USAID | WEST BANK/GAZA
FROM THE AMERICAN PEOPLE

Observations and Recommendations Regarding the Pediatric In-patient Department at Rafidia Hospital and Brief Evaluation of the Palestine Medical Complex Children's Wing

PALESTINIAN HEALTH SECTOR REFORM AND DEVELOPMENT PROJECT (FLAGSHIP PROJECT)

SHORT-TERM TECHNICAL ASSISTANCE REPORT (FINAL)

Prepared by:
Shamel Abd-Allah, MD
Associate Professor
Chief, Pediatric Critical Care Division
Loma Linda University Children's Hospital

AND

Harry Gunkel, MD
Pediatric Consultant
Flagship Project

Submitted on June 16, 2010

Contract No. 294-C-00-08-00225-00

This document was produced for review by the United States Agency for International Development by Shamel Abd-Allah, MD and Harry Gunkel, MD

CONTENTS

Acronyms 3
Abstract 4
Summary of Recommendations 5
Section I: Introduction 8
Section II: Activities Conducted 9
Section III: Findings, Recommendations, and Next Steps 11
Annex A: Scope of Work 15
Annex B: Assignment Activities 19
Annex C: Consultant CV 20
Annex D: Bibliography of Documents Collected and Reviewed 39
Annex E: List and Copy of Materials Created or Provided During Assignment 41

ACRONYMS

APLS	Advanced Pediatric Life Support
BP	Blood Pressure
CICU	Cardiac Intensive Care Unit
CPAP	Continuous Positive Airway Pressure
ICU	Intensive Care Unit
LLUCH	Loma Linda University Children's Hospital
LLUMC	Loma Linda University Medical Center
NICU	Neonatal Intensive Care Unit
NRP	Neonatal Resuscitation Program
PALS	Pediatric Advanced Life Support
PICU	Pediatric Intensive Care Unit
PMC	Palestine Medical Complex
RMG	Ramallah General Hospital

ABSTRACT

This document provides an evaluation of pediatric inpatient services at Rafidia Hospital, Nablus, as well as a brief assessment of the Children's Wing of the Palestine Medical Complex in Ramallah. It results from a consultancy for the USAID-Flagship Project during the period April 12 - April 23, 2010.

The consultancy was focused in Nablus where the current status of in-patient pediatric services at Rafidia Hospital was evaluated, as well as future possibilities. In addition, specific technical assistance and advice were provided in the intensive care unit (PICU), neonatal intensive care unit (NICU), and general pediatrics ward. Educational lectures were given for staff, as well as bedside education regarding critically ill children and neonates. Assistance was also given concerning USAID donated medical equipment for direct patient application. The consultant presented a lecture at Pediatric Grand Rounds, the first-ever such occasion at Rafidia Hospital. There was also a presentation to the monthly meeting of the Palestinian Pediatric Society.

Near the end of the consultancy, there was an opportunity to visit the PMC Children's Wing in order to briefly assess the technical issues and challenges that might be encountered in its opening of operations. A lecture was presented to the pediatric staff at the Ramallah General Hospital Wing.

During the consultancy there were opportunities for multiple discussions with Flagship staff regarding the project. Several pediatric hospital policies and protocols were given to Flagship. These documents are listed in Annex E of this document.

Finally, the consultancy included a brief visit to Makassed Hospital in Jerusalem, an important institution in pediatric care in the region.

SUMMARY OF RECOMMENDATIONS

A. RAFIDIA HOSPITAL

Within the next month:
Obtain monitors with blood pressure capability for children and neonates. Currently only one such monitor is available in the NICU to care for very sick neonates.

- Obtain infant/pediatric nasal cannulas for oxygen delivery. Neonatal care could be enhanced with these cannulas.
- Obtain neonatal/pediatric blood gas machine with pH, PaO2, PaCO2, HCO3, base excess, ionized calcium, sodium, potassium, hemoglobin to be placed on unit. There is currently no blood gas machine in the unit. A machine is located in the hospital laboratory but its use involves excessive waiting at time. This can impede the demands of critical care.
- Train all nurses in the hospital who interact with children in pediatric advanced life support (PALS). First trained should be nurses in the adult ICU, where critically ill children are currently hospitalized, then train pediatric ward nurses, and emergency department nurses.
- Train neonatal nurses and pediatric physicians in the neonatal resuscitation program (NRP).
- Continue to train staff on use of nasal CPAP machine and high frequency ventilator via in-services and bedside application by expert.
- Advocate with hospital administration for pediatric and ICU nurses to rotate shifts on different units to improve care of critically ill children and babies.
- Arrange next STTA visit by a neonatologist. Ideally, the neonatologist should be accompanied by a nurse educator and respiratory therapist for maximum assistance and educational impact.

Within the next six months:
Obtain basic pediatric training manikins for nursing and physician staff to review pediatric resuscitation therapies and skills

- Implement multidisciplinary quality improvement meetings including Pediatric Morbidity and Mortality Review.
- Evaluate the feasibility of a separate PICU for improved services and care to critically ill children.
- Development capacity for monitoring children of intermediate care severity on the Pediatric ward.

Within the next year:
Evaluate the feasibility of expanding the pediatric residency program to 6 residents per year to enhance the educational aspects of the program and improve night coverage of hospitalized children.

- Evaluate nursing staffing for better patient coverage.

Recommendations for future STTA consultancies:
Neonatologist to assess capacity of NICU, and provide educational experiences for medical and nursing staffs.

- Respiratory therapist for policy development, and education and mentoring in ventilator management. May need multiple visits by these consultants.
- Bedside nurse/nurse educator to assist nursing staff in direct patient care and policy and procedure development for all pediatric inpatient services. Will also require multiple visits.
- General pediatrician with hospitalist capabilities to assess and improve pediatric general ward services.
- Subspecialists as needed including pharmacy.
- Repeat visit by Pediatric intensivist within next 3 months to assess progress of PICU services.
- Quality Improvement expert to educate and assist hospital in setting up appropriate committees.

B. CHILDREN'S WING PALESTINIAN MEDICAL COMPLEX (PMC)

With Opening:

- Train all pediatric nurses and physician staff in pediatric advanced life support (PALS).
- Train neonatal nurses and physician staff in neonatal resuscitation program (NRP).
- Assist PMC and MoH staff in developing a method or system to assure that increased demands for pediatric and subspecialist coverage are met at the Children's Wing.
- Form a team to streamline the move from Ramallah General to Children's Wing, including hospital administration.
- Provide training for physician and nursing staff on new equipment to be used in the Children's Wing.
- Develop pediatric policies and protocols to assist in operationalizing the Children's Wing.

Within the next six months:

- Increase pediatric residency at PMC to 6 residents per year for total of 24 with potential collaboration with other institutions' pediatric residents to enhance education, offload specialist workload, and improve night coverage of hospitalized children.
- Identify other pediatricians to be trained in subspecialties to increase subspecialty availability on site at the Children's Wing.
- Evaluate adequacy of nursing staffing.
- Implement multidisciplinary quality improvement meetings including Pediatric Morbidity and Mortality Review.

Recommendations for future STTA Consultancies:

- Neonatologist
- Respiratory therapist for policy development and educational offerings in actual ventilator management/troubleshooting.
- Bedside nurse/nurse educator to assist nursing staff in direct patient care and policy and procedure development for all pediatric inpatient services.
- General pediatrician with hospitalist capabilities to assess and improve pediatric general ward services.
- Subspecialists as needed including pharmacy.
- Repeat visit by Pediatric intensivist within next 2-3 months to assess progress of PICU services.
- Quality improvement expert to educate and assist in setting up appropriate committees.

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.

