

## Appendix 4 Pathophysiology

This listing outlines the basic knowledge of illnesses, conditions and injuries required in order for practitioners to achieve the competencies defined in Area 4.

	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
<b>A. Cardiovascular System</b>			
<i>Vascular Disease</i>			
	Aneurysm	Aneurysm	Aneurysm (intracranial, abdominal aortic)
	Arteriosclerosis	Arteriosclerosis	Arteriosclerosis
		Deep vein thrombosis	Deep vein thrombosis
	Hypertension	Hypertension	Hypertension
		Peripheral vascular disease	Peripheral vascular disease
			Thoracic aortic dissection
<i>Inflammatory disorders</i>			
		Endocarditis	Endocarditis
		Myocarditis	Myocarditis
		Pericarditis	Pericarditis
<i>Valvular Disease</i>			
			Prolapsed mitral valve
			Regurgitation
			Stenosis
<i>Acute Coronary Syndromes</i>			
	Infarction	Infarction	Infarction
	Ischemia / angina	Ischemia / angina	Ischemia / angina
<i>Heart Failure</i>			
		Cardiomyopathies	Cardiomyopathies
		Left sided	Left sided
		Pericardial tamponade	Pericardial tamponade
		Right sided	Right sided
<i>Cardiac Conduction Disorder</i>			
		Benign arrhythmias	Benign arrhythmias
		Lethal arrhythmias	Lethal arrhythmias
		Life threatening arrhythmias	Life threatening arrhythmias
<i>Congenital Abnormalities</i>			
			Atrial septal defect
			Patent ductus arteriosus
			Transposition
			Ventricular septal defect

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
<i>Traumatic Injuries</i>			
			Aortic disruption
			Myocardial contusion
			Peripheral vascular disruption
<b>B. Neurologic System</b>			
<i>Convulsive Disorders</i>			
	Febrile seizures	Febrile seizures	Febrile seizures
	Generalized seizures	Generalized seizures	Generalized seizures
	Partial seizures (focal)	Partial seizures (focal)	Partial seizures (focal)
<i>Headache and Facial Pain</i>			
		Infection	Infection
		Intracranial hemorrhage	Intracranial hemorrhage
		Migraine	Migraine
		Tension	Tension
<i>Cerebrovascular Disorders</i>			
	Stroke		
		Ischemic / hemorrhagic stroke	Ischemic / hemorrhagic stroke
	Transient ischemic attack	Transient ischemic attack	Transient ischemic attack
<i>Altered Mental Status</i>			
		Metabolic	Metabolic
		Structural	Structural
<i>Chronic Neurologic Disorders</i>			
			Alzheimers
		Amyotrophic lateral sclerosis (ALS)	Amyotrophic lateral sclerosis (ALS)
			Bell's palsy
		Cerebral palsy	Cerebral palsy
		Multiple sclerosis	Multiple sclerosis
			Muscular dystrophy
		Parkinson's disease	Parkinson's disease
		Poliomyelitis	Poliomyelitis
<i>Infectious Disorders</i>			
		Encephalitis	Encephalitis
		Guillian Barre syndrome	Guillian Barre syndrome
	Meningitis	Meningitis	Meningitis

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
<i>Tumors</i>			
		Structural	Structural
		Vascular	Vascular
<i>Traumatic Injuries</i>			
	Head injury	Head injury	Head injury
			Hematoma (epidural, subdural, subarachnoid)
	Spinal cord injury	Spinal cord injury	Spinal cord injury
<i>Pediatric</i>			
			Downs syndrome
			Hydrocephalus
			Spina bifida
<b>C. Respiratory System</b>			
<i>Medical Illness</i>			
		Acute respiratory failure	Acute respiratory failure
		Adult respiratory disease syndrome	Adult respiratory disease syndrome
		Aspiration	Aspiration
	Chronic obstructive pulmonary disorder	Chronic obstructive pulmonary disorder	Chronic obstructive pulmonary disorder
			Hyperventilation syndrome
		Pleural effusion	Pleural effusion
		Pneumonia / bronchitis	Pneumonia / bronchitis
	Pulmonary edema	Pulmonary edema	Pulmonary edema
	Pulmonary embolism	Pulmonary embolism	Pulmonary embolism
	Reactive airways disease / asthma	Reactive airways disease / asthma	Reactive airways disease / asthma
<i>Traumatic Injuries</i>			
	Airway obstruction	Aspirated foreign body	Aspirated foreign body
			Burns
		Diaphragmatic injuries	Diaphragmatic injuries
	Flail chest	Flail chest	Flail chest
	Hemothorax	Hemothorax	Hemothorax
	Penetrating injury	Penetrating injury	Penetrating injury
	Pneumothorax (simple, tension)	Pneumothorax (simple, tension)	Pneumothorax (simple, tension)
		Pulmonary contusion	Pulmonary contusion
			Toxic inhalation
			Tracheobronchial disruption

