Task Force	AHA ID	Domain	Active	Subcategory	Short Title	PICO	Category	Prioritization	Domain Leader	Comments
BLS	343	CPR	Yes	Compressions	Chest compression rate	Among adults and children who are in cardiac arrest in any setting (P), does any specific rate for external chest compressions (I), compared with a compression rate of about 100/min (C), change outcome including CPR	REPOSE			
BLS	344	Emergency Care	No	Head & Neck Injury	Face-down victim	Among adults and children with suspected neck injury who are in cardiac arrest in any setting (P), does any different strategy regarding positioning (eg. leaving them in the position they are found) (I), compared with standard care (ie. positioning the victim on his or her back) (C), change spinal cord injury, neurological injury, harm to patient, time to first shock (O)?	REPOSE			
BLS	345	CPR	Yes	Compressions	Rhythm check timing	Among adults and children who are in cardiac arrest in any setting (P), does checking the cardiac rhythm immediately after defibrillation (I), compared with immediate resumption of chest compressions with delayed check of the cardiac rhythm (C), change outcome including recurrence of VF (O)?	REPOSE			
BLS	346	CPR	Yes	Compressions	Timing of CPR cycles (2 min vs other)	Among adults who are in cardiac arrest in any setting (P), does pausing chest compressions at another interval (I), compared with pausing chest compressions every two minutes to assess the cardiac rhythm (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, coronary	REPOSE			
BLS	347	Defibrillation & Electrical Therapy	Yes	-	Public access AED programs	Among adults and children who are in cardiac arrest outside of a hospital (P), does implementation of a public access AED program (I), compared with traditional EMS response (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, time to first shock, bystander CPR rates,	REPOSE			
BLS	348	CPR	Yes	Compressions	Check for circulation during BLS	Among adults and children receiving CPR (P), does continuous CPR without any check for return of spontaneous circulation at pre-defined time intervals (I), compared with interruption of CPR to check for return of spontaneous circulation at pre-defined time intervals (C), change outcome (O)?	REACTIVATE	B4	de Caen	
BLS	349	CPR	No	Compressions	Rescuer fatigue in CC Only CPR	Among rescuers who are performing chest compressions (P), does compression only CPR (I), compared with conventional CPR (C), change chest compression quality or outcome (O)?	REACTIVATE	B5	de Caen	
BLS	352	Airway & Ventilation	Yes	Basic Airway Management	Passive ventilation techniques	Among adults and children who are in cardiac arrest in any setting (P), does addition of any passive ventilation technique (eg positioning the body, opening the airway, passive oxygen administration) to chest compression-only CPR (I), compared with just chest compression-only CPR (C), change outcome including bystander initiated CPR, oxygenation (O)?	REPOSE			
BLS	353	CPR	Yes	Compressions	Harm from CPR to victims not in arrest	Among Adults and children who are NOT in cardiac arrest outside of a hospital (P), does provision of chest compressions from lay rescuers (I), cause unacceptable harm (O)?	REPOSE			
BLS	354	CPR	No	Miscellaneous	Harm to rescuers from CPR	Among rescuers who are caring for patients in cardiac arrest in any setting (P), does performing CPR (I), compared with not performing CPR (C), change harm to rescuer , bystander CPR performance, willingness to provide CPR, prevent further illness or injury (i.e., harm), the likelihood of harm (eg infection) (O)?	REPOSE			
BLS	357	CPR	Yes	Compressions	Hand position during compressions	Among adults and children who are receiving chest compressions in any setting (P), does delivery of chest compressions on the lower half of the sternum (I), compared with any other location for chest compressions (C), change outcome including cardiac output, harm (eg rib fracture), coronary perfusion pressure (O)?	REPOSE			
BLS	358	CPR	Yes	Compressions	Minimizing pauses in chest compressions	Among adults and children who are in cardiac arrest in any setting (P), does minimization of pauses in chest compressions for cardiac rhythm analysis or ventilations (I), compared with prolonged pauses in chest compressions for rhythm analysis or ventilations (C), change outcome including time to first shock, CPR	REPOSE			
BLS	359	CPR	Yes	Bystander CPR	Dispatcher instruction in CPR	Among adults and children who are in cardiac arrest outside of a hospital (P), does the ability of a dispatch system to provide CPR instructions (I), compared with a dispatch system where no CPR instruction are ever provided (C), change outcome including delivery of bystander CPR, time to first shock, time to commence	REACTIVATE	B1	Couper	
BLS	360	CPR	Yes	Compressions	EMS CC only vs standard CPR	Among adults who are in cardiac arrest outside of a hospital (P), does provision of chest compressions with delayed ventilation by EMS (I), compared with chest compressions with early ventilations by EMS (C), change otucome including time to first shock, time to first compressions, CPR quality (O)?	REPOSE			
BLS	361	CPR	Yes	Monitoring / Feedback	Feedback for CPR quality	Among adults and children who are in cardiac arrest in any setting (P), does real-time feedback and prompt device regarding the mechanics of CPR quality (e.g. rate and depth of compressions and/or ventilations) (I), compared with no feedback (C), change outcome including bystander CPR rates, time to first compressions	REPOSE			
BLS	362	CPR	Yes	Compressions	Compression ventilation ratio	Among adults and children who are in cardiac arrest in any setting (P), does delivery of CPR with another specific C:V ratio (I), compared with CPR using a 30:2 compression:ventilation ratio (C), change outcome	REPOSE			
BLS	363	CPR	Yes	Compressions	CPR prior to defibrillation	Among adults and children who are in ventricular fibrillation or pulseless ventricular tachycardia in any setting (P), does a prolonged period of chest compressions before defibrillation (I), compared with a short period of chest compressions before defibrillation (C), change outcome including rhythm control (O)?	REPOSE			
BLS	366	CPR	Yes	Compressions	Chest compression depth	Among adults who are in cardiac arrest in any setting (P), does a different chest compression depth during CPR (I), compared with chest compression depth to 5 cm (2 inches) (C), change outcome including CPR quality, coronary perfusion pressure, cardiac output, bystander CPR performance (O)?	REPOSE			
BLS	367	CPR	Yes	Compressions	Chest wall recoil	Among adults and children who are in cardiac arrest (P), does allowing complete chest wall recoil (I), compared with incomplete chest wall recoil (C), change outcome (O)?	REPOSE			
BLS	368	Emergency Care	No	Miscellaneous	Foreign body airway obstruction	Among adults and children who are choking from a foreign body in the airway in any setting (P), does provision of abdominal thrusts, and/or back slaps, and/or chest thrusts (I), compared with no action (C), change outcome incldluing clearance of airway foreign body, risk of complications (eg aspiration), airway pressure	REACTIVATE	B8	Cheng	
BLS	370	CPR	Yes	Miscellaneous	Firm surface for CPR	Among adults and children who are in cardiac arrest in any setting (P), does performance of CPR on a hard surface like a backboard or deflatable mattress (I), compared with performance of CPR on a regular mattress (C), change outcome including chest compression depth (O)?	REACTIVATE	B6	Couper	
BLS	372	CPR	Yes	Compressions	Chest compression only CPR vs conventional CPR	Among adults who are in cardiac arrest outside of a hospital (P), does provision of chest compressions (without ventilation) by untrained/trained laypersons (I), compared with chest compressions with ventilation	REPOSE			
BLS	373	CPR	Yes	Compressions	Analysis of rhythm during chest compression	Among adults and children who are in cardiac arrest in any setting (P), does analysis of cardiac rhythm during chest compressions (I), compared with standard care (analysis of cardiac rhythm during pauses in chest compressions) (C), change outcome including time to first shock, time to commence CPR, CPR quality (O)?	REACTIVATE	B2	de Caen	
BLS	374	CPR	No	Compressions	Alternative compression techniques	Among adults and children who are in cardiac arrest (P), does an alternative method of manual CPR (eg. simultaneous compression and ventilation, interposed abdominal compression, active compression-decompression, heel-CPR) (I), compared with standard CPR (C), change outcome (O)?"	REPOSE			
Peds	382	Airway & Ventilation	No	Ventilation rate	Etiology specific minute ventilation	Among Infants and children with a secure airway who are in cardiac arrest in any setting (P), does a specific minute ventilation (combination of respiratory rate and tidal volume) depending on the aetiology of the arrest (I), compared with standard care (8-10 asynchronous breaths per minute) (C), change outcome (O)?	REACTIVATE	P13	Rabi	
Peds	384	Miscellaneous	No	Miscellaneous	Family presence (peds)	Among infants and children who are in cardiac arrest in any setting (P), does presence of family members during the resuscitation (I), compared with the absence of family members (C), change outcome (O)?	REACTIVATE	P33	Skifvars	

Peds	387	Post Arrest Care	Yes	Therapeutic Hypothermia	Post-ROSC Targeted Temperature Management (TTM)	Among infants and children who are experiencing ROSC after cardiac arrest in any setting (P), does does the use of TTM (eg, therapeutic hypothermia) (I), compared with compared with the use of normothermia (C), change outcome including ICU length of stay (O)?	REPOSE	P10		
Peds	388	Drugs & Fluids	No	Buffering Agents	Sodium bicarb for peds	Among Infants and children who are in cardiac arrest in any setting (P), does buffering agent administration (I), compared with no use of buffering agents (C), change outcome (O)?	REACTIVATE	P16	Ristagno	
Peds	390	Miscellaneous	No	Etiology	Resuscitation of the patient with single ventricle	Among infants and children with single ventricle, s/p stage I repair who are in cardiac arrest in any setting (P), does any specific modification to standard practice (I), compared with standard resuscitation practice (C),	REPOSE			
Peds	391	Miscellaneous	No	Etiology	Resuscitation of the patient with pulmonary hypertension	Among Infants and children who are in cardiac arrest with pulmonary hypertension in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
Peds	392	Miscellaneous	No	Etiology	Resuscitation for Fontan circulation.	Among infants and children with Fontan or hemi-Fontan circulation who are in cardiac arrest in any setting (P), does any specific modification to standard practice (I), compared with standard resuscitation practice (C),	REPOSE			
Peds	393	CPR	No	Monitoring / Feedback	Pulse check accuracy	Among infants and children who are in cardiac arrest in any setting (P), does a pulse check (I), compared with assessment for signs of life (C), change outcome (O)?	REPOSE			
Peds	394	CPR	Yes	Compressions	Chest Compression Depth	In infants and children receiving chest compressions (in or out of hospital) (P), does does the use of any specific chest compression depth (I), compared with compared with the depth specified in the current treatment algorithm (C), change survival to 180 days with good neurological outcome, survival to hospital discharge, Complication Rate, Intermediate physiologic endpoints (O)?	REACTIVATE	P3	de Caen	