This consultancy was the first by a pediatric intensive care specialist and built upon the previous recommendations of Richard Chinnock, MD. During this consultancy, more focus was provided on improving patient care in the pediatric in-patient arena with an emphasis on intensive care services. Strategies were also identified for administrative interaction and support, which are vital for the success of any hospital endeavor. Most of the consultancy was spent at Rafidia Hospital in Nablus, a government hospital with solid reputation and patient care capabilities. A brief visit to the Palestine Medical Complex (PMC) allowed for dialogue regarding the continued need for direction, planning, and staff (hospital administration, physician, and nursing) to insure success of the opening of the Children's Wing.

This report contributes to Flagship Project 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 12, Improve the Quality of Clinical Services in the Palestinian MoH Hospital System.

SECTION II: ACTIVITIES CONDUCTED

General activities conducted during this consultancy include:

1. Visit to Makassed Hospital with tour and meeting the chair of pediatrics, Dr. Abu Libdeh, to dialogue regarding support of the PMC Children's Wing.
2. Evening lecture to Palestinian Pediatric Society on Pediatric Guillain Barre Syndrome.
3. Multiple discussions with Flagship staff regarding overall progress of project, including meetings with Chief of Party, Deputy Chief of Party, and various members of the team.
4. Meeting with USAID leadership, Dr. Suzy Srouji, to update her on findings and recommendations.
5. Interaction with Chemonics Board Members during their site visit to explain assessments, accomplishments, and recommendations.
6. Evening meeting with Flagship Project Component Director and Dr. Samir, President Palestinian Pediatric Society, regarding plans for the PMC Children's Wing.

Activities conducted and accomplishments at Rafidia Hospital include:

1. Daily rounding in NICU and ICU.
2. Lectures to physician staff regarding:
    a. Mechanical Ventilation
    b. Vasoactive medications
    c. Treatment for Pediatric Head Injury
    d. Status Epilepticus Management
    e. Status Asthmaticus Management
    f. Introduction to High Frequency Oscillation Ventilation
3. Grand Rounds on Pediatric Critical Care from a global perspective and how it applies to the West Bank and Rafidia Hospital.
4. Participation in Rafidia Pediatrics morning report.
5. Education on nasal continuous positive airway pressure (CPAP) machine with placement of the first patient ever on the device. Arranged additional in-service training on machine by a company representative.
6. Training on high frequency oscillation ventilation
7. Multiple joint discussions with hospital administration, including Dr. Khaled Saleh; Ms. Sawsan, head nurse; pediatricians; and nurses regarding cooperation for improvement of pediatric services.
8. Distribution of multiple hospital procedures and policies for children to pediatric staff.
9. Distribution of pediatric resuscitation medication dosages as quick reference to physician staff and nursing staff.
10. Discussion with nurses regarding their needs to take care of children well.
11. Assessment of intensive care equipment.

12. Distribution of pediatric residency handbook.
13. Discussion with Dr. Hasan Fitian, Chief of Pediatrics Rafidia Hospital, and physician staff (including pediatric surgeons) regarding how to improve pediatric services and create a center of excellence for children at Rafidia Hospital with a focus on pediatric surgery.
14. Donated two Pediatric Critical Care textbooks to the pediatric library.

Activities conducted and accomplishments at the PMC Children's Wing include:

1. Rounding with doctors on ward.
2. Assessment of the Children's Wing facility.
3. Lecture on Mechanical Ventilation.
4. Meeting with hospital Director.
5. Discussion with Dr. Miriam Basir regarding how to improve pediatric services and create a center of excellence for children at PMC and challenges faced with move to the Children's Wing.

SECTION III: FINDINGS, RECOMMENDATIONS, AND NEXT STEPS

A. Findings

1. GENERAL FINDINGS

The Palestinian health sector has a good primary care system for children. There is a high vaccination rate. Child mortality is < 20/1000 live births in the West Bank. The West Bank is ideal for development of district hospitals as pediatric centers of care with focus in particular areas such as pediatric surgery. Makassed Hospital is a tertiary care facility for children, but its services are not always accessible to all patients as it is located in East Jerusalem.

There is a need for the PMC to expand and improve in regards to pediatric services. Ideally, the PMC should have consulting and referral relationships with other institutions providing care for children.

2. ASSESSMENT FINDINGS FOR: Rafidia Hospital

Rafidia Hospital is a district hospital located in Nablus with solid Pediatric capabilities. The pediatric ward has approximately 30 beds. The NICU has approximately 20 beds, but is lacking vital equipment such as patient monitors, infant nasal cannula, blood pressure cuffs, and a blood gas machine. A Nasal CPAP machine and High Frequency Oscillation Ventilator were procured by Flagship and are available but not currently in use pending training and in-servicing. Critically ill children are presently housed in the 14 bed adult ICU.

Rafidia Hospital has a three year history of providing pediatric surgery services. Currently, nine pediatric specialists are on staff, however they do not have subspecialty training. There are also six pediatric residents. The nurses all have great experience but no specialized training in pediatrics. There are no respiratory therapists or those who are capable of respiratory care. Nurses and physicians manage ventilator patients.

While the hospital administration has a vision to create a pediatric center of excellence, there are no clear pediatric policies/protocols or quality improvement committees.

3. ASSESSMENT FINDINGS FOR: PMC

The Palestine Medical Complex (PMC) Children's Wing is a modern facility with state of the art medical equipment. However it is not yet functional. The financial situation is constrained. The staff are trying to establish pediatric policies/protocols.

Children are currently hospitalized at the Ramallah General Wing. There is a NICU with six beds that is reasonably equipped and presently functioning at the Ramallah General Wing.

There are four pediatric specialists with solid experience, but they constitute an inadequate staff for the Children's Wing. There are no subspecialists. There is a pediatric residency program. The nursing staff is solid but there are not enough nursing staff for a move to the Children's Wing. The nurses also do not have specialized training in pediatrics.

B. Recommendations

1. GENERAL RECOMMENDATIONS

An overall recommendation is to develop district hospitals as pediatric centers of excellence. Referral patterns should be established for local hospitals. The PMC Children's Wing should have working relationships with other institutions providing pediatric care.

2. RECOMMENDATIONS FOR: Rafidia Hospital

AREA	RECOMMENDATION	TIMEFRAME
Equipment	Obtain monitors with blood pressure (BP) capability for children and neonates. Only one monitor was identified in the NICU with very sick neonates.	Immediate
	Obtain blood gas machine with pH, PaO2, PaCO2, HCO3, base excess, ionized calcium, sodium, potassium, hemoglobin to be placed on unit.	Immediate
	Obtain infant nasal cannulas for oxygen delivery and easier access to neonates.	Immediate
	Continue to train staff on use of nasal CPAP machine and high frequency ventilator.	Ongoing
	Develop capacity for intermediate care on the pediatric ward with monitoring capability.	Within the next month
	Obtain pediatric training manikins for staff to review pediatric resuscitation therapies.	Within next six months
	Assess the feasibility of a separate PICU to improve care of critically ill children.	Within the next year
Training	Train all nurses in pediatric life support (PALS) beginning with adult ICU nurses, followed by pediatric ward nurses, and ending with emergency department nurses.	Immediate
	Train physician and resident staff in PALS.	Immediate

	Train neonatal nurses in neonatal life support (NRP).	Immediate
	Explore opportunities for pediatric subspecialty training.	Within next six months
	Arrange for a neonatology STTA consultant along with a nurse educator and respiratory therapist for maximum training impact.	Within the next month
	Rotate shifts for nurses on different units to improve experience with critically ill children.	Within the next month
Staff	Assess nursing staff in the ICU's.	Within the next six months
	Evaluate opportunities for increased residency program to six residents per year of a four-year pediatric program to offload specialist workload and improve night coverage of hospitalized children.	Within the next six months
	Continue to dialogue with administration and outlying hospitals to create a center of pediatric excellence with a focus on pediatric surgery and solid referral patterns.	Ongoing
	Explore possibility of respiratory care practitioners.	Within the next month
Administration	Develop quality improvement committees	Within the next six months
	Develop pediatric policies/protocols	Within the next six months

