



Raleigh, North Carolina

Historical Perspectives

- October 5, 2006, WakeMed participated in community-wide efforts to coordinate field-tohospital use of Induced Hypothermia therapy for select cardiac arrest patients.
- WakeMed was one of the first health systems in the country to work in conjunction with Wake County EMS to implement the change in the standard of care consistent with recommendations from the AHA. (Class I, LOE-B)

The Field

- S/P cardiac arrest patient meets criteria for cooling.
 - Non-traumatic arrest.
 - ROSC, GCS <8 and no purposeful movement.
 - Time to initiate therapy less than 6 hours.
- Cold saline administered IV.
- Patient transported to E.D.



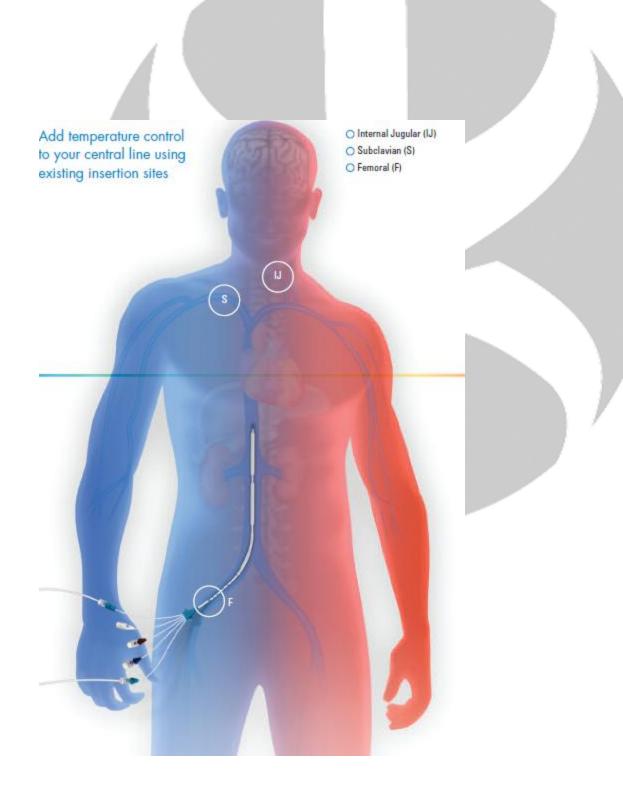
The Emergency Department

- Placement of special central venous catheter by ED physician.
- Initiation of catheterbased cooling therapy.
- Bed procurement in the intensive care unit.



Equipment





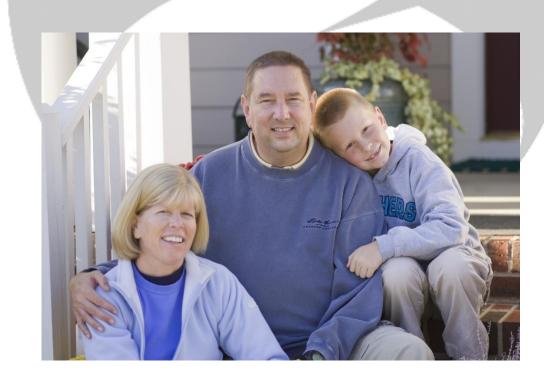
Intensive Care Unit

- Cooling phase (33°C)
 consists of 24-hours of
 circulating iced saline via
 central venous catheter
 balloons.
- Warming phase consists of 24 hours of controlled (6-8hrs) re-warming to 36°.
- Intensive assessment/ management of VS, mechanical ventilation, fluid volume, analgesia, shivering, sedation, electrolytes, etc.



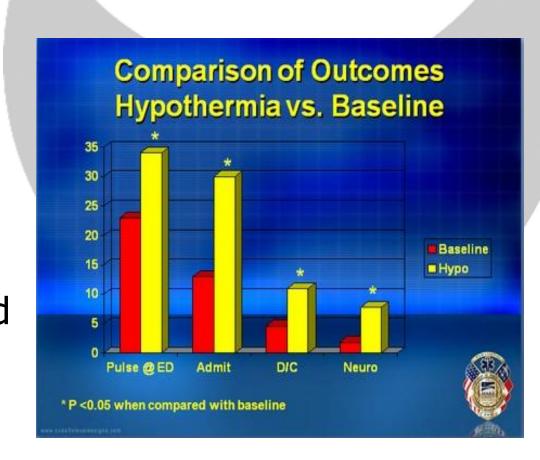
Case Study

- Summer 2007, cardiac arrest from cardiac embolus.
- Early CPR, 911, AED, 20-minute downtime
- Induced hypothermia therapy
- 1-month hospital/ rehab stay



Outcomes (Wake County EMS)

- Nationally-recognized cardiac arrest save rate.
- Implementation of the pioneering ICE (induced hypothermia by EMS) protocol for cardiac arrest patients.





WakeMed Health & Hospitals

Raleigh, North Carolina