Appendix III

Partnership Worksheets

Certification Worksheet Responses

A. Group Reporting on Country Proposals and Next Steps
B. Final Thoughts from Teams
C. Breakout Sessions: Thematic Group Comparison of Plans
   a. African OBGYNs
   b. American OBGYNs
   c. Professional Societies
D. Conclusion and Next Steps
   a. Appendices
   b. Conference Presentations
   c. Participant Reaction Worksheets
   d. Critical Components from Country Worksheets

Section 1: Authentic Partnerships

A. Given the issues described in the plenary presentations, the discussion, and the Elmina Declaration, what are the key aspects of your partnership that need to be discussed?
   - Challenge / Need to develop more faculty; important to many, not only for clinical work, but also for training the next generation of OBGYNs.
     - Need to improve incentives and infrastructure to draw people to the field
     - Also need to further develop mentorship & research processes
   - Developing & Standardizing curricula (both w/in and between countries)
     - Medical education
     - Residency
     - Fellowships
     - Subspecialty development
   - Developing & Evaluating the current state of the partnership
     - One country noted the equilibrium of residency exchange program with Michigan has shifted with more Michigan residents coming than domestic residents going.
   - Transparency of processes
   - Funding
     - Equipment
     - Residency programs
     - Research
     - Others
   - Supply of equipment
   - Other issues
     - Increasing access to healthcare
     - Increasing political support for OBGYN

B. How will decisions be made in the partnership?

   Many responses emphasized that decisions should be made by consensus, according to MOU, but noted the different levels of decisions to be considered (i.e., policy, clinical, etc.) and differentiated between these.

C. What major opportunities are there?
   - Improving maternal health outcomes
   - Improving healthcare infrastructure in general & other related systems
   - Further development of OBGYN field
     - Developing more OBGYNs
   - Developing research infrastructure
   - Bilateral exchange that serves both organizations
     - Fistula repair experience for American OBGYNs
   - Use OBGYN partnership to develop a model for other training programs in country
   - Developing partnerships between African training institutions

D. What major barriers for both partners will make working together difficult?
   - Funding
   - IT Capabilities
   - Curriculum Development
   - Communication
     - Language, Time Zones
   - Lack of central coordination
   - Differing institutional protocols for research, faculty & resident expectations
   - Differing standards of care
   - Potential inequitable exchange between partners
   - Need for transparency

E. Describe what you will do to communicate effectively. How will you avoid the typical problems of communication between partners?
   - Promise to respond quickly
   - Keeping people in the loop - "liberal use of the cc function"
   - Designated leader
   - Regular in-person visits and meetings
   - Setting written guidelines about communications
   - Transparency is important
   - Scheduled regular communications on certain topics

F. Effective partnerships require clear understandings of the roles to be played by each partner. Keeping in mind that roles also need to be flexible, describe the role of:
   The American partner:
   - To identify faculty willing to participate
   - To identify funding sources
   - Curriculum Development
   - Research support
   - Help with equipment acquisition
   - Provide hosted visits for partnership colleagues
   - Promote collaboration
   - Technical Support
     - Support with simulation activities and instruction
     - Help develop teams to maintain equipment
     - Online access (library materials, journals, etc.)
   - Opportunities for adjunct appointment of African partners
   - Provide expertise in policymaking

- The African Partner:
- Coordinate collaboration between countries & institutions
- Coordinate funding and resources
- Identify specific needs of departments
- Ensuring plans/projects aligns with local and national needs
- Communicating with leadership in the university
- Curriculum development
- Create space for training
- Establish guidelines for educational and clinical responsibilities
- Data collection for clinical data

G. Describe a process that would enable both inter-country (American-African) and in-country partnerships (for example, Ministries-Universities) to train and deploy new OBGYNs and translate knowledge into practice at the hospital, district, and community levels.

Responses to this varied, but most emphasized the need to deploy OBGYNs in rural areas through either mandated service or improving incentives.

Section 2: Partner Roles and Contributions

A. What are the expected inputs from the American partner? How much faculty time can be committed to the partnership, both funded and unfunded?
- Visiting faculty time & shared expertise; reciprocal visits
- Skills transfer
- Access to online materials
- IT infrastructure
- Research contribution & exchange between partners
- Some other issues also mentioned that have been raised elsewhere in the document.

