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Improving Pediatric Services

**THE PALESTINIAN HEALTH SECTOR REFORM AND DEVELOPMENT
PROJECT (FLAGSHIP PROJECT)**

SHORT-TERM TECHNICAL ASSISTANCE REPORT

**Prepared by:
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Consultant**

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ACRONYMS

CPAP	Continuous positive airway pressure
EKG	Electrocardiogram
EWAS	Emergency Water and Sanitation
ICU	Intensive Care Unit
IDP	Institutional Development Plan
MoH	Ministry of Health
NICU	Neonatal Intensive Care Unit
PMC	Palestine Medical Complex
STTA	Short-term Technical Assistance

ABSTRACT

This consultancy was carried out from February 15 – May 15, 2010 in support of the Flagship Project's request for short term technical assistance to investigate and assess the maternal and child health and the pediatric services available in hospitals of the Palestinian Ministry of Health system. The emphasis was on services in Nablus at Rafidia Hospital. An initial assessment of existing services was performed during the first days of the consultancy, and then the remainder of the consultancy was focused on developing and implementing a plan to improve pediatric services. In concert with this activity, some assessment was made of other elements of pediatric medicine; specifically, the status of physician training and development and opportunities for continuing education. Finally, a portion of the consultancy was directed toward an assessment of the status of the Children's Wing of the Palestine Medical Complex and its readiness to open for operation.

SUMMARY OF RECOMMENDATIONS

Within the next month:

- Pursue procurement process for necessary equipment: pediatric-specific consumables; infant warmers; emergency trolleys; oxymeters; glucometer; bilirubinometer; blood gas analyzer; EKG machine; phototherapy units; apnea monitors; syringe and IV infusion pumps; neonatal CPAP machines; pediatric scales.
- Deploy EWAS resources to assess renovation needs in pediatric areas of Rafidia Hospital
- Strengthen the interdisciplinary care model set in place at Rafidia Hospital by continuing visits and monitoring the status

Within the next six months:

- Advocate with MoH officials the need for additional nurse staffing
- Core resuscitation competency training of personnel working in areas of Rafidia Hospital that interact with pediatric patients: BLS, PALS, NRP
- Assist in preparing in-service training classes on basic elements of pediatric care for staff who work in other patient care and clinical areas of the hospital (pharmacy, laboratory, radiology, etc). Help determine types of protocols to be used.
- Increase number and selection of study materials, journals and pediatric reference resources available
- Recommend a configuration and location for placement of two beds in Emergency Department for pediatric patients
- Assess possibility of creating separate pediatric entry and triage points in the Emergency Dept.
- Help hospital management, medical staff, and the MoH decide whether a separate Pediatric ICU is needed. If so, participate in planning its size, location, configuration and equipment.
- Participate in the design, procurement, and installation of new informational and directional signage to and within the Pediatric Unit
- Assess pediatrics services at Qalqilya Hospital and Alia Hospital, Hebron

Within the next year:

- Develop pediatric volunteer program (feeding babies, play, assisting staff, etc...)
- Develop proposal for nationwide Annual MoH Pediatrics Conference at Rafidia Hospital
- Begin process with MoH, Palestine Medical Council, and perhaps Palestinian Pediatric Society to move toward development of strategic objectives; i.e.,
 - Increased and enhanced pediatric residency training programs
 - Establishing indigenous pediatric subspecialty training programs
 - Developing the “culture of Pediatrics”

SECTION I: INTRODUCTION

The Flagship Project is a five-year initiative funded by the U.S. Agency for International Development (USAID), designed and implemented in close collaboration with the Palestinian Ministry of Health (MoH). The Project's main objective is to support the MoH, selected non-governmental organizations, and selected educational and professional institutions in strengthening their institutional capacities and performance to support a functional and democratic Palestinian health sector able to meet its priority public health needs. The Project works to achieve this goal through three components: (1) supporting health sector reform and management, (2) strengthening clinical and community-based health, and (3) supporting procurement of health and humanitarian assistance commodities.

Within the Project's second component, maternal and child health is a priority area, as it is for the Palestinian Ministry of Health (MoH). Plans are underway to operationalize the Children's Wing at the Palestine Medical Complex (PMC). In the meantime, the Flagship Project is actively engaged in supporting pediatric hospital services throughout the West Bank. Although a portion of this consultancy was directed toward development of the Children's Wing, the focus was on pediatric hospital services in the Nablus area at Rafidia Hospital.

This consultancy occurred from February 15 – May 11, 2010. During that time the secondary hospital services for children in the Nablus area underwent significant changes. In previous years, hospital services for children were divided between Al Watani Hospital and Rafidia Hospital, with Al Watani Hospital housing most of the services. However, consequent to several factors in early 2010 the MoH mandated consolidation of all pediatric services at Rafidia Hospital. The move of all pediatric patients, equipment and staff at Al Watani Hospital to Rafidia Hospital occurred on March 15, 2010.

The relocation of pediatric patients was directed by the MoH before Flagship's involvement; however, this consultancy assisted the MoH and Rafidia Hospital in the relocation. The capacity of Rafidia Hospital was assessed and recommendations were offered to make optimal use of the facilities and resources allocated to Pediatrics at Rafidia.

