

### UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

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18 November 2004

#### MEMORANDUM FOR MTN PALS PROGRAM DIRECTORS/ADMINISTRATORS

SUBJECT: Hostile Environments Life-Saving Pediatrics (HELP)

Walter Reed Army Medical Center and Uniformed Services University of the Health Sciences has published HELP, a collection of Pediatric educational materials specifically geared to medical personnel in deployed settings. The HELP materials were created in response to learning over 500 children have been admitted to military hospitals in Iraq and Afghanistan within the last 18 months. These children are victims of injuries associated with insurgencies and conflicts, such as blasts, burns, GSWs and other medical emergencies.

The program contains 3 DVDs and a VIPER (Virtual Intensive Pediatric Educational Resource) CD, which can be deployed to unit's locations. This education program is for all medical personnel (physicians, nurses, PA, corpsmen, etc.). Continuing medical education and nursing contact hours will become available soon. Check the website <a href="http://cim.usuhs.mil/help/">http://cim.usuhs.mil/help/</a> for further information.

Attached is a letter from LTC Kevin Creamer, MTN PALS National Faculty, Program Abstract, and VIPER CD Content List. Please share this information with the appropriate leaders of your facility/command. If you are interested in obtaining a copy of the collection or have additional questions, please contact LTC Kevin Creamer, kevin.creamer@na.amedd.army.mil.

RYAN M. SHERCLIFFE, Majusaf, NC Director, Military Training Network

**Uniformed Services University** 

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3 Attachments: As stated

# Walter Reed Army Medical Center Walter Reed Health Care System Washington, DC 20307-5001

REPLY TO ATTENTION OF:

MCHL-K 18 June 2004

Department of Pediatrics Walter Reed Army Medical Center 6900 Georgia Ave, NW Washington, DC 20307-5001

Dear Colleague

I wanted to let you know about the enclosed educational program that our team from both Walter Reed AMC and the Uniformed Services University of the Health Sciences has been feverishly working on for the last several months. The project was based on the knowledge that 500 children have been admitted to Combat Support Hospitals in Iraq and Afghanistan in the last 18 months. These infants and children were victims of burns, blasts, falls, and MVAs in addition to GSWs and run of the mill operative and medical emergencies. Of note, none of these facilities have any pediatricians or pediatric specific nurses assigned to them. We decided to put together an educational package to help our non-Pediatric colleagues to care for these children. The project evolved into a set of 3 DVDs that includes almost 6 hours lectures and a CD with dozens of handouts, and web sites for reference as well as interactive pediatric resuscitation simulators. The CD also includes the PowerPoint slides from the DVD lectures and an additional narrated nursing assessment lecture.

The entire Program is Called **HOSTILE ENVIRONMENTS LIFE-SAVING PEDIATRICS** or **HELP**. Each white envelope contains the entire program, 3 DVDs and the Viper (VIRTUAL INTENSIVE PEDIATRIC EDUCATIONAL RESOURCE) CD. We have included extra VIPER CDs for the widest possible distribution for your personnel. The entire VIPER CD can be transferred to your own computer and copied to another CD for increased portability We received unprecedented copyright permission from the American Heart Association and the American Academy of Pediatrics for distribution to military personnel caring for children in Hostile Environments, so the material should only be reproduced in this context.

If you are receiving this educational program you are either deployed currently or soon to be deployed. We hope you find this information useful in caring for critically ill or injured children. It education is for all medical personnel, Physicians (Surgeons, Orthopedists, Anesthesiologists, Family Practitioners, and Emergency Medicine specialists), nurses, PA, corpsmen, etc. CME and nursing contact hours are soon to be available through a USUHS web site <a href="http://cim.usuhs.mil/help/">http://cim.usuhs.mil/help/</a>. I can be contacted to obtain more copies of the program for unit training at kevin.creamer@na.amedd.army .mil.

On Behalf of the **HELP** program team

Sincerely,

Kevin M. Creamer MD LTC, MC Asst Chief of Pediatrics, Clinical Services Walter Reed Army Medical Center

### **Program Abstract**

**Title:** Leveraging new technologies for distance "just in time" pediatric education for deployed military medical personnel worldwide: The **HELP** Program

**Authors**: Kevin Creamer, Cynthia Shields, Ben Gonzalez, Mark Burnett, Agnes Sierocka-Casteneda, Marisa Mize, Fred Copeman, Richard Kyle, Kathryn Camp, Walter Reed AMC, Washington DC, USUHS, Bethesda Md

**Introduction**: Over 600 children have been admitted to Army Combat Support Hospitals (CSHs) in Iraq and Afghanistan in <3 years, many to the ICU. These children were victims of burns, blasts, MVAs, GSWs and medical emergencies. None of these facilities have any assigned pediatricians or pediatric nurses. Since the Gulf War in 1991, new technologies have made access to the Internet, computers with CD Rom drives as well as DVD players for personal and professional use almost universal. We hypothesized these new technologies could be harnessed for pediatric "just in time" distance education.

