Bangladesh Fistula Mission Partnership: Leveraging Assets from the United States Agency for International Development and the Department of Defense to Address a Health Care Crisis in a Developing Nation

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ABSTRACT

Introduction: Obstetric fistulae are a leading scourge for women in developing countries resulting, in severe individual suffering and devastating socio-economic repercussions for her family and community. The underlying causes of obstetric fistula stem from multiple factors to include poor nutrition, early marriage, insufficient education and inferior social status of women as well as substandard medical care. The US Agency for International Development (USAID) has invested more than $100 million globally since 2004 to address these factors as well as support women suffering with fistulae. The ultimate goal is to eradicate obstetric fistula in Bangladesh in the next 20 years. Despite these efforts, nearly 20,000 women in Bangladesh still suffer with this malady. Methods: To close this gap, USAID and the Department of Defense (DOD) developed a novel Interagency Agreement (IAA) leveraging the surgical skills of military health professionals to scale-up the ongoing fistula care program. The agreement outlined three lines of effort: (1) treat existing fistulae by bolstering surgical capacity of the existing USAID fistula care program; (2) promote fistula mitigation with lectures and hands-on teaching of obstetric care as well as safe gynecologic surgery; and (3) assist with advocacy at higher levels of the Bangladesh government. A Bangladesh Fistula Mission Partnership working group was formed to design and implement this IAA. Critical partners from the US Embassy in Dhaka included USAID (Health, Legal, Contracting), the DOD (Office of Defense Cooperation), and Department of State (Regional Security Officer). Partners from the US Army included United States Army-Pacific Command (Surgeon, Legal, Finance, Security Cooperation, Contracting), Regional Health Command-Pacific (Operations, Legal, Public Affairs), and Tripler Army Medical Center (Department of OBGYN, Operations, Public Affairs). Institutional Review Board approval was not required as the treatments offered were standard of care. Results: The Tripler Army Medical Center (TAMC) health professionals executed the IAA with one pre-deployment site survey and two surgical missions in 2016–2017. The military team supported the surgical repair of 40 pelvic fistulae and perineal tears and provided operative management for an additional 25 patients with pelvic organ prolapse. Furthermore, the team conducted 19 professional lectures and multiple educational forums at hospitals in Kumudini, Khulna and the premier medical university in Dhaka for over 800 attendees including physicians, nurses and students to help prevent obstetric and surgical fistulae. Importantly, the team assisted USAID as subject matter experts in its advocacy to the Bangladesh Ministry of Health for improved maternity care and regulatory oversight. During the missions, the team enhanced their readiness by exercising individual and collective tasks while exposing personnel to the cultural context of the region. Conclusion: This IAA was the first USAID funded and DoD-executed health mission in the US Indo-Pacific Command Area of Responsibility. Direct participation in the IAA enabled TAMC to support the US Indo-Pacific Command Theater Campaign Plan, the Department of Defense Instruction 2000.30 on Global Health Engagements, the USAID Country Development Cooperation Strategy, and the US Ambassadors Integrated Country Strategy Objectives in Bangladesh. This effort can serve as a model for future cooperation between USAID and the DoD.