3. RECOMMENDATIONS FOR: PMC

AREA	RECOMMENDATION	TIMEFRAME
Staff	Train all pediatric nurses and physician staff in pediatric life support (PALS).	Immediate
	Train neonatal nurses and physician staff in neonatal life support (NRP).	Immediate
	Complete pediatric policies/protocols.	Within the next six months
	Establish quality improvement committees for self-evaluation, such as Pediatric Morbidity and Mortality.	Within the next six months
	Assess adequacy of nursing staff in Children's Wing.	Within the next six months
	Explore opportunities for increased PMC pediatrics residency program to six per year of a four-year program with potential collaboration with Makassed and Augusta Victoria residents.	Within the next six months
	Provide long-term training of subspecialists to work full-time at the Children's Wing.	Within the next six months
	Form a team to streamline move from Ramallah General Wing to the Children's Wing, including hospital administration.	Immediate
	Train nurses and physician staff on the new equipment in the Children's Wing.	Immediate

C. Next Steps

The immediate essential next steps for success include obtaining monitors with neonatal BP capability, nasal cannulas, and a neonatal/pediatric blood gas machine to be on the unit at Rafidia Hospital. Training of nursing and physician staff in PALS and NRP should also be immediate.

For further steps, please see Section B above where timeframes and explanations are clearly delineated.

ANNEX A: SCOPE OF WORK

Short-Term Consultancy Agreement Scope of Work

SOW Title: Pediatric Critical Care Consultancy
Work Plan No:
SOW Date: April 1, 2010
SOW Status: Revised
Consultant Name: Shamel Abd-Allah, MD
Job Classification: Short-Term US Expatriate Pediatric Critical Care Clinical Consultant
Reporting to: Paul Rader, Hospital Management Support Team Leader

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 quality of Palestinian health services has been compromised by fragmentation among health service providers, resulting in multiple and varying clinical standards and norms. There has been little citizen participation and feedback solicited by the MoH, resulting in a gap between citizen expectations and MoH delivery of services. Improvement of pediatric services in MoH hospitals is a priority of the MoH and Flagship staff is committed to help initiate change and necessary reforms to deliver better secondary health care services to the Palestinian people.

III. Objective of this Consultancy

This consultancy will focus on improving MoH Pediatric Intensive Care Unit (PICU) services at the secondary health care level.

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 related Loma Linda University Flagship Project technical reports
   - Loma Linda University GHI Consultant Orientation Guide
   - Previous related Flagship Project technical reports, Work Plan, etc.

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 Project Management Unit (PMU), if appropriate
   - Chemonics Field Office Staff, as needed
   - Appropriate MOH Staff and others appropriate
   - Pediatric Hospital Staff and others as appropriate
   - LLU Palestine Project leadership
   - LLUCH pediatric critical care leadership

C. **Tasks Related to Accomplishing the Consultancy's Objectives**. The Consultant shall use his/her education, considerable experience and additional understanding gleaned from the tasks specified in A. and B. above to:
   - Work as a clinical consultant to help integrate and activate pediatric critical care services at Rafidia Hospital and at the Palestine Medical Complex Pediatric Hospital, if approved.
   - Investigate the need and feasibility of a pediatrics residency training program at Rafidia Hospital. If applicable, outline the structure that such a program would have.
   - Advocate and assist with planning the opening of a pediatric intensive care unit at Rafidia Hospital.
   - Assess and make work plan recommendations that address that status of pediatric subspecialty training within the Ministry of Health and in the West Bank.
   - Define or clarify the working relationships that pediatrics should have with other departments at Rafidia Hospital, such as obstetrics/gynecology, future outpatient clinic, and other services that are affected. Identify topics that could be presented at future training sessions or by future STTAs.
   - Prepare and recommend a pediatrics service medical staff committee structure at Rafidia Hospital to deal with issues such as morbidity and mortality statistics, pharmaceuticals and therapeutics, and other matters.
   - Provide presentations and/or lectures on relevant pediatric critical care medicine topics and pediatric grand round topics.
   - Conduct assessments and presentations at Rafidia Hospital, Holy Family Hospital, Caritas Babies Hospital, Augusta Victoria Hospital, and Al Makasad Hospital..
   - Identify and recommend a selection of reading materials and pediatric reference resources for the Rafidia Hospital learning center.

- 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 prior to the consultant's departure and final no later than 7 business days after the consultant's departure.

1. Presentation materials
2. Assessment report of hospital sites visited
3. List of pediatric reference resources and reading materials

VI. Timeframe for the Consultancy.

The timeframe for this consultancy is on or about April 12, 2010 to on or about April 23, 2010 in the West Bank and will conclude on or about May 23, 2010.

VII. LOE for the Consultancy.

The days of level of effort are estimated to be 3 days for preparation work prior to departure; 2 days for travel; 10 days for work in the West Bank (6 day work week if needed); and up to 30 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:

<u>Educational Qualifications</u>

- Shall be a currently licensed physician in good standing
- Shall be board certified in pediatric critical care

<u>Work Experience Qualifications</u>

- Minimum of three years of work in pediatric critical care
- 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 Loma Linda University 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

Associated practitioners of Loma Linda University 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.

Trip Logistics

Consultant shall depart Ontario, CA or Los Angeles, CA on a U.S. flag air carrier compliant with the Fly America Act to Tel Aviv, Israel and will return to the U.S. to the Ontario, CA or Los Angeles, CA airport. Transportation from/to the Tel Aviv airport will be provided by the Flagship Project. Housing will be provided in the West Bank.

ANNEX B: ASSIGNMENT ACTIVITIES

DATE	ACTIVITY	LOCATION
Monday 4/12/10	• Arrival	• Tel Aviv
Tuesday 4/13/10	• Flagship Project orientation • Rafidia Hospital	• Ramallah • Nablus
Wednesday 4/14/10	• Meet with Dr. Damianos • Rafidia Hospital	• Ramallah • Nablus
Thursday 4/15/10	• Rafidia Hospital	• Nablus
Friday 4/16/10	• Paperwork and work at Flagship office	• Ramallah
Sunday 4/18/10	• Rafidia Hospital	• Nablus
Monday 4/19/10	• Rafidia Hospital • Pediatric Grand Rounds • Chemonics Board of Directors visit	• Nablus • Nablus • Nablus
Tuesday 4/20/10	• Rafidia Hospital • Tour PMC • Lecture – Palestinian Pediatric Society	• Nablus • Ramallah • Ramallah
Wednesday 4/21/10	• Paperwork and work at Flagship office • Visit Makassed Hospital	• Ramallah • Jerusalem
Thursday 4/22/10	• Debriefing at Flagship Office • Draft STTA report	• Ramallah • Ramallah
Friday 4/23/10	• Departure	• Tel Aviv

ANNEX C: CONSULTANT CV

SHAMEL A. ABD-ALLAH, MD

LOMA LINDA UNIVERSITY CHILDREN'S HOSPITAL
PEDIATRIC CRITICAL CARE DIVISION
11175 CAMPUS STREET, COLEMAN PAVILLON
LOMA LINDA, CA 92354

PHONE: (909) 558-4250
FAX: (909) 558-0303
E-MAIL ADDRESS: sabd-Allah@llu.edu

PERSONAL

Born: [redacted]
Marital Status: [redacted]

EDUCATION

Fellowship	Loma Linda University Children's Hospital Pediatric Critical Care	1994-1997
Residency	Loma Linda University Medical Center-Pediatrics	1990-1993
	University of Miami-Jackson Memorial-General Surgery	1989-1990
Medical School	Loyola University Stritch School of Medicine Maywood, IL	1985-1989
Undergraduate	University of Notre Dame, Notre Dame, IN Bachelor of Arts English Literature/Preprofessional Studies	1981-1985