Peds	396	Airway & Ventilation	No	Supplemental Oxygen	Oxygen dose (peds)	Among infants and children who are in cardiac arrest in any setting (P), does an FIO2 titrated to oxygenation during cardiac arrest (I), compared with the use of 100% oxygen (C), change outcome (O)?	REACTIVATE	P21	Rabi	
Peds	397	Emergency Care	Yes	Rapid Response Teams	Pediatric METs and RRTs	For infants and children in the in-hospital setting (P), does does the use of pediatric METs/RRTs (I), compared with compared with not using METs/RRTs (C), change Cardiac arrest frequency outside of the ICU, Cardiac arrest frequency, overall hospital mortality (O)?	REPOSE			
Peds	399	Emergency Care	No	Shock	Intubation for shock (timing)	Among infants and children who are in any type of shock in any setting (P), does intubation and assisted ventilation prior to the onset of respiratory failure (I), compared with intubation and assisted ventilation only with the onset of respiratory failure (C), change outcome (O)?	REPOSE			
Peds	400	Emergency Care	No	Shock	Graded volume resuscitation for traumatic shock	Among infants and children who are hemorrhagic shock following trauma in any setting (P), does graded volume resuscitation (I), compared with standard care (C), change outcome (O)?	REACTIVATE	P20	Patocka	
Peds	401	Airway & Ventilation	No	Advanced Airway Management	Formulas for peds ET tube size	Among infants and children who are requiring endotracheal intubation in any setting (P), does a specific formula to guide cuffed endotracheal tube size (I), compared with the formula of 3.5 + age/4 (C), change outcome (O)?	REPOSE			
Peds	407	CPR	Yes	Extracorporial CPR	Extracorporeal CPR for Inhospital Cardiac Arrest	In infants and children with IHCA (P), does does the use of ECMO for resuscitation, also called ECPR (I), compared with when compared with conventional resuscitative treatment (CPR without the use of ECMO) (C), change survival to 180 days with good neurological outcome, survival to hospital discharge, survival to	REPOSE	P9		
Peds	408	Screening & Diagnosis	No	ECG/EEG	Echo to diagnose perfusing rhythm	Among infants and children who are in cardiac arrest in any setting (P), does a focused echocardiogram (I), compared with standard assessment (C), change (O)?	REACTIVATE	P14	Scholefield	
Peds	409	Drugs & Fluids	No	Tachycardia	Drugs for unstable tachycardia	Among infants and children who are in unstable ventricular tachycardia in any setting (P), does any drug or combination of drugs (I), compared with electrical cardioversion (C), change outcome (O)?	REPOSE			
Peds	410	Drugs & Fluids	No	Miscellaneous	Distributive shock and inotropes (peds)	Among infants and children who are in distributive shock with or without myocardial dysfunction in any setting (P), does inotropic agent use (I), compared with no inotropic agent use (C), change outcome (O)?	REACTIVATE	P7	Kleinman	
Peds	414	CPR	Yes	Compressions	Chest Compression–Only CPR Versus Conventional	Among infants and children who are in cardiac arrest in any setting (P), does does compression-only CPR (I), compared with compared with the use of conventional CPR (C), change neurologically intact survival at one year , neurologically intact survival at 30 days, survival to hospital discharge, improved ICU length of stay	REACTIVATE	P1	de Caen	
Peds	417	Miscellaneous	No	Etiology	Channelopathies	Among infants and children who are in cardiac arrest in any setting (P), does consideration of a channelopathy as the etiology of the arrest (I), compared with standard management (C), change outcome (O)?	REACTIVATE	P32	Kleinman	
Peds	420	Drugs & Fluids	No	Miscellaneous	Calculating peds drug dosages	Among infants and children who are in cardiac arrest in any setting (P), does any specific alternative method for calculating drug dosages (I), compared with standard weight-based dosing (C), change outcome (O)?	REPOSE			
Peds	424	Drugs & Fluids	Yes	Vasoconstrictors	Vasopressor Use During Cardiac Arrest	Among infants and children in cardiac arrest (P), does does the use of no vasopressor (epinephrine, vasopressin, combination of vasopressors) (I), compared with compared with any use of vasopressors (C), change survival to 180 days with good neurological outcome, survival to hospital discharge, ROSC (O)?	REPOSE			
ALS	428	Drugs & Fluids	Yes	Antiarrhythmics	Antiarrhythmic Drugs for Cardiac Arrest	Among adults who are in cardiac arrest in any setting (P), does administration of antiarrhythmic drugs (eg, amiodarone, lidocaine, other) (I), compared with compared with not using antiarrhythmic drugs (no drug or placebo) (C), change outcome (O)?	REACTIVATE	A1	Ristagno	
ALS	429	Emergency Care	No	Toxic Substances / Toxicity	Tricyclic antidepressant toxicity	Among adults who are in cardiac arrest due to severe tricyclic antidepressant toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	431	Post Arrest Care	Yes	Miscellaneous	Postresuscitation Seizure Prophylaxis	Among adults with ROSC after cardiac arrest in any setting (P), does does seizure prophylaxis (I), compared with compared with no prophylaxis (C), change outcome (O)?	REACTIVATE	A10	Skifvars	
ALS	433	Drugs & Fluids	Yes	Corticosteroids	Steroids for Cardiac Arrest	Among adults who are in cardiac arrest in any setting (P), does does corticosteroid or mineralocorticoid administration during CPR (I), compared with compared with not using steroids (C), change outcome (O)?	REPOSE			
ALS	435	Miscellaneous	Yes	Etiology	Cardiac Arrest Associated With PE	Among adults who are in cardiac arrest due to PE or suspected PE in any setting (P), does does any specific alteration in treatment algorithm (eg, fibrinolytics, or any other) (I), compared with compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	436	Miscellaneous	Yes	Pregnancy & Child Birth	Cardiac Arrest During Pregnancy	Among pregnant women who are in cardiac arrest in any setting (P), does do any specific interventions (I), compared with compared with standard care (usual resuscitation practice) (C), change outcome (O)?	REPOSE			
EIT	437	CPR	No	Miscellaneous	Practioner experience	Among adults who are in cardiac arrest in any setting (P), does resuscitation by experienced practitioners (I), compared with care by less experienced practitioners (C), change outcome (O)?	ACTIVATE	E6	Couper	This question should be combined with EIT 773.
ALS	441	Emergency Care	Yes	Toxic Substances / Toxicity	Opioid Toxicity	Among adults who are in cardiac arrest or respiratory arrest due to opioid toxicity in any setting (P), does does any specific therapy (eg, naloxone, bicarbonate, or other drugs) (I), compared with compared with usual	REPOSE			
ALS	442	Emergency Care	No	Shock	Non-cardiac etiology cardiac arrest	Among adults who are in cardiac arrest due to hemorrhagic, hypovolemic, septic, or neurogenic shock in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	444	Defibrillation & Electrical Therapy	No	-	Algorithm for transition from shockable to non-shockable rhythm and vice versa	Among adults who are in cardiac arrest who were initially in a) a non-shockable rhythm but who develop a shockable rhythm or b) were in a shockable rhythm and develop a non-shockable rhythm, in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	445	Drugs & Fluids	No	Fibrinolytics	Fibrinolytics for cardiac arrest	Among adults who are in cardiac arrest in any setting (P), does fibrinolytic therapy (I), compared with not using fibrinolytic therapy (C), change outcome (O)?	REPOSE			

ALS	446	Drugs & Fluids	No	Corticosteroids	Steroids post resuscitation	Among adults with ROSC after cardiac arrest in any setting (P), does corticosteroid administration (I), compared with no corticosteroids (C), change outcome (O)?	REPOSE			
ALS	447	Post Arrest Care	No	Miscellaneous	Mechanical circulatory support post resuscitation	Among adults with ROSC after cardiac arrest but with cardiovascular dysfunction in any setting (P), does mechanical circulatory support (I), compared with no mechanical circulatory support (C), change outcome	REPOSE			
ALS	448	Airway & Ventilation	Yes	Supplemental Oxygen	Oxygen Dose After ROSC in Adults	Among adults who have ROSC after cardiac arrest in any setting (P), does does an inspired oxygen concentration titrated to oxygenation (normal oxygen saturation or partial pressure of oxygen) (I), compared with compared with the use of 100% inspired oxygen concentration (C), change outcome (O)?	REPOSE			
ALS	449	Post Arrest Care	Yes	Miscellaneous	Organ Donation	In adults and children who are receiving an organ transplant in any setting (P), does do organs retrieved from a donor who has had CPR (I), compared with compared with organs retrieved from a donor who did not have CPR (C), change increase survival rates, Complication Rate (O)?	REPOSE			
ALS	450	Screening & Diagnosis	Yes	Risk Factors & Assessment	Prognostication in Comatose Patients Treated With Hypothermic TTM	Among adults with ROSC who are comatose and treated with hypothermia (P), does does any clinical variable when abnormal (eg, clinical exam, EEG, somatosensory evoked potentials [SSEPs], imaging, other) (I), compared with compared with any clinical variable when normal (C), change outcome (O)?	REACTIVATE	A4	Scholefield	
ALS	452	Miscellaneous	No	Etiology	Morbid obesity	Among adults with morbid obesity who are in cardiac arrest in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change	REPOSE			
ALS	453	Post Arrest Care	No	Miscellaneous	Hemofiltration post resuscitation	Among adults who are experiencing ROSC after cardiac arrest in any setting (P), does hemofiltration therapy (I), compared with no hemofiltration (C), change outcome (O)?	REPOSE			
ALS	454	Post Arrest Care	No	Miscellaneous	Neuroprotective drugs	Among adults who are experiencing ROSC after cardiac arrest in any setting (P), does neuroprotective drug administration (I), compared with no neuroprotective agents (C), change outcome (O)?	REACTIVATE	A8	Skifvars	
ALS	456	Emergency Care	No	Miscellaneous	Electrolyte disturbances	Among adults who are in cardiac arrest due to severe electrolyte abnormalities in any setting (P), does any specific alteration in treatment algorithm for (1. Potassium, 2. Calcium, 3. Magnesium, 4. Other) (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	457	Drugs & Fluids	No	Tachycardia	Drugs for Torsades de Pointes	Among adults who are in Torsades de Pointes tachycardia in any setting (P), does any drug or combination of drugs (I), compared with not using drugs or alternative drugs (C), change outcome (O)?	REPOSE			
ALS	458	Screening & Diagnosis	No	Imaging	Imaging studies post resuscitation	Among adults who are comatose after cardiac arrest in the hospital (P), does specific findings on imaging studies, when present (I), compared with when absent (C), change outcome (O)?	REACTIVATE	A9	Scholefield	
ALS	459	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	ETCO2 to Predict Outcome of Cardiac Arrest	Among adults who are in cardiac arrest in any setting (P), does does any ETCO2 level value, when present (I), compared with compared with any ETCO2 level below that value (C), predict clinical outcome (O)?	REACTIVATE	A7	Rabi	
ALS	468	Emergency Care	No	Toxic Substances / Toxicity	Digoxin toxicity	Among adults who are in cardiac arrest due to digoxin toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change	REPOSE			