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The US Agency for International Development (USAID) has invested more than $100 million since 2004 to support fistula patients globally, working to restore dignity to women’s lives. Despite large-scale investment in Bangladesh, nearly 20,000 women live with obstetric fistula, and pregnant women continue to suffer the deleterious effects of childbirth. In an effort to close the gap, USAID and the Department of Defense (DOD) developed a novel Interagency Agreement (IAA) to leverage the expeditionary surgical capabilities of military health professionals to scale up the ongoing USAID fistula care program. Tripler Army
Within 7 to 9 days, large fistulae are an abnormal communication between the lower urogenital and gastrointestinal tracts. The most common cause of pelvic fistulae worldwide is obstructed labor, which leads to severe morbidity and even mortality for the new mother. These fistulae develop primarily between the bladder, urethra and the vagina, but can also develop between the uterus and the vagina as well as the rectum and the vagina. With obstructed labor, the presenting fetal part becomes lodged deep in the pelvis. Without intervention, obstructed labor can extend for days, leading to extensive areas of vascular injury and pressure necrosis. Within 7 to 9 days, large areas of tissue loss ensue involving the vagina, bladder, urethra and rectum resulting in complicated fistulae with uncontrolled leakage of urine and feces. In addition to the direct damage to pelvic organs, obstructed labor with resultant fistulae also leads to multiple other morbidities such as chronic dermatitis of the external genitalia due to the continuous exposure to urine and feces, renal failure due to ureteral scarring, neurologic injuries and permanent musculoskeletal problems from prolonged abnormal positioning in labor, as well as chronic pain. Lastly, prolonged obstructed labor, as seen in developing countries, leads to fetal demise in 88–95% of cases with major neonatal injury accompanying the majority of remaining live births.

Even if the mother survives parturition after such an injury and does not succumb to sepsis or hemorrhage in the postpartum period, her family and extended social circle commonly do not accept her back into the community. She is shunned due to her incontinence of urine and feces or due to other morbidities such as foot drop. Additionally she is stigmatized due to the infertility which almost universally results. With the loss of family support in a country with no established welfare system, she is rapidly banished by society and leads a miserable existence often as a beggar, with a markedly reduced lifespan succumbing to the effects of poor nutrition, kidney failure, or infection. Often these women take their own life.

The underlying causes of this malady are multifactorial arising from economic, social and cultural factors. As Bangladesh is still a developing country, large portions of the population live in poverty which predisposes women to poor nutrition. This factor leads to stunted growth with skeletal dysmaturity at the time of their first delivery as well as predisposition to poor wound healing. Families of low financial means subject daughters to early marriage often at 13–14 years of age, with pregnancy following soon thereafter. Moreover, women in Bangladeshi society suffer a subordinate social status which limits their access to basic education, further limiting their ability to receive appropriate maternal care.

The risk factors for fistula including teenage pregnancy, poor nutrition and stunted growth are compounded by substandard medical care. Although Bangladesh has a national health care system with public health care facilities to include clinics and hospitals distributed throughout the country, the medical services are often of poor quality. Poorly trained providers and limited resources engenders a distrust by the population in the medical system and makes families less likely to bring a laboring family member to government facilities to receive care. In addition, medical care, although subsidized, is not free, and families are not able or willing to invest their meager savings into obstetric health care.

The exact burden of obstetric fistulae is difficult to establish in countries such as Bangladesh as birth outcomes are not accurately recorded amongst large segments of the population. Most recent estimates place the number of existing fistulae at approximately 20,000 with an additional 1,000 cases per year. Although many cases can be repaired surgically with return of normalized bowel and bladder function, only 300 cases per year are surgically treated and the backlog of untreated cases in Bangladesh continues to increase. This rise has also been fueled by fistulae caused by poorly performed cesarean sections and hysterectomies.

**COORDINATION OF USAID-DOD EFFORT**

USAID has worked resolutely to decrease and ultimately eradicate obstetric fistula in Bangladesh employing a multi-pronged approach. As described above, the variables that influence the development of obstetric fistula within Bangladeshi society are complex. (Fig. 1). The societal variables affecting the economic and social standing of women are the most difficult to modify and require sustained broad national programs to promote durable changes. USAID has undertaken a large scale public awareness campaign to help the population understand the dangers of obstructed labor, and the need to seek medical assistance with any concern regarding pregnancy or labor. USAID sponsored training programs for birth attendants and emergency obstetric services to improve intrapartum care. Representatives continue to vigorously campaign the Ministry of Health to promote
interventions beyond safe maternity care including improved access to safe birth control and education on its use.\textsuperscript{17}

To treat existing fistulas, Non-Governmental Organizations (NGOs) funded by USAID developed extensive outreach programs with centers around the country to assist women seeking care for obstetric fistulae. These patients are screened and then referred to fistula camps where they are evaluated and offered surgical treatment. Additionally, USAID developed programs to help women with fistula reintegrate into society through work programs. These collective efforts are coordinated through the NGO EngenderHealth (www.endgenderhealth.org).\textsuperscript{17} Despite these far-reaching efforts, the gap in surgical treatment remains and led USAID to seek assistance from the Department of Defense.

