18 months we have committed to monthly teleconferences between the two institutions. I think the learning challenge has been Internet access. You might think that it was Internet connectivity in Uganda that was the challenge, but in fact it was more problematic on the MGH side. One HIPAA, the privacy rules, they have been taking Skype off all of our computers and in order to Skype, you have to use a personal computer. A personal computer requires Wi-Fi and the Wi-Fi is

not so great in the hospital. We found that we were lagging our Ugandan partners in terms of connectivity. We have tried a number of different platforms including just calling each other and forwarding the slides. We tried using something called Bluejeans, trying Skype on hospital computers and personal computers, and we have settled with Skype on a cell phone and each partner advancing the slides. It is something to work on.

In terms of the methods, we made sure that names were not shared when we had case-based presentations. We used a drop box format to share our slides, which was also free. We were able to share materials back and forth. And I think what was really unique about this was that we pushed the fellows in the subspecialties that MGH to lead this conference in coordination with the residents at Mbarara. They were the ones who are driving the topics, picking out the cases, and ideally we were picking out a case from Uganda and having someone from MGH respond to that but the lecture.

So far we have had nineteen. Like we said, connectivity has been our issue. We were most successful with Skype over a phone. This is relatively new on both sides of the ocean. On average we had about 12 learners at MGH and 20 in Uganda. This was just a smattering of the topics that we gave, as you can see it started off primarily in gynecology. There had been other Mbarara-MGH teleconferences on maternal mortality so we wanted to beef up the gynecology topics and only later have expanded to some of the other subspecialties.

In conclusion, to try to keep to time, this idea is low cost. It is sustainable. It requires time and not much more than that. It allows us to sort of have ambassadors who have not had the opportunity yet to travel, but can still make connections. I think that we have the opportunity and the mission to reflect on what we have done so far. By presenting this, it has given us the opportunity to just kind of come up with how this teleconference is going and where we should move forward. One thing that we had talked about his curriculum development. This is more ad hoc as cases come up and as topics come up. Is that good? Or should we be structuring the curriculum and saying let's had the following 12 topics over this coming year? That is something that we can talk about in our free time this week.

We have talked about alleviating the teaching burden on the MUCT faculty and I think that it is also important to recognize the learning may even be greater for those of us in North America, hearing the challenges and lack of resources available. We may make suggestions for management and in here that is not possible. Recognizing and reflecting that the learning is bidirectional is quite important.

Joseph Ngonzi: Well, thank you, Blair. Within the next one and a half minutes, even as you listen, we are open to contributions on the way you people think we can take this forward to make this sustainable and also more useful, not only to the Ugandan residents and faculty, but also our American partners. When it comes to discussion, we are very expectant that we will be able to hear from you, especially those of you who have been doing this for a while and have measurable deliverables on this kind of teaching. Thank you for your time. "Let me introduce Adeline who is also one of our partners from Harvard. And lastly, I am delighted to reintroduce Robert, who has gladly decided to come and listen. When it comes to policy, we hope that, Robert, you will be our ambassador out there. Thank you.

Frank Anderson: Thank you. That was so interesting and innovative and I think it reminds me that it takes an individual and institution at both places to make some of these things happen. I think that was a no-cost intervention. They just meant that there was an intention there on both sides for doing that. It reminds me of our worksheets and we will talk about those again, but these

worksheets are your opportunity to share what you are doing. We are going to collate these things so there is some larger document with everyone's ideas. But it is also an opportunity for what you would like to do so dream big. This is your opportunity. You are here with your team today. I don't know when this is going to happen again and the more that you can write down for yourself the better. The more you can dream the better. This conference would not be happening had we not had this crazy dream that we could actually do this and then present it to people to fund it. It is an old adage - I'm not sure what the old adage is - but if you think of something that you want to do, then you can make it happen. Maybe it is a new adage. You know what I am saying. Dream big and then maybe things can happen. These worksheets are the only way I can figure out how to get you to do this. It may not be perfect, so don't spend time wondering whether the question is perfect or not. Know the spirit of the question; change the question, do what you need to do, but get as much down in writing as possible. We can produce things and you can have that to read again. I know that this is odd for a conference, but please write down as much as possible.

Association of Professors of Obstetrics and Gynecology Curriculum Presentation

Frank Anderson: So more great ideas are along the way. Karen Adams is from the Association of Professors of Obstetrics and Gynecology, this interesting association that we have in the US that helps doctors learn to be teachers. I think that it is an interesting model and interesting ideas that she will share for us in the group.