ALS	470	Defibrillation & Electrical Therapy	Yes	-	Defibrillation Strategies for VF/pVT	Among adults who are in VF or pVT in any setting (P), does does any specific defibrillation strategy, such as biphasic waveform, pulsed biphasic waveform, first-shock energy, single shock versus stacked shocks, fixed versus esacalating defibrillation energy levels, recurrent VF (Refibrillation), (I), compared with compared with standard management (or other defibrillation strategy), such as monophasic waveform, (C), change outcome	REPOSE			
ALS	471	Emergency Care	No	Toxic Substances / Toxicity	Cyanide toxicity	Among adults who are in cardiac arrest due to severe cyanide toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm)	REPOSE			
ALS	474	Emergency Care	No	Toxic Substances / Toxicity	Cocaine toxicity	Among adults who are in cardiac arrest due to severe cocaine toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm)	REPOSE			
ALS	475	Defibrillation & Electrical Therapy	No	-	Cardioversion strategies with ICD or pacemakers	Among adults with an ICD or pacemaker who are in a shockable rhythm requiring defibrillation or cardioversion in any setting (P), does any unique or modified cardioversion/defibrillation strategy (I), compared with standard management (C), change outcome (O)?	REPOSE			
ALS	478	Miscellaneous	No	Etiology	Cardiac tamponade	Among adults who are in cardiac arrest due to cardiac tamponade in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm)	REPOSE			
ALS	479	Miscellaneous	Yes	Etiology	Cardiac Arrest During Coronary Catheterization	Among adults who have a cardiac arrest in the cardiac catheterization laboratory (P), does does any special intervention or change in care (eg, catheterization during CPR, cardiopulmonary bypass, balloon pump, different timing of shocks) (I), compared with compared with standard resuscitation care (eg, CPR, drugs, and shocks according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	480	Emergency Care	No	Toxic Substances / Toxicity	Carbon monoxide toxicity	Among adults who are in cardiac arrest due to severe carbon monoxide toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	481	Emergency Care	No	Toxic Substances / Toxicity	Calcium channel blocker toxicity	Among adults who are in cardiac arrest due to calcium channel blocker toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REPOSE			
ALS	482	Drugs & Fluids	No	Buffering Agents	Calcium administration (adults)	Among adults who are in cardiac arrest in any setting (P), does calcium administration (I), compared with no calcium administration (C), change outcome (O)?	REPOSE			
ALS	483	Drugs & Fluids	No	Buffering Agents	Buffering agents for cardiac arrest	Among adults who are in cardiac arrest in any setting (P), does buffering agent administration (I), compared with not using buffering agents (C), change outcome (O)?	REPOSE			
ALS	485	Emergency Care	No	Toxic Substances / Toxicity	Beta blocker toxicity	Among adults who are in cardiac arrest due to beta-blocker toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm)	REPOSE			
ALS	486	Emergency Care	No	Toxic Substances / Toxicity	Benzodiazepine toxicity	Among adults who are in cardiac arrest due to severe benzodiazepine toxicity in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment	REPOSE			
ALS	489	Emergency Care	No	Accidents & Disasters	Avalanche victims	Among adults who are victims of an avalanche outside of a hospital (P), does what factors when present (I), compared with when absent (C), change outcome (O)?	REPOSE			
ALS	490	Airway & Ventilation	No	Advanced Airway Management	Automatic ventilators vs manual ventilation during CPR	Among adults and children who are in cardiac arrest with advanced airways in any setting (P), does use of automatic ventilators (I), compared with manual ventilation (C), change outcome (O)?	REPOSE			
ALS	491	Drugs & Fluids	No	Bronchodilators	Atropine	Among adults who are in cardiac arrest in any setting (P), does atropine administration (I), compared with not using atropine (C), change outcome (O)?	REPOSE			
ALS	492	Miscellaneous	No	Etiology	Asthma and cardiac arrest	Among adults who are in cardiac arrest due to severe asthma in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change	REPOSE			
ALS	493	Drugs & Fluids	Yes	Antiarrhythmics	Postresuscitation Antiarrhythmic Drugs	Among adults with ROSC after cardiac arrest in any setting (P), does do prophylactic antiarrhythmic drugs given immediately after ROSC (I), compared with compared with not giving antiarrhythmic drugs (C),	REPOSE			
ALS	494	Emergency Care	No	Anaphylaxis	Cardiac arrest caused by anaphylaxis	Among adults who are in cardiac arrest due to anaphylaxis in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change	REPOSE			
ALS	495	Defibrillation & Electrical Therapy	No	-	AED vs manual defibrillator	Among adults who are in cardiac arrest in any setting (P), does AED or a multifunctional defibrillator in automatic mode use (I), compared with standard resuscitation (using a manual defibrillator) (C), change	REPOSE			
ALS	497	Defibrillation & Electrical Therapy	No	-	Adhesive pads vs paddles for defibrillation (adults)	Among adults who are in cardiac arrest in any setting (P), does self-adhesive defibrillation pad use (I), compared with paddle use (C), change outcome (O)?	REPOSE			

Peds	498	Emergency Care	No	Rapid Response Teams	Traumatic arrest	Among infants and children with major (blunt or penetrating) injury who are in cardiac arrest in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change outcome (O)?	REACTIVATE	P24	Lockey	
First Aid	500	Emergency Care	Yes	Anaphylaxis	Second dose of epinephrine for anaphylaxis	Among adults and children experiencing anaphylaxis requiring the use of epinephrine (P), does administration of a second dose of epinephrine (I), compared to administration of only one dose (C), change resolution of symptoms, adverse effects, complications (O)?	REPOSE			
First Aid	502	Emergency Care	No	Environmental Injury - cold/frostbite	Cold injury - Anti-inflammatory agents	Among adults and children who are being treated for frostbite outside of a hospital (P), does NSAID administration (I), compared with no use of NSAID (C), change outcome (O)?	REACTIVATE	F15	Patocka	
First Aid	511	Emergency Care	No	Musculoskeletal Injury	Compression wrap for joint injuries	Among adults and children who are victims of a closed joint injury outside of a hospital (P), does application of a compression bandage by a lay rescuer (I), compared with not applying a compression bandage (C), change	REACTIVATE	F10	Cheng	
First Aid	513	Emergency Care	No	Anaphylaxis	Recognition of anaphylaxis by first aid providers	Among adults and children who are being evaluated for possible allergic reaction outside of a hospital (P), does any specific factor (eg, clinical exam finding, history) (I), compared with other factors (C), change outcome	REPOSE			
First Aid	516	Emergency Care	No	Environmental injury - Bites & stings	Jellyfish stings - Topical applications to prevent nematocyst discharge	Among adults and children who are stung by a jellyfish (P), does topical application of vinegar, baking soda, meat tenderizer, lidocaine preparations or another commercial product (I), compared with not applying a topical treatment (C), change complications, prevent further illness or injury (i.e., harm), resolution of	REACTIVATE	F7	Epstein	
First Aid	517	Emergency Care	Yes	Altered Level of Response	Recovery Position	Among adults outside of a hospital with a non-traumatic illness who are unresponsive but breathing normally (P), does positioning in any specific position (I), compared with a supine or other proposed recovery position (C), change overall mortality, complications, incidence of cardiac arrest, the incidence of aspiration, the likelihood of cervical spinal injury, need for airway management (O)?	REPOSE			
First Aid	519	Airway & Ventilation	Yes	Supplemental Oxygen	Oxygen administration for first aid	Among adults and children who exhibit symptoms or signs of shortness of breath, difficulty breathing or hypoxia outside of a hospital (P), does administration of oxygen (I), compared with no administration of oxygen (C), change outcomes including shortness of breath, time to resolution of symptoms , therapeutic endpoints (eg oxygenation and ventilation) (O)?	REPOSE			
First Aid	520	Emergency Care	Yes	Shock	Optimal position for shock victim	Among adults and children who receive First Aid for shock (P), does does positioning of the patient (I), compared with not positioning the patient (C), change overall mortality, complications, incidence of cardiac arrest, vital signs, hospital length of stay (O)?	REPOSE			
First Aid	522	Emergency Care	No	Toxic Substances / Toxicity	Irrigation of skin for toxic substance exposure	Among adults and children who are exposed to a toxin on the skin outside of a hospital (P), does irrigation with water (I), compared with irrigation with other fluids (C), change outcome (O)?	REPOSE			
First Aid	523	Emergency Care	No	Environmental injury - Bites & stings	Jellyfish stings - Heat or cold application	Among adults and children who are stung by a jellyfish outside of a hospital (P), does application of heat or cold (I), compared with not applying heat or cold (C), change outcome (O)?	REACTIVATE	F16	Epstein	
First Aid	525	Emergency Care	Yes	Bleeding & Wounds	First aid treatment for open chest wound	Among adults and children who are being treated for an open chest wound outside of a hospital (P), does occlusive bandage application or occlusive device (I), compared with a non-occlusive dressing (C), change improve survival, respiratory arrest, oxygen saturation, vital signs, the rate of cardiac and respiratory arrests, improve therapeutic endpoints (oxygenation and ventilation) (O)?	REPOSE			
First Aid	530	Emergency Care	Yes	Bleeding & Wounds	Control of bleeding	Among adults and children with severe, external bleeding, (P), does application of ice, elevation of an injured extremity and/or application of pressure over proximal pressure points, with or without simultaneous direct pressure (I), compared with direct pressure alone (C), change (O)?	REPOSE			
First Aid	531	Emergency Care	No	Environmental injury - Bites & stings	Snake bite - Compression wrapping	Among adults and children who are victims of a venomous snakebite in any setting (P), does pressure immobilization of the injured extremity (I), compared with no therapy (C), change outcome (O)?	REACTIVATE	F11	Epstein	
First Aid	534	Drugs & Fluids	Yes	Bronchodilators	Bronchodilator administration	Among adults and children in the prehospital setting who suffer from asthma and are experiencing difficulty in breathing (P), does bronchodilator administration (I), compared with no brochodilator administration (C), change time to resolution of symptoms, time to resumption of usual activity, complications, harm to patient, therapeutic endpoints (eg oxygenation and ventilation), need for advanced medical care (O)?	REPOSE			
First Aid	535	Emergency Care	No	Environmental injury - Bites & stings	Jellyfish stings - Pressure immobilization bandage	Among adults and children who are stung by a jellyfish (P), does application of a pressure immobilization bandage (I), compared with not applying a pressure immobilization bandage (C), change outcome (O)?	REACTIVATE	F19	Epstein	