B. Has an MoU been developed and/or signed? What are the next steps for your partnership in terms of an MoU or MoA?

Responses to these varied as MOUs/MOAs were in various stages of development/signing/implementation. As such, responses were mostly unique to the country, particularly for the next steps.

C. What are the expected inputs from the African partner? The university? The department? The government?
- Faculty appointments
- Faculty commitment & engagement
- Medical students & residents
- Teaching & Research opportunities
- Funding

D. What are the sustainability issues for the university-based OBGYN training program? Describe the issues and suggest how they may be overcome.
- Funding
- Government support
- Developing faculty and instructors

- Retention
- Clear roles by partners
- Transparency
- Research infrastructure

Section 3: Infrastructure

A. Given the needs assessment results and the discussions from the infrastructure plenary session, what additional information did you learn about the basic infrastructure needs to create/expand an obstetrics and gynecology department at the African institutions? List/describe all essential components.

The common themes that arose from this section include:
- IT Issues: IT infrastructure, quality internet connection, and online access to things like academic journals and current textbooks, including subspecialty textbooks.
- Physical infrastructure: New buildings or improvements to existing buildings. Specific examples include libraries, PHC hospitals, housing for trainees, and satellite care centers.
- Technological infrastructure: Many listed the need for more ultrasound machines, hysteroscopy, colposcopy, and things of this nature, as well as the training necessary to use these. At least one country noted telemedicine infrastructure as well.
- Basic supplies: Things like OR & ER supplies were mentioned a few times, as were teaching supplies, medical records and data collection.

B. Given the information in the infrastructure plenary session, what is required from an American institution that seeks to partner with an African OBGYN department? Brainstorm and record. What could be provided, given current resources, that would require new resources?

Though these responses were more unique per country than the first question, there was still noticeable overlap between the responses to the two questions. These include:
- Basic supplies: Potential connections w/US supplies for donated or reduced price disposable goods.
- Collaboration / IT: A few countries noted the commitment of US institutions through funding, faculty interest & time. More specifically, lending expertise through teleconferencing/ teleconsultation, facilitating research collaboration, and grant writing.
- Technological infrastructure: Equipment to be used for training purposes.
- Educational: Conferences & training, subspecialty training, assistance w/ technological & skills transfer.

C. What agencies of the African government/university would be involved in infrastructure building and what would be their role? What governmental resources are available to build OBGYN departments, and what would external support provide?

The countries responded almost universally with two agencies (though others were included to varying degrees) – the Ministry of Health and the Ministry of Education. Other agencies listed frequently included universities and medical organizations (either general physicians or OBGYN associations). Some further organizations included the Ministry of Finance as well as some less obvious choices – such as environmental agencies or the International Atomic Agency that provided funding to the cancer hospital.

The responses to the role of these agencies and the second question were less consistent and appeared to be much more country specific.

D. What (non-clinical) technologies are needed at your institution to either establish or strengthen the African OBGYN department?

These responses overlapped with the first two questions of this section again. Themes include:

- IT Issues: High speed internet & access to associated things like video conferencing, journal/textbook access, etc. Additionally, electronic medical records were brought up by numerous respondents.
- Training equipment, including simulation centers.
- While not as common, more basic supplies such as running water, electricity, and OR lights were also raised.

E. Describe the current clinical capacity at the African hospitals in terms of the number of OBGYNs, nurse midwives, clinical spaces and clinical equipment and anything else. Describe capacity/needs in Obstetrics–

General, and High Risk Obstetrics, Gynecology, Gynecological Oncology, Reproductive Endocrinology, Family Planning, Other.

The number of OBGYNs was consistently noted to be low overall, often substantially lower than the estimated need. Midwives were also noted to be lower than needed, and a few countries also highlighted substandard numbers of other positions like community health workers and trained birth attendants. Regarding specialty care, that was commonly noted to be low though it had less emphasis than the overall number of OBGYNs (the slightly lower emphasis on the lack of specialists and subspecialists may have been due to the assumed lack of these, given the lack of general OBGYNs). The most common specialty need appears to be Gyn ONC.

Clinic space was also noted to be far below the necessary capacity. Some noted the potential for renovation of existing facilities, but more common was a basic need for clinical facilities as the existing (or not) are not sufficient to the population's needs.