CURRENT POSITIONS

Associate Professor, Pediatrics Loma Linda University School of Medicine	2004-Present
Chief, Pediatric Critical Care Division Loma Linda University Children's Hospital	2002-Present

Associate Director, Pediatric Home Mechanical Ventilation Program 2002-Present
Loma Linda University Children's Hospital

Attending, Pediatric Critical Care 1999-Present
White Memorial Medical Center

Program Director, Pediatric Critical Care Residency 1998-Present
Loma Linda University Children's Hospital

Attending, Pediatric Critical Care 1997-Present
Loma Linda University Children's Hospital

Attending, Pediatric Emergency Department 1993-Present
Loma Linda University Children's Hospital

Assistant Professor, Pediatrics and Emergency Medicine 1997-2004
Loma Linda University School of Medicine

PREVIOUS POSITIONS

Interim Chief, Pediatric Critical Care Division 2000-2002
Loma Linda University Children's Hospital

Medical Director, Pediatric Critical Care Transport 2000-2002
Loma Linda University Children's Hospital

Medical Director, Pediatric Critical Care Unit 1999-2000
White Memorial Medical Center

Associate Director, Pediatric ECMO 1998-2000
Loma Linda University Children's Hospital

Attending, Pediatric Critical Care Unit 1998-2000
Riverside County Regional Medical Center

Attending, Pediatric Emergency Department 1996-1997
San Bernardino Community Hospital

Clinical Instructor, Pediatrics 1993-1997
Loma Linda University School of Medicine

Chief Resident/Assistant Program Director 1993-1994
Pediatrics Residency Program
Loma Linda University Children's Hospital

CERTIFICATION & LICENSURE

DEA License #BA3231288	Exp. June 30, 2010
California Medical License #G073462	Exp. Nov. 30, 2011
Recertification, Pediatric Critical Care	Exp. 2012
Recertification, General Pediatrics	Exp. 2014
Board Certified, Pediatric Critical Care	August 11, 1998
Diplomate, American Board of Pediatrics	October 13, 1993
Diplomate, National Board of Medical Examiners	July 1990

PROFESSIONAL SOCIETY MEMBERSHIPS

American Academy of Pediatrics
Society of Critical Care Medicine
Islamic Medical Association of North America

COMMITTEES

Member, Children's Hospital Leadership Committee	2007-Present
Member, Physician Wholeness and Engagement Committee	2007-Present
Member, Ethics	2002-Present
Member, Pediatric Bronchoscopy Quality Improvement	2002-Present
Chairman, Pediatric Critical Care Medicine Quality Improvement	2001-Present
Member, Pediatric Quality Improvement	2000-Present
Chairman, Pediatric Mortality and Morbidity	2000-Present
Member, Critical Care Quality Improvement	1998-Present
Member, Hand Hygiene Task Force	2005-2006
Member, Pediatric Sedation Quality Improvement	2003-2005
Member, Pediatric Trauma Quality Improvement	1998-2002
Member, Pediatric Mortality and Morbidity	1993-2000

SELECTED PRESENTATIONS

Loma Linda University Medical Center
Global Health Week
Panel discussion
November 17, 2009

Panang Adventist Hospital
Latest Advances and Updates in Pediatric Intensive Care
Grand Rounds
July 2, 2009

Panang Adventist Hospital
Pulmonary Hypertension Management
Malaysia Medical Mission
June 30, 2009

Panang Adventist Hospital
Brain Injury Following Cardiac Surgery
Malaysia Medical Mission
June 29, 2009

University of California, Riverside
11th Annual MSA West Conference
The Sound of Leadership
April 12, 2009

East Africa University
Pediatric Assessment
Baraton, Kenya
March 18, 2009

East Africa University
Pediatric Respiratory Diseases I & II
Baraton, Kenya
March 18, 2009

Loma Linda University Adventist Health Sciences Center
Boards of Trustees Annual Retreat
Global Opportunities
Jerusalem Medical Mission
February 24, 2007

Loma Linda University Adventist Health Sciences Center
Center for Pre-Hospital Care
Annual Paramedic Refresher Course
Near Drowning
February 6, 2007

Pediatric Grand Rounds
Loma Linda University Children's Hospital
The Effects of Obesity in the PICU
October 20, 2006

Bioethics Grand Rounds
Loma Linda University Medical Center
Islam and End of Life Issues
May 11, 2006

Annual International Medicine Week
Western University Osteopathic School
Pomona, CA
International Medicine Expeditions
November 14, 2006

EVBP Investigator Update Meeting
Chicago, IL
Baseline Characteristics of a Pediatric open-label study of Recombinant Human Activated Protein C in Severe Sepsis
September 13, 2005

Advanced Pediatric Life Support Course
Baraton University School of Nursing, Kenya
Pediatric Shock
April 7, 2005

11th Annual Pediatric Critical Care Symposium
Loma Linda University Children's Hospital
End of Life Issues in the Pediatric Intensive Care Unit
September 9, 2004

Grand Rounds
Loma Linda University Children's Hospital
Department of Pediatrics
Medical Mission: Kabul, Afghanistan
September 3, 2004

10th Annual Pediatric Symposium
Chulalongkorn University Children's Hospital
Pediatric Critical Care and General Practice
Bangkok, Thailand
Novel Therapies in Pediatric Critical Care
August 19, 2004

10th Annual Pediatric Symposium
Chulalongkorn University Children's Hospital
Pediatric Critical Care and General Practice
Bangkok, Thailand
Transportation of Critically Ill Pediatric Patients
August 18, 2004

ICAN/NCFR
Child Death Review Training
Loma Linda University Children's Hospital

Differentiating Intentional vs. Accidental Fatal Head Trauma in the PICU
February 26, 2004

EVBP Rejuvenation
RESOLVE Patient Enrollment
November 14, 2003
Loma Linda University Children's Hospital
Transport Luncheon Lecture Series
Management of the Difficult Pediatric Airway
May 20, 2003

6th Annual Pediatric Acute Care Symposium
Sunrise Children's Hospital
Las Vegas, Nevada
Pediatric Guillain Barré Syndrome
April 12, 2003

Grand Rounds
Loma Linda University Children's Hospital
Department of Pediatrics
Apparent Life Threatening Events in Children
November 9, 2001

9th Annual Pediatric Critical Care Symposium
Loma Linda University Children's Hospital
Recognition and Management of Pediatric Drug and Alcohol Poisonings
September 28, 2000

Bright Horizons in Respiratory Care 2000
California Society for Respiratory Care
Rancho Mirage, CA
Pediatric Respiratory Failure
April 13, 2000

Grand Rounds
Loma Linda University Children's Hospital
Department of Pediatrics
Recent Therapies in Pediatric ARDS
October 22, 1999

2nd Annual ECMOlogy Workshop
Loma Linda University Children's Hospital
Who Needs ECMO – Kids Do!
September 21, 1998

7th Annual Pediatric Critical Care Symposium

Loma Linda University Children's Hospital
Pediatric Pain Control
March 26, 1998

Grand Rounds
Loma Linda University Children's Hospital
Department of Pediatrics
Vascular Access and Complications in the Pediatric Patient (co-presenter - Bruce Beckwith, MD)
October 17, 1997

Kaiser Permanente Fontana
Pediatric Department Educational Meeting
Pediatric Vascular Access
August 28, 1997

Kaiser Permanente Fontana
Pediatric Department Educational Meeting
Head and Spinal Cord Injury
March 27, 1997

Loma Linda University Children's Hospital
4th Annual Pediatric Critical Care Symposium
San Bernardino, California
High Frequency Oscillation Ventilation
April 13, 1995

Loma Linda University Medical Center
5th Annual Inland Counties Trauma Symposium
Ontario, California
Percutaneous chest tube placement
May 9, 1994