Of more strategic importance, however, the Flagship Project seized the opportunity offered by these developments to implement a plan to create a Center for Excellence for Pediatrics at Rafidia Hospital. The bulk of the consultancy was used to provide support to the Flagship Project in this effort.

The plan that was developed for Rafidia pediatrics by the consultancy encompasses several areas of focus:

- Strengthening Administrative Capacity
- Facilities and Equipment
- Training and Professional Development
- Reform of Pediatric Care; i.e., creating a "child-friendly" institution

It is anticipated that many of the initiatives and reforms implemented at Rafidia Hospital can also be applied to the Children's Wing at the PMC.

This report contributes to Component 2, Objective 2.1 of the Flagship Project: Improve the Quality of Essential Clinical Services for Palestinians.

Task 2.1.2 Strengthen Quality Improvement Systems within Palestinian Health Institutions to Deliver Better Secondary Health Care Services

Deliverable 2.1.2.4 Expanded opportunities for scholarships, residencies, fellowships, visiting professor or certificate programs to support improved quality of MoH and NGO hospital services by training Palestinian doctors and nurses in various areas, including advanced clinical specialties related to maternal/child health care and in chronic disease prevention and treatment (i.e. midwifery, general pediatrics and sub-specialties, laparoscopic surgery, etc)

This consultancy also contributed to the MoH IDP module number 1, Create a Center for Excellence at the Palestine Medical Complex; and module number 12, Improve the Quality of Clinical Services in the Palestinian MoH Hospital System.

SECTION II: ACTIVITIES CONDUCTED

The consultant's Scope of Work was broadly drawn to include development of clinical guidelines and protocols, assess aspects of professional development, and assess pediatric referral and discharge patterns in MoH hospitals. Many of these activities were to be performed within the context of opening the Children's Wing of the Palestinian Medical Complex (PMC). Because the Wing has been intended to become a referral center for children, the scope of work went beyond clinically-oriented tasks to encompass professional education and community referral issues.

Upon arrival of the consultant, however, the Flagship Project had agreed with USAID to interrupt activity at the PMC and turn its focus to the relocation of the pediatric care unit from al Watani to Rafidia hospital in Nablus. Therefore, the consultant was re-focused to that arena and its more specific needs.

MoH hospital services in the Nablus area had been divided for many years between Al Watani Hospital and Rafidia Hospital. Early in 2010 coincident with this consultancy, the MoH decided to consolidate all the pediatric services at Rafidia Hospital alone. This decision was made without Flagship counsel or advice. However, once decided, the MoH asked Flagship to assist in these changes. Consequently, the consultant was tasked primarily with assessing the situation and then developing an Action Plan for pediatrics services at Rafidia Hospital. This task involved assisting as requested in the transition itself, but also recommending any other plans or actions regarding future pediatric services and facilities at Rafidia Hospital. Therefore, activities during the consultancy were focused at Rafidia Hospital, the main facility in the northern West Bank area with highly specialized pediatric care services.

With this change in focus, the consultant's scope of work was narrowed. In the relatively brief three months of the consultancy period, there was little time to pursue the objectives of developing clinical guidelines and protocols or assessing referral patterns.

The changes in pediatric inpatient care that were mandated by the MoH involved more than a physical relocation of patients. The transition comprised many different facets including:

- Introducing a new "culture" into Rafidia Hospital, which previously been primarily a surgical hospital for adults. Staff, administration, patients, and visitors were not accustomed to seeing sick children and their families. The routine of the hospital was disrupted.
- Many doctors, nurses, and paramedical personnel had little prior experience with pediatric illness or patients. For example, the pharmacists were not familiar with common pediatric medications or doses.
- The space allocated for the new pediatric ward at Rafidia was designed and previously used for adult surgical patients. It was not wholly suitable for children. Pediatric patients have needs that are much different from adults; for example, their mothers stay with them overnight and more space is needed in the rooms; children have higher frequency of communicable diseases and isolation facilities are needed; optimal care requires facilities for play and privacy. None of these requirements were known, expected or planned for by the MoH.

- Many pediatric nurses at Al Watani Hospital were transferred to Rafidia Hospital with the move. They were not familiar with the hospital, its departments or systems, or the incumbent nursing staff there.
- Similarly, the medical staff had been previously divided between the two institutions and were not used to working with each other.
- The consultant found that the MoH and hospital leadership had little understanding of pediatric medicine or its different requirements.

The consultant's scope of work needed to be carried out within a context of changing cultures, mores, behaviors, and practices. Many of the consultant's activities represented only the beginning of processes that will continue well beyond the 3-month consultancy.

The activities conducted by the consultant were as follows:

- Visits were made to Rafidia Hospital 2-4 times per week throughout the consultancy. The purposes and outcomes of the visits varied and changed as the process went on. A typical visit included time spent in the pediatric ward observing activities and noting problems or needs. Following these observations, discussions occurred with medical and nursing staffs to understand their concerns and viewpoints. With this perspective, an informal or formal meeting could occur with the appropriate department of hospital administration to consider the possibility of implementing an activity. If agreement was reached, a process of implementation began. If agreement was not reached, further discussions followed in order to try to reach consensus about moving forward.