First Aid	537	Emergency Care	No	Toxic Substances / Toxicity	Dilution with milk or water for poisoning	Among adults and children who are being treated for ingestion of a caustic substance outside of a hospital (P), does milk or water administration (I), compared with no use of milk or water (C), change outcome (O)?	REPOSE			
First Aid	539	Emergency Care	No	Bleeding & Wounds	Preservation of amputated body part	Among adults and children who are being treated for amputated body parts outside of a hospital (P), does cooling the amputated part (I), compared with not cooling the amputated part (C), change (O)?	REACTIVATE	F13	Epstein	
First Aid	540	Emergency Care	Yes	Toxic Substances / Toxicity	Eye injury - Irrigation	Among adults and children who are exposed to a chemical agent (i.e., cleaning solutions, known acidic or alkaline substance) in the eye (P), does irrigation with saline, tap water or commercial eye irrigation solution (I) compared with each other (C), change (O)?	REACTIVATE	F18	Patocka	
Peds	544	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	Post-ROSC PaO2	Among infants and children with ROSC after cardiac arrest(in- or out-of-hospital setting) (P), does does the use of a targeted PaO2 strategy (I), compared with compared with a strategy of no targeted PaO2 (C), change survival to 180 days with good neurological outcome, survival to 6 months, survival to hospital discharge, survival to ICU discharge, ICU length of stay (O)?	REACTIVATE	P25	Rabi	
ALS	570	Drugs & Fluids	Yes	Drug Delivery	Postresuscitation Hemodynamic Support	Among adults with ROSC after cardiac arrest in any setting (P), does does titration of therapy to achieve a specific hemodynamic goal (eg, MAP greater than 65 mm Hg) (I), compared with compared with no hemodynamic goal (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1	REACTIVATE	A5	Kleinman	
ALS	571	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	Postresuscitation Ventilation Strategy	Among adults with ROSC after cardiac arrest in any setting (P), does does ventilation to a specific PaCO2 goal (I), compared with compared with no specific strategy or a different PaCO2 goal (C), change Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year (O)?	REACTIVATE	A6	Rabi	
ALS	572	Miscellaneous	No	Etiology	Post op cardiothoracic surgery cardiac arrest	Among adults who are in cardiac arrest following recent open or closed heart surgery in any setting (P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment	REACTIVATE	A12	Deakin	
ALS	574	CPR	No	Miscellaneous	Open-chest CPR	Among adults who are in cardiac arrest in any setting (P), does open-chest CPR (I), compared with closed-chest CPR (C), change (O)?	REACTIVATE	A14	Couper	
ALS	577	Drugs & Fluids	No	Fluids	IV fluids following cardiac arrest	Among adults with ROSC after cardiac arrest but with cardiovascular dysfunction in any setting (P), does parenteral fluid administration (I), compared with no parenteral fluids (C), change (O)?	REPOSE			
ALS	578	Drugs & Fluids	No	Fluids	IV fluids during cardiac arrest	Among adults who are in cardiac arrest in any setting (P), does parenteral fluid administration (I), compared with no parenteral fluids (C), change (O)?	REPOSE			
ALS	579	Airway & Ventilation	Yes	Advanced Airway Management	Impedance Threshold Device	Among adults who are in cardiac arrest in any setting (P), does does use of an inspiratory ITD during CPR (I), compared with compared with no ITD (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days	REPOSE			
ALS	580	Post Arrest Care	Yes	Glucose Control	Glucose Control After Resuscitation	Among adults with ROSC after cardiac arrest in any setting (P), does does a specific target range for blood glucose management (eg, strict 4–6 mmol/L) (I),compared with any other target range (C), change outcome	REPOSE			

First Aid	584	Emergency Care	Yes	Environmental Injury - heat/dehydration	Exertion-related dehydration and rehydration therapy	Among adults and children with exertion-related dehydration (P), does drinking oral carbohydrate-electrolyte liquids (I), compared with drinking water (C), change Volume/hydration status, vital signs, development of hyperthermia, development of hyponatremia, need for advanced medical care, blood glucose, patient	REPOSE			
First Aid	586	Drugs & Fluids	Yes	Platelet Agregator Inhibitors	Aspirin for Chest Pain (Early vs. Late)	Among adults who are experiencing chest pain outside of a hospital (P), does prehospital administration of aspirin (I), compared with later administration of aspirin (C), change cardiovascular mortality, complications, incidence of cardiac arrest, cardiac functional outcome, infarct size, hospital length of stay, chest pain	REPOSE			
NRP	590	Airway & Ventilation	Yes	Basic Airway Management	CPAP and IPPV	In spontaneously breathing preterm infants with respiratory distress requiring respiratory support in the delivery room (P), does the use of CPAP (I), compared with with intubation and IPPV (C), change overall mortality, Bronchopulmonary dysplasia, air leak, retinopathy of prematurity, necrotizing enterocolitis, brain	REPOSE			
NRP	593	Drugs & Fluids	No	Vasoconstrictors	Adrenaline/ Epinephrine dose	Among neonates who have no detectable cardiac output or have asystole or sustained bradycardia (P), does any other dose or interval of intravenous adrenaline/epinephrine or alternative vasopressor (I), compared with standard dose epinephrine (C), change short or long term outcomes (O)?	REACTIVATE	N6	Kleinman	
NRP	596	Miscellaneous	No	Pregnancy & Child Birth	Clear amniotic fluid	Among neonates who are being born in clear amniotic fluid and are depressed in any setting (P), does suctioning of the mouth and nose (I), compared with no suctioning (C), change (O)?	REACTIVATE	N12	Rabi	
NRP	597	Airway & Ventilation	No	Gas Concentrations & Volume Monitoring	Bradycardia and CO2 monitoring	In neonates who are receiving mask ventilation (P), does does the use of end-tidal CO2 monitoring demonstrate effective ventilation faster than (I), compared with clinical judgement (chest rise) (C), change	REPOSE			
NRP	599	Emergency Care	Yes	Environmental Injury - cold/frostbite	Warming adjuncts	Among preterm neonates who are under radiant warmers in the hospital delivery room (P), does increased room temperature, thermal mattress, or another intervention (I), compared with plastic wraps alone (C), reduce hypothermia (< 36.0) on admission to NICU (O)?	REPOSE			
ALS	601	Defibrillation & Electrical Therapy	No	-	Waveform analysis for predicting successful defibrillation	Among adults who are in cardiac arrest in any setting (P), does a technique for prediction of the likelihood of success of defibrillation (analysis of VF, etc) (I), compared with standard resuscitation (without such	REPOSE			
NRP	605	CPR	Yes	Compressions	Two thumb vs two finger	In neonates receiving cardiac compressions (P), does does the use of a two thumb technique (I), compared with as opposed to a two finger technique (C), change (O)?	REPOSE			
NRP	607	Post Arrest Care	No	Glucose Control	Supplemental glucose	Among neonates who are in or immediately after cardiac or respiratory arrest in any setting (P), does early supplemental glucose administration (I), compared with no glucose administration (C), change (O)?	REPOSE			
NRP	611	Screening & Diagnosis	No	Risk Factors & Assessment	Prenatal prediction of respiratory compromise	Among infants who are delivered at ≥ 34 weeks gestation in the hospital (P), does delivery by elective c-section under regional anesthesia (I), compared with unassisted vertex vaginal deliveries (C), change (O)?	REPOSE			
NRP	613	Post Arrest Care	No	Fever	Maternal fever	Among neonates who are being born to mothers with a fever in the hospital (P), does normalizing temperature (I), compared with no temperature management (C), change (O)?	REPOSE			
NRP	615	Drugs & Fluids	No	Vasoconstrictors	IV vs ET epinephrine	Among neonates who are at term with a heart rate < 60 and no other signs of life in any setting (P), does tracheal delivery of epinephrine (I), compared with intravenous drug delivery (C), change (O)?	REPOSE			
NRP	616	Drugs & Fluids	No	Drug Delivery	IO vs IV	Among neonates who are requiring resuscitation in the hospital (P), does intraosseus medication administration (I), compared with intravenous medication administration (C), change (O)?	REACTIVATE	N15	Kleinman	
NRP	617	Post Arrest Care	No	Therapeutic Hypothermia	Hypothermia (induced)	Among neonates who are at risk for hypoxic-ischemic encephalopathy secondary to intra-partum hypoxia in the hospital (P), does targeted temperature management (I), compared with no temperature management	REPOSE			
NRP	618	Airway & Ventilation	Yes	Basic Airway Management	LMA	In newborn infants at or near term that have indications for positive pressure ventilation for resuscitation (P), does use of a laryngeal mask as a primary device (I), compared with mask ventilation (C) improve response to resuscitation or change outcomes (O)?	REPOSE			
EIT	623	Education	Yes	Simulation	High fidelity training	Partcipants undertaking training (ALS BLS PAEDS FA NRP) in an education setting (P), does the use of high-fidelity manikins (I), compared with the use of low-fidelity manikins (C), change improve patient outcomes, skill performance in actual resuscitations, skill performance at 1 year, skill performance at time between course conclusion and 1 year, skill performance at course conclusion, cognitive knowledge (O)?	REPOSE			
EIT	624	Miscellaneous	Yes	Regionalization of Care	Cardiac arrest centers	Adults and children in out-of-hospital cardiac arrest (OHCA) (P), does transport to a specialist cardiac arrest centre (I), compared with no directed transport (C), change neurologically intact survival at 30 days, survival to hospital discharge with good neurological outcome, survival to hospital discharge, hospital admission	REACTIVATE	E1	Deakin	
EIT	626	CPR	No	Miscellaneous	Willingness to provide CPR	Among rescuers who are responsible for caring for patients at risk for cardiac or respiratory arrest outside of a hospital (P), does any specific factor (I), compared with other factors (C), change (O)?	REPOSE			
EIT	628	Education	Yes	Miscellaneous	Timing for retraining	Among students who are taking resuscitation or first aid courses (P), does any specific interval for update or retraining (I), compared with standard practice (ie. 12 or 24 monthly) (C), change improve patient outcomes, skill performance in actual resuscitations, skill performance at 1 year, skill performance at course conclusion	REPOSE			
EIT	629	Screening & Diagnosis	No	Risk Factors & Assessment	Use of checklist during ACLS or PALS	Among adults and children who are requiring resuscitation or first aid in any setting (P), does checklist use (I), compared with no use of checklists (C), change outcome (O)?	REACTIVATE	E2	Scholefield	
EIT	631	Education	Yes	Teaching Methods & Models	Team and leadership training	Among students who are taking courses in an educational setting (P), does inclusion of specific leadership or team training (I), compared with no such specific training (C), change improve patient outcomes, bystander CPR performance, skill performance in actual resuscitations, skill performance at 1 year, skill performance at course conclusion, cognitive knowledge (O)?	REPOSE			