Loma Linda University Medical Center
18th Annual Primary Care Update Conference
Intraosseous Line Placement
October 19, 1993

SELECTED LECTURES

Loma Linda University Medical Center
Pediatric Critical Care Nursing
Pediatric Spinal Cord Emergencies
June 8, 2009

Emergency Management and Research Institute
Local Physicians, Hyderabad, India
Video Conference

Loma Linda University Medical Center
Pediatric Resident Mock Code
SVT
August 12, 2008

Advanced Pediatric Life Support Course
Pediatric Respiratory Emergencies
January 21, 2008

Loma Linda University Medical Center
Sophomore Medical Students
Integrative Care
Introduction to Islam
February 17, 2004

Loma Linda University Medical Center
Emergency Medicine Residency
Advanced Pediatric Life Support Course
Pediatric Cardiovascular Emergencies
July 21, 2003

Loma Linda University Children's Hospital
Respiratory Therapy Department
Recognition and Management of the Difficult Pediatric Airway
August 22, 2002

Loma Linda University Children's Hospital
Respiratory Therapy Department
Pediatric Bronchoscopy
July 9, 2002

Loma Linda University Medical Center
Otolaryngology Residency
Introduction to Ventilator Management
June 19, 2001

Loma Linda University Medical Center
Emergency Medicine Residency
Advanced Pediatric Life Support Course
Pediatric Shock
July 10, 2000

Crafton Hills College
School of Allied Health EMS Course
Status Epilepticus
June 1, 2000

Loma Linda University Children's Hospital
Advanced Pediatric Critical Care Nursing Course
Advanced Hemodynamic Monitoring and Interpretation
May 4, 1999

Inland Valley Regional Medical Center
Outreach CME Course
Near Drowning in Children
March 24, 1999

Loma Linda University Children's Hospital
Pediatric Residents Noon Lecture
Pediatric Pain Control
June 8, 1998

Loma Linda University Children's Hospital
Pediatric Residents Transport Orientation
Intubations, Chest Tubes, and Intraosseous Placement
May 27, 1998

Loma Linda University Medical Center
Advanced Pediatric Critical Care Nursing Course
Sepsis
May 20, 1998

Loma Linda University Medical Center
Advanced Pediatric Critical Care Nursing Course
Advances in Respiratory Therapy
December 8, 1997

Crafton Hills College
School of Allied Health EMS Course
Teen Suicide
December 2, 1997

Loma Linda University Medical Center
Advanced NICU Transport Nursing Course
Intraosseous Infusions
November 20, 1997

Loma Linda University Medical Center

Pediatric Critical Care Nursing Course
Respiratory Failure and Treatment
October 30, 1997

Loma Linda University Medical Center
Emergency Medicine Residency Program
Helium Therapy for Obstructive Airway Diseases
March 7, 1996

Riverside General Hospital
Department of Pediatric Nursing
Caring for the Pediatric Patient with Chest Tubes
February 28, 1996

Loma Linda University Medical Center
Pediatric Residency Program
General Burn Management
March 13, 1995

Loma Linda University Medical Center
Pediatric Residency Program
Apnea, ALTE, SIDS
December 27, 1994

Loma Linda University Medical Center
Pediatric Residency Program
Vascular Access in Children
December 12, 1994

Loma Linda University School of Allied Health
Professions
Department of Cardiopulmonary Sciences
Pulmonary Airleaks/High Frequency Oscillation Ventilation
September 22, 1994

PUBLICATIONS

Original Manuscripts

Abd-Allah S. Gastrointestinal bacterial translocation following fiberoptic bronchoscopy: Fact or fiction? *Crit Care Med 2008 Vol. 36, No. 9: 2680-2681*

Mathur M, Taylor S, Tiras K, Wilson M, **Abd-Allah S.** Pediatric critical care nurses' perceptions, knowledge, and attitudes regarding organ donation after cardiac death. *Pediatric Crit Care Med 2008; 9:261-269*

Nadel S, Goldstein B, Williams MD, Dalton H, Peters M, Macias WL, **Abd-Allah SA**, Levy H, Angle R, Wang D, Sundin DP, Giroir B for the REsearching severe Sepsis and Organ dysfunction in children: a gLobal perspective (RESOLVE) study group. Drotrecogin alfa (activated) in children with severe sepsis: a multicentre phase III randomised controlled trial. Lancet 2007; 369:1-8.

Slaughter A, Roddy S., Holshouser B Slaughter A, Roddy S, Holshouser B, **Abd-Allah S**. Magnetic resonance spectroscopy findings in a 14-year-old coma patient after baclofen ingestion. *Pediatr Neurol* 2006; 34:151-155

Fiorito B, Mirza F, Doran T, Oberle A, Vince Cruz E, Wendtland C, **Abd-Allah S**. Intraosseous access in the setting of pediatric critical care transport. *Pediatr Crit Care Med 2005*; 6:50-53

Abd-Allah S, Rogers M, Terry M, Gross M, Perkin R. Helium-oxygen therapy for pediatric acute severe asthma requiring mechanical ventilation. *Pediatr Crit Care Med* 2003; 4:353-357

Green SM, Denmark TK, Cline J, Roghair C, **Abd-Allah S**, Rothrock SG. Ketamine sedation for pediatric critical care procedures. *Pediatr Emerg Care.* 2001; 17:244-248

Abd-Allah S, Jansen P, Ashwal S, Perkin R. Intravenous Immunoglobulin as Therapy for Pediatric Guillain-Barre Syndrome. *J Child Neurol.* 1997; 12:376-380

Tatum WO, Coker SB, Ghobrial M, **Abd-Allah S**. The Open Opercular Sign: Diagnosis and Significance. *Ann Neurol.* 1989;25(2):196-199.

Abstracts

Wu T, Utrapiromsuk T, Mikhael M, Treiman S, Rowe M, **Abd-Allah S.** Bronchoscopic findings of children with tracheostomies requiring home mechanical ventilators. *12th International Home Mechanical Ventilation Conference; Barcelona Spain 2009*

Yanni G, Shores D, Yorgin P, Sahney S, Cutler D, Shah M, Ojogho O, Baron P, Franco E, Ejike J, **Abd-Allah S**, Mathur M, Mirza F, Tinsley C, Treiman S, Bahk T. Successful use of plasmapheresis combined with continuous renal replacement therapy (CRRT) in treating children with acute hepatic failure (AHF) and acute-on chronic hepatic failure. *XXII International Congress of the Transplant Society, Sidney Australia 2008*

Wayment M, **Abd-Allah S**, Gross M, Pfeifle J, Terry M, Grainger M, Cuda J, Mathur M. High frequency oscillatory ventilation as a primary and rescue ventilatory modality in children. *World Congress on Pediatric Critical Care 2007;* Suppl, Vol 8 No. 3:37

Eguchi J, Deming D, Bailey L, **Abd-Allah S.** Use of high frequency oscillatory ventilation in patients with cardiac transplantation. *World Congress on Pediatric Critical Care 2007*

Wayment M, Ejike C, **Abd-Allah S**, Disseminated community acquired methicillin resistant staphylococcus aureus in a previously healthy pediatric patient. *CHEST 2006;* Suppl Vol 130 No 4:321S-322S

Abd-Allah S, Woodward B, Short M, Wang D, Williams M. Baseline characteristics of patients enrolled in RESOLVE: A phase III trial of drotrecogin alfa (activated) in pediatric severe sepsis. *Crit Care Med* 2005; 33(Suppl 12):A154

Mathur M, Taylor S, Tiras K, Wilson M, **Abd-Allah S.** Pediatric critical care nurses knowledge and attitudes towards donation after cardiac death. *Crit Care Med* 2005; 33(Suppl 12):A13