Accomplishments included:

- Before the relocation of patients to Rafidia, the facilities were assessed. Based on the assessments of each item below, recommendations were made to MoH and hospital administration to make the following changes:
 - Create an area for isolation patients.
 - Create a playroom or facility.
 - Provide another bathroom for patients and families.
 - Install additional sinks for hand-washing in the general pediatric ward and in the NICU.
 - Provide a "child-friendly" environment with colorful décor, drawings, etc.
 - Provide space for doctors' charting.
 - Provide a space for patient and family counsel.
 - Install guard rails on the windows in patient rooms.
 - Cover electrical outlets in rooms.

Following the move of patients into Rafidia Hospital, the consultant observed care practices and behaviors, as well as facilities and resources for professional staff. Recommendations were made as follows.

- Control traffic flow within the pediatric ward, limiting numbers of visitors.
- Assess nurse staffing and make recommendations to increase the staffing of nurses to meet international standards; e.g., no more than 1:6 nurse: patient ratio in pediatrics and no more than 1:3 in NICU.

- Evaluate the care of children in the adult ICU and make recommendations regarding the need for a Pediatric ICU.
- Procure textbooks, journals, internet access and wireless capabilities to enhance educational resources for physicians.
- Provide trainings in Basic Life Support (BLS), Pediatric Advanced Life Support (PALS), and Neonatal Resuscitation Program (NRP).
- Provide dedicated space for children in the Emergency Department.
- Reinforce proper waste management and infection control practices on the ward.
- Encourage and model interdisciplinary care of patients.
- Provide or recruit additional paramedical personnel, including social service, diet and nutrition, physiotherapy and occupational therapy, etc
- Encourage pediatric topics at weekly medical staff educational meetings.
- Post signage to inform patients about the new pediatric services.
- Provide additional cardio-respiratory monitors for the NICU.
- Provide in-servicing for new ventilators in the NICU.
- Establish a schedule of regular educational events for the professional staff.

Additional activities at the hospital included meeting with staff and administrators to determine the status of certain infrastructure components, including Medical Staff By-laws; clinical and departmental policies and procedures; and job descriptions. Following the determination that there were no such documents extant, the consultant pursued possibilities to provide drafts of them to the hospital.

Further activities carried out by the consultant included:

- Preparation of reports, including recommendations, for Flagship Project staff
- Participation in relevant Flagship Project internal meetings as requested
- Part of the process of the change in pediatric care involved recommendations to improve the capacity for pediatric care into the future. This included assessing the opportunities for continuing professional medical education and residency training programs. Toward that end, meetings were held with officials of MoH, Palestine Medical Council, An-Najah University, and the Pediatric Palestinian Society. These were preliminary activities only and time was not available during the 3-month consultancy to proceed beyond that initial assessment stage.
- Some activities were prompted ad hoc. For example, a request was made for a meeting between the Flagship Project and the Poison Control and Drug Information Center at An-Najah University to consider possible collaboration with the Flagship Project. The consultant was requested to attend and report the results to Flagship leadership.
- During the consultancy, from April 12 – 23, 2010, STTA Dr Shamel Abd-Allah, Pediatric Intensive Care Specialist visited Rafidia Hospital. The consultant was tasked with coordinating the visit and accompanying Dr Shamel throughout. This occupied approximately 2 weeks of the consultancy and the results were reported in Dr Shamel's STTA report.

- Visit Al-Makasad Hospital, Jerusalem, accompanying Dr Shamel Abd-Allah. Meet Chair of Department of Pediatrics and tour pediatric facilities at the hospital.
- Assist in preparation and planning for future STTA consultants for pediatric care services
- Brief visit to Children's Wing, PMC, to assess its readiness for opening. Meet pediatric physicians and Director of Ramallah Hospital Wing
- Debriefing before departure with Dr Suzy Srouji, USAID
- Preparation of STTA report before departure

All these activities finally led to formulation of an Action Plan for pediatrics services at Rafidia Hospital which is shown in Section III.2 below.

Most of the recommendations made by the consultant were not carried out during the period of the consultancy. Others were initiated and still in process at the end of the consultancy.

Components of the Action Plan that were initiated or carried out or completed during the consultancy included:

- Cardio-respiratory monitors were obtained, installed, and in-serviced for NICU, Rafidia Hospital
- First-ever Pediatric Grand Rounds conducted at Rafidia Hospital
- An isolation area was created on the pediatric ward.
- Engineers were requested to visit the hospital to evaluate some of the other recommendations. This did not occur during the consultancy.
- Initiate meetings and sessions with the medical and nursing staffs to implement interdisciplinary care of patients.
- Selected by-laws, policies and job descriptions were drafted and provided to the hospital leadership.
- Plans were initiated to provide BLS, PALS, and NRP trainings.

SECTION III: FINDINGS, RECOMMENDATIONS, AND NEXT STEPS

I. Findings

Rafidia Hospital Pediatric Services

Rafidia Hospital has been in operation for almost 40 years primarily as a surgical hospital. It also housed obstetrics services, an accompanying NICU, and an ER where children comprise a high percentage of patients. Nevertheless, the consultant found that the understanding of pediatric care at the hospital is somewhat primitive and without a sophisticated understanding of the unique aspects of children and their care. Just two examples encountered were that children in the ER receive no anesthetics for suturing lacerations, and pharmacy has little understanding of the ways clinical pharmacy services must differ for infants and neonates.