The USAID objective was to find a ready-made partner to assist in their long-term fistula campaign in Bangladesh. In requesting support from the DOD, USAID sought a surgical team to augment their established program along three lines of effort: 1) treat existing fistulae by bolstering surgical capacity of the existing USAID fistula care program; 2) promote fistula mitigation with lectures and hands-on teaching of obstetric care as well as safe gynecologic surgery; and 3) assist with advocacy at higher levels of the Bangladesh government. This surgical team would require expertise in pelvic surgery, and experience working in remote environments with limited logistical support. With manpower, anesthesia support and surgical equipment, the team would increase the number of patients who could be evaluated and surgically treated in fistula camps. Importantly, the DOD team would serve in a supporting role in this effort. The Bangladeshi surgeons would remain the face of the mission and, with the assistance of Engender Health, provide the full scope of postoperative care for all patients. The intent of this organizational framework is to build trust between patients and their local care providers. The mission did not want to undermine, or worse, supplant this trust. The team was assigned sole responsibility for providing educational forums to physician, resident, nurse and medical student audiences across the country. Furthermore, USAID sought assistance in round table discussions with ministers and other critical leaders in their advocacy efforts within the Bangladeshi government ministries.

To shape and organize this effort, Regional Health Command-Pacific (RHC-P) established the Bangladesh Fistula Mission (BFM) working group with participants representing the various interagency partners and subordinate offices required to plan, prepare and execute the concept (Fig. 2). Critical working group partners from the US Embassy in Dhaka included USAID (Health, Legal, Contracting), the DOD (Office of Defense Cooperation), and Department of State (Regional Security Officer). Partners from the US Army included USARPAC (Surgeon, Legal, Finance, Security Cooperation, Contracting), the RHC-P (Operations, Legal, Public Affairs), and TAMC (Department

\begin{figure}
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\includegraphics[width=\textwidth]{fig1.jpg}
\caption{Underlying causes of fistula in Bangladesh.}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{fig2.jpg}
\caption{Dotted lines depict coordinating relationships, solid lines depict command relationships. Legend for Figure 2: DC – Washington, DC; DSCA – Defense Security Cooperation Agency, HI – Hawaii; RHC-P – Regional Health Command Pacific; TAMC – Tripler Army Medical Center; USARPAC – US Army Pacific Command; USAID – US Agency for International Development; USINDOPACOM – US Indo-Pacific Command.}
\end{figure}
Bangladesh Fistula Mission – Planning and Execution

EXECUTION OF THE PREDEPLOYMENT SITE SURVEY (PDSS) AND FISTULA MISSION

As part of the IAA, TAMC sent two senior surgeons to Bangladesh as part of a PDSS to meet with critical personnel, survey the hospital sites and make final preparations for the mission. In May 2016, the survey team traveled to Bangladesh to engage with their USAID counterparts and the Bangladesh fistula surgeons with whom they would collaborate. The Bangladeshi surgeons expressed a strong preference for instruction on urogynecologic surgery. In order to fulfill this request, in addition to patients with obstetric fistula, those with severely symptomatic pelvic organ prolapse were offered surgical treatment during the follow-on missions. Lastly, the PDSS allowed the team to tour and critically assess the capabilities of the individual hospitals where surgeries would be performed and lectures presented.