**Methods:**We created an education package to improve pediatric critical care at Army CSHs and other remote sites. Interviews with returning physicians and nurses and DOD admission data clarified the educational needs. Due to intermittent availability of technologies at the CSHs, we wanted a compact and scalable format. The project allows recipients to access educational material ranging from printouts for bedside use, links to educational web sites, interactive resuscitation simulators, up to digitally recorded, and professionally edited DVD lectures. The materials have been distributed worldwide to deployed military medical personnel caring for children.

Results: The HOSTILE ENVIRONMENTS LIFE-SAVING PEDIATRICS (HELP) program includes 6 hours of pediatric specific lectures on DVD (Recognizing and Resuscitating Critically Ill and Injured Children, Trauma and Burns, Nursing Assessment, PICU Management PRIMER for the CSH, Pain Management, Newborn Resuscitation Essentials, Humanitarian Care Overview and Intraosseous needle insertion demo). The VIRTUAL INTENSIVE PEDIATRIC EDUCATIONAL RESOURCE (VIPER) CD contains dozens of handouts, slides for the lectures, links to educational web sites, interactive pediatric resuscitation simulators, and Internet access to CME and CEUs. The entire set including the HELP DVDs and the VIPER CD were distributed worldwide to Army Medical centers, major deployed medical units and CSHs within 3 months of inception for < \$1000. The format of the VIPER CD allowed for a wider distribution to individual military medical personnel deployed to or likely to be deployed to CSHs, including graduating residents of Army Surgery, Orthopedic, Anesthesia, Pediatric, and Emergency Medicine residencies.

**Conclusion:** The **HELP** Program is a highly portable and scalable distance education project. We speculate that this application of newly available technologies will enhance care provided by deployed military physicians and nurses caring for children worldwide Efforts to enhance the triservice availability of the entire program on a secure military website are underway.

# **VIPER CD Contents List**

# **Special Lectures Folder**

**HELP Intro** 

The Rapid Assessment of Critically Ill + Injured Children

Nursing Assessment and Care of Pediatric Trauma and Burns

Intro to Peds Trauma CSH

**Burn Injuries** 

PICU Primer for the CSH

Pediatric Pain Management

Newborn Resuscitation

Humanitarian Assistance Overview

### **Simulators (Web based)**

MDChoice Pediatric Advanced Life Support Simulator

Mechanical Ventilator Simulator

Paediatric Trauma Moulage (Five) TRAUMA.ORG

# **Viper Handouts Folder**

WHO antibiotics

Status epilepticus

Sedation for Ventilated Pediatric Patients

Preparation for Intubation

PICU DKA

**Pediatric Transfusions** 

Pediatric Mechanical Ventilation

**Pediatric Burns** 

Inotropes and Vasoactive drugs in the PICU

Intraosseous needle placement

**ICP** Management

Hypovolemic shock and maintenance fluids

Hemodynamic monitoring and support

HELP pediatric Spinal handout

HELP pediatric pain handout

External jugular placement

Emergency Nutrition for Sick kids

Common Pediatric Infectious Disease Problems and Suggested Therapy

Asthma Emergency Management Plan

# PALS and APLS Material Subfolder

### **APLS Subfolder**

Procedural sedation Peds vs Adult Empiric antibiotics

# **PALS Subfolder**

Bradycardia

Equipment chart

Hemorrhagic shock

Multiple trauma

Newborn resuscitation

Pulseless arrest

Rapid Cardiopulmonary Assessment

Septic shock

Tachycardia with poor perfusion

Tachycardia with stable perfusion

# **Reference Folder**

ARTIFICIAL AIRWAYS AND VENTILATION OF THE PEDIATRIC PATIENT

Overview of Humanitarian Emergencies

PEDIATRIC VITAL SIGNS

Prev Med in Humanitarian Emergencies

Primary Infectious Sources of Mortality

#### Web base references

Armstrong Medical Broselow® Pediatric Emergency Tape

**Code Med Calculations** 

Pediatric Resuscitation Equipment - Sizing by Age

PedsCCM- Pediatric Critical Care Medicine

WHO - Emergency and Humanitarian Action NGO Links

### **Education Folder (web based)**

**CME** 

**BURNS** 

Akron PICU Resident Syllabus

head trauma – introduction

PEDIATRIC TRAUMA

SCCM Specialties - Pediatric - PICU Course - Course Catalog

Virtual Naval Hospital Pediatric Emergency Manual Trauma