The existing facilities within Rafidia which were provided for the relocation of pediatric patients and services were deficient, but not irremediable. The most notable deficiencies at the time pediatric services were transferred to Rafidia were:

1. Inadequate floor space to accommodate the mandated census of 36 patients, which resulted in crowded conditions
2. No Pediatric ICU. Critically ill children are hospitalized in the adult ICU
3. No facilities for monitoring children of intermediate disease severity on the general ward
4. Inadequate bathroom facilities for patients and families
5. Inadequate sinks in the isolation area
6. Poor attention to waste management by staff
7. No play area
8. No facilities for family waiting
9. No suitable furniture for a parent to stay overnight at the child's bedside
10. Inadequate monitors, nasal cannulas, neonatal equipment in the NICU
11. No emergency trolleys
12. No blood gas machine or other lab equipment or dedicated pharmacy for NICU
13. Inadequate office and on-call facilities for physicians
14. Inadequate pediatric learning resources for staff

The other most notable resource that is deficient is nurse staffing. It is inadequate, with the nurse: patient ratio sometimes exceeding 1:10. The staff is experienced, but few have formal pediatric training.

The pediatricians at Rafidia are well-trained, capable and dedicated. There are nine, which is an adequate number to meet the clinical demands, however, none is a fully qualified subspecialist (for example, pediatric cardiologist or pediatric neurologist). This is a deficiency throughout the MoH system, as noted below.

All staff, both physicians and nurses, are either lacking in basic and advanced resuscitation certification or many years lagging in renewal.

Although there are congenial relations between physicians and nurses, there is no real sense of an interdisciplinary approach to care. Nurses do not attend morning reports, lectures, or attend ward rounds. Other paramedical personnel (e.g. clinical pharmacy, nutrition) are completely uninvolved with ward care.

Administrative departmental infrastructure is lacking. There are no written departmental policies or clinical guidelines or protocols.

Pediatrics in the MoH System

Although pediatric medicine in general was not a specific focus of the consultancy, it is apparent that there are three major challenges to improving the quality of pediatric care and services in the MoH system.

First, there are no pediatric subspecialists at all in the entire MoH system. There are general pediatricians whose practice experience has made them particularly adept in certain areas, especially neonatology, but no one has received accredited subspecialty training or been certified. This not only prevents access of patients to the highest standard of care, but also stifles the professional development and job satisfaction of physicians.

Second, the pediatric residency training needs to be improved. Many residency positions are available, but the bulk of the training programs are devoted to sharing the clinical work load, rather than training and education. There is no formal curriculum for pediatric residents at Rafidia and no regular formal educational venues.

Third, there is only a rudimentary understanding throughout the MoH, hospital administrations, and general public of the unique aspects of pediatric medicine. Children are considered to be “small adults.” This is an impediment to delivering optimal care and creates a less than optimal environment for children and their families. An example observed during this consultancy is the absence of intermediate or intensive care areas devoted to children at Rafidia Hospital. As a result, a 6 week old infant was hospitalized in the ICU of Rafidia Hospital on an adult-size bed, next to a 60 year old man with pancreatitis.

Children’s Wing, PMC

Only one brief visit was made to the Children’s Wing during this consultancy. It was possible to make only a few observations.

- The Children’s Wing is poorly designed with little understanding of medical facilities and logistics, yet the problems are not insurmountable and the facilities can be functional.
- The Wing is well equipped with major equipment (beds, monitors, etc) but is lacking in adequate pediatric-specific consumables.
- The four pediatricians at Ramallah Hospital Wing who will man the Children’s Wing are well trained and competent, but are inadequately staffed to cover a children’s hospital.
- In addition, to the knowledge of the consultant, there is no departmental infrastructure in place or clinical policies, protocols, or guidelines available
- There are no pediatric subspecialists available to the Children’s Wing.
- It is not apparent that any attempt has been made to establish relationships with other institutions for the purposes of sharing referrals, consultations, educational activities, etc.

2. Recommendations

Rafidia Hospital Pediatric Services

An Action Plan for pediatric services at Rafidia Hospital was formulated by the consultant. It is shown below. The recommended activities and their timelines are tabulated on the next page.