The BFM was scheduled to utilize facilities in three hospitals spread over the southern part of the country. USAID had standing agreements with these hospitals where fistula camps had been conducted over the preceding 15 years. The hospitals had varying degrees of expertise and equipment available. Kumudini Women’s Hospital, located 60 miles north of Dhaka, is a 750 bed charity hospital built in the 1930s with an attached women’s hospital and nursing school. The facility had limited technical and manpower support for complicated surgery and no intensive care. The other two hospitals, Ad-Din hospital in Khulna and the Bangabandhu Sheikh Mujib Medical University (BSMMU) in Dhaka had facilities comparable to a US hospital in the 1970s–80s. The supporting staff in these two facilities were well trained and experienced. Both Ad-Din and Kumudini hospitals had large open wards to accommodate patients during their prolonged postoperative care. All hospitals had basic surgical equipment and disposable supplies available.

The team augmented these with critical items such as headlamps, ureteral stents, 3-way Foley catheters, cystoscopes as well as special abdominal and vaginal instruments.

After preparations were completed to include approval of credentials by the Bangladeshi national medical board, allotment of funds from USAID to RHC-P, and mitigation of the hazards identified during the PDSS, the BFM was ready to commence. The first mission was postponed due to the brazen terrorist attack directed against Westerners on 01 July 2016 at a Dhaka Café in the diplomatic enclave resulting in 29 deaths. With careful scrutiny of the security situation, the US Embassy allowed the team to proceed four months later. The first mission from 19 November to 2 December began with intake briefings at USAID and the US Embassy as well as the headquarters of the NGO Engender Health. The surgical and teaching missions followed at Kumudini hospital, Ad-Din hospital and BSMMU. The second mission from 15–27 May 2017 omitted the engagement at Ad-Din hospital due to their common use of nonspecific menstrual regulation procedures for family planning which conflicted with rules set forth by the newly elected U.S. government administration.

The US surgical team consisted of an urogynecologist, urologist, gynecologic oncologist, anesthesia provider and two resident physicians. The team was supported by two USAID representatives and two representatives from EngenderHealth—one of whom was a public health physician, the other a public health researcher. Additionally USAID provided all housing, travel and security arrangements to include armed guards at hotels and police escorts of armored embassy vehicles.

The US team worked hand-in-hand with the two most experienced fistula surgeons in Bangladesh at all locations. Engender Health had selected and prescreened patients as part of their fistula program and provided transport and lodging for these patients as well as their supporting family members. All patients were evaluated in a preoperative clinic by the US- Bangladesh team. The evaluations included obtaining a thorough review of pertinent history and symptoms with the assistance of the EngenderHealth staff and the Bangladeshi surgeons who acted as interpreters. Examinations were performed to help define the type and extent of the fistula with clear documentation of the fistulous tract using retrograde bladder filling with dilute methylene blue solution. Basic laboratory evaluation was performed but upper urinary tract imaging was not available. After the evaluations were completed, individualized surgical plans were made for each patient and the schedule was set. The Bangladeshi surgeons counseled patients on the plan with associated risks. The team was split into two groups, each composed of US and Bangladeshi surgeons. These teams operated simultaneously. Bangladeshi medical students, nurses, residents and staff physicians were assigned to the teams to support and learn.

The combined Bangladeshi-TAMC team performed a total of 40 fistula and perineal repairs and 25 prolapse...
surgery over the course of the two missions. The mean age of the fistula and perineal tear patients was 35 ranging from 22 to 53 years. They had suffered with these problems for extended periods of time ranging from 2–25 years. Most patients were destitute with marginal nutritional status. A detailed listing of operations performed is provided in Table I.

The fistulous tracts varied in size, location and complexity. The patients with fistulae <3 cm in diameter above the bladder trigone with thin margins of necrosis were categorized as simple. More challenging were cases with larger fistulae or those which involved the bladder neck and urethra. These were documented as complex. Complex fistulae required complete reconstruction of the proximal urethra with mobilization of the bladder from the pubic bone. All surgeries with exception of those for ureterovaginal fistulae were performed vaginally. The smaller fistulae with limited scarring were closed primarily. The larger ones required large-scale mobilization of surrounding vaginal and even labial tissue. Urethral reconstruction was performed with neighboring vaginal tissue. Due to severe vaginal stenosis and scarring, relaxing incisions in the vagina were required in many cases. During preoperative evaluation, 15% of patients were deemed inoperable due to the size of the fistula and the degree of scarring. The only option for these patients would have been a urinary diversion procedure with ostomy. Aside from the high morbidity of these operations, patients would be unable to receive the necessary postoperative care in the Bangladeshi medical system. These procedures were therefore not offered and these patients were sent home.