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
<i>Pediatric Illness</i>			
		Acute respiratory failure	Acute respiratory failure
		Bronchiolitis	Bronchiolitis
	Croup	Croup	Croup
			Cystic fibrosis
	Epiglottitis	Epiglottitis	Epiglottitis
		Sudden infant death syndrome	Sudden infant death syndrome
<b>D. Female Reproductive System and Neonates</b>			
<i>Pregnancy complications</i>			
			Abruptio placenta
			Eclampsia
	Ectopic pregnancy	Ectopic pregnancy	Ectopic pregnancy
	First trimester bleeding	First trimester bleeding	First trimester bleeding
			Placenta previa
			Pre-eclampsia
	Third trimester bleeding	Third trimester bleeding	Third trimester bleeding
			Uterine rupture
<i>Childbirth complications</i>			
		Abnormal presentations	Abnormal presentations
			Post partum complications
	Post partum bleeding	Post partum hemorrhage	Postpartum hemorrhage
		Prolapsed cord	Prolapsed cord
		Uterine inversion	Uterine inversion
<i>Neonatal complications</i>			
	Neonatal care		
		Cardiovascular insufficiency	Cardiovascular insufficiency
		Meconium aspiration	Meconium aspiration
		Respiratory insufficiency	Respiratory insufficiency
<b>E. Gastrointestinal System</b>			
<i>Esophagus / Stomach</i>			
			Esophageal varices
		Esophagitis	Esophagitis
		Gastritis	Gastritis
			Gastroesophageal reflux
			Obstruction

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C (ACP, CCP)
		Peptic ulcer disease	Peptic ulcer disease
	Upper gastrointestinal bleed	Upper gastrointestinal bleed	Upper gastrointestinal bleed
	<i>Liver / Gall Bladder</i>		
		Cholecystitis / biliary colic	Cholecystitis / biliary colic
		Cirrhosis	Cirrhosis
		Hepatitis	Hepatitis
	<i>Pancreas</i>		
		Pancreatitis	Pancreatitis
	<i>Small / Large Bowel</i>		
	Appendicitis	Appendicitis	Appendicitis
		Diverticulitis	Diverticulitis
		Gastroenteritis	Gastroenteritis
		Inflammatory bowel disease	Inflammatory bowel disease
	Lower gastrointestinal bleed	Lower gastrointestinal bleed	Lower gastrointestinal bleed
	Obstruction	Obstruction	Obstruction
	<i>Traumatic Injuries</i>		
	Abdominal injury - penetrating / blunt	Abdominal injury - penetrating / blunt	Abdominal injuries- penetrating / blunt
			Esophageal disruption
			Evisceration
	<b>F. Genitourinary System</b>		
	<i>Reproductive Disorders</i>		
		Bleeding / discharge	Bleeding / discharge
		Infection	Infection
		Ovarian cyst	Ovarian cyst
		Testicular torsion	Testicular torsion
	<i>Renal / Bladder</i>		
	Renal colic	Colic / calculi	Colic / calculi
		Infection	Infection
		Obstruction	Obstruction
		Renal failure	Renal failure
	Traumatic injuries	Traumatic injuries	Traumatic injuries
	<b>G. Integumentary System</b>		
	<i>Traumatic Injuries</i>		
	Burns	Burns	Burns
	Lacerations / avulsions / abrasions	Lacerations / avulsions / abrasions	Lacerations / avulsions / abrasions

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
	<i>Infectious and Inflammatory Illness</i>		
		Allergy / urticaria	Allergy / urticaria
		Infections	Infections
		Infestations	Infestations
<b>H. Musculoskeletal System</b>			
	<i>Soft Tissue Disorders</i>		
	Amputations	Amputations	Amputations
		Compartment syndrome	Compartment syndrome
	Contusions	Contusions	Contusions
	Dislocations	Dislocations	Dislocations
			Muscular dystrophies
			Myopathies
		Necrotizing fasciitis	Necrotizing fasciitis
	Sprains	Sprains	Sprains
	Strains	Strains	Strains
			Subluxations
	<i>Skeletal Fractures</i>		
	Appendicular	Appendicular	Appendicular
	Axial	Axial	Axial
	Open, closed	Open, closed	Open, closed
	<i>Inflammatory Disorders</i>		
		Arthritis	Arthritis
			Gout
		Osteomyelitis	Osteomyelitis
			Osteoporosis
<b>I. Endocrine System</b>			
			Acid-base disturbances
			Addison's disease
			Cushing's disease
	Diabetes mellitus	Diabetes mellitus	Diabetes mellitus
			Electrolyte imbalances
			Thyroid disease
<b>J. Multisystem Diseases and Injuries</b>			
	<i>Cancer</i>		
	Malignancy	Malignancy	Malignancy