EIT	632	Education	No	Teaching Methods & Models	Skills testing for resuscitation	Among students who are taking resuscitation or first aid courses in an educational setting (P), does skill and knowledge assessment (I), compared with no such assessment (C), change outcome (O)?	REPOSE			
EIT	634	Education	Yes	Teaching Methods & Models	Resuscitation training in low income countries	Among students who are taking resuscitation or first aid courses in a resource limited educational setting (P), does does any educational approach (I), compared with compared with other approaches (C), change clinical outcome, skill performance in actual resuscitations, skill performance at 1 year, skill performance at time between course conclusion and 1 year, skill performance at course conclusion, cognitive knowledge (O)?	REPOSE			
EIT	637	Education	Yes	Teaching Methods & Models	Precourse preparation for advanced courses	Among students who are taking resuscitation or first aid courses in an educational setting (P), does inclusion of specific pre-course preparation (eg. e-learning and pre-testing) (I), compared with no such preparation (C), change increase survival rates, skill performance in actual resuscitations, cognitive knowledge, skill performance at course conclusion, skill performance at 1 year, skill performance at time between course	REACTIVATE	E4	Lockey	
EIT	638	Emergency Care	Yes	Rapis Response Teams	METs for adults	Among adults who are at risk for cardiac or respiratory arrest in the hospital (P), does EWSS/response teams/MET systems (I), compared with no such responses (C), change survival to hospital discharge, In-hospital incidence of cardiac/respiratory arrest, survival to hospital discharge with good neurological outcome	REPOSE			
EIT	640	Miscellaneous	Yes	Regionalization of Care	Measuring performance of resuscitation systems	Among systems of care who are caring for patients in cardiac arrest in any setting (P), does a performance measurement system (I), compared with no system (C), change survival to hospital discharge, skill performance in actual resuscitations, survival to admission, system level variables (O)?	REPOSE			
EIT	641	Education	Yes	Miscellaneous	Implementation of guidelines in communities	Within organisations that provide care for patients in cardiac arrest in any setting (P), does implementation of resuscitation guidelines (I), compared with no such use (C), change survival to 180 days with good neurological outcome, survival to hospital discharge, bystander CPR performance, return of spontaneous	REPOSE			
EIT	642	Miscellaneous	No	Guidelines & Protocols	Futile resuscitation rules	In adults with (out-of-hospital / in-hospital) cardiac arrest (P), does clinical decision rule use (I), compared with no use of a clinical decision rule (C), change accurately predict: transport to hospital rates (OHCA only), survival to hospital discharge, ROSC (O)?	REPOSE			

EIT	643	Education	No	Evaluation	End of course testing vs continuous feedback	Among students who are taking BLS or ALS or First Aid courses in an educational setting (P), does end of course testing (I), compared with continuous assessment and feedback (C), change outcome (O)?	REACTIVATE	E5	Cheng	
EIT	645	Education	Yes	Teaching Methods & Models	Debriefing of resuscitation performance	Among rescuers who are caring for patients in cardiac arrest in any setting (P), does briefing or debriefing (I), compared with no briefing or debriefing (C), change improve survival, skill performance in actual resuscitations, improve quality of resuscitation (eg reduce hands-off time allow for continuous compressions)	REPOSE			
EIT	647	Education	Yes	Teaching Methods & Models	CPR instruction methods (self-instruction vs traditional)	Among students who are taking BLS courses in an educational setting (P), does video or computer self instructions (I), compared with traditional instructor-led courses (C), change improve survival, skill performance in actual resuscitations, skill performance at 1 year, skill performance at course conclusion	REPOSE			
EIT	648	Education	Yes	Teaching Methods & Models	CPR feedback devices during training	Among students who are taking (BLS ALS NRP) courses in an educational setting (P), does CPR feedback device use (I), compared with no use of CPR feedback devices (C), change improve patient outcomes, skill performance in actual resuscitations, skill performance at 1 year, skill performance at course conclusion	REPOSE			
EIT	649	Education	Yes	Teaching Methods & Models	BLS training for high risk populations	For people at high-risk of OHCA (P) (P), does does focussed training of likely rescuers (eg family or care-givers) (I) (I), compared with no such targeting (C), change Survival with favorable neurological outcome at discharge, ROSC, bystander CPR performance, number of people trained in CPR, willingness to provide CPR	REPOSE			
ALS	656	CPR	Yes	Monitoring / Feedback	Monitoring Physiological Parameters During CPR	Among adults who are in cardiac arrest in any setting (P), does does the use of physiological feedback regarding CPR quality (eg, arterial lines, ETCO2 monitoring, SpO2 waveforms, or others) (I), compared with compared with no feedback (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1	REACTIVATE	A3	Couper	
ALS	658	Screening & Diagnosis	Yes	Imaging	Ultrasound During CPR	Among adults who are in cardiac arrest in any setting (P), does does use of ultrasound (including echocardiography or other organ assessments) during CPR (I), compared with compared with conventional CPR and resuscitation without use of ultrasound (C), change outcome (O)?	REPOSE			
ALS	659	Drugs & Fluids	Yes	Vasoconstrictors	Epinephrine Versus Vasopressin	Among adults who are in cardiac arrest in any setting (P), does does use of epinephrine (I), compared with compared with vasopressin (C), change outcome (O)?	REPOSE			
Peds	660	Airway & Ventilation	No	Advanced Airway Management	Supraglottic airway devices	Among infants and children who are in cardiac arrest in any setting (P), does supraglottic airway devices (I), compared with bag-valve-mask alone (C), change (O)?	REPOSE			
BLS	661	CPR	Yes	Compressions	Starting CPR	Among adults and children who are in cardiac arrest in any setting (P), does CPR beginning with compressions first (30:2) (I), compared with CPR beginning with ventilation first (2:30) (C), change outcome (O)?	REPOSE			
Peds	709	CPR	Yes	Miscellaneous	Sequence of Chest Compressions and Ventilations:	Among infants and children who are in cardiac arrest in any setting (P), does does the use of a circulation-airway-breathing approach to initial management (I), compared with compared with the use of an airway-breathing-circulation approach to initial management (C), change ROSC, survival to hospital discharge, survival to 180 days with good neurological outcome, time to first compressions (O)?	REACTIVATE	P2	Couper	
ALS	713	Screening & Diagnosis	Yes	Risk Factors & Assessment	Prognostication in Absence of TTM	Among adults who are comatose after cardiac arrest and are not treated with TTM (P), does does any clinical finding when normal (eg, clinical exam, EEG, SSEPs, imaging, other) (I), compared with compared with any clinical finding when abnormal (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days	REPOSE			
ALS	714	Airway & Ventilation	Yes	Advanced Airway Management	SGAs Versus Tracheal Intubation	Among adults who are in cardiac arrest in any setting (P), does does SGA insertion as first advanced airway (I), compared with compared with insertion of a tracheal tube as first advanced airway (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, CPR parameters, development	REPOSE			
ALS	723	CPR	Yes	Extracorporial CPR	ECPR Versus Manual or Mechanical CPR	Among adults who are in cardiac arrest in any setting (P), does does the use of ECPR techniques (including extracorporeal membrane oxygenation or cardiopulmonary bypass) (I), compared with compared with manual CPR or mechanical CPR (C), change survival to 180 days with good neurological outcome, survival with favorable neurologic outcome, survival to hospital discharge with good neurological outcome, survival to	REACTIVATE	A2	Deakin	
ALS	724	CPR	No	Miscellaneous	IABP vs manual CPR	Among adults who are in cardiac arrest in any setting (P), does Does the use of early IABP (I), compared with manual CPR (C), change coronary perfusion pressure; ROSC; survival to hospital discharge; survival to 180 days with good neurological outcome; survival to hospital discharge with good neurological outcome (O)?	REPOSE			
NRP	734	Post Arrest Care	Yes	Therapeutic Hypothermia	Limited resource induced hypothermia	For term infants with moderate/severe hypoxic ischemic encephalopathy managed in resource limited countries (P), does therapeutic hypothermia to core temperature of ~33.5C for 72 hours delivered by passive hypothermia and/or ice packs (I), compared with standard care (C), change improved rates of death; neurodevelopmental impairments at 18 months-2 years (O)?	REPOSE			
NRP	738	Airway & Ventilation	Yes	Supplemental Oxygen	Oxygen delivery during CPR (Neonatal)	In neonates receiving cardiac compressions (P), does does 100% O2 as the ventilation gas (I), compared with compared with lower concentrations of oyxgen (C), change increase survival rates, improve neurologic outcomes, decrease time to ROSC, decrease in oxidative injury (O)?	REPOSE			
BLS	740	CPR	Yes	Bystander CPR	Dispatcher recognition of cardiac arrest	Among adults and children who are in cardiac arrest outside of a hospital (P), does the description of any specific symptoms to the dispatcher (I), compared with the absence of any specific description (C), change the likelihood of cardiac arrest recognition (O)?	REPOSE			
First Aid	768	Emergency Care	Yes	Bleeding & Wounds	Use of Tourniquet	Among adults and children with severe life-threatening external limb bleeding (P), does the application of a tourniquet (I), compared with not applying a tourniquet (C), change (O)?	REPOSE			
First Aid	769	Emergency Care	Yes	Bleeding & Wounds	Hemostatic Dressings	In patients with severe, life-threatening external bleeding (P), does the application of topical hemostatic dressings plus standard first aid (I), compared with standard first aid alone (C), change overall mortality , vital signs, hemostasis, complications, blood loss, major bleeding, incidence of cardiac arrest (O)?	REPOSE			
First Aid	770	Emergency Care	Yes	Burns	Cooling of burns	Among adults and children with thermal injuries (P), does active cooling of burns by a specific technique or for any particular duration (I), compared with passive cooling (C), change (O)?	REACTIVATE	F9	Epstein	
First Aid	772	Emergency Care	Yes	Head & Neck Injury	Spinal motion restriction	Among adults and children with possible traumatic cervical spinal injury (P), does spinal motion restriction (I), compared with no spinal motion restriction (C), change (O)?	REPOSE			
EIT	773	Education	Yes	Teaching Methods & Models	First Aid Training	Among adults and children receiving first aid (P), does care from a trained first aid provider (I), compared with care from an untrained person (C), change increase survival rates, recognition of acute injury or illness, prevent further illness or injury (i.e., harm), time to resolution of injury, the likelihood of harm (eg infection)	REACTIVATE	E6	Lockey	This question should be combined with EIT 437.