Karen Adams: Balkachew, come join us and Diana, please, as well. I just have to start by saying there are thousands of years of wisdom in this room and it is kind of incredible to me that we are all together for the same purpose. It is absolutely inspiring. The fact that I get to stand here for ten minutes at the invitation of Dr. Danso and Dr. Anderson to share what I hope might be useful for you is quite humbling. The thing that helps me to feel better about that is that I am here with my two very good friends, Balkachew and Diana. And it has just been a delight and a pleasure to get to know both of them through this work. I hope that what we offer you today is useful and we offer it up to you in that spirit. Again, I am Dr. Karen and there is Dr. Balkachew and Dr. Diana. We have no conflicts of interest.

I'm an educator so I want to start by telling you what I hope you will learn from this presentation. I want you to understand the rationale for existing curriculum of the new CREOG new program director school. I'll talk to you about what that is and how it came to be. I have a couple of folks here who are either graduates of the school or are currently participating to give you some perspective. And there are several other graduates of the school here in fact. It kind of feels like a CREOG meeting because they are so many residency program directors here. I would like you to understand the benefits of the knowledge gained by the US and African participants in the school and think about the ways that we may collaborate on educational programs. Finally then, as a group, kind of all of us together, thinking about as a good or table groups how aspects of this story might translate to your specific site, to your specific partners, and how you might take some of this curriculum and use it.

CREOG is a subset of ACOG, which of course is the American Congress of Obstetrics and Gynecology. You have a subset which is specifically focused on graduate medical education, and that is the Council on Residency Education in OBGYN. In 2009, ACOG decided that CREOG should create a school for new program directors. Currently about 75% of our US residency program directors have gone through the school. The participant evaluations are among the highest of any ACOG courses. I became co-director of the school back in 2009 I believe, and it has continued to be evolving as we have gone from there. The primary goal of the school initially when it was established was to increase the term of service of program directors. As you can imagine, being the

program director requires a tremendous amount of skills, knowledge, and expertise. It is an incredible waste to have someone take on that position and then turn over relatively quickly. Then someone else has to come and learn how to run the program. The primary goal when this program was established was to try to increase the term of service of the program directors because the average term is about five years and annual turnover is about 20%. The additional goal is to provide high quality and timely support to the program directors as they address the many aspects of running a residency program. The core principles of this talk and the school are really about training the trainers and that is what Frank asked me to speak about today is the idea of teaching people how to be teachers. As you guys develop your residency programs, how can we work together and collaborate to try to improve our medical educational expertise? Just because you can do something doesn't necessarily mean you can effectively teach it. If you just say, "Watch me, watch me, or do as I do," then some people may be able to learn from that but others may not. So faculty, you, can learn to be an effective educator just as you can learn to be a good surgeon. You can learn to teach just as you can learn to do a hysterectomy. That's one of the core principles of the school.

In addition, for learners, timely and effective feedback is really key. How do we give that feedback? Do we say something like, "You are doing great; just keep doing what you're doing?" That's not feedback; that is a compliment. That is a great; we all love to hear compliments, but that doesn't help you get better. So how do you actually help your learners improve by the feedback that you give them?

In the US, residency curriculum is standardized across all US residency programs. But how individual programs teach that curriculum varies from program to program. The school is designed to provide ideas. We share templates and resources and we provide these different resources to program directors, to help them either set up their programs or to modify their programs. When those national requirements change, we also provide assistance to program directors and implementing them.

The school is structured in three meetings, and two are attached to pre-existing meetings. So for example, for this kind of meeting there would be a day or two afterwards that would be the program directors' school that people could come and learn specifics of education. And then one is freestanding. Part one is three full days, part two is two half days, and part three is another half day. Then there is a tuition that is charged. We also allow people who have taken the school before and want to come just for an update to have a small tuition charge if they just want to take a portion of the school. So I wanted to just show you the topics and Balkachew is going to talk about the portions of the program that were particularly helpful for him because he has been coming to the US in participating in the school. What we would love to be able to do is to bring the school here, rather than having to have people come to the United States to take it. But that is something that we can talk about.

The first day topics are mentorship and then orientation for - I actually said new interns, but I don't believe interns in Africa means the same thing as interns in the United States. This is first year residents, I should say. So how you orient your first year residents to your program. Maybe you do surgical simulation. Dr. Curran and Dr. Nigatu have worked together to do orientation for the new residents in St. Paul in Addis. They're going to talk about that. Then we talk about recruitment of residents - how do you choose the right resident for your program.

And then we talk about the match, the way we do it in the US, but that obviously would not be relevant for African programs, unless you establish a match, which I am not sure you want to do. Also we talk about how to ask for resources that you need - dealing with your deans, dealing with your department chairs, figuring out how to make a persuasive pitch for resources that you may need for your learners. And then we also talk about technology and so this piggybacks really beautifully onto

the previous talks of e-learning and ways you can access that technology for your program. Then we have a little networking reception in the evening, which is very valuable because really all of this is about relationships. Just as we are all getting to know each other and developing these relationships with each other, having the opportunity to do that in our school is really an important part of it.