J Luu, C Wendtland, F Mirza, M Gross, **S Abd-Allah.** The use of 3% saline during pediatric critical care transport. *American Academy of Pediatrics National Conference 2005*

S Abd-Allah, M Rocha, G Lam, M Gross, T Simeon, C Tinsley, M Wilson, M Shah, R Perkin. Esophageal foreign body removal in the pediatric intensive care unit. *Pediatr Crit Care Med* 2005; 6(5):628

SJ Lee, TW Chin, M Gross, L Akanli, **S Abd-Allah**. Long-term use of oral sildenafil for pediatric pulmonary hypertension appears to be safe and efficacious. *J Invest Medicine, 2005: 53(1):197*

Chin T, Howard R, **Abd-Allah S**, Rogers M, Roy R, Pfeifle J, Samransamruajkit R. Decreased cytokine production with nitric oxide treatment of acute lung injury. *J Invest Medicine 2004; 52:177*

Mirza F, **Abd-Allah S**, Ashwal S. Use of hypertonic saline for raised intracranial pressure secondary to Reye's syndrome. *World Congress of Pediatric Intensive Care 2003*

Samimi S, Adams J, Rogers M, Benitez R, Lewis K,
Abd-Allah S, Lee C. A bronchodilator algorithm in the management of bronchiolitis. *American Academy of Pediatrics National Conference 2002*

Amos I, Adams J, Rogers M, Lewis K, **Abd-Allah S**, Lee C. Racemic epinephrine versus nebulized albuterol in the treatment of bronchiolitis. *American Academy of Pediatrics National Conference 2002*

Mirza F, Gross M, Sehra R, Slaughter A, **Abd-Allah S**. Use of nesiritide in children with severe cardiac failure. *3rd Special Topics in Pediatric Cardiac Intensive Care 2002*

Fiorito B, Mirza F, Doran T, Oberle A, Vince Cruz E, Wendtland C, **Abd-Allah S**. Intraosseous access in the setting of pediatric critical care transport. *Annual Pediatric Critical Care Colloquium 2002*

Van Stralen D, King P, **Abd-Allah S**, Rao R. Intensive care unit support for a freestanding pediatric subacute facility. *Annual Chest Conference 2002*

Fiorito B, Mirza F, Slaughter A, **Abd-Allah SA**. An unexpected need for the Sensor Medics 3100B in a pediatric patient. *Annual Keystone ECMO Conference 2002*

Nguyen KP, Perkin RM, **Abd-Allah SA**. Intentional acetaminophen overdose among children. *Pediatrics* 2000

Abd-Allah SA, Siddiqui MS, Perkin RM. Open lung biopsy evaluation of lung disease in the difficult to wean critically ill pediatric patient. *Crit Care Med* 1999; 27(suppl 1):A95.

Abd-Allah SA, Hilton T, Riviera A, Enverga M, Perkin RM. Bronchoscopic findings in a pediatric home mechanical ventilation population. *Chest* 1998; 114(suppl 4):363S.

Rogers MS, **Abd-Allah S**, Scott JR, Malinowski TP, Perkin RM. The use of helium-oxygen mixtures in pediatric patients with status asthmaticus requiring mechanical ventilation. *Respir Care* 1997; 42(11):1106.

Abd-Allah S, Jansen P, Ashwal S, Perkin R. Intravenous Immunoglobulin as Therapy for Pediatric Guillain-Barre Syndrome. *Crit Care Med* 1996; 24(suppl 1):A136.

Rogers MS, Scott JR, **Abd-Allah S**, Perkin RM, Van Stralen DW. Volume Accuracy of the Siemens Servo 900C and Novametrix VenTrak when delivering helium oxygen mixtures. *Respir Care* 1995; 40(11):1206.

Abd-Allah S, Rogers M, Van Stralen D, Perkin R. Helium-Oxygen Therapy in Pediatric Status Asthmaticus. *Chest* 1995; 108(suppl 3): 115S.

Book Chapters

Abd-Allah S, Checchia P. Heart Transplantation. In D Wheeler, H Wong, T Shanley, eds. Pediatric Critical Care Medicine: Basic Science and Clinical Evidence. Springer-Verlag, London, England; 2007: 841-864

Samransamruajkit R, Wendtland C, **Abd-Allah S**. Transportation of critically ill pediatric patients. In N Prapphal, J Deelodegenavong, P Lerdsarpchareaon, eds. Pediatric Critical Care in General Practice. Beyond Enterprises, Bangkok, Thailand; 2004: 108-114.

Other Publications

Abd-Allah S, Kuko M. Muslims section. Loma Linda University Medical Center Health Care and Religious Beliefs Manual. 2007

Pakistan Medical Trip
Islamic Medical Association of North America News, Vol. 24, Issue 8, Jan-July 2006, page 6

Abd-Allah, S: "Warning signs that teens may attempt suicide". *The Press Enterprise.* Riverside, California. December 8, 1996

INVESTIGATIVE RESEARCH PROJECTS

Current

Family presence during cardiopulmonary resuscitation in the pediatric intensive care unit. Co-investigator
2003 – Present

Comparison of hypertonic saline versus mannitol and other treatment modalities in the management of children with traumatic intracranial hypertension. Sub-investigator
2002 – Present

Potent inflammatory cytokines in an ARDS animal model after exposure to iNO
Principle investigator, $20,000-Pediatric Education, Research, and Training Fund
2000 – Present

Previous

A multicenter, epidemiological, observational survey of the management of anemia in critically ill pediatric patients. Site investigator, $2,180/patient-Johnson and Johnson Pharmaceutical Research & Development
2004-2005

An open-label study of Recombinant Human Activated Protein C in severe sepsis. A Phase 3b Clinical Trial, Protocol F1K-MC-EVBE. Site investigator, $7900/patient-Eli Lilly and Company
2001 – 2006

Clinical trial of human botulism immune globulin
Site investigator
2000 – 2004

The effects of amplitude and frequency on iatrogenic lung injury during HFOV in an animal model of acute lung injury. Associate principle investigator
2001 – 2002

Evaluation of the small child profile Lite™ mask for the application of non-invasive positive pressure ventilation. Site investigator, $5000-Respironics, Inc
2001 – 2002

Randomized prospective multicenter oscillator ARDS trial
Site investigator
1999 – 2001

A prospective, randomized, placebo-controlled, multi-center trial examining the role of Antithrombin III treatment in the management of meningococcal purpura fulminans
Site investigator, $1000/patient-Bayer Corporation
1996 – 1999

COURSE INSTRUCTION

Advanced Pediatric Life Support
Course Lecturer
2002 – Present

Emergency Medical Service Theory for the Paramedic
Crafton Hills College
Instructor
1998 – Present

Advanced Pediatric High Frequency Oscillation Ventilation Training Course, Sensormedics, Inc
Invited Lecturer
1999 – 2002
Medical Applications of the Basic Sciences Course
Medical student facilitator
1998

Pediatric Critical Care Nurse Practitioner Program
Course lecturer
1997

CURRICULUM DEVELOPMENT/OTHER

Bedside Ultrasound in the ICU Seminar
Pediatric Critical Care Division

May 2009

Journal Reviewer
Critical Care Medicine
2005-present

Bi-Annual Loma Linda University Children's Hospital
Pediatric Critical Care Symposium Planning Committee
2002-present

Judicial Review Committee
Loma Linda University Medical Center
October 2007
Journal Reviewer
Pediatric Critical Care Medicine
2005

Question Contributor
Pediatric Critical Care Subspecialty Examination
American Board of Pediatrics
2000

Pediatric Resident Education Syllabus
Pediatric Critical Care Section
Loma Linda University Children's Hospital
1999-2000

INTERNATIONAL MEDICAL SERVICE

Medical Mission Trip
Rafidia Hospital
Palestine
April 11-April 23, 2010

Medical Mission Trip
Panang Adventist Hospital
Malaysia
June 26-July 3, 2009

Medical Mission Trip
East Africa University
Kapsebat Hospital
Kenya, Africa
March 16-28, 2009