Category	Action	Timeline	Month						
			Apr	May	Jun	Jul	Aug	Sept	
Support the MoH's relocation of Pediatrics from Al Watani Hospital to Rafidia Hospital and improvement of the combined unit	Assist in evaluation of available space and recommend number and configuration of beds on the Pediatric Unit.	3 months	x	x	x				
	Participate in assessment of existing equipment in Pediatrics; project any additional needs for the ward, such as monitors, emergency trolleys, etc.; and order equipment needed.	2 months	x	x					
	Evaluate adequacy of patient care areas (isolation, intermediate care, playroom, treatment room) as areas to properly care for pediatric patients, and recommend actions to correct any deficiencies found	3 months	x	x	x				
	Help calculate staffing needs for the new Pediatric Unit and prepare recommendations for making personnel adjustments to meet international standards	3 months	x	x	x				
Training	Train personnel working in pediatrics areas in BLS procedures and Emergency Department staff in basic pediatric life support.	3 months	x	x	x				
	Assist in preparing in-service training classes on basic elements of pediatric care for staff who work in other patient care and clinical areas of the hospital (pharmacy, laboratory, radiology, etc). Help determine types of protocols to be used.	6 months	x	x	x	x	x	x	
	Increase number and selection of study materials, journals and pediatric reference resources available	4 months	x	x	x	x			
Reform and develop Pediatric Excellence at Rafidia Hospital (MoH)	Recommend a configuration and location for placement of two beds in Emergency Department for pediatric patients	3 months	x	x	x				
	Assess possibility of creating separate pediatric entry and triage points in the Emergency Dept.	3 months	x	x	x				
	Help hospital management, medical staff, and the MoH decide whether a separate Pediatric ICU is needed. If so, participate in planning its size, location, configuration and equipment.	5 months	x	x	x	x	x		
	Participate in the design, procurement, and installation of new informational and directional signage to and within the Pediatric Unit	3 months	x	x	x				
	Help with the design and activation of a pilot data collection project to create a model for other departments to use when collecting, storing and using data.	6 months	x	x	x	x	x	x	
	Prepare a plan for pediatric specialty educational conferences (Pediatric Grand Rounds, Journal Club, etc), and help operationalize	3 months	x	x	x				
	Develop pediatric volunteer program (feeding babies, play, assisting staff, etc...)	6 months	x	x	x	x	x	x	
	Implement interdisciplinary care model, such as Team Rounds, Patient Care Conference, etc	3 months	x	x	x				
	Develop proposal for nationwide Annual MoH Pediatrics Conference at Rafidia Hospital	6 months	x	x	x	x	x		

Of the Action Plan items, the following were implemented or initiated during the consultancy

- Cardio-respiratory monitors were obtained, installed, and in-serviced for NICU, Rafidia Hospital
- A nasal CPAP (continuous positive airway pressure) machine was used on patients for the first time in NICU.
- First-ever Pediatric Grand Rounds conducted at Rafidia Hospital
- An isolation area was created on the pediatric ward.

- Engineers were requested to visit the hospital to evaluate some of the other facility recommendations (e.g., playroom). This did not occur during the consultancy.
- Initiate meetings and planning sessions with the medical and nursing staffs to implement interdisciplinary care of patients.
- Selected by-laws, policies and job descriptions were drafted and provided to the hospital leadership.
- Plans were initiated to provide BLS, PALS, and NRP trainings.
- Textbooks were procured for the physicians' library. Delivery was pending when the consultancy ended.
- Multiple discussions occurred with medical and nursing staffs and hospital leadership regarding the need for a Pediatric ICU. It was agreed among all to continue housing children in the adult ICU, but that pediatric nurses would work with their counterparts in ICU to provide coaching and mentoring in pediatric nursing care.

Pediatrics in the MoH System

- Explore opportunities for pediatric subspecialty training
 - Provide fellowships for training abroad
 - Develop long-term strategic plan with Palestine Medical Council and universities to develop indigenous Palestinian programs
- Explore opportunities to strengthen Pediatric Residency Training programs
 - Develop residency program curriculum
 - Work with Palestine Medical Council and MoH to increase residency slots available
- Exploit the development of Rafidia Hospital as a pediatric Center of Excellence to further promote pediatrics throughout the MoH system

Children's Wing, PMC

Recommended actions to "commission" the Children's Wing for opening and operations:

- Coordinate physician staff coverage of the Children's Wing and the remaining pediatric services at the Ramallah General Wing
- Coordinate local subspecialty consultants' schedules and responsibilities
- Coordinate STTA schedule
- With Hospital Administrator, Nursing Director, and Security, establish patient flow patterns, visiting hours, and security measures. Provide signage and personnel to ensure enforcement
- Create Hospital Leadership/Management Team to assure coordination and communication of all hospital departments. Frequent meetings are necessary to establish and assure continuity.
- Create Clinical Services Team of Medical, Nursing, Lab, Radiology, Pharmacy representatives
- Create Clinical Quality Assurance Team
- Establish Waste Management Team
- Conduct daily, informal walking rounds of all patients to monitor quality of care
- Monitor adequacy of resources
 - Implement efforts to correct identified deficiencies
- Meet frequently, e.g. weekly, with MoH designate

- Establish Medical Staff Office
- Develop Medical Staff By-Laws and shepherd toward approval
- *Implement* Medical Staff By-Laws; e.g., form committees
- Develop Medical Staff Rules and Regulations
- Coordinate development of clinical guidelines and protocols
- Develop and implement schedule of educational activities
- Provide clinical mentoring as needed
- Community Outreach to inform about PMC and establish relationships with referring hospitals and practitioners
- Develop plan to roll out other areas/departments of hospital
 - Liaise with other departments to prepare for openings
- With MoH, plan recruitment of additional full-time staff for Children’s Wing