The second day we do curriculum design. We teach program directors how to write rotation goals and objectives. Each residency year has its particular structure in the US. In this gyn-onc rotation, what are the reading lists, what are the goals, what should you come out of this rotation with? The skills - then we help them write the goals and objectives. We also talk about the difference between formative and summative evaluations. Formative is getting feedback right now - we just finished this surgery; how did you do? I want you to practice going faster; I want you to call for your instruments. Something you can tell them specifically about what just happened.

Summative is at the end of the rotation. And maybe do teaching techniques because what we know about adult learning is that people don't actually learn very well sitting in rooms like this. They learn better in small groups and case-based discussions and things like that. We talk about that. Day three topics are more about the OBGYN structure of oversight and organization in the USA.

Part two we talk about how you motivate your faculty to teach. Why is it that somebody would work in academic medical center when they could be out in the community? And what motivates them? We talk about budgets. We talk about resident remuneration, which is a very, very hot topic because I don't care how long you have been a residency program director, you are always going to struggle with how to remunerate the person who is not quite hitting the targets. As our colleague from Uganda was saying earlier this morning, it is about knowledge, skills, and attitude and professionalism. So we talk about how to identify areas that our resident needs support in and how do we remediate them. If you have to get rid of somebody, if you actually need to dismiss them or put them on probation, we talk about the ways of doing that. Finally at the end of the school is preventing burnout - yours and theirs, how to stay motivated, how to keep yourself engaged, and we talk about leave policies.

Finally we talk about medical errors and patient safety, so we do some root cause analysis and we talk about how program directors might help their residence evaluate for areas where patient safety could be improved along with quality insurance, that sort of thing. That is kind of an overview of what we do. As I said Balkachew is completing the school right now and we have asked him to just share some of his experiences, what you found to be useful, and maybe wasn't so useful. Diana is going to talk about the way they have collaborated for doing new resident orientation. Thanks so much.

Balkachew Nigatu: Good morning again. I am very happy to share the podium with my mentor and deep friend, Dr. Diana Curran and my teacher in the course Dr. Karen Adams. I am going to reflect on the lessons that I got from the CREOG course on residency directors. How we handle it in Ethiopia is totally different from how residency training is handled in the US. We have a postgraduate program coordinator who mainly does the scheduling, summing up the evaluation results, posting the results, and so on. This program director is totally different in a lot of aspects. So is it important to bring it to Africa and give a really structured course for residency program coordinators to do their jobs better? That is going to be a verdict that we will be passing at the end.

The job description of a program director involves a lot of issues: he is an educator, an administrator, a financial monitor, and a time management expert – a lot of issues. He has to also understand the curriculum better than any other faculty, because he is going to give the feedback and decisions based on the curriculum. He needs some requisites to succeed. Some of these requisites include a good and well understanding chair. The other supporting faculty also play a great role in the success of the residence director. How does he manage to enroll these stakeholders?

The quality of a good program director include a good communicator, listener, decision-maker, and has to also pull up the actions that were already said. Part of the things that I learned from the residency director course include giving orientations to new coming residents. We did not have that tradition; we gave just a brief orientation on what they're going to do in the year, and so on. But this one is more structured and well organized. I learned how to do it in a less intense way and in a fun way. I prepared the materials that will be orienting my residence ahead of time. It helps me to be more organized and I will be able to share the mission of the residency program. We did that last year with Dr. Diana Curran in Addis.

The other issue that is significantly different from our system is mentoring residents. It sounds like Greek mythology, so you understand Mentor and Odysseus. Mentoring is better than if there is no bias and there is a large case study in the US that compares those who are mentored and those who are not. The outcome states that it significantly improves timely completion of phases, improves the satisfaction of the residents, and the residents tend to be more involved in academic careers than those who are not mentored. That is very helpful. How do we do this in the 21st century? Those are some of the things that I learned and you can probably brainstorm on this issue.

The other issue is retention and transition. After they are accepted, recruited, and have joined the residency program. Due to different life events, they may tend to withdraw because of family reasons, better offers, and so on. So how do we keep them in the training? How can we help them to pass through those sometimes-adverse events? That is a lesson that I got from this section. But the selection is very important.

During recruitment, you have to know who is unstable, who is not likely to quit, and who is not likely to continue. That is a big difference between our system and the US system in terms of recruitment and selection. There is a national residency matching program in the US. That is not the case in our country so we do it at every institution and a lot of difference. We need to adjust the curriculum of the CREOG in relation to selection and recruitment.

The other significant issue in Africa is dealing with administration. Program directors have the responsibility to facilitate the training. He has to deal with a lot of stakeholders, including the administrative wing. How does he negotiate better with administrators. That was the lesson that I got and as you can see this is [on the eighth] and counting down, one of my instructors [saying in Amharic], which literally translates to “Fortune favors the bold.” So you have to be bold in your demons to the administrators.

