**In order to successfully answer these questions, you should frequently consult the ARC and CPA Coding Instructions**

**Scenario A**

Meagan Greyson is a 55 year old female with no history of Cardiovascular Disease. She is admitted to the hospital for knee replacement on 6 January 2017. Prior to admission she is working full time and mother of 20 year old twins. On day two of her hospitalization a family member calls the nurse because “something is wrong”.

**7 January 2017**

1324 Nurse Aid answers call and finds the patient unresponsive calls Nurses station for help

1325 RN responds patient has a weak pulse and shallow breathing. Calls a MET

1327 MET arrives. O2 being given via nasal cannula. BP 70/P HR 60. Placed on defibrillator monitor

1328 Sinus Bradycardia HR 60 BP 62/P Atropine given. New IV started O2 100%

1329 CPR started. Cardiac Arrest team called HR 70 No pulse. Epinephrine given IV

1330 Code Team arrives. Rhythm PEA. No pulse HR 68 Chest Compressor changed.

1331 Fluid bolus given. CPR continues. CPR Quality Coach in place

1332 Epinephrine given. HR 40 Chest compression continued. Compressor changed

1333 Ventricular Fibrillation (VF) on monitor

1334 Defibrillated 360J Rhythm VF Chest Compressions started

1335 Epinephrine given. CPR Continued

1336 Defibrillated 360J HR 70

1337 BP 78/40 Amiodarone given

1340 HR 80. Sinus Rhythm with occasional PVCs BP 89/61

1345 Code Ended

1400 Patient transferred to ICU

**10 January 2017** Patient transferred to Telemetry floor

**12 January 2017** Removed from Telemetry

**15 January 2017** - Patient is awake alert and orientated without any apparent neurological impairments. Ms. Greyson is ambulating without problems and minimal assistance. She will be discharged home with home PT and follow up Ortho appointment in one week.

**15 January 2017** Discharged home at 1642

***The following questions 1–10 relate to Patient Scenario A. Select the answer that would be entered for the data element stated.***

*Question 1*

System Entry Date/Time

1. 01/06/2017 1324
2. 01/06/2017 time unknown/not documented
3. 01/07/2017 1324
4. 01/07/2017 time unknown/not documented

*Question 2*

Admission CPC Score

1. 1 - Good cerebral performance
2. 2 - Moderate cerebral disability
3. 3 - Severe cerebral disability
4. Unknown/Not Documented

*Question 3*

Discharge CPC Score

1. 1 - Good cerebral performance
2. 2 - Moderate cerebral disability
3. 3 - Severe cerebral disability
4. Unknown/Not Documented

*Question 4*

Time the need for chest compressions (or defibrillation when initial rhythm was VF or Pulseless VT) was FIRST recognized (CPA event start):

1. 1324
2. 1325
3. 1329
4. 1330

*Question 5*

Interventions ALREADY IN PLACE when need for chest compressions and/or defibrillation was first recognized

1. O2, defibrillator/monitor and ET Tube
2. O2 and IV
3. O2 and defibrillator/monitor
4. O2, defibrillator/monitor and IV

*Question 6*

Condition that best describes this event:

1. Patient was PULSELESS when need for chest compressions and/or need for

defibrillation of initial rhythm VF/Pulseless VT was first identified

1. Patient had a pulse (poor perfusion) requiring chest compressions PRIOR to becoming pulseless
2. Patient had a pulse (poor perfusion) requiring chest compressions, but did NOT

become pulseless at any time during this event

1. This event does not meet inclusion criteria for GWTG Resuscitation and should not be entered.

*Question 7*

First documented pulseless rhythm:

1. Asystole
2. Bradycardia
3. Pulseless Electrical Activity (PEA)
4. Ventricular Fibrillation (VF)

*Question 8*

Select the interventions initiated during the event.