3. Next Steps

1. Maintain close, frequent contact with counterparts at Rafidia Hospital to assure continuity and sustaining of programs already implemented and those planned.
 - a. Define the criteria and timeline for turning the process over completely to counterparts
2. Develop strategy and schedule for STTAs for Rafidia and PMC through remainder of 2010
3. With administrative counterparts, further develop the commissioning plan for PMC.
4. Prepare to intervene immediately upon opening of the Children’s Wing.
5. Begin assessments of pediatrics services at other MoH hospitals in anticipation of broadening the scope of improved pediatric services; especially Qalqilya Hospital and Alia Hospital, Hebron
6. Begin process with MoH, Palestinian Medical Council, and perhaps Palestinian Pediatric Society to move toward development of strategic objectives; i.e.,
 - a. Increased and enhanced pediatric residency training programs
 - b. Establishing indigenous pediatric subspecialty training programs
 - c. Developing the “culture of Pediatrics”

ANNEX A: SCOPE OF WORK

Short-Term Consultancy Agreement Scope of Work

SOW Title: Medical Advisor Consultancy

Work Plan No:

SOW Date: February 7, 2010

SOW Status: Revised

Consultant Name: Harry Gunkel, MD

Job Classification: Short-Term US Expatriate Medical Advisor Clinical Consultant

Reporting to: Jihad Mashal, MD

I. Flagship Project Objective

The Flagship Project is a five-year initiative funded by the U.S. Agency for International Development (USAID), and designed in close collaboration with the Palestinian Ministry of Health (MoH). The Project's main objective is to support the MoH, select non-governmental organizations, and select educational and professional institutions in strengthening their institutional capacities and performance to support a functional, democratic Palestinian health sector able to meet its priority public health needs. The project works to achieve this goal through three components: (1) supporting health sector reform and management, (2) strengthening clinical and community-based health, and (3) supporting procurement of health and humanitarian assistance commodities.

The Flagship Project will support the MoH implement health sector reforms needed for quality, sustainability, and equity in the health sector. By addressing key issues in governance, health finance, human resources, health service delivery, pharmaceutical management, and health information systems, the Ministry will strengthen its dual role as a regulator and main health service provider. The Flagship Project will also focus on improving the health status of Palestinians in priority areas to the Ministry and public, including mother and child health, chronic diseases, injury prevention, safe hygiene and water use, and breast cancer screening for women.

II. Specific Challenges to Be Addressed by this Consultancy

The Consultant will work with Flagship Project to support the MoH hospital system throughout the West Bank including the pediatric hospital at the PMC. The Consultant will complement the efforts exercised by visiting consultants from LLU team and act as a liaison and resource on the ground at the hospitals to further facilitate their efforts.

III. Objective of this Consultancy

The Consultant will work with Flagship Project to support the MoH hospital system throughout the West Bank including the pediatric hospital at the PMC.

IV. Specific Tasks of the Consultant

Under this Scope of Work, the Consultant shall perform, but not be limited to, the specific tasks specified under the following categories:

A. **Background Reading Related to Understanding the Work and Its Context.** The Consultant shall read, but is not limited to, the following materials related to fully understanding the work specified under this consultancy:

- Previous Loma Linda University Flagship Project technical reports relating to the PMC
- Previous Flagship Project technical reports, Work Plan, etc.
- MoH National Strategic Health Plan
- USAID Needs Assessment Report, December 2008
- USAID MoH Institutional Development Plan
- Rand Corporation, "Building a Successful Palestinian State," 2007
- Rand Corporation, "Strengthening the Palestinian Health Care System," 2005

B. **Background Interviews Related to Understanding the Work and Its Context.** The Consultant shall interview, but is not limited to, the following individuals or groups of individuals in order to fully understand the work specified under this consultancy:

- Chemonics Field Office Staff, as needed
 - Taroub Faramand, MD, Chief of Party
 - Damianos Odeh, PhD, Deputy Chief of Party
 - Amal Bandak, RN, PhD, Hospital Specialist
 - Jihad Mashal, MD, Director of Clinical And Community Based Health
- Appropriate MoH Staff and others appropriate

- Pediatric Hospital Staff and others as appropriate

C. **Tasks Related to Accomplishing the Consultancy's Objectives.** The Consultant shall use his education, considerable experience and additional understanding gleaned from the tasks specified in A. and B. above to:

- Assist in developing effective leadership and management of the MoH Hospitals
- Develop pediatric service delivery and clinical guidelines
- Work as a clinical mentor/advisor to MoH hospital staff, especially in pediatric medicine
- Conduct or facilitate training on relevant management practices and current topics in patient care
- Review and develop appropriate protocols, guidelines, and algorithms for patient care at MoH hospitals as needed
- Assess and make recommendations regarding medical and nursing staff development, including job descriptions, continuing education, interdisciplinary relations, performance evaluation, and clinical training opportunities
- Assist and make recommendations regarding pediatric referral, discharge, and follow-up practice at MoH Hospitals
- In the event that new priority tasks are introduced during the consultancy, the consultant will work with the Flagship Project staff to revise the tasks and expected products to accommodate for the new priorities
- In addition to the above-listed tasks, the Flagship Project welcomes additional contributions and creative ideas in support of the Flagship objectives
- The consultant is encouraged to support the identification of additional STTA and scopes of work to help accomplish Flagship goals and objective where possible

V. **Expected Products.**

Within four days of the consultant's arrival the consultant should provide the methodology for successfully completing the work (using Annex I: STTA Methodology). The substance of, findings on, and recommendations with respect to the above-mentioned tasks shall be delivered by the Consultant in a written report, policy statement, strategy, action plan, etc. for submission to USAID (using Annex II: the Flagship-provided STTA report template). A **draft or detailed outline** of this report is due no later than 3 business days prior to the consultant's departure and final no later than 10 business days after the consultant's departure.