Pediatric Cardiothoracic Surgery Mission

Alexandria New University Hospital
Alexandria, Egypt
November 5-November 21, 2008

Pediatric Cardiothoracic Surgery Mission
Makassed Hospital
East Jerusalem, Palestine
January 31-February 9, 2008

Pediatric Cardiothoracic Surgery Mission
Makassed Hospital
East Jerusalem, Palestine
January 9-19, 2007

Emergency Medicine and Pediatrics Mission
Chennai and Hyderabad, India
Muzafarabad and Islamabad, Pakistan
January 19-February 3, 2006

Emergency Medicine and Pediatrics Mission
Nairobi, Kenya
April 5-14, 2005

Emergency Medicine and Pediatrics Continuing Education Course
Kabul, Afghanistan
May 2–9, 2004

COMMUNITY SERVICE

Muslim View of God lecture
Oak Glen Adventist Fellowship
Oak Glen, CA
2008

Volunteer Physician
American Red Cross Fire Evacuation Center
San Bernardino, CA
2003

Chairman, School Board
Islamic Academy of Riverside
2000-2001

Master of Ceremonies
Annual Fundraiser, Islamic Academy of Riverside

2000

Vice Chairman, School Board
Islamic Academy of Riverside
1999-2000

Volunteer Physician
University of California, Riverside
National Youth Sports Program
1998-1999

Chairman, Election Committee
Masjid of Riverside
1997

Vice President
Masjid of Riverside
1996 - 1997

Youth Coordinator
Masjid of Riverside
1993 – 1996

CERTIFICATES/AWARDS

Certificate of Appreciation
Six Sigma Hand Hygiene Project
May 2006

The Crossroads Rotary Club and The Unforgettables Foundation
N. Pages and L. Tomasi Unforgettable Pediatrician
Annual Award
Co-recipient
December 2005

Outstanding Active Participation in the One Legacy Organ Donation Breakthrough Collaborative
June 2005

Pediatric RN Residency Program donor
December 2004

COMMUNITY PRESENTATIONS

Effective Communication

Muslim American Society
Rancho Cucamonga, CA
January 24, 2009

The Muslim View of God
Oak Glen Adventist Fellowship
January 12, 2008

Child Safety and Health
Straightway Elementary School
West Covina, CA
January 7, 2004

Introduction to Islam
Redlands Kiwanis
May 14, 2002

Introduction to Islam
Yucaipa SDA Church Sabbath
January 19, 2002

Hajj Medical Advice
Masjid of Riverside
January 4, 2002

ADDITIONAL SKILLS

Flexible Fiberoptic Pediatric Bronchoscopy
ECMO

ANNEX D: BIBLIOGRAPHY OF DOCUMENTS COLLECTED AND REVIEWED

1. Warehouse stock – ***document follows***

Items available in the warehouse:

2 chemistry analyzers

10 ECG Machines

5 emergency trolleys

10 bedside monitor

1 x-ray film processor

1 high frequency ventilator

Ultra sound diagnostic

1 nasal Cpap

22 tube rotator

2 pulse oximeter with NIBP

The total amount available in the warehouse is $237639

The total amount of distributed items 353366

Total distributed to MOH clinics: $730257

Total distributed to MOH hospitals: $418242

Total distributed to NGO's: $ 204867

ANNEX E: LIST OF MATERIALS CREATED OR PROVIDED DURING ASSIGNMENT

1. LLUCH Emergency-Resuscitation Dosages – ***document on file***
2. LLUCH guidelines for using HFOV in the pediatric intensive care unit & pediatric cardiac surgical intensive care unit – ***document on file***
3. LLUCH policy D-5: Uses and disclosures of protected health information - ***document on file***
4. LLUCH policy G-16: Maintenance and quality control of code blue equipment - ***document on file***
5. LLUCH policy G-21: Patient care equipment rental - ***document on file***
6. LLUCH policy G-27: Scope and accessory reprocessing and disinfection - ***document on file***
7. LLUCH policy I-72: Family school partnership - ***document on file***
8. LLUCH policy M-100: Authorization for treatment of minors who lack capacity to consent, – ***document on file***
9. LLUCH policy M-100: Authorization for treatment of minors who lack capacity to consent - ***document on file***
10. LLUCH policy M-101: Change in pediatric patient condition - ***document on file***
11. LLUCH policy M-102: Pediatric infection control - ***document on file***
12. LLUCH policy M-103: Child life infection control - ***document on file***
13. LLUCH policy M-104: Pediatric patient safety precautions and event reporting - ***document on file***
14. LLUCH policy M-107: Interdisciplinary assessment and reassessment of patients - ***document on file***
15. LLUCH policy M-11: Transportation of patients - ***document on file***
16. LLUCH policy M-111: Point-of-care testing - ***document on file***
17. LLUCH policy M-113: Communication with patients who have limited English proficiency and/or are hearing, speech, or vision impaired - ***document on file***
18. LLUCH policy M-115: Intravenous administration of potassium - ***document on file***
19. LLUCH policy M-116: Visiting pediatric patients - ***document on file***
20. LLUCH policy M-124: Provisions for social work services for children admitted to children's hospital, university hospital, and east campus hospital - ***document on file***
21. LLUCH policy M-125: Breast milk storage, transport, and administration - ***document on file***
22. LLUCH policy M-133: Medication reconciliation - ***document on file***
23. LLUCH policy M-135: Breastfeeding - ***document on file***
24. LLUCH policy M-20: Discharge planning/continuity of care - ***document on file***
25. LLUCH policy M-22: Determination of death by neurologic criteria - ***document on file***
26. LLUCH policy M-27: Deceased patient management - ***document on file***
27. LLUCH policy M-30: Infection control – comprehensive aspects - ***document on file***
28. LLUCH policy M-31: Patient education - ***document on file***
29. LLUCH policy M-55: Medication administration and errors - ***document on file***
30. LLUCH policy M-60: Inpatient nutrition care - ***document on file***
31. LLUCH policy M-8: Suspected child abuse/neglect/exploitation - ***document on file***
32. LLUCH policy M-86: Procedure related sedation (PRS) - ***document on file***

33. LLUCH policy M-87: Education services for pediatric and adolescent patients - ***document on file***
34. LLUCH policy M-88: Continuity of care for pediatric patients - ***document on file***
35. LLUCH policy M-89: Family-centered care in children's hospital - ***document on file***
36. LLUCH policy M-91: Restraints and safety devices - ***document on file***
37. LLUCH policy M-96: Administration of blood and blood components - ***document on file***
38. LLUCH policy M-97: Pediatric patient emergencies - ***document on file***
39. LLUCH policy O-22: Patient admissions and transfers within the Children's Hospital – ***document on file***
40. LLUCH policy O-23: Pediatric admission through PICU transport center - ***document on file***
41. LLUCH policy O-23: Pediatric admissions through PICU transport center - ***document on file***
42. LLUCH policy O-24: Intrafacility transfers - ***document on file***
43. LLUCH policy O-3: Patient admissions and transfers within the medical center - ***document on file***
44. LLUCH policy P-12: Conflict resolution regarding patient care - ***document on file***
45. LLUCH policy P-15: Code status/limitation of treatment for patients between birth and the eighteenth birthday S-6: Infant and pediatric security - ***document on file***
46. LLUCH policy P-15: Code status/limitation of treatment for patients between birth and the eighteenth birthday - ***document on file***
47. LLUCH policy P-2: Patient consent - ***document on file***
48. LLUCH policy P-5: California natural death act declaration - ***document on file***
49. LLUCH policy P-8: Consent for emergency treatment - ***document on file***
50. LLUCH policy P-9: Rights and/or responsibilities of pediatric patients, parents/guardians - ***document on file***
51. LLUCH policy Q-10: Organ/tissue donation from patients determined decreased by neurologic criteria - ***document on file***
52. LLUCH policy Q-20: Deaths reportable to coroner - ***document on file***
53. LLUCH policy Q-25: Organ/tissue donation after cardiac death of adult and pediatric patients - ***document on file***
54. LLUCH policy Q-6: Autopsy requirements - ***document on file***
55. LLUCH policy R-1: Investigational drugs - ***document on file***
56. LLUCH policy R-12: Discharge medications - ***document on file***
57. LLUCH policy R-13: Medications brought into the hospital by patients - ***document on file***
58. LLUCH policy R-18: Patient instructions for outpatient medications - ***document on file***
59. LLUCH policy R-23: Medication storage in patient care areas - ***document on file***
60. LLUCH policy R-30: Review of medication orders - ***document on file***
61. LLUCH policy R-34: Automated dispensing cabinets (ADC) for medications - ***document on file***
62. LLUCH policy R-35: High risk/high alert medications - ***document on file***
63. LLUCH policy T-23: Product/device hazard notification program - ***document on file***
64. LLUCH policy T-29: Medical equipment management and safety - ***document on file***