F. From the American partner, what resources are you are to share at the department level, medical school level, university level, and other levels (faculty time, electronic resources, CME, Grand Rounds)?

These responses raised similar topics to earlier questions, particularly IT/educational issues such as e-journals, online grand rounds, and other educational tools for CME.

G. What is the proposed personnel infrastructure for this department, both faculty and staff? Describe the ideal department. How can you fill the gaps now and how can you fill them in the future?

The responses to this question were largely unique, as the respondents took different approaches to answering the question. These included very specific responses of their department's number of doctors for each type of specialty/subspecialty, breaking down the administration branch and including faculty as one general component of that, or more general responses that included relative sizes of different roles to each other.

H. What can the American partner contribute (funded or unfunded) in terms of faculty time, internet resources, and sharing other electronic or printed resources?

Many responded to this question by either referring to previous responses or leaving it blank entirely.

Section 4: Curriculum Development

A. What are the current OBGYN curriculum needs at your institution?

These responses varied significantly by country, displaying a significant range including that there was not currently a curriculum in the country, that funding is needed to revise the current curriculum, or that a country has minimal need for its OBGYN curriculum. Additionally, multiple countries noted that their curricula had different needs according to region. Those countries that listed specific needs included training on such things as ectopic pregnancy, tubal ligations, fistula, and fibroids.

B. How many months is your current residency or specialist curriculum? How much time must be spent in each rotation?

The most common of length appeared to be ~4 years for residency, with most variability being between 3-5 years overall, though at least one country lacked a residency program.

Rotation length varied between countries but also within them. Most rotations appeared to fall within a window of two to four months, with some as short as one month and others as long as six months. A few also noted the amount of vacation time residents had per year, though many left this component out.

C. What rotations are included? What rotations would be useful/expected?

These responses varied substantially, with a couple countries providing very detailed listings of their rotations, some providing much smaller lists, and some not listing any, and the same can be applied to useful/expected rotations. That being said, the potentially useful rotations listed included: GYN ONC, OBGYN research, tropical obstetrics, and community/rural medicine.

D. What is the resident training schedule? What are the requirements for graduation?

The responses to these questions approached from a few different perspectives that make it difficult to draw any themes from them, such as hours/week, total years, number and timing of new classes, or curriculum contents. Graduation requirements were fairly general including written/oral exams being most commonly listed, and research work being frequently listed as well.

E. How are residents assessed?

These responses largely focused on the annual assessment of residents, which almost universally included written exams, written evaluations by faculty, and review of resident logbooks. A couple countries had more frequent evaluations (six months or quarterly) or included more details of what's involved in the evaluation.

F. Describe the amount of contact time between residents and faculty.

Lecture time per week ranged from 2-20 hours, with most of those likely in the lower half of

that. Many others responded that they had daily lectures, but didn't specify the amount of time spent in daily lectures.

Rounding time varied. Approximately one-third said about two sessions per week, one-third said daily, and another third did not specify. One respondent noted unstructured rounding time that had room for improvement.

Mentorship time varied most, with few reporting specific time spent on this. Many noted the ways mentorship occurs on a daily basis through routine interaction, though a couple also noted designated time with mentors specifically for that purpose.

G. What is needed in terms of contact time between residents and faculty?

There appear to be two primary themes to this question. One is a need to increase the number of faculty. The second is to have dedicated time for mentoring.

H. Is there an accreditation board for this residency?

Nearly all the respondents stated there was an accreditation board for the residency, with WACS having a plurality. Others included were Ministries of Education, Ministries of Health, and others.

I. Is there a role for regular program inspections?

These answers varied. A few countries have regular inspections now, a few did not have any but aimed to in the future, and others either didn't have any or didn't answer.

J. What inputs and information could come from your American partner to help solve these problems?

The most common response to this centered on the role of an external partner that could force institutions to upgrade their standards, specifically noting the role of externalization of inspection, external accreditation, and external examiners.

Section 5: Faculty Development

A. What are the African faculty needs in terms of clinical education and how could a partnership help fill the gaps? What could be the role of the professional organizations and international organizations?

These responses emphasize some of the points made in previous sections. Electronic resources were commonly noted, including things such as access to up-to-date clinical resources. Membership in professional organizations was viewed as important for other career development opportunities such as attending conferences, technical supervision, research mentorship, and adapting curricula for local needs, among others.