During the two surgical missions, the team delivered 19 grand round lectures to audiences around the country (Table II). Over 800 Bangladeshi medical personnel attended the lectures. These lectures provided targeted information for the audience of nurses, medical students and physician-surgeons with the ultimate goal of decreasing obstetric and surgical morbidity in the country. Topics presented at Kumudini and Ad-Din hospitals included basic management of patients in labor and delivery, operative vaginal delivery, techniques for vaginal and abdominal hysterectomy, peri- and postoperative care, pelvic floor physical therapy, and cystoscopy. The lectures at BSMMU focused on advanced pelvic floor surgery. One of the major goals requested by EngenderHealth was to teach cystoscopy technique. During the two missions, the team certified eight Bangladeshi surgeons in cystoscopy anticipating that this diagnostic tool would augment their ability in performing safe surgeries.

The team also met in conference with the US Ambassador, the USAID Mission Director, the leadership at the Kumudini and Khulna Hospitals, and the Vice- Chancellor of BSMMU, among many other experts at Bangladesh’s premier medical teaching hospital located in Dhaka. The most critical meeting occurred during the second mission with the Assistant Minister of Health where the US team participated as subject matter experts in the discussion. The elevated status of American surgeons in Bangladesh helped USAID’s efforts to raise awareness of the obstetric and postoperative fistula epidemic plaguing Bangladesh.

**IMPACT AND LESSONS LEARNED**

The BFM had three principle goals, the first of which was to provide surgical care to women afflicted with fistula. The surgical success of the mission was assessed by the physician team from EngenderHealth who followed all patients for 30–90 days postoperatively. With funding from USAID, EngenderHealth paid for the surgical expenses and subsequent hospitalization and provided financial support for the patient and family caregivers attending to the patient. The mission had an 86% success rate in closing fistulous tracts 1 month postoperatively. However, this success does not entail complete continence as obstetric fistulae generally lead to

### TABLE I. Procedures performed during Bangladesh Fistula Mission

<table>
<thead>
<tr>
<th>Types of Repair Procedures</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Complex lower urinary tract fistula</td>
<td>17</td>
</tr>
<tr>
<td>Simple vesico-vaginal fistula</td>
<td>7</td>
</tr>
<tr>
<td>Isolated ureterovaginal fistula</td>
<td>3</td>
</tr>
<tr>
<td>Rectovaginal fistula</td>
<td>3</td>
</tr>
<tr>
<td>Perineal tears with cloaca</td>
<td>10</td>
</tr>
<tr>
<td>Prolapse</td>
<td>25</td>
</tr>
<tr>
<td>Exam under anesthesia</td>
<td>6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>76</strong></td>
</tr>
</tbody>
</table>

