**Juba Teaching Hospital, South Sudan Health Systems Strengthening Project**

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## I. Demographic Information

1. City & State
   - Juba, Central Equatoria State, Republic of South Sudan

2. Organization:
   - Real Medicine Foundation, South Sudan ([www.realmedicinefoundation.org](http://www.realmedicinefoundation.org))
   - Medical Mission International ([www.mminternational.org.uk](http://www.mminternational.org.uk))

3. Project Title:
   - Juba Teaching Hospital: Health Systems Strengthening

4. Reporting Period:
   - July 1 – September 30, 2016

5. Project Location (region & city/town/village):
   - Juba Teaching Hospital, Juba County, Central Equatoria State, Republic of South Sudan

6. Target Population:
   - Direct project beneficiaries are approximately 444,680 people living in Juba and the immediate surrounding areas, projected from the 2008 South Sudan Population and Housing Census. Including referrals from South Sudan’s 10 states, the hospital serves the country’s population of 10.16 million indirectly.

## II. Project Information

7. Project Goals:
   - To improve the quality and sustainability of medical and surgical services provided at Juba Teaching Hospital (JTH).

Juba Teaching Hospital is the only national referral hospital in the whole country of South Sudan and is located in the capital city of Juba, Central Equatoria State. With an estimated population of 10.16 million (based on annual population growth of 3% from a population census conducted in 2008) and lack of proper functioning primary healthcare facilities upcountry, many South Sudanese have nowhere to go but to this national referral hospital. Some military and police personnel also share these limited facilities with civilians.

Juba Teaching Hospital is directly funded by the central government through the National Ministry of Health of South Sudan. Medical supplies and maintenance are handled through the National Ministry of Health, with supplements coming from United Nations agencies and NGOs. The supplies are irregular, forcing patients to buy most of the consumables and pharmaceuticals from private pharmacies. Due to the high level of poverty and current economic situation, most vulnerable patients are not able to afford modern medicine, hence increasing patient mortality in Juba.

8. Project Objectives:
   - Improve patient wards and build infrastructure within Juba Teaching Hospital.
   - Assist in improving conditions for providing health care at Juba Teaching Hospital, including the policies and management of regular and medical waste.
   - Rehabilitate and/or purchase new medical equipment.
   - Provide basic medical supplies, disposables, and pharmaceuticals for Juba Teaching Hospital starting with Pediatric department, complementing those provided by the Ministry of Health.
Organize on-site clinical training, including general equipment usage, respectful maternity care and respectful health care, and psycho trauma support.

9. Summary of RMF/MMI-sponsored activities carried out during the reporting period under each project objective (note any changes from original plans):

- Continued to provide maintenance for the Antenatal care block following the refurbishment completed during a previous quarter.
- Provided micronutrient supplements to Juba Teaching Hospital’s Antenatal Care Unit (ACU).
- Printed and provided antenatal cards for the ANC department.
- Facilitated minor repairs, such as plumbing repairs, in the ANC department.
- Supported the Infectious Disease unit of Juba Teaching Hospital by installing doors for the wards and washrooms.
- Supported the hospital’s human resource capacity by providing one RMF registered nurse, now serving in the Gynecology department.
- Continued to support RMF cleaners attached to the Pediatric department to supplement the few cleaners maintained by the Ministry of Health (MOH).
- Procured and provided adequate cleaning materials for the Pediatric department to keep the wards clean.
- Hired a research consultant to review the final version of the Maternal Near-Miss Audit report; the audit was conducted at Juba Teaching Hospital (refer to detailed Near-Miss Audit report).
- Installed additional office space for RMF’s Juba-based team.
- Procured and delivered 2 additional laptop computers for RMF’s Juba coordination team.
- Continued to support high speed WIFI internet service at RMF’s office and the Maternity ward.
- Continued monitoring and mentorship of trained healthcare professionals on the usage of Health eVillages tablets.
- Facilitated and coordinated meetings with the MOH, UN agencies, and other partners on how to improve services at Juba Teaching Hospital.
- Renewed RMF’s certificate of operations with the Relief and Rehabilitation Commission.

10. Results and/or accomplishments achieved during this reporting period:

RMF’s Health Systems Strengthening Project, focused on Juba Teaching Hospital (JTH) has achieved many notable milestones during this reporting quarter through our committed partnership with the National Ministry of Health, JTH administration, and JTH staff.

