WEB TABLE I PEDIATRIC PRE ARREST CARE [3, 4]

Sr. No	*Target Population*	*Questions*	*Treatment recommendations*
1.	Infants and children hospitalized in non ICU wards	Whether the use of pediatric RRT/MET, changes the • frequency of cardiac or pulmonary arrest and • overall hospital mortality	May be considered for admitted high risk children. Emphasis here is on the potential to recognize and intervene for patients with deteriorating illness so as to prevent them from progressing to cardiac/respiratory arrest
2.	Infants and children hospitalized in non ICU wards	Whether the use of a PEWS changes • overall hospital mortality, and • cardiac arrest frequency	Very-low-quality evidence from one pediatric observational study. Hence no recommendation possible.
3.	Infants and children with myocarditis/ DCMP with imminent cardiac arrest	Whether a specific approach like ECMO changes • cardiac arrest frequency • ROSC • survival to hospital discharge • survival with favorable neurologic/ functional outcome at discharge, 30,60, 180 days, and/or 1 year	No evidence in favor, though veno-arterial ECMO may be considered in acute fulminant myocarditis with imminent arrest. (very-low-quality evidence)
4.	Emergency tracheal intubation	Whether premedication with atropine changes • survival with favorable neurologic/functional outcome at discharge,30, 60, 90 ,180 days, and/or 1 year after event • incidence of cardiac arrest • incidence of arrhythmias and peri-intubation shock	Not recommended for routine use. May be used in situation where risk of bradycardia is high (e.g. succinyl choline use). Atropine to be given as 0.02mg/Kg with no minimal dose concept
5.	Infants and children with septic shock	Whether the use of restrictive volumes of resuscitation fluid(< 20 mL/kg) or the use of non-crystalloid fluids, change • time to resolution of shock • need for ventilation or vasopressor support, • frequency of complications • total intravenous (IV) fluids administered • length of hospital stay • ventilator-free days • survival to hospital discharge	Routine use of bolus intravenous fluids (crystalloids or colloids) for infants and children with a “severe febrile illness” and who are not in shock is not recommended Initial bolus of 20 ml/Kg is indicated in shock associated with severe sepsis, severe malaria, Dengue shock syndrome, with emphasis on frequent reassessments to detect deterioration at an early stage. No advantage of non crystalloids except in Dengue Shock Syndrome (time to resolution of shock) [7].

WEB TABLE II INTRA ARREST -ADVANCED LIFE SUPPORT [3,4]

Sr. No	*Target Population (infants & children)*	*Questions*	*Treatment recommendations*
1.	With VF or pVT	Whether any specific energy dose/s for defibrillation attempt(s), changes • termination of arrhythmia • ROSC • survival to hospital discharge, survival with favorable neurologic/functional outcome at discharge, 30, 60, 180 days , and/or 1 year	For initial dose use of monophasic/biphasic shock at 2 to 4 J/kg For further shock use escalating doses of ≥ 4J/kg. Should not exceed 10 J/kg or maximum dose in adults
2.	Requiring CPR	Whether use of invasive hemodynamic monitoring targeting specific blood pressure values for both systolic and diastolic, changes • likelihood of ROSC • survival to hospital discharge • survival to hospital discharge, 60 days and 180days after event with favorable neurologic outcome	Invasive blood pressure monitoring to guide CPR quality may be used.(very-low-quality evidence) No specific target values of BP are available
3.	With cardiac arrest	Whether chest compression technique to achieve a specific ETCO2 threshold, changes • ROSC • the likelihood of survival on discharge • survival at 180 days with good neurologic outcome	The quality of Chest Compression, may be evaluated by capnography (very low) Specific target values to guide chest compression have not been established
4.	With refractory VF/pVT	Whether use of Amiodarone versus Lidocaine, changes • termination of arrhythmias • ROSC • recurrence of VF • risk of complications (e.g., need for tube change, airway injury, aspiration) • survival at hospital discharge	For shock-refractory VF or pVT, either of the drugs amiodarone or lidocaine may be used
5.	With cardiac arrest	Whether the use of vasopressor (epinephrine, vasopressin, combination of vasopressors) changes • ROSC • survival at hospital discharge • survival to 180 days with good neurologic outcome	No pediatric studies that demonstrate the effectiveness of any vasopressors or its combination. Give standard-dose epinephrine for pediatric cardiac arrest, which is mainly based on one adult OHCA RCT [8](very-low-quality evidence)
6.	In hospital cardiac arrest	Whether use of ECMO for resuscitation(ECPR), changes • survival to intensive care discharge • survival at hospital discharge • survival to 180 days with good neurologic outcome	In settings with protocols, expertise and equipment for ECMO, ECPR might be considered in patients with underlying cardiac diseases.
7.	With cardiac arrest	Whether presence of any specific intra-arrest prognostic factors, changes • survival to hospital discharge with good neurologic outcome • survival at discharge, 30 days, 60 days, 180 days, and/or one year • survival to 30, 60 days with good neurologic outcome • survival to 180 days with good neurologic outcome	For **OHCA,** age < 1 year, longer durations of cardiac arrest and non-shockable rhythm are poor prognostic markers [9] In **IHCA**, positive predictors are age < 1 year and initial presence of a shockable rhythm.