ALS	782	CPR	Yes	Compressions	Mechanical CPR Devices	Among adults who are in cardiac arrest in any setting (P), does do automated mechanical chest compression devices (I), compared with compared with standard manual chest compressions (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC (O)?	REPOSE			
ALS	783	Airway & Ventilation	Yes	Basic Airway Management	Basic Versus Advanced Airway	Among adults who are in cardiac arrest in any setting (P), does does insertion of an advanced airway (tracheal tube or SGA) (I), compared with compared with basic airway (bag-mask device with or without oropharyngeal airway) (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, CPR parameters, development of aspiration pneumonia (O)?	REPOSE			

ALS	784	Drugs & Fluids	Yes	Vasoconstrictors	Timing of drug delivery (epinephrine)	Among adults who are in cardiac arrest in any setting (P), does does early epinephrine delivery by IV or IO route (eg, less than 10 minutes after the beginning of resuscitation) (I), compared with compared with delayed timing of epinephrine delivery (eg, more than 10 minutes after the beginning of resuscitation) (C)	REPOSE			
NRP	787	Miscellaneous	Yes	Pregnancy & Child Birth	Delayed Cord Clamping in Preterm Infants Requiring Resuscitation	In preterm infants, including those who received resuscitation (P), does delayed cord clamping (> 30 seconds) (I), compared with immediate cord clamping (C), change survival (death), long-term developmental outcome, intraventricular hemorrhage, cardiovascular stability, necrotizing enterocolitis, temperature on admission to	REPOSE			
ALS	788	Drugs & Fluids	Yes	Vasoconstrictors	Epinephrine Versus Placebo	Among adults who are in cardiac arrest in any setting (P), does does the use of epinephrine (I), compared with compared with placebo or not using epinephrine (C), change outcome (O)?	REPOSE			
ALS	789	Drugs & Fluids	Yes	Vasoconstrictors	Epinephrine Versus Vasopressin in Combination With Epinephrine	Among adults who are in cardiac arrest in any setting (P), does does use of both vasopressin and epinephrine (I), compared with compared with using epinephrine alone (C), change outcome (O)?	REPOSE			
ALS	790	Post Arrest Care	Yes	Therapeutic Hypothermia	Targeted Temperature Management	Among patients with ROSC after cardiac arrest in any setting (P), does does inducing mild hypothermia (target temperature 32°C–34°C) (I), compared with compared with normothermia (C), change outcome	REPOSE			
ALS	791	Post Arrest Care	Yes	Therapeutic Hypothermia	Duration of TTM	In patients with ROSC after cardiac arrest in any setting (P), does does induction and maintenance of hypothermia for any duration other than 24 hours (I), compared with compared with induction and maintenance of hypothermia for a duration of 24 hours (C), change outcome (O)?	REPOSE			
NRP	793	Emergency Care	Yes	Environmental Injury - cold/frostbite	Maintaining Infant Temperature During Delivery Room Resucitation	In newborn infants (>30 weeks gestation) during and/or post resuscitation/ stabilization (P), does drying and skin to skin contact or covering with plastic (I), compared with drying and no skin to skin or use of radiant warmer or isolette (C), change body temperature (O)?	REPOSE			
First Aid	795	Emergency Care	Yes	Altered Level of Response	Hypoglycemia treatment	Among adults and children with symptomatic hypoglycemia (P), does administration of dietary forms of sugar (I), compared with standard dose (15 - 20 gm) of glucose tablets (C), change time to resolution of symptoms, risk of complications (eg aspiration), blood glucose, Hypoglycaemia, hospital length of stay (O)?	REPOSE			
First Aid	796	Emergency Care	No	Miscellaneous	Medical exam gloves	Among first aid providers in the setting of potential exposure to blood or body fluids (P), does use of nitrile medical examination gloves (I), compared with vinyl medical examination gloves (C), change infection rate, complications, harm to rescuer, harm to patient (O)?	REACTIVATE	F20	Cheng	
First Aid	797	Emergency Care	No	Miscellaneous	Hyperventilation treatment	Among adults and children with hyperventilation (P), does use of re-breathing into a paper bag (I), compared with reassurance (C), change time to resolution of symptoms, complications, improving patient outcomes, patient satisfaction, symptoms (O)?	REACTIVATE	F14	Cheng	
First Aid	798	Emergency Care	No	Altered Level of Response	Presyncope	Among adults and children with signs and symptoms of faintness or pre-syncope (P), does an intervention such as muscle contraction, positioning the person supine, raising the legs, placing the head between the knees, use of smelling salts/ammonia, or fanning (I), compared with no intervention (C), change time to resolution of symptoms, death, the incidence of aspiration, the rate of cardiac and respiratory arrests (O)?	REACTIVATE	F2	Epstein	
First Aid	799	Screening & Diagnosis	Yes	Risk Factors & Assessment	Concussion	Among adults and children with suspected head injury without loss of consciousness (P), does use of a simple single-stage concussion scoring system (I), compared with standard first aid assessment without a scoring	REPOSE			
First Aid	801	Screening & Diagnosis	Yes	Risk Factors & Assessment	Stroke recognition	Among adults with suspected acute stroke (P), does the use of a rapid stroke scoring system or scale (I), compared with standard first aid assessment (C), change time to treatment (eg door to balloon), recognition of acute injury or illness, discharge with favorable neurologic status, cognitive knowledge, survival with	REPOSE			
ALS	802	Post Arrest Care	Yes	Therapeutic Hypothermia	Timing of Induced Hypothermia	Among patients with return of pulses after cardiac arrest in any setting (P), does does induction of hypothermia before some time point (eg, 1 hour after ROSC or before hospital arrival) (I), compared with compared with induction of hypothermia after that time point (C), change outcome (O)?	REPOSE			
NRP	805	Screening & Diagnosis	Yes	Risk Factors & Assessment	Delivery room assessment < 25 weeks and prognostic score	In extremely preterm infants (<25 weeks) (P), does Delivery room assessment with a prognostic score (I), compared with Gestational age assessment only (C), change survival to 30 days (O)?	REPOSE			
NRP	806	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	Newborn infants who receive positive pressure ventilation for resuscitation, and use of a device to assess respiratory function	Newborn infants who receive positive pressure ventilation for resuscitation (P), does Use of a device to assess respiratory function with or without pressure monitoring (I), compared with No Device (C), change survival to hospital discharge with good neurological outcome, Intraventricular Hemorrhage, time to heart rate > 100 bpm, Bronchopulmonary dysplasia, Pneumothorax (O)?	REPOSE			
ALS	808	Airway & Ventilation	Yes	Ventilation rate	Ventilation Rate During Continuous Chest Compression	Among adults with cardiac arrest with a secure airway receiving chest compressions (in any setting, and with standard tidal volume) (P), does does a ventilation rate of 10 breaths/min (I), compared with compared with any other ventilation rate (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1	REACTIVATE	A11	Rabi	
NRP	809	Airway & Ventilation	Yes	Basic Airway Management	Ventilation Strategies in the DR	Term and preterm newborn infants who do not establish spontaneous respiration at birth (P), does administration of one or more pressure-limited sustained lung inflations (I), compared with compared to intermittent PPV with short inspiratory times (C), change AGAR at 5 minutes, Establishment of functional residual capacity, Requirement for mechanical ventilation in first 72 hours, time to heart rate > 100 bpm, Rate	REPOSE			
BLS	811	Emergency Care	Yes	Toxic Substances / Toxicity	Resuscitation care for suspected opioid-associated emergencies	Adults and children with suspected opioid-associated cardio / respiratory arrest in the pre-hospital setting (P), does Bystander naloxone administration (intramuscular or intranasal), in addition to standard CPR (I), compared with Standard CPR only (C), change outcome (O)?	REPOSE			
ALS	812	Miscellaneous	No	Surgery	Cardiac arrest in operating room	All subjects who have cardiac arrest in the perioperative setting (operating room /theatre, PACU), before, during or immediately after surgery (1. any surgery, or 2. cardiac surgery) (P), does Any non-standard ALS procedure (e.g. atropine, non-standard adrenaline dose, chest reopening) (I), compared with Standard ALS procedure (e.g. closed-chest CPR, epinephrine, defibrillation) (C), change outcome (O)?	REPOSE			
Peds	813	Screening & Diagnosis	Yes	Risk Factors & Assessment	Post-ROSC Predictive Factors	Among infants and children with return of circulation (P), does does the presence of any specific factors (I), compared with compared with the absence of those factors (C), change survival to 180 days with good neurological outcome, survival to 60 days with good neurological outcome, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, survival to 30 days with good neurological outcome, survival to	REACTIVATE	P6	Scholefield	
Peds	814	Screening & Diagnosis	Yes	Risk Factors & Assessment	Intra-arrest prognostic factors for cardiac arrest in infants and children	Among infants and children during cardiac arrest (P), does does the presence of any specific intra-arrest prognostic factors (I), compared with compared with the absence of these factors (C), change survival to 180 days with good neurological outcome, survival to 60 days with good neurological outcome, survival to hospital discharge with good neurological outcome, survival to 30 days with good neurological outcome, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year (O)?	REACTIVATE	P12	Scholefield	
Peds	815	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	Post-ROSC Ventilation: PaCO2 Goals	Among infants and children with ROSC after cardiac arrest in any setting (P), does does ventilation to a specific PaCO2 target (I), compared with compared with ventilation to no specific PaCO2 target (C), change survival with favorable neurologic outcome, survival to 180 days with good neurological outcome, survival to 30 days with good neurological outcome, the likelihood of a good Quality of Life (QoL) after discharge from the hospital, survival to hospital discharge, survival to hospital discharge, survival to 30 days, survival to 60 days, survival to 6 months, survival to ICU discharge (O)?	REACTIVATE	P17	Rabi	
Peds	818	Screening & Diagnosis	Yes	Risk Factors & Assessment	Pediatric Early Warning Scores (PEWS)	For infants and children in the in-hospital setting (P), does does the use of a PEWS (I), compared with compared with not using a PEWS (C), change overall hospital mortality, Cardiac arrest frequency outside of	REACTIVATE	P11	Scholefield	

Peds	820	Drugs & Fluids	Yes	Fluids	Post-ROSC Fluid/Inotropes	In infants and children after ROSC (P), does does the use of parenteral fluids and inotropes and/or vasopressors to maintain targeted measures of perfusion such as blood pressure (I), compared with as compared with not using these interventions (C), change patient satisfaction, Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, survival	REACTIVATE	P8	Ristagno	
Peds	821	Drugs & Fluids	Yes	Miscellaneous	Atropine for Emergency Intubation	In infants and children requiring emergency tracheal intubation (P), does does the use of atropine as a premedication (I), compared with compared with not using atropine (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, incidence of cardiac arrest, Survival with favorable neurological outcome at 1 year follow up, Survival with favorable neurological outcome at 180 days, survival to hospital discharge, Survival with favorable neurological outcome at 90 days, Survival with favorable neurological outcome at 30 days follow up, Survival with favorable neurological	REACTIVATE	P30	Kleinman	