- Pregnant women visiting the Antenatal clinic are benefitting from micronutrient supplements provided by RMF, reducing the burden of patients having to buy the supplements from private pharmacies.
- The ANC continued to enroll women in the program with the help of antenatal cards provided by RMF.
- The improved/upgraded, well-furnished, well-maintained Antenatal Care Unit (ACU) continued to provide quality antenatal care services for women and their families. The ACU also provides a favorable learning environment for students from JCONAM, Juba Health Science Training Institute, Juba School of Nursing, Central Equatoria School of Nursing/Midwifery, the Juba University College of Medicine, and visiting teams.
- Supported one registered nurse, posted in the Gynecology department by Juba Teaching Hospital’s management to bridge the staffing gap in the unit and share her experience.
- The Infectious Disease department continued to provide services for the suspected cholera cases/patients.
- RMF’s Juba coordination team and visiting field teams have adequate working space in Juba following the installation of additional office space.
- All RMF staff members now have access to computers following the purchase of two additional new laptops.
- We continued to support high speed WIFI internet service at both the Maternity ward and RMF’s office, providing internet access to doctors, nurses, and RMF’s Juba team.
• Monthly provision of adequate cleaning materials to the Pediatric department and support of 3 cleaners ensured proper cleaning and maintenance of hygiene in the wards and the surroundings.
• The Maternity Operating Theatre continued to provide emergency obstetric services, further improved by the installation of an air conditioning system.
• The final version of the Maternal Near-Miss Audit report generated by the study team was delivered to an independent research consultant for review before publication.
• The two Health eVillages (HeV) master trainers, along with Juba Teaching Hospital’s nurses, midwives, and doctors, continued to benefit from the HeV tablets. JTH staff is now able to do quick reference checks, hence improving the quality of care and general services they provide.
• We collected the monthly report from healthcare professionals on the usage of HeV tablets and patients’ responses to how the application of the tablets influenced their healthcare experience. This is to evaluate the impact of the Health eVillages project (the evaluation is ongoing).
• We facilitated and performed regular monitoring and supportive supervision of JTH healthcare workers and janitors on implementation of waste management policy guidelines.
• RMF continued to work closely with JTH administration and public health officers to ensure proper implementation of waste management policy guidelines and regular waste removal.
• RMF is legally allowed to continue operating in South Sudan after obtaining our new registration certificate from the Relief and Rehabilitation Commission following the newly enacted South Sudan NGO bill.
• RMF entered into partnership with UNICEF to implement primary healthcare services (in addition to nutrition services we are already providing) in Greater Pibor Administrative Area and Ayod County (refer to detailed reports under UNICEF-supported health project).

11. Impact this project has on the community (who is benefiting and how):

• This project offers employment opportunities for South Sudanese nationals in both technical and supporting positions.
• The women coming for routine antenatal care services are benefiting from RMF-provided micronutrient supplements, reducing the financial burden of buying supplements from private pharmacies and encouraging pregnant women to come for services at JTH, hence improving pregnancy outcomes.
• The upgraded/improved Antenatal Care Unit (ACU) continued to provide comprehensive services for women and their families in a clean, well-organized environment.
• Waiting times in the Antenatal Care Unit (ACU) have been reduced, since there are now three well-furnished examination rooms compared to only one before the renovation. This has a very positive effect, as women are receiving quality services and encouraging their communities to visit JTH, hence improving the rate of institutional deliveries and overall pregnancy outcomes.
• Privacy: the remodeled Antenatal Care Unit (ACU) has three furnished examination rooms, which ensures privacy and encourages women to share their concerns and pregnancy related complications with healthcare providers. This plays a significant role in the overall outcomes of their pregnancies.
• There is now an adequate waiting area for conducting health education, which is positively influencing the health habits of women and thus pregnancy outcomes; it is also encouraging child spacing and family planning services.
• There is now space for pre- and post-test counseling of pregnant women and their partners during their antenatal visits.
• Students from JCONAM, Juba Health Science Training Institute, Juba School of Nursing, Central Equatoria School of Nursing/Midwifery, the Juba University College of Medicine, and visiting teams continued to have adequate learning space and are interacting well with the pregnant women, tutors, and ANC midwives.
• The Gynecology department continued to benefit from the services of an RMF-supported registered nurse, who is filling a human resources gap for the hospital.
• The installation of doors at the Infectious Disease unit has reduced the spread of WASH-related illnesses like cholera within the hospital.
• The Pediatric inpatient wards are kept clean, reducing nosocomial infections, and the premises are conducive to the health and well-being of healthcare providers, patients, and visitors.
• The Pediatric ward cleaners continued to benefit from protective gear, such as gumboots, provided to them in the previous quarter.
• JTH premises and the surrounding areas are preserved and kept clean and safe through regular removal of the waste which had posed a threat to the healthcare workers, patients, surrounding community, and the environment.
• The working conditions of JTH’s janitorial workers have been improved through implementation of the waste management policy, developed with the support of RMF staff.
• The high speed WIFI internet service at the Maternity department and RMF office provides internet access to doctors, nurses, midwives, and RMF’s team, facilitating research and improving continuous medical education for healthcare professionals and coordination for RMF’s team.
• The RMF coordinating team in Juba continued to perform its functions without interruption, as we have a backup source of electricity from the generator stationed at the JCONAM students’ hostel.
• The master trainers continued to supervise and mentor the healthcare workers provided with HeV tablets, further educating them on usage of the devices.
• The healthcare professionals provided with Health eVillages (HeV) tablets continued to provide evidence based healthcare services for patients by using the devices as a guide.
• The trained healthcare professionals at JTH continued to practice the concepts of psycho-trauma support, enabling them to identify and manage traumatized patients.
• RMF’s Juba-based staff continued to perform their duties satisfactorily in the well-furnished, well-equipped office.