B. What are the faculty needs in terms of research mentoring?

Many noted the need to further develop specific research skills that could occur through mentorship, partnership, co-authorship, or other means. The main skills listed were research design, statistics, ethics, and writing (applied to both grants and research papers). One or two respondents noted their lack of support on these (such as having dedicated statisticians)

and it appeared they hoped to develop this. Related to this was obtaining funding for research. IRBs were mentioned by at least two respondents, specifically noting the need to develop or to improve the IRB. More generally, developing research as a career interest in young OBGYNs was noted to be important, with some suggestions including journal club, workshops, and recognition (beyond publications).

C. What are the faculty needs in terms of teaching and evaluation?

Teaching:
APGO was noted to have valuable resources by a number of respondents, specifically noting their different methods of teaching techniques. Some noted the challenge of different teaching styles from different countries being confusing to students and residents. Therefore, it may be useful to develop common values and/or a common style for instructors early in their teaching career. Increasing the number of faculty and having more resources (such as textbooks) were also noted.

Evaluation:
There were a variety of responses to the evaluation half. There didn't seem to be any particular common theme to these.

D. What is needed to ensure African and American faculty can reach their academic and promotion goals? What is the role of the government in this? What is the role of the university?

Grants and research publications were mentioned frequently in these responses, though these were not as commonly listed when respondents were referring to other career pathways such as the Ministry of Health or teaching.

E. What is the role of the government in this? What is the role of the university?

Government:
A predominant theme for the role of government centers on enabling research through providing funding, guidance on key research topics, helping faculty reach academic and promotion goals.

University:
Universities can provide financial support for faculty, but also can establish and maintain tenure tracks and determine tenure. On a related note, they can establish transparent guidelines for promotion and incentives to remain in academics (such as recognition for teaching and grant-protected time for research).

Section 6: District/Community Hospital Outreach

Each country appears to have received a different question (and numerous did not discuss this issue), so there weren't any opportunities for common themes between different respondents.

Section 7: Work with Ministry of Health and Ministry of Education

A. What is the current commitment by the African governmental agencies in terms of OBGYN deployment?

The primary theme that seemed to come up in these responses was the geographic distribution of OBGYNs, specifically to underserved rural areas. A few respondents noted that the current distribution was a problem. Most responded that the government controls

deployment to some degree or another (often for a certain amount of time post-residency) and it appears OBGYN's are frequently sent to underserved areas.

B. What is the Ministry of Health's goal for the deployment of OBGYN's throughout the country? (i.e., one to two OGYN's per each district hospital?) What are the opportunities and barriers to making this happen?

Goals:
All but one respondent listed goals for deployment. These were expressed in different terms, so comparisons are difficult. Here's the basic info by respondent:

- Three to four OBGYNs/major health center
- 800 OBGYNs in country
- Four OBGYNs / 200,000 population ; Two OBGYNs / district hospital
- Two OBGYNs / county ; Four to five OBGYN's / regional hospital
- Three chiefs, Five principal OBGYNs at each Central Hospital. After those numbers are achieved, they will be deployed to the District Hospitals.
- To OBGYNs per regional referral hospital; One OBGYN per district referral hospital.

Opportunities:
Responses varied for opportunities, but included the idea that OBGYN's accept their deployments, as well as the possibility for expanding training or building new medical schools that could expand the number of OBGYN's in country.

Barriers:
Political will was noted to be a problem, specifically by the MoH to train OBGYN's, and so the challenge as noted by one participant is that, "You can't deploy people that you don't have." Other problems noted including the pass rate for entry exams and that many districts (notably rural) are unattractive to OBGYN's.

C. What is needed to increase the deployment of OBGYN's, i.e., if sufficient numbers existed could they be deployed across the country?

Every respondent explicitly mentioned incentives as the primary method to increase deployment, typically referring directly to financial incentives. These sometimes took different forms (salaries, support for their children's education, and housing allowance), but responses also included non-financial incentives: things like improved rural infrastructure, internet access, and career opportunities also were viewed as ways to lure or retain doctors in rural areas.

D. Describe the role an academic OBGYN department could play in shaping maternal care policy.

A few potential pathways by which academic OBGYN departments could shape maternal care policy came up in these responses.