Peds	822	Screening & Diagnosis	Yes	ECG/EEG	Post-ROSC Electroencephalogram (EEG)	For infants and children who have had cardiac arrests in the inhospital or out-of-hospital setting (P), does does any use of neuroelectrophysiology information (EEG) (I), compared with compared with none (C), change predict survival to one year with good neurological outcome, survival to 180 days with good neurological outcome, survival to 60 days with good neurological outcome, survival to 6 months, survival to 30 days with good neurological outcome, survival to hospital discharge with good neurological outcome, survival with	REPOSE			
Peds	825	Drugs & Fluids	Yes	Antiarrhythmics	Amiodarone Versus Lidocaine for Shock-Resistant VF or pVT	In infants and children with shock-refractory VF or pVT (P), does does amiodarone (I), compared with compared with lidocaine (C), change termination of arrhythmia, recurrence of VF, return of spontaneous circulation, survival to hospital discharge, Survival rates, neurologically intact survival at 30 days (O)?	REACTIVATE	P23	Ristagno	
Peds	826	CPR	Yes	Monitoring / Feedback	Invasive Blood Pressure Monitoring During CPR	In infants and children undergoing CPR (P), does does using invasive hemodynamic monitoring to titrate to a specific systolic/ diastolic blood pressure (I), compared with compared with not using invasive hemodynamic monitoring to titrate to a specific systolic/diastolic blood pressure (C), change survival to 180 days with good neurological outcome, survival to 60 days with good neurological outcome, survival to hospital discharge with good neurological outcome, the likelihood of survival to discharge, ROSC (O)?	REPOSE			
Peds	827	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	End-tidal CO2 Monitoring During CPR	In infants and children in cardiac arrest (P), does does adjustment of chest compression technique to achieve a specific ETCO2 threshold (I), compared with compared with not using ETCO2 to adjust chest compression technique (C), change survival to 180 days with good neurological outcome, the likelihood of survival to discharge, ROSC	REPOSE			
ALS	834	Emergency Care	Yes	Toxic Substances / Toxicity	Lipid Therapy for Cardiac Arrest secondary to drug toxicity	In adult patients with cardiac arrest due to suspected drug toxicity (eg, local anesthetics, tricyclic antidepressants, others) (P), does does administration of IV lipid (I), compared with compared with no IV	REPOSE			
BLS	856	Emergency Care	Yes	Accidents & Disasters	Drowning	In adults and children who are submerged in water (P), does any particular factors in search and rescue operations (e.g. duration of submersion, salinity of water, water temperature, age of victim) (I), compared with no factors (C), change outcome (O)?	REPOSE			
NRP	858	Emergency Care	Yes	Environmental Injury - cold/frostbite	Warming of Hypothermic Newborns	In newborns hypothermic (<36.0c) on admission (P), does rapid rewarming (I), compared with slow rewarming (C), change mortality rate , short and long term neurological outcome, hemmorhage, episodes of apnea and hypoglycemia, need for respiratory support (O)?	REPOSE			
NRP	862	CPR	Yes	Monitoring / Feedback	Use of Feedback CPR Devices for Neonatal Cardiac Arrest	In asystolic/bradycardic neonates receiving cardiac compressions (P), does feedback devices such as ETCO2 monitors, pulse oximeters, or automated compression feedback devices (I), compared with clinical assessments of compression efficacy (C), change outcome (O)?	REPOSE			
NRP	864	Airway & Ventilation	Yes	Gas Concentrations & Volume Monitoring	Oxygen concentration for resuscitating premature newborns	Among preterm newborns who receive positive pressure ventilation in the delivery room (P), does lower initial oxygen (I), compared with higher initial high oxygen (C), change improve survival (O)?	REACTIVATE	N1	Rabi	
NRP	865	Airway & Ventilation	Yes	Advanced Airway Management	Tracheal intubation for suctioning in non-vigorous infants born though meconium-stained amniotic fluid	For non-vigorous infants at birth born through meconium-stained amniotic fluid (P), does tracheal intubation for suctioning (I), compared with no tracheal intubation (C), reduce morbidities and/or mortality (O)?	REACTIVATE	N4	Nation	
EIT	867	Education	Yes	Teaching Methods & Models	Neonatal resuscitation instructors	In neonatal resuscitation instructors (P), does formal training on specific aspects of how to facilitate learning (I), compared with generic or nonspecific training (C), change clinical outcome, improve all levels of	ACTIVATE	E7	Lockey	
ALS	868	Emergency Care	Yes	Miscellaneous	Seizure Treatment	Among adults with ROSC after cardiac arrest in any setting (P), does does effective seizure treatment (I), compared with compared with no seizure control (C), change outcome (O)?	REACTIVATE	A13	Cheng	
NRP	870	Airway & Ventilation	Yes	Advanced Airway Management	T-piece resuscitator and Self-inflating Bag	Newborns receiving ventilation (PPV) during resuscitation (P), does using a T-piece resuscitator or a self-inflating bag with PEEP (I), compared with using a self-inflating bag without PEEP (C), change survival to hospital discharge, air leak, development of stable spontaneous breathing, Bronchopulmonary dysplasia (O)?	REPOSE			
EIT	878	CPR	Yes	Bystander CPR	Social media technologies	For out-of-hospital cardiac arrest (OHCA) (P), does having a citizen CPR responder notified of the event via technology or social media (I), compared with no such notification (C), change survival to hospital discharge with good neurological outcome, survival to hospital discharge, hospital admission, ROSC, bystander CPR	REPOSE			
ALS	879	Post Arrest Care	Yes	Fever	Prevention of Fever After Cardiac Arrest	Among adults with ROSC after cardiac arrest in any setting (P), does does prevention of fever to maintain strict normothermia (I), compared with compared with no fever control (C), change outcome (O)?	REPOSE			
EIT	881	CPR	Yes	Compressions	CCPR training	Among communities who are caring for patients in cardiac arrest in any setting (P), does does teaching compression-only CPR (I), compared with conventional CPR (C), change Survival rates, bystander CPR rates, willingness to provide CPR (O)?	REPOSE			
ALS	889	Airway & Ventilation	Yes	Supplemental Oxygen	Oxygen Dose During CPR	In adults with cardiac arrest in any setting (P), does does administering a maximal oxygen concentration (eg, 100% by face mask or closed circuit) (I), compared with compared with no supplementary oxygen (eg, 21%) or a reduced oxygen concentration (eg, 40%–50%) (C), change outcome(O)?	REPOSE			
BLS	891	Education	Yes	Miscellaneous	Opioid overdose response education	Adults and children at risk of suspected cardio/respiratory arrest due to opioids in the prehospital setting (P), does opioid overdose response education with or without naloxone distribution (I), compared with no overdose response education or overdose prevention education only (C), change outcome (O)?	REPOSE			
NRP	895	CPR	Yes	Compressions	Chest compression ratio	In neonates receiving cardiac compressions (P), do other ratios (5:1, 9:3, 15:2, asynchronous) (I), versus 3:1 (C), decrease compressor fatigue, improve perfusion and gas exchange during CPR, decrease time to ROSC, increase survival rates, improve neurologic outcomes, decrease tissue injury (O)?	REPOSE			
NRP	896	Screening & Diagnosis	Yes	Risk Factors & Assessment	Apgar score of 0 or 1 for ≥ 10 minutes	In infants ≥36 weeks GA with an Apgar score of 0 or 1 for ≥ 10 minutes (P), does in spite of ongoing resuscitation (I), compared with (C), change death, death or neurocognitive impairment at 18-22 months,	REACTIVATE	N13	Scholefield	
NRP	897	Airway & Ventilation	Yes	Advanced Airway Management	Outcomes for PEEP versus no PEEP in the delivery room	In preterm/term newborn infants who do not establish respiration at birth (P), does does the use of PEEP as part of the initial ventilation strategy (I), compared with as compared with no PEEP improve (C), change survival to discharge, 5-minute APGAR scores, time for heart rate to rise above 100 beats per minute, intubation rate in the delivery room, chest compressions in the delivery room, heart rate, incidence of air leaks, oxygen saturation/oxygenation, FiO2 exposure in the delivery room, mechanical ventilation in the first	REPOSE			
NRP	898	Screening & Diagnosis	Yes	ECG/EEG	ECG/ EKG (I) in comparison to oximetry or auscultation	In babies requiring resuscitation (P), does ECG/ EKG (I), compared with oximetry or auscultation (C), change measure heart rate faster and more accurately (O)?	REPOSE			

BLS	1509	CPR	No	Miscellaneous	Should CPR be performed in a moving ambulance	Adults with out of hospital cardiac arrest (P), does standard 2 rescuer adult CPR (I), compared with staying on scene with the patient and performing standard 2 person CPR until either ROSC is achieved and then transporting or the attempt at resuscitation is terminated (C), change 30 day mortality, neurologically intact survival at 6 months, discharge with favorable neurologic status (O)?	REACTIVATE	B3		
BLS	1527	CPR		bystander	CPR prior to call for help	Among adults who are in cardiac arrest (P), does an immediate call for help to the EMS dispatch centre by a lone bystander with a mobile phone (I) when compared with a call after 1 minute of CPR (C) change outcome	REPOSE			
BLS	1528	Defibrillation & Electrical Therapy		-	AED for non-cardiac origin	Among adults who are in cardiac arrest of presumed non-cardiac origin (P), does the use of an AED immediately when available (I) when compared with delayed application (C) change outcome (O)?	REACTIVATE	B7	Deakin	
Peds	1533	Emergency Care		Shock	volume for septic shock	Among infants and children who are in septic shock in any setting (P), does the use of restrictive (initial) volumes of resuscitation fluid (less than 20 mL/kg) (I) when compared with nonrestrictive volumes (greater than or equal to 20 mL/kg) (C) change outcome (O)?	REACTIVATE	P5	Patocka	
Peds	1534	Miscellaneous		Etiology	septic cardiac arrest	Among Infants and children who are in cardiac arrest with SEPSIS (in hospital)(P), does any specific alteration in treatment algorithm (I), compared with standard care (according to 2010 treatment algorithm) (C), change	REACTIVATE	P18	Nation	
Peds	1535	CPR		Miscellaneous	CPR for HR<60	Among infants and children who are in cardiac arrest (P), does starting CPR if they have a heart rate of <60 bpm with symptoms of shock and with a palpable pulse (I) compared to starting CPR for patients with a heart rate of <60 and no palpable pulse (C) change outcome (O)?	REACTIVATE	P22	Couper	
Peds	1536	CPR		Miscellaneous	Call for help	Among infants and children who are in cardiac arrest (P), does an immediate call for help to the EMS dispatch centre by a lone bystander with a mobile phone (I) when compared with a call after 1 minute of CPR (C) change outcome(O)?	ACTIVATE	P26	Couper	This was listed as a BLS question, but we changed to PEDs based on prioritization list
Peds	1537	Emergency Care		Head & Neck Injury	C-spine	Among children who have suffered a severe traumatic injury (P) does the use of a cervical collar by healthcare professionals to provide C-spine immobilisation (I) when compared to any other means of in-line	ACTIVATE	P28	Cheng	
Peds	1538	Drugs & Fluids		Miscellaneous	Atropine for bradycardia	Among infants and children who are bradycardic (P), does the use of a minimum dose of atropine (!), as compared with a weight-based dose of atropine (C) change(O)?	ACTIVATE	P31	Kleinman	