VI. **Timeframe for the Consultancy.**

The timeframe for this consultancy is on or about February 15, 2010 in the West Bank and will conclude on or about May 15, 2010.

VII. **LOE for the Consultancy.**

The days of level of effort are estimated to be 90 days for work upon conclusion of time in the West Bank to complete the assignment.

VIII. **Consultant Qualifications.**

The Consultant shall have the following minimum qualifications to be considered for this consultancy:

Educational Qualifications

- Shall be a currently licensed physician in good standing
- Shall be board certified in Pediatrics

Work Experience Qualifications

- Minimum of three years of work as an physician in Pediatrics
- Minimum of three years management and leadership experience in a hospital setting
- Successful involvement and participation in international health and/or development

XI. **Other Provisions.**

Professional Liability Coverage

The Palestinian National Authority, Ministry of Health shall provide the consultant and associated practitioners with professional liability (malpractice) coverage that will protect the organizations and individual practitioners from litigation and financial responsibility in the case of human error or uncontrollable circumstances arising from the performance of their duties and practice of medicine.

License to Practice Medicine

The consultant will be temporarily licensed to practice medicine in the West Bank/Gaza under the auspices of the Palestinian National Authority, Ministry of Health, to work within the scope of their normal duties and responsibilities.

ANNEX B: ASSIGNMENT SCHEDULE

MEETING WITH DR. NAIM SABRA, DEPUTY MINISTER OF HEALTH, REGARDING HOSPITAL SERVICES IN NABLUS GOVERNORATE

MEETING WITH PALESTINE MEDICAL COUNCIL REGARDING RESIDENCY TRAINING ISSUES IN MINISTRY SYSTEM

MEETING AT AN-NAJAH UNIVERSITY REGARDING EMERGENCY MEDICINE RESIDENCY PROGRAM

MEETING AT AN-NAJAH UNIVERSITY REGARDING POISON CONTROL AND DRUG INFORMATION CENTER

MEETING OF PALESTINIAN PEDIATRIC SOCIETY FOR SPECIAL PRESENTATION BY STTA DR. SHAMEL ABD-ALLAH

VISIT AND MEETINGS WEEKLY AT RAFIDIA HOSPITAL

ANNEX C: CONSULTANT CV

Personal

- Date of Birth: [REDACTED]
- [REDACTED]
- Languages: English (mother tongue); read, speak, write Spanish; studying spoken Arabic, Palestinian dialect
- USA Passport Issued at National Passport Center; [REDACTED]
- Permanent Address:
[REDACTED]
[REDACTED]

Education and Training

- High School Diploma: Alamo Heights High School, San Antonio, TX, 1966
- **B.A.** Summa cum laude (Zoology): University of Texas at Austin, 1970
- **M.D.:** University of Texas Medical School at San Antonio, 1974
 - Pediatric Residency: Columbus Children's Hospital, Columbus, OH, 1974-„75
 - Pediatric Residency: Bexar County Hospital District, San Antonio, TX, 1975-„77
 - Chief Resident 1976-'77
 - Neonatal-Perinatal Medicine Fellowship, Bexar County Hospital District, San Antonio, TX, 1977-„79
- **M.A.P.M.** (Master of Arts in Pastoral Ministry) Episcopal Theological Seminary of the Southwest, Austin, TX; May 2008

Professional Experience

- Part-Time Instructor, Bethlehem University, June 2008 – present
- Volunteer for Mission, US Episcopal Church, assigned to Diocese of Jerusalem, Nov 2007 – Feb 2009
- Retired January, 2006
- United States Food and Drug Administration, Silver Spring, MD, 2003-2006
 - Medical Officer, Division of Pulmonary and Allergy Products
 - Review, analyze, summarize data relating to the safety and efficacy of pharmaceutical drug products for diseases of the respiratory and allergic systems
- University of Texas Health Science Center, Department of Pediatrics, San Antonio, TX, 1995-2003
 - Associate Professor, Division of Neonatology; Director of Clinical Research
 - Provide clinical care in normal newborn nursery
 - Prepare and write grant proposals

- Direct clinical research projects
 - Teach residents and medical students
 - Committee work, including Institutional Review Board and Admissions Committee
- Ross Laboratories Division of Abbott Laboratories, Columbus, OH, 1985-1995
 - Director of Clinical Research
 - Coordinate and supervise clinical activities related to development of pharmaceutical products
 - Directed multicenter clinical trials in US and Europe
 - Co-authored scientific publications in peer-reviewed professional journals
- St. Francis Medical Center, La Crosse, WI, 1983-85
 - Director of Neonatal Intensive Care Unit
- Cedars-Sinai Medical Center, Los Angeles, CA, 1979-1983
 - Staff Neonatologist
 - Director of High-Risk Infant Follow-up Clinic

