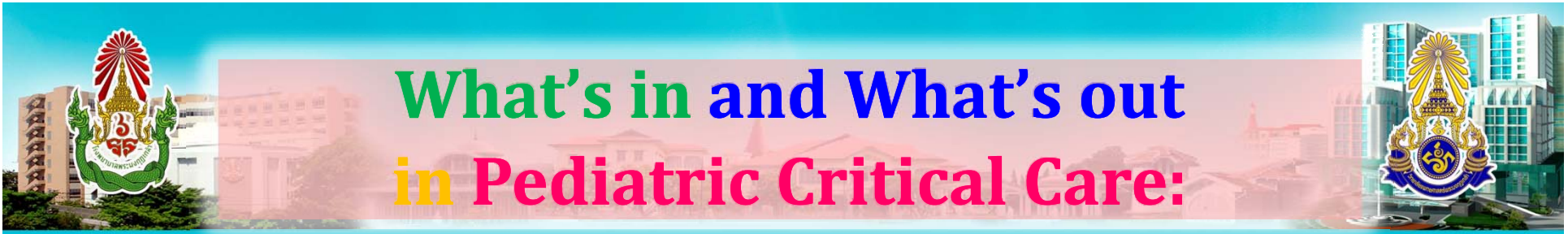




What's in, What's out **in** Pediatric Critical Care

Dusit Staworn, M.D.
Department of Pediatrics
Phramongkutklao Hospital



- **Survival sepsis campaign for severe sepsis and septic shock endorsed by SCCM/ESICM/ACCP/ATS/SIS**

Surviving Sepsis Campaign: International guidelines for management of severe sepsis and septic shock: 2008

R. Phillip Dellinger, MD; Mitchell M. Levy, MD; Jean M. Carlet, MD; Julian Bion, MD; Margaret M. Parker, MD; Roman Jaeschke, MD; Konrad Reinhart, MD; Derek C. Angus, MD, MPH; Christian Brun-Buisson, MD; Richard Beale, MD; Thierry Calandra, MD, PhD; Jean-Francois Dhainaut, MD; Herwig Gerlach, MD; Maureen Harvey, RN; John J. Marini, MD; John Marshall, MD; Marco Ranieri, MD; Graham Ramsay, MD; Jonathan Sevransky, MD; B. Taylor Thompson, MD; Sean Townsend, MD; Jeffrey S. Vender, MD; Janice L. Zimmerman, MD; Jean-Louis Vincent, MD, PhD; for the International Surviving Sepsis Campaign Guidelines Committee



Survival sepsis campaign for severe sepsis and septic shock



The SSC has been implemented in three phases:

- **Campaign introduction (2002)**
- **Practice guideline development and publication (2003 to 2004, 2006-7)**
- **Guideline translation to clinical protocols with assessment of practice performance (Ongoing)**
 - **Sepsis resuscitation bundle (6-hr bundle)**
 - **Sepsis management bundle (24-hr bundle)**



Sepsis Resuscitation Bundle **(6-hr bundle)**



- 1. Measure serum lactate.**
- 2. Obtain blood cultures before antibiotic administration.**
- 3. Administer broad-spectrum antibiotics within 3 hrs from time of presentation for ED admissions and 1 hr for non-ED ICU admissions.**
- 4. In the event of hypotension and/or lactate $>4\text{mmol/L}$:**
 - a. Deliver an initial minimum of 20 mL/kg of crystalloid**
 - b. Apply vasopressors for hypotension not responding to initial fluid resuscitation**
- 5. In the event of persistent hypotension despite fluid resuscitation (septic shock) and/or lactate $> 4 \text{ mmol/L}$:**
 - a. Achieve central venous pressure (CVP) ,8 mm Hg.**
 - b. Achieve central venous oxygen saturation (ScvO₂) ,70%**
 - (or SvO₂ ,65%).**



Sepsis Management Bundle (24-hr bundle)



- 1. Administer low-dose steroids for septic shock in accordance with standardized ICU policy.**
- 2. Standardized ICU protocol.**
- 3. Maintain glucose control greater than or equal to the lower limit of normal, but <150 mg/dL.**
- 4. Maintain inspiratory plateau pressures <30 cm H₂O for mechanically ventilated patients.**