12. Number served/number of direct project beneficiaries:
• Direct project beneficiaries are approximately 444,680 people living in Juba and the immediate surrounding areas, projected from the 2008 Sudan Population and Housing Census.
• Students from JCONAM, Juba Nursing School, Juba Health Science Training Institute, the Central Equatoria School of Nursing/Midwifery, and the Juba University College of Medicine are also direct beneficiaries of this project since they all do their clinical practice in Juba Teaching Hospital.

13. Number of indirect project beneficiaries (geographic coverage):
1. 10.16 million South Sudanese from all ten states, as per the 2008 Sudan Population and Housing Census. Juba Teaching Hospital is the only national referral hospital for the entire country.
2. All business communities from neighboring and other African countries, the working class from NGO/INGOs, and UN agencies, etc.

14. If applicable, please list the medical services provided:

N/A

15. Please list the most common health problems treated through this project.

• Malaria
• Diarrheal Diseases
• Intestinal Worms
• Respiratory Tract Infections
• Urinary Tract Infections
• Skin Infections
• Measles
• Malnutrition
• Enteric Fever
• Burns
• Trauma (i.e. Traffic Accidents)
• Gunshot Wounds
16. Notable project challenges and obstacles:

The project has made notable progress during this reporting quarter, but has faced challenges in the following areas:

1. As per Ministry of Health orders, the two blocks of the Accident and Emergency (A&E) Department in Juba Teaching Hospital (JTH) are still not occupied following their successful upgrade/improvement by RMF. Patients are still lying on the floor due to lack of space. The A&E blocks are not serving the purposes stipulated in the improvement proposal and agreed upon by the Ministry of Health in writing, thus hindering patients' wellbeing.

2. The operating theatres in the A&E department are not functional due to lack of equipment. This hinders the performance of minor surgeries, since the main operating theatre is always fully booked.

3. Power instability at Juba Teaching Hospital hinders effective and efficient service delivery, especially at night. The lack of reliable electricity has contributed significantly to the maternal and under-5 mortality rates in Juba Teaching Hospital (JTH).

4. Frequent interruption of running water in the hospital compromises cleaning and effective infection control measures, as well as normal functioning of the operating theatres and labor suite.

5. Irregular and inadequate supplies of pharmaceuticals, consumables, and laboratory reagents forces patients to buy most of the needed supplies from private pharmacies. Due to poverty and rising inflation (the inflation rate has risen to approximately 660%), most people are not able to afford modern medicines, which increases patient mortality at Juba Teaching Hospital (JTH).

6. The Ministry of Health (MOH) lacks commitment in initiating a stabilization center for the management of Severe Acute Malnourished (SAM) children with medical complications.