Licensure and Certification

- License E2592, Texas Medical Board, Expires 11-30-2010
- Board Certified, American Board of Pediatrics, 1979
- Sub-board Certified Neonatal-Perinatal Medicine, 1979

Bibliography

- Hoekstra RE, Jackson JC, Myers TF, Frantz ID III, Stern ME, Powers WF, Maurer M, Raye JR, Carrier ST, **Gunkel JH**, Gold AJ. Improved Neonatal Survival following multiple doses of bovine surfactant in very premature neonates at risk for Respiratory Distress Syndrome. *Pediatrics* 1991; 88:10-18.
- Liechty EA, Donovan E, Purohit D, Gilhooly J, Feldman B, Noguchi A, Denson SE, Sehgal SS, Gross I, Stevens D, Ikegami M, Zachman RD, Carrier ST, **Gunkel JH**, Gold AJ. Reduction of neonatal mortality after multiple doses of bovine surfactant in low birth weight neonates with Respiratory Distress Syndrome. *Pediatrics* 1991;88:19-28.
- Jobe AH, Mitchell BR, **Gunkel JH**. Beneficial effects of the combined use of prenatal corticosteroids and postnatal surfactant on preterm infants. *Am J Obstet Gynecol* 1993;168:508-513.
- Zola EM, **Gunkel JH**, Chan RK, Lim MO, Knox I, Feldman BH, Denson SE, Stonestreet BS, Mitchell BR, Wyza MM, Bennett KJ, Gold AJ. Comparison of three dosing procedures for administration of bovine surfactant to neonates with respiratory distress syndrome. *J Pediatr* 1993; 122:453-459.

- Zola EM, Overbach AM, **Gunkel JH**, Mitchell BR, Nagle BT, DeMarco NG, Henwood GA, Gold AJ. Treatment investigational new drug experience with Survanta (beractant). *Pediatrics* 1993; 91:546-551.
- **Gunkel JH**, Banks PLC. Surfactant therapy and intracranial hemorrhage: Review of the literature and results of new analyses. *Pediatrics* 1993; 92:775-786.
- Survanta Multidose Study Group. Two year follow-up of infants treated for neonatal respiratory distress syndrome with bovine surfactant. *J Pediatr*; 1994; 124:962-967.
- Sherman MP, Campbell LA, Merritt TA, Long WA, **Gunkel JH**, Curstedt T, Robertson B. Effect of different surfactants on pulmonary group B streptococcal infection in premature rabbits. *J Pediatr* 1994; 125:939-947.
- **Gunkel JH**, Mitchell BR. Observational evidence for the efficacy of antenatal steroids from randomized studies of surfactant replacement. *Am J Obstet Gynecol* 1995; 173:281-285.
- Wright LL, Horbar JD, **Gunkel JH**, Verter J, Younes N, Andrews E, Long W. Evidence from multicenter networks on the current use and effectiveness of antenatal corticosteroids in low birth weight infants. *Am J Obstet Gynecol* 1995; 173:263-269.
- Lotze A, Mitchell, BR, Bulas DI, Zola EM, Shalwitz R, **Gunkel JH**. Multicenter evaluation of Survanta in the treatment of term infants with severe respiratory failure. *J Pediatr*, 1998; 132:40-47.
- **Gunkel JH**, Beavers H, Escobedo MB. Proficiency of Pediatric Residents in Neonatal Endotracheal Intubation. *Pediatr Res* 2000;47:89A (Abstract Platform Presentation)
- Escobedo MB, **Gunkel JH**, Kennedy KA, Shattuck KE, Sánchez PJ, Seidner S, Hensley G, Cochran CK, Moya F, Morris B, Denson S, Stribley R, Naqvi M, Lasky RE; Texas Neonatal Research Group. Early surfactant for neonates with mild to moderate respiratory distress syndrome. *J Pediatr* 2004;144:804-8.

Volunteer and International Experience

- Volunteer for Mission, Episcopal Church, USA, November 2007 – February 2009
- Volunteer with San Antonio Metropolitan Ministries (SAMM) homeless shelter, Jan 2007 – Oct 2007
- Volunteer pediatrician, Volunteer Clinic of Austin, TX, January 2007 – October 2007
- Volunteer with Columbus AIDS Task Force, Columbus, OH, 1985-1988
- Work-related Travel to United Kingdom, Sweden, Saudi Arabia, Kuwait
- Personal travel to UK, France, Germany, Italy, Belgium, Netherlands, Austria, Switzerland, Ireland, Greece, Mexico, Kenya, Israel
- Technical Exchange Program, People to People International, to People's Republic of China, South Korea, Japan, Hong Kong

ANNEX D: BIBLIOGRAPHY OF DOCUMENTS COLLECTED AND REVIEWED

- Previous Loma Linda University Flagship Project technical reports relating to the PMC
- Previous Flagship Project technical reports, Work Plan, etc.
- MOH National Strategic Health Plan
- USAID Needs Assessment Report, December 2008
- USAID MOH Institutional Development Plan

**ANNEX E: LIST AND COPY OF MATERIALS DEVELOPED AND UTILIZED
DURING ASSIGNMENT**

(NOT APPLICABLE)