### TABLE II. Lectures Presented during Bangladesh Fistula Mission

<table>
<thead>
<tr>
<th>Topic</th>
<th>Number</th>
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<tbody>
<tr>
<td>Basic pelvic anatomy</td>
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<tr>
<td>Non-surgical treatment of pelvic organ prolapse</td>
<td></td>
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<tr>
<td>Non-surgical treatment of stress urinary incontinence</td>
<td></td>
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<tr>
<td>Simple Urodynamics in the assessment of lower urinary tract symptoms</td>
<td></td>
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<tr>
<td>Indications and technique of low transverse cesarean delivery</td>
<td></td>
</tr>
<tr>
<td>Techniques for the induction of labor</td>
<td></td>
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<tr>
<td>Obstetric laceration and repair</td>
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<tr>
<td>Labor, delivery and postpartum interventions to reduce pelvic floor dysfunction</td>
<td></td>
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<tr>
<td>Principles of pre and intraoperative care</td>
<td></td>
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<tr>
<td>Principles of postoperative care</td>
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<tr>
<td>Safe anesthetia</td>
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<tr>
<td>Technique of total abdominal hysterectomy</td>
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<tr>
<td>Technique of total vaginal hysterectomy</td>
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<tr>
<td>Surgical approach to stress urinary incontinence</td>
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<tr>
<td>Vaginal reconstructive surgical approach to pelvic organ prolapse</td>
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<tr>
<td>Colpoceleisis</td>
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<tr>
<td>Cystoscopy technique and ureteral stent placement</td>
<td></td>
</tr>
<tr>
<td>Cystoscopy practicum with certification (8 participants)</td>
<td></td>
</tr>
<tr>
<td>Enhanced surgical recovery</td>
<td></td>
</tr>
<tr>
<td><strong>Total: 19 lectures</strong></td>
<td></td>
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</tbody>
</table>
severe compromise of the continence mechanism and scar-ring of the bladder resulting in stress and urge incontinence postoperatively. Beyond postoperative urinary inconti-nence, patients also had to face other long term conse-quences of surgery to include pain, gynatresia, sexual dysfunction, infertility and the effects on mental health which are difficult to measure. One patient succumbed to a suspected pulmonary embolism during the second mission.

The BFM doubled the number of obstetric fistulae assessed and treated as compared to previous USAID-sponsored fistula camps in Bangladesh. The rates for successful treatment are consistent with those recorded in other mis-sions. Failures can be attributed to the size and extent of the obstetric fistula and the poor tissue quality seen in the majority of patients. Even if the fistula is anatomically closed at time of surgery, the wounds have an increased likelihood of breaking down due to poor vascularity. The team made valiant surgical attempts, but the sobering outcomes reflect the significant challenge in curing these patients.

Fortunately, USAID-sponsored studies are beginning to show a decline in new cases of fistula among Bangladeshi women in childbirth. This positive trend is due to improved prenatal and obstetric care, options for birth con-trol, decreasing family size, decreasing rates of childhood marriage, improved nutrition, and awareness of the popula-tion regarding the risks of childbirth. However, a new epi-demic of fistulae is afflicting women in Bangladesh. These result from surgical errors typically accompanying hysterectomy and cesarean section, leading to vesico-vaginal and uretero-vaginal fistulae. Compared to obstetric fistulae, these fistulae are easier to repair, as they are smaller and do not involve the large-scale necrosis and compromise of the continence mechanism. The team successfully treated all five post-operative fistulae. The root cause for these inadequately performed surgeries lies with inadequate training and poor regulation. The Bangladeshi government has limited over-sight and regulation of training programs and surgical prac-tices. USAID had identified this problem through surveys and incorporated the prevention of surgical fistula into the second goal of the BFM.

The second mission goal was training and teaching Bangladeshi health care providers. The responsibility for this part of the mission fell exclusively on the TAMC team, which lectured on multiple subjects germane to the topic of fistula prevention and care. The team trained eight Bangladeshi gynecologists in basic diagnostic cystoscopy with which they are better equipped to address more chal-lenging fistula cases and gynecologic surgery. Additionally the team taught perioperative care and surgical technique for hysterecomy and cesarean section both in lecture format as well as in the operating room to staff physicians, residents, medical students and nurses. The effect of this training in preventing future fistulae is difficult to measure as it was centered on a small group of surgeons and staff. However, any improvement in the obstetric or surgical care undertaken by these surgeons will hopefully reduce the rate of obstetric and iatrogenic fistulae in Bangladesh. Moreover, the sur-geons who participated in the BFM and cystoscopy training had leadership credentials and were selected from different geographic regions of the country. The intent of USAID was to have these participants engage in training in their respec-tive hospitals thereby extending the reach of the BFM. This is the first reported mission to utilize a training program for cystoscopy in a developing country to mitigate the risk of surgical fistula. This abbreviated training however does not replace a full-fledged training program, and USAID is con-sidering funding further surgical training campaigns.