A major aspect that I learned from this residency director course is about the curriculum. I learned how to design and identify the basics of curriculum. How do you use it? How do you measure outcomes? How do you evaluate your residents, whether they are achieving the six core competencies? How do you teach residents? Residents are different from undergrad students. It's a safety-driven teaching most commonly, so how do you prepare your teaching techniques? This is another lesson that I got. The academic and technical relegation for residents who are in trouble is another lesson. At first the residency director should be able to identify the area of trouble. Where is he weak? Where is the tension? Is it at the behavior level, the cognitive level, or the technical level? Is it about the expectations and how to correct them and so on? So, that will avoid regrets. Again I am quoting the direct words from the course instructor, “It is very rare to regret earlier action and it is common to regret delayed action.” The residency director has a responsibility to track these things early and manage them.

What happens with residents in difficulty? We follow some specific orders. We have to try to identify where the difficulties are, comfort the residents, and try to develop an intervention. Then do

some action and follow-up. Recommendation at every level: What is the identified problem? How are we comforting the resident? What is the intervention? How is the follow-up? These should always be documented at every level. But if you have to terminate the resident's continuation then that is going to be very difficult for the residency director. Proper recording of the events is very critical. Due process is very necessary so that it is more transparent. Then you may consider to allow him for remediation depending on the disciplinary problem or academic problems.

Then at the end you have to have a resident and receive a copy of the plan. So he will abide by that signed document. I have already taken the first two sessions of the CREOG. The third part is in a couple of weeks in February 26th to be exact. I am hoping to get more knowledge during the third part, specifically on the probation and treatment of burnouts – the residency director and also other faculty and the residents as well.

Resident leave policies, what should they look like? We don't have a written residency leave policy, we only give them one month per year. Is that enough for males? If I have a female resident, what am I going to do? So these things I am hoping to get some insight. Teaching residents record analysis and patient safety and quality improvement education is the last piece that I am expecting to learn during the third part. Thank you very much.

Diana Curran: Since we are running overtime I am going to be brief. I have been assisting Dr. Balkachew with his new residency program. He has been doing a wonderful, wonderful job. Last summer I came to help him with orientation and it was a great example of me learning some great things that I am using now in my program in simulation. We did a bunch of obstetric and gynecological simulations, and one of the things that I learned from him is that they actually use a beef heart to teach cesarean section, repair of the uterus skills. It is actually a fantastic model to just throw it out there. We did a bunch of OB emergency skills and, as I said, gyn simulations. I also went over communication skills, since all of us know that is very important, as well as professionalism. I did some OBGYN topics. I did adjust the level of my teaching because all of his first year residents have already done two years out in rural practice, so a lot of them have a lot of knowledge. That was important for me to know, because it certainly would have been insulting for me to speak at the level of what we consider an intern. That is really all I have to say. I really enjoy learning things from them and vice versa. So that's all I have to say.

Karen Adams: So that wraps up our session and we just want to say that we are available to anyone who would like to talk about how the residency program directors school might translate to your country or to your continent. Thanks again for your attention.

Frank Anderson: This idea of a program director school, I know that some places don't have programs yet and some people have very early starting programs so again it is a luxury at some level to have a residency program director. But I think that if you think about that in ten years from now or five years from now, that the structure of an obstetrics and gynecology department may include a residency program director. When you think about the infrastructure of your department and you are filling out your sheets. That is something to consider.

Kwabena Danso: Well in fact that was the point that I wanted to add. Yesterday in my group, we were talking about infrastructure. I brought up the idea that it is important to have people who run the program. Of course they would be under the chair of the department, but it is important to have somebody who does the leg work and the hard work. So if you want some documentation, then that person would be able to give it to you. So it is worth considering in the infrastructure session of our partnerships. Thank you.

Madeline Taskier: We will have a quick break now for coffee downstairs in the atrium, outdoor

area for about half an hour - 10:45 or 10:50 to 11:15 or so. Then head straight to your breakout rooms to start working on your worksheets about curriculum development. You are going to work on that until one o'clock and then you are going to come downstairs into the lunch area for lunch. The same folks will be in your breakout rooms: Frank, Ray, Diana, myself, Professor Danso will all be circulating to make sure that you are working through your worksheet and to answer any of your questions, etc. Thanks so much.

Frank Anderson: You should actually have completed your worksheets up through "Curriculum Development." There is a "Faculty Development," sheet and a, "Curriculum Development," sheet. I would suggest that you work on "Faculty Development" and "Curriculum Development" sheets right now and if you need to go back to work on some of the other partnership stuff, you can do that later. Thank you.