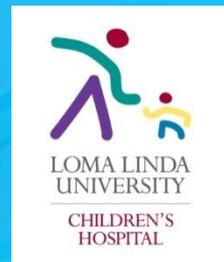




# Advance in PICU Monitoring

**Rujipat Samransamruajki MD**  
Associate Professor of Pediatrics  
Pediatric Pulmonary & Critical Care  
King Chulalongkorn Memorial Hospital



# MONITORING

Monitor is derived from the word “Monere”  
means

“To Warn or Remind”

Monitoring means using oversight to detect threats early enough for effective intervention. Permit timely intervention to avoid potentially harmful consequences.

# Ideal Monitoring System

- ❖ Safe, non-invasive, associated with no discomfort, responsive to real time change
- ❖ Data would be reliable, accurate, repeatable, continuously displayed, able to be stored and retrieved
- ❖ Least invasive monitoring that is appropriate for diagnosis, patient safety, assessment of treatment

# Advance in PICU Monitoring



**Intracranial**

**Intra-Thoracic**

**Hemodynamic**

**Intra-Abdomen**

**Abdominal  
Compartment  
Syndrome**



# Hemodynamic Monitoring

- ❖ Understanding Principles/Practice essential for management of critically ill child
- ❖ Knowledge pathophysiology and physical Principles of technology  
Limitations  
Potential errors