65. LLUCH policy T-63: Patient provided equipment - ***document on file***
66. LLUCH protocol A-10: Care of the pediatric patient receiving IV therapy through a central venous catheter – ***document on file***
67. LLUCH protocol A-12: Care of the patient receiving blood products – ***document on file***
68. LLUCH protocol A-13: Care of the patient with IV extravasation (infiltration) – ***document on file***
69. LLUCH protocol A-14: Care of the patient receiving total parenteral nutrition (TPN) – ***document on file***
70. LLUCH protocol A-15: Care of the pediatric patient receiving peripheral intravenous therapy (non-TPN, non-blood products) – ***document on file***
71. LLUCH protocol A-6: Care of the pediatric patient with invasive hemodynamic monitoring – ***document on file***
72. LLUCH protocol C-13: Care of the pediatric patient with a temporary transcutaneous pacemaker – ***document on file***
73. LLUCH protocol E-2: Care of the physically restrained patient – ***document on file***
74. LLUCH protocol E-6: Care of the pediatric patient at risk of falling – ***document on file***
75. LLUCH protocol G-1: Care of the pediatric patient with difficulty swallowing – ***document on file***
76. LLUCH protocol G-13: Care of the pediatric patient receiving continuous renal replacement therapy (CRRT) – ***document on file***
77. LLUCH protocol G-15: Care of the pediatric patient receiving enteral tube feedings – ***document on file***
78. LLUCH protocol G-16: Care of the pediatric patient with a gastrostomy tube – ***document on file***
79. LLUCH protocol G-3: Care of the pediatric patient with colostomy/ileostomy/urostomy – ***document on file***
80. LLUCH protocol G-5: Care of the pediatric patient with an indwelling urinary catheter – ***document on file***
81. LLUCH protocol G-9: Care of the hospitalized pediatric patient receiving peritoneal dialysis – ***document on file***
82. LLUCH protocol GC-10: Care of the intermediate intensive care pediatric patient – ***document on file***
83. LLUCH protocol GC-12: Care of the intensive care pediatric patient during transport to/from LLUMC – ***document on file***
84. LLUCH protocol GC-13: Care of the pediatric patient with a disability – ***document on file***
85. LLUCH protocol GC-14: Care of the hospitalized breastfeeding infant – ***document on file***
86. LLUCH protocol GC-2: Care of the intensive care pediatric patient – ***document on file***
87. LLUCH protocol M-1: Care of the pediatric patient with an extremity cast – ***document on file***
88. LLUCH protocol M-2: Care of the pediatric patient with spinal instrumentation – ***document on file***
89. LLUCH protocol M-6: Care of the pediatric patient with impaired physical mobility – ***document on file***

90. LLUCH protocol N-10: Care of the pediatric patient with acute neurological deficit – ***document on file***
91. LLUCH protocol N-11: Care of the pediatric patient with intracranial pressure (ICP) monitoring – ***document on file***
92. LLUCH protocol N-12: Care of the restless/combative/disoriented pediatric patient – ***document on file***
93. LLUCH protocol N-13: Care of the pediatric patient with or at risk for seizures – ***document on file***
94. LLUCH protocol N-14: Care of the pediatric patient with major neurosurgical wounds and dressings – ***document on file***
95. LLUCH protocol N-3: Care of the pediatric patient receiving midazolam (versed) infusion – ***document on file***
96. LLUCH protocol N-4: Care of the pediatric patient with a cerebrospinal fluid (CSF) shunt – ***document on file***
97. LLUCH protocol NP-1: Care of the pediatric patient experiencing pain – ***document on file***
98. LLUCH protocol NP-2: Care of the patient undergoing procedure related sedation – ***document on file***
99. LLUCH protocol NP-3: Care of the pediatric patient receiving continuous opioid infusion (Non-PCA) – ***document on file***
100. LLUCH protocol NP-4: Care of the pediatric patient receiving patient controlled analgesia (PCA) – ***document on file***
101. LLUCH protocol NP-5: Care of the pediatric patient receiving continuous epidural analgesia with/without patient controlled epidural analgesia (PCEA) option – ***document on file***
102. LLUCH protocol P-2: Care of the pediatric patient/family with ineffective coping – ***document on file***
103. LLUCH protocol P-3: Care of the pediatric patient with suspected abuse/neglect – ***document on file***
104. LLUCH protocol P-5: Care of the dying and deceased child/adolescent – ***document on file***
105. LLUCH protocol P-6: Care of the pediatric suicidal patient – ***document on file***
106. LLUCH protocol R-1: Preparation of the ventilator assisted patient for home mechanical ventilation (HMV) – ***document on file***
107. LLUCH protocol R-2: Care of the chemically paralyzed pediatric patient – ***document on file***
108. LLUCH protocol R-3: Care of the pediatric patient with tracheotomy/tracheostomy – ***document on file***
109. LLUCH protocol R-5: Care of the pediatric patient receiving mechanical ventilation – ***document on file***
110. LLUCH protocol R-7: Protocol for passy-muir tracheostomy speaking valve (PMSV) – ***document on file***
111. LLUCH protocol R-8: Care of the pediatric patient with impaired gas exchange – ***document on file***
112. LLUCH protocol R-9: Care of the patient with chest tubes – ***document on file***

113. LLUCH protocol S-1: Care of the pediatric patient with diaper rash – ***document on file***
114. LLUCH protocol S-2: Care of the pediatric patient with pediculosis (lice) – ***document on file***
115. LLUCH protocol S-3: Care of the pediatric patient with stomatitis/mucositis – ***document on file***
116. LLUCH protocol S-4: Care of the pediatric patient at risk for development and/or with pressure ulcers and other wounds – ***document on file***
117. LLUCH technical procedure: Calibrate high frequency oscillator ventilator – ***document on file***
118. LLUCH technical procedure: Continuous and pediatric tent nebulizers – ***document on file***
119. LLUCH technical procedure: Continuous medication nebulizer (cont med neb) and Continuous nebulized bronchodilator (CNB) therapy – ***document on file***
120. LLUCH technical procedure: Ventilator care of the neonatal patient – ***document on file***
121. LLUCH technical procedure: Ventilator care of the pediatric patient – ***document on file***
122. LLUCH technical procedure: High frequency oscillatory ventilation (HFO) – ***document on file***
123. LLUCH technical procedure: Non-invasive positive pressure ventilation for the neonatal patient (NIPPV) – ***document on file***
124. Loma Linda University Children's Hospital 2009 Pediatric Resident Handbook – ***document on file***
125. PowerPoint presentation "Pediatric Intensive Care: A Global Perspective" **–** ***document on file***