WEB TABLE III PEDIATRIC POST CARDIAC ARREST CARE [3, 4]

S. No.	*Target Population (infants and children)*	*Questions*	*Treatment recommendations*
1.	ROSC post cardiac arrest	Whether use of therapeutic hypothermia (TTM) changes • ICU length of stay • survival to hospital discharge	For persisting coma after OHCA, TTM be used. However, ideal target temperature range and duration are unknown, use either hypothermia (32°C–34°C) or normothermia (36°C–37.5°C) [10] For pediatric survivors after IHCA insufficient data exists Temperature ≥38°C should not be allowed after ROSC
2.	Post cardiac arrest ROSC	Whether use of a targeted PaO2 target , changes • survival at ICU discharge • survival at hospital discharge • survival at 6 months • survival at 180 days with good neurologic outcome,	Target normoxemia (Pao2 ≥60 and <300 mmHg) after ROSC Wean O_2 to target SpO2 <100%, but >94%.
3.	Post cardiac arrest ROSC	Whether ventilation to a specific Paco2target, change • survival to ICU discharge • survival to hospital discharge • survival to 30, 60 days, 6 months with good neurologic out-come • survival to 180 days with good neurologic outcome	The limits of PaCO2(both upper and lower)are unknown and no specific PaCO2 in pediatric patients with ROSC has been demonstrated to have better outcomes Worse survival outcome was associated with Paco2 ≥50 mmHg [11]. Avoid hypercapnia
4.	Post arrest ROSC	Whether use of intravenous fluids and inotropes and/or vasopressors to maintain blood pressure, changes • patient satisfaction • survival to hospital discharge • survival with favorable neurologic/ functional outcome at discharge, 30, 60, 180 days, and/or 1 year	Parenteral fluids, inotropes/ vasoactive drugs are recommended to maintain SBP > 5th %tile for age Continuous arterial BP monitoring is desirable
5.	Post cardiac arrests	Whether use of neuro-electrophysiology information (EEG), predict • survival to hospital discharge with or without good neurologic outcome • survival at 6 months • survival with favorable neurologic outcome at 30, 60, 180 days and 1 year	On hospital discharge EEG within first 7 days showing discontinuous/ iso-electric line predicts poor neurologic outcome
6.	After ROSC	Whether presence of any specific prognostic factors, changes • survival at hospital discharge with good neurologic outcome • survival at discharge, 30 days, 60 days, 180 days, and/or1 year • survival to 30, 60, 180 days with good neurologic outcome	Multiple factors should be taken into account while predicting outcomes (e.g. pupillary size at 12-24 hrs, serum neurologic markers, and lactate)