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
<i>Hematologic Disorders</i>			
		Anemia	Anemia
		Bleeding disorders	Bleeding disorders
			Leukemia
			Lymphomas (Hodgkins, non-Hodgkins)
			Multiple myeloma
			Sickle cell disease
<i>Infectious Diseases</i>			
		Acquired immune deficiency syndrome	Acquired immune deficiency syndrome
		Antibiotic resistant infection	Antibiotic resistant infection
		Influenza virus	Influenza virus
			Malaria
		Meningococemia / bacteremia	Meningococemia / bacteremia
		Tetanus	Tetanus
		Toxic shock syndrome	Toxic shock syndrome
<i>Toxicologic Illness</i>			
		Prescription medication	Prescription medication
		Non-prescription medication	Non-prescription medication
		Recreational	Recreational
	Poisons (absorption, inhalation, ingestion)	Poisons (absorption, inhalation, ingestion)	Poisons (absorption, inhalation, ingestion)
	Acids and alkalis	Acids and alkalis	Acids and alkalis
			Hydrocarbons
			Asphyxiants
			Cyanide
			Organophosphates
			Alcohols
			Food poisoning
<i>Alcohol Related</i>			
			Chronic alcoholism
			Delerium tremens
			Korsakov's psychosis
			Wernicke's encephalopathy
<i>Environmental Disorders</i>			
		Barotrauma	Barotrauma
	Hyperthermal injuries	Hyperthermal injuries	Hyperthermal injuries
	Hypothermal injuries	Hypothermal injuries	Hypothermal injuries
			Air embolism

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
	Anaphylaxis	Anaphylaxis	Anaphylaxis / anaphylactoid reactions
			Decompression sickness
			Descent, ascent barotrauma
			Heat cramps
			Heat exhaustion
			Heat stroke
			High altitude cerebral edema
			High altitude pulmonary edema
			Local cold injuries
	Near drowning and drowning	Near drowning and drowning	Near drowning and drowning
			Radiation exposure
	Stings and bites	Stings and bites	Stings and bites
			Systemic hypothermia
	<i>Immunologic Disorders</i>		
			Autoimmune disorders
	<i>Shock Syndromes</i>		
	Anaphylactic	Anaphylactic	Anaphylactic
		Cardiogenic	Cardiogenic
	Hypovolemic	Hypovolemic	Hypovolemic
	Neurogenic	Neurogenic	Neurogenic
		Obstructive	Obstructive
		Septic	Septic
	<i>Trauma</i>		
	Assault	Assault	Assault
	Blast injuries	Blast injuries	Blast injuries
	Crush Injuries	Crush Injuries	Crush Injuries
	Falls	Falls	Falls
	Rapid deceleration injuries	Rapid deceleration injuries	Rapid deceleration injuries
	<b>K. Psychiatric Disorders</b>		
	<i>Anxiety Disorders</i>		
		Acute stress disorder	Acute stress disorder
		Generalized anxiety disorder	Generalized anxiety disorder
		Panic disorder	Panic disorder
		Post-traumatic stress disorder	Post-traumatic stress disorder
		Situational disturbances	Situational disturbances

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
<i>Childhood Psychiatric Disorders</i>			
		Attention-deficit disorder	Attention-deficit disorder
		Autistic disorder	Autistic disorder
<i>Cognitive Disorders</i>			
		Delirium	Delirium
<i>Eating Disorders</i>			
		Anorexia nervosa	Anorexia nervosa
		Bulimia nervosa	Bulimia nervosa
<i>Affective Disorders</i>			
		Bipolar disorder	Bipolar disorder
		Depressive disorders	Depressive disorders
	Suicidal ideation	Suicidal ideation	Suicidal ideation
<i>Psychotic Disorders</i>			
	Anxiety / depression		
	Psychosis		
		Delusional disorder	Delusional disorder
		Homicidal ideation	Homicidal ideation
		Schizophrenia	Schizophrenia
<i>Psychosocial disorders</i>			
		Antisocial disorder	Antisocial disorder
<b>L. Ears, Eyes, Nose and Throat</b>			
<i>Eyes - Traumatic Injuries</i>			
	Eye trauma		
		Burns / chemical exposure	Burns / chemical exposure
		Corneal injuries	Corneal injuries
		Hyphema	Hyphema
		Penetrating injury	Penetrating injury
<i>Eyes - Medical Illness</i>			
			Cataracts
			Central retinal artery occlusion
		Glaucoma	Glaucoma
			Infection
		Retinal detachment	Retinal detachment
<i>External, Middle and Inner Ear Disorders</i>			
		Otitis externa	Otitis externa
		Otitis media	Otitis media

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	APPENDIX 4A (EMR)	APPENDIX 4B (PCP)	APPENDIX 4C ( ACP, CCP)
		Traumatic ear injuries	Traumatic ear injuries
		Vertigo	Vertigo
	<i>Face and Jaw Disorders</i>		
		Dental abscess	Dental abscess
	Trauma injury	Trauma injury	Trauma injury
		Trismus	Trismus
	<i>Nasal and Sinus Disorders</i>		
	Epistaxis	Epistaxis	Epistaxis
		Sinusitis	Sinusitis
		Trauma injury	Trauma injury
	<i>Oral and Dental Disorders</i>		
		Dental fractures	Dental fractures
		Penetrating injury	Penetrating injury
	<i>Neck and Upper Airway Disorders</i>		
		Epiglottitis	Epiglottitis
		Obstruction	Obstruction
		Peritonsillar abscess	Peritonsillar abscess
		Retropharyngeal abscess	Retropharyngeal abscess
		Tonsillitis	Tonsillitis
		Tracheostomies	Tracheostomies
		Trauma injury- blunt / penetrating	Trauma injury- blunt / penetrating