Peds	1540	Miscellaneous		Shock	Type of fluid for septic shock	Among infants and children who are in septic shock in any setting (P), does the use of noncrystalloid fluids (I), compared with crystalloid fluids (C), change outcome (O)?	REACTIVATE	P15	Kleinman	
Peds	1541	Drugs & Fluids		Vasoconstrictors	epinephrine frequency during CPR	Among infants and children in cardiac arrest (in or out of hospital) (P), does the use of epinephrine more or less frequently than every 3-5 minutes (I), compared with every 3-5 minute use of epinephrine (C), change	ACTIVATE	P4	Kleinman	
BLS	1542	CPR		bystander	Dispatcher airway vs. compression first	For dispatcher-assisted telephone CPR in adults who are in cardiac arrest (P), does a sequence of airway - breathing – circulation (I) when compared with a sequence of circulation – airway – breathing (C) change	REPOSE			
First Aid	1543	Emergency Care		Bleeding & Wounds	Types of Tourniquet	Among adults and children with severe, life-threatening bleeding from an extremity wound (P), does application of a commercial elastic wrap tourniquet (I) compared to a commercial windlass-type tourniquet	ACTIVATE	F12	Epstein	
First Aid	1544	Emergency Care		Bleeding & Wounds	Eye-Foreign body	Among adults and children who develop a sensation of dirt (foreign body) in the eye (P), does irrigation with isotonic saline (i.e., contact lens solution) compared with tap water (C) change (O)?	ACTIVATE	F17	Epstein	
First Aid	1545	Emergency Care		Burns	Thermal Injury dressings	Among adults and children with thermal injuries (P), does any specific type of dressing for first aid use (I), compared to another (C), change outcome (O)?	ACTIVATE	F8	Epstein	
First Aid	1546	Airway & Ventilation		Supplemental Oxygen	Supplementary oxygen in acute stroke	In persons with suspected acute stroke (P), does use of (normobaric) supplementary oxygen (I), compared with no use of supplementary oxygen (C), change outcome (O)?	ACTIVATE	F6	Rabi	
First Aid	1547	Emergency Care		Head & Neck Injury	Spinal injury manual stabilization	Among injured adults with identified high-risk for spinal injury (P), does manual stabilization (i.e., use of trap-squeeze or head-squeeze techniques) by first aid/lay providers (I) compared to no manual stabilization (C)	ACTIVATE	F5	Cheng	
First Aid	1548	Emergency Care		Environmental Injury; Heat/Dehydration	Heat Stroke cooling	In persons with suspected heat stroke (P), does conductive cooling (e.g., immersion in ice water, or packing part of or the entire body in ice or ice slurry (I), compared with evaporative cooling (e.g., covering the bare body with wet sheets or spraying with room-temperature water accompanied by continual fanning) (C)	ACTIVATE	F3	Epstein	
First Aid	1549	Emergency Care		Bleeding & Wounds	Use of hemostatic dressing with/without tourniquet	Among adults and children with severe, life-threatening bleeding from an extremity wound (P), does application of a hemostatic dressing/agent (I) compared to a tourniquet with or without simultaneous hemostatic dressing/agent (C) change outcome (O)	ACTIVATE	F4	Epstein	
EIT	1550	Education		Evaluation	e-Learning in between courses improves knowledge and skill retention	Participants of any CPR course or FA course in any educational setting setting (P) does e-learning after the courses / in between courses (refresher) (I) compared to no e-learning (but other learning) (C) improve retention of knowledge and/or skills?	ACTIVATE	E3	Cheng	
NRP	1551	Miscellaneous		Pregnancy & Child Birth	Timing of cord clamping	In newborns (P) does clamping the cord after the establishment of breathing (I) vs a set time after birth(C) improve short and long term outcomes (O)?	ACTIVATE	N2	Rabi	
NRP	1552	Miscellaneous		Pregnancy & Child Birth	Cord Milking vs DCC	In newborns (P) does cord milking (I) vs delayed cord clamping (C) improve short and long term outcomes (O)	ACTIVATE	N3	Rabi	
NRP	1553	Airway & Ventilation		Advanced Airway Management	LISA/INSURE Versus CPAP or Mech Vent with Surf	In spontaneously breathing preterm infants with respiratory distress requiring respiratory support in the delivery room or during the stabilization shortly after birth (P), what mechanical ventilation strategy with or without surfactant vs does surfactant administration avoiding prolonged mechanical ventilation via INSURE or LISA (I), compared with CPAP alone (C) or mechanical ventilation with traditional surfactant (C), change (O)	ACTIVATE	N10	Nation	This question is a combined question from NRP 1553 and NRP1557.
NRP	1554	Airway & Ventilation		Supplemental Oxygen	Oxygen for resuscitating term newborns	For term newborns receiving resuscitation (P) does increased FiO2 as a starting concentration (I) vs air (C) improve outcome (O)?	ACTIVATE	N8	Rabi	
NRP	1555	Screening & Diagnosis		Risk Factors & Assessment	Hypovolemia (risk factors for newborns)	In newborn babies in need of resuscitation (P) what risk factors predict that volume infusion may improve outcome (O)(increase heart rate, improve survival or morbidity)?	ACTIVATE	N9	Scholefield	
NRP	1558	Miscellaneous		Pregnancy & Child Birth	Stimulation	Among newborns immediately after birth (P) does no physical stimuatlion (I) compared with physical stimualtion (C) change outcome (O)?	ACTIVATE	N11	Rabi	
NRP	1559	Education		Teaching methods & models	Effect of monitoring technology on team function	In babies receiving resuscitation at birth (P) does increasing information using accurate HR monitoring and respiratory function monitoring (I) vs conventional techniques (C) improve team functioning or patient	ACTIVATE	N14	Lockey	
NRP	1560	Education		Teaching methods & models	Attendance at delivery	For babies in need of resuscitation or stabilisation at birth is there a minimum level of personnel below which mortality and morbidity increases?	REPOSE			
NRP	1561	Education		Teaching methods & models	Check lists	For newborn babies predicted to need resuscitation or stabilisation (P) does the use of preparatory checklists (I) vs no checklist (C) improve resuscitation process or outcomes for the baby or team (O)?	REPOSE			
NRP	1562	Education		Teaching methods & models	Role assignment/briefing	For newborn babies predicted to need resuscitation or stabilisation (P) does team role assignment and briefing (I) vs no role assignment and briefing (C) improve team functioning and dynamics and resuscitation outcome	REPOSE			
NRP	1563	Miscellaneous		Pregnancy & Child Birth	Monitoring temperature	Among newborns immediately after birth, does monitoring temperature during resuscitation/stabilization (I) compared with not monitoring temperature (C), change outcome (O)?	REPOSE			
NRP	1564	Post Arrest Care		therapeutic Hypothermia	Hypothermia (induced in DR)	Among neonates who are at high risk for hypoxic-ischemic encephalopathy secondary to intra-partum asphyxia (P), does early implementation of targeted temperature management in the delivery room (I), compared with standard temperature management (C), change short or long term outcomes (O)?	REPOSE			
NRP	1565	Drugs & Fluids		Fluids	Quantity of volume (newborns)	In newborn babies in need of volume resuscitation with a history or symptoms suggesting hypovolaemia (P) does any other dose in ml/kg (I) vs 10ml/kg (C) improve short or long term outcomes (O)?	REPOSE			

NRP	1569	Post Arrest Care		Miscellaneous	Oxygen Use Post ROSC for newborns	In newborns who underwent CPR with ROSC (P), during post resuscitation care, do higher (I) or lower oxygen saturation goals (C) improve outcomes (O).	REPOSE			
NRP	1570	CPR		Compressions	CPR Timing	In neonates being ventilated who have a slow heart rate (P), compressions started when the HR is < 60 (I) vs starting at other heart rates (C) improves short and long term outcomes (O)	REPOSE			
NRP	1571	Airway & Ventilation		Advanced Airway Management	HiFlow NC	In spontaneously breathing infants (preterm or term) with respiratory distress requiring respiratory support in the delivery room (P), does the use of HiFlow NC or CPAP (I), compared with intubation and IPPV (C), change outcome (eg overall mortality, Bronchopulmonary dysplasia, air leak, retinopathy of prematurity,	ACTIVATE	N7	Nation	
NRP	1572	Miscellaneous		Pregnancy & Child Birth	Temperature maintenance when born outside hospital	For newborn babies born outside hospital or in low resource settings (P) does wrapping in polyethelene or placing skin to skin after drying (I) vs drying and wrapping (C) improves admission temperature (O).	REPOSE			
NRP	1573	Screening & Diagnosis		Risk Factors & Assessment	ECG/EKG prognosticator	In newborn babies receiving chest compressions (P) is the rhythm or length of time of asystole or sinus bradycardia <60 predictive of outcome (O)?	REPOSE			
NRP	1574	Screening & Diagnosis		ECG/EEG	ECG/EKG information	In newborn babies requiring resuscitation(P) does knowledge of the electrical rhythm (I) vs no knowledge (C) alter outcome.(O)	REPOSE			
NRP	1575	Airway & Ventilation		ventilation rate	Optimal Ventilation Rate	For newborn infants receiving PPV in the delivery room (P) does a rate of 40-60 breaths per minute (I) compared to other ventilation rates © improve outcomes (O)?	REPOSE			
NRP	1576	Airway & Ventilation		Basic Airway Management	Epiglottic spasm	In the conscious or semi-conscious baby at birth (P) does waiting for the baby to initiate spontaneous breathing (I) compared with immediate initiation of PPV with mask or LMA (C) improve effective ventilation	REPOSE			
NRP	1577	Airway & Ventilation		Advanced Airway Management	Upright resuscitator	In babies receiving positive pressure ventilation at birth (P) does ventilation with an upright resuscitator (I) vs conventional self inflating bags(C) improve outcome (O	REPOSE			
NRP	1579	Airway & Ventilation		Advanced Airway Management	CPAP vs Increased Oxygen	For term and late preterm babies at birth who are breathing with a good heart rate but low transcutaneous oxygen saturations (P), does commencing CPAP (I) rather than increasing FiO2 (C) outcomes (improve saturations and admission without increased pneumothoraces) CO2 (O)?	REPOSE			
NRP	1580	Airway & Ventilation		Gas Concentrations & Volume Monitoring	Oxygen saturation target percentiles	For newborns receiving resuscitation (P) does maintenance of oxygen saturations around the median of healthy term newborns (I) vs some other percentile range (C) improve outcomes (O).	REPOSE			
NRP	1581	Drugs & Fluids		Vasoconstrictors	Adrenaline/Epinephrine Timing	In newborn babies with asystole or sustained bradycardia unresponsive to ventilation (P) does early intravenous adrenaline/epinephrine before compressions (I) vs adrenaline/epinephrine after compressions (C) improve short and long term outcome (O)?	REPOSE			
NRP	1583	Drugs & Fluids		Vasoconstrictors	Adrenaline/Epinephrine (neonatal)	In newborn babies with no detectable cardiac output or sustained bradycardia (P) does intravenous adrenaline/epinephrine (I) vs no adrenaline/epinephrine (C) improve outcome (O)?	REPOSE			
First Aid	1585	Drugs & Fluids		Drug Delivery	Hypoglycemia treatment - methods of glucose administration	Among adults and children with mild to moderate hypoglycemia (P), does administration of sublingual or buccal glucose (I) compared to oral (swallowed) or intravenous glucose (C) change outcome (O)	ACTIVATE	F1	Kleinman	
EIT	1586	Education		Teaching Methods & Models	Resp Function Monitor	For neonatal team members (P) does use of a respiratory function monitor (I) compared with standard training (C) improve mask ventilation skills and/or clinical outcomes (O)	ACTIVATE	E8	Cheng	

Domain	
CPR	
Emergency Care	REACTIVATE
Airway & Ventilation	REPOSE
Miscellaneous	ACTIVATE
Drugs & Fluids	
Screening & Diagnosis	
Post Arrest Care	
Education	yes
Defibrillation & Electrical	no