They can directly participate in policy-making meetings, whether these are through Ministry of Health or other policy-making organizations. They can provide the research that identifies the epidemiological burden and data on best practices to better inform policy or to advocate specific policy solutions. The academic department can draft, edit, and implement treatment protocols and policies. They may also fulfill this role by providing information on lessons learned from prior successful and unsuccessful maternal care policies. These apply

to both domestic and foreign policy discussions. Similarly, they can improve communications between the ministry and the professional association. Finally, it is also important to influence the operation of the hospitals to ensure that optimal care will be provided.

Section 8: Improving Clinical Outcomes

Each country appears to have received a different question (and numerous did not discuss this issue), so there weren't any opportunities for common themes between different respondents.

Section 9: Monitoring and Evaluation

A. What are the current indicators for maternal health being reported by the hospitals to the Ministry of Health or other?

- Maternal death
- Neonatal death
- Case fatality rates
- Stillbirth rate
- Caesarean section rate
- Near miss mortality rate
- Total delivery rate
- Antenatal care statistics
- Perinatal
- Near miss mortality rate
- Bed occupancy
- Pregnancy complications
- Preeclampsia/Eclampsia
- Postpartum hemorrhage
- Abortions
- HIV Status
- Skilled attendance
- FP / Contraceptive use

This isn't an exhaustive list, nor is it in order of how common they are, but the list essentially consists of the items that at least three countries noted. The exact means of reporting may also vary (for example: maternal mortality, maternal mortality ratio, and maternal deaths were all listed).

B. What other indicators would you like to track? What is the numerator what is the denominator of the indicator and how can it be measured?

This had a bit more variability than the list of indicators that are collected. A few countries listed maternal mortality. Near misses were listed in quite a few of these responses. The rest were essentially listed once each.

C. Where are most data recorded? Are data available from a hand written register? Computerized systems? Other?

Data appears to be universally available in written records, with scarce availability of

computerized records. The few computer records mentioned appeared to be available only at isolated hospitals, and in those cases often after a delay for translating the data from the written records into the computer program (such as Excel).

D. Describe a health information system and the personnel and equipment that would allow you to accurately track maternal deaths and the case fatality rates – stratified by referral status, cases of severe post partum hemorrhage, ectopic pregnancy, hypertensive disease of pregnancy, eclampsia, preeclampsia and the case fatality rate for referrals in and those who were booked. Additional data would include Apgar scores, neonatal intensive care admission, early neonatal death/survival, and still births. What other indicators would be helpful to measure?

   Responses varied for this question.

E. What are the important clinical/public health research questions?

   These broke down into a few predictable themes. One was the causes of maternal morbidity and mortality – what are the most common and how prevalent are they? Methods of preventing these outcomes were included, specifically researching whether or not they are effective. Similarly, health behaviors were mentioned (both how prevalent were they and how effective are they). A few respondents specifically raised the Millennium Development Goals as points to research. Finally, many included other issues not directly associated with pregnancy, such as cervical cancer, leiomyoma, and others.

F. Does the Ministry of Education or other government agency or private group provide the OBGYN professor time for teaching and provide time/resources/facilities and expertise for research? What could be changed to make this better?

   Many respondents listed that they got some time for research – somewhere around one half to one day per week, it appeared. However, a few also said there was not protected time for research. Dedicated time for research also appears to be flexible depending on the institution. One suggestion for making this better is to capitalize on the prestige the hospital gets from publications, to use this to convey the culture to outsiders and use that to get more protected time.

G. Describe what would be needed to create a supportive environment for research. What could the American partner offer to help build this?

   Common suggestions here included statistical support and assistance with grant writing, as well as other funding assistance. Additionally, many suggestions raised previously (increasing number of faculty, dedicated research time, online journal access) were raised again here.

H. How can academic programs promote working and research environments that are more likely sustain the staff?

   Only one respondent answered this question. Their response is as follows: Engaging at the highest level to make working environments most favorable. Creating an enabling environment is key. Skill mix is essential beyond just clinical skills: research skill, teaching skill, presentation skill, advocacy, communication, leadership skill, negotiation skill, and time management. Cultivate more technical experts among faculty and trainees. Some residency programs will output critical leaders, which creates national opportunity at the highest level to impact policy and quality of education and service delivery.