The success of the third goal of the BFM, to draw political impetus to the battle against fistulae in Bangladesh, is also difficult to assess. The INDOPACOM team provided expert medical opinion for the fistula campaign in the halls of the Bangladeshi government. The meetings focused the attention of Bangladeshi politicians and bureaucrats on the plight of fistula patients and policies which could be implemented to alleviate the suffering. The BFM was only the “tip of the spear” of an extensive enterprise with a large NGO network providing the ground work and USAID providing the supervision and funding. Eradication of new obstetric fistula in the next 10–20 years will represent a significant development-milestone for Bangladesh. It will require a major shift of policy and community support for the care of women in Bangladeshi society. Although Bangladesh has made signifi-cant economic and social progress over the past 40 year and strengthened its health system, access to timely and quality obstetric services remain a challenge.

One clear success of the BFM Partnership is the ability of USAID and the DOD to collaborate on common objectives leveraging one another’s strengths and assets. The IAA lever-aged DODs capability to support an USAID program whereby DOD provided personnel and USAID resourcing and direction. Initial funding calculations included DOD salary costs of personnel deployed. These costs consumed 70% of the funds allocated. To truly leverage capabilities, DOD could take on a greater share of the financial burden. If DOD could fund the modest medical logistic requirements and absorb personnel costs, USAID would be able to cover travel and security costs. Taking this approach would increase the number of missions and truly lead to a cost sharing arrange-ment between government agencies that would be less expensive than funding NGOs or other contracting support mechanisms. This concept was socialized with the INDOPACOM Overseas Humanitarian Disaster Assistance and Civic Aid (OHDACA) program manager with initial positive feedback. Next, the IAA concept would need to be discussed with the DOD liaison to USAID in Washington, DC, the Defense Security Cooperation Agency which is responsible for the OHDACA authority, and Office of the Secretary of Defense for Policy who provides oversight of the OHDACA program. Should these various organizations agree
to the concept, USARPAC could submit an OHDACA funding proposal for medical supplies and work with the USAID Development Advisor to INDO PACOM to update the IAA for action. This single example could be used as a template for future interagency collaboration to meet National Security Strategy objectives, markedly improving the coordination that currently takes place at the Combatant Command level.

CONCLUSION
This mission was the first USAID funded and DoD-executed health care mission in the Pacific USINDOPACOM Area of Responsibility. In developing and executing this IAA, RHC-P and its subordinate medical elements contributed to national and regional security and stability by improving bi- and multilateral relations, advancing US national priorities, and enhancing partner nation health care systems. The TMC health professionals enhanced their readiness by exercising individual and collective tasks and exposing personnel to the cultural context of the region. Direct participation in the IAA enabled the US Army to support the USINDOPACOM Theater Campaign Plan, the Department of Defense Instruction 2000.30 on Global Health Engagements, the USAID Country Development Cooperation Strategy, and the US Ambassadors Integrated Country Strategy Objectives in Bangladesh.

PREVIOUS PRESENTATIONS
Grand Rounds Presentation: Bangladesh Fistula Mission Partnership University of Hawaii Department of OB/GYN 10 AUG 2018, Tripler Army Medical Center 23 MAY 2018 University of Kentucky Department of OB/GYN 15 MAR 2018

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This mission was funded by USAID and did not involve any private funding source.

CONFLICT OF INTEREST
None of the authors have a conflict of interest to declare.

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DEDICATION
This manuscript is dedicated to Dr. Gary Davis MD, COL, MC Ret, who has spent the last 13 years in Afghanistan as a State Department physician working tirelessly with the Afghan government augmenting their medical system to address the needs of women.

REFERENCES