17. If applicable, plans for next reporting period:

- Continue to implement RMF’s annual work plan, guided by our MOU with the Ministry of Health (MOH).
- Follow up on the WASH proposal for improving Juba Teaching Hospital’s water and sanitation system.
- Follow up with the MOH on the plan for improvements to the Maternity and Pediatric departments.
- Discuss (with the MOH) the possibility of setting up a stabilization center in Juba Teaching Hospital for the management of Severe Acute Malnourished (SAM) children with medical complications.
- Discuss (with the MOH) the possibility of receiving essential medicines from Direct Relief International to supplement those provided by the MOH.
- Continue to monitor the impact of the Health eVillages devices.
- Finalize and publish the Maternal Near-Miss Audit report.
- Continue to rehabilitate the equipment set at Juba Teaching Hospital, with focus on the Pediatric department.
- Continue to provide basic medical supplies, disposables, and pharmaceuticals for Juba Teaching Hospital (JTH), especially the Pediatric department, complementing those provided by the Ministry of Health.
- Continue to organize on-site clinical training.
- Continue trainings on Respectful Health Care and Respectful Maternity Care, and continue to monitor and evaluate the impact of RMF’s Respectful Maternity Care Project through continued supervision guided by RMF’s RMC supervisory checklist, specifically developed for this purpose.

18. If applicable, summary of RMF/MMI-sponsored medical supply distribution and use:

N/A

19. Success story(s) highlighting project impact:

See Project Photos

20. Recommendations by the Juba Teaching Hospital administration and MOH to RMF for the fourth quarter of 2016:
- To provide essential pharmaceuticals and consumables for the Maternity unit.
- To procure a generator for the Maternity unit.
- To consider refurbishing the Pediatric blocks of Al Sabah Children’s Hospital, as the Pediatric department moves from JTH to Al Sabah Children’s Hospital.

### III. Financial Information

21. Detailed summary of expenditures within each budget category as presented in your funded proposal (file attachment is fine). Please note any changes from plans.

Provided separately

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**Project Photos**

- Contractor delivering materials for building the foundation of the extension of RMF’s Juba office space.
- Technician cutting prefab panels for the wall of the building.
- Fixing the roofing of the new office space.
- Welding burglar proof attachments for the windows.
Adding interior design to the new office space.

Fixing the burglar proof attachments at the door of the installed office space.

Metallic doors for the Infectious Disease department repaired with support from RMF. Waiting to be installed.

Mowing the hospital premises supported and facilitated by RMF.

Electrician fixing the interior lighting system.

Exterior of the RMF Juba office space. The first door is the newly installed office space annexed to the existing structure.
Student carrying micronutrients provided by RMF for the ANC department.

R-L; Joyce in charge of ANC, Taban, and JCONAM midwifery student. Joyce thanked RMF for provision of antenatal cards.

JCONAM student providing ANC services in the RMF-maintained Antenatal Care Unit.
JCONAM students conducting a health education session in the RMF-maintained Antenatal Care Unit during a routine visit.

Cleaning materials procured by RMF for the Pediatric ward.

A young girl underwent several surgeries for rectovaginal fistula following a gunshot wound, now stable carrying a child on treatment for simple malaria.

A child on treatment for malaria with a good prognosis.

Twins on treatment for gastroenteritis and malaria in RMF supported Pediatric ward.

A child on treatment for bronchopneumonia with a good prognosis.
A child on treatment for malaria, recovering well and discharged to continue on oral medications at home.

A child admitted due to malaria and RTI. The mother reported good improvement.

A child on treatment for severe malaria and G/E in RMF’s well-maintained Pediatric ward.

A child on treatment for severe malaria and enteric fever, reported great improvement.

A child on treatment for malaria and RTI, has improved greatly clinically.

A child admitted due to severe malaria, has improved and allowed to continue with oral medications at home.
A child on treatment for G/E and malaria. Her young sister is by her side to give her support.

A child on treatment for malaria with a good prognosis.

A child on treatment for malaria has recovered well and is set to go home and continue with oral medications.

A child on treatment for G/E and pneumonia in RMF’s well-maintained Pediatric ward.

A child on traction for a fractured right femur following RTA in surgical Ward 5, renovated by RMF.

A child admitted in Ward 5 (surgical) due to a fractured right tibia following RTA, renovated by RMF.
JCONAM students helping in wound dressing of a woman admitted in Ward 5 (medical), renovated and supported by RMF.

RMF nutrition nurse relocated from Ayod after delivery, now serving in Gynecology ward of JTH.