1. Atropine, Epinephrine 3 doses, Defibrillated 360J twice, Fluid bolus
2. Atropine, Amiodarone, Epinephrine 3 doses, Defibrillated 360J twice, Fluid bolus
3. Amiodarone, Epinephrine 3 doses, Defibrillated 360J twice, Fluid bolus
4. Epinephrine 3 doses, Defibrillated 360J twice, Fluid bolus

*Question 9*

Date/Time of FIRST adequate return of circulation (ROC):

1. 1327
2. 1336
3. 1337
4. 1340

*Question 10*

Date/Time sustained ROC ***began (lasting > 20 min)*** OR resuscitation efforts were terminated (End of event):

1. 1336
2. 1337
3. 1340
4. 1357

**Scenario B**

Michael Salas, a 5 month old infant, reported to be normal healthy infant was found blue and unresponsive in his crib. CPR was in progress by Mother when EMS arrived. EMS successfully resuscitated the patient and transported to hospital.

**4 December 2016**

1423 Patient was admitted to the Emergency Department. Lethargic HR 120 Resp Rate 24

1500 Patient is apnic HR 80 and dropping. Bag Valve Mask ventilation started. Code called

1502 Atropine given preparing to intubate

1503 HR 60: weak carotid pulse. Chest compressions started. Intubated with 3.0 tube, bilateral chest expansion and breath sounds

1504 HR 100 Chest compressions stopped ETT placement confirmed with colorimetry

1600 Transferred to ICU

***The following questions 11–13 relate to Patient Scenario B. Select the answer that would be entered for the data element stated.***

*Question 11*

Condition that best describes this event:

1. Patient was PULSELESS when need for chest compressions and/or need for

defibrillation of initial rhythm VF/Pulseless VT was first identified

1. Patient had a pulse (poor perfusion) requiring chest compressions PRIOR to becoming pulseless
2. Patient had a pulse (poor perfusion) requiring chest compressions, but did NOT

become pulseless at any time during this event

1. This event does not meet inclusion criteria for GWTG Resuscitation and should not be entered.

*Question 12*

Time the need for chest compressions (or defibrillation when initial rhythm was VF or Pulseless VT) was FIRST recognized (CPA event start):

1. 1423
2. 1500
3. 1502
4. 1503

*Question 13*

First documented rhythm:

1. Asystole
2. Bradycardia

 C. Pulseless Electrical Activity (PEA)

 D. Ventricular Fibrillation (VF)

**Scenario C**

Henry Lane, a 62 year old male, started complaining of indigestion following lunch. He was driven to the Emergency Department via private car. He lost consciousness prior to arrival.

**15 December 2016**

1330 Patient arrived via private car. CPR was started by hospital staff transported to Bay 2.

1331 CPR in progress. Placed on monitor. BVM started. Rhythm VF

1332 Defibrillated 360J HR 58 Pulse present

1333 IV started HR 66 RR 18 BP 90/40

1335 Patient awake but disoriented to place and time HR 90 with frequent PVCs BP110/56

1400 Transferred to Cath Lab

***Questions 14 -16 relate to Patient Scenario C. Select the answer that would be entered for the data element stated.***

*Question 14*

Pre-existing conditions at time of the event:

1. Acute CNS Non-Stroke Event
2. Baseline Depression in CNS Function
3. Congestive heart failure
4. Respiratory insufficiency

*Question 15*

Condition that best describes this event:

1. Patient was PULSELESS when need for chest compressions and/or need for

defibrillation of initial rhythm VF/Pulseless VT was first identified

1. Patient had a pulse (poor perfusion) requiring chest compressions PRIOR to becoming pulseless
2. Patient had a pulse (poor perfusion) requiring chest compressions, but did NOT

become pulseless at any time during this event

1. This event does not meet inclusion criteria for GWTG Resuscitation and should not be entered.

*Question 16*

Time the need for chest compressions (or defibrillation when initial rhythm was VF or Pulseless VT) was FIRST recognized (CPA event start):

1. Event would not be entered into GWTG Resuscitation
2. 1330
3. 1331
4. Unknown/not documented

**Scenario D**

1:10 PM Patient registers at the freestanding Ambulatory Outpatient Clinic

1:45 PM She is noted to be in moderate respiratory distress and is taken to the Emergency Department.

1:50 PM She is admitted to Emergency Department.

4:00 PM She is admitted to Rm 321

8:45 PM She has a cardiopulmonary arrest (CPA)

9:30 PM She is admitted to the ICU

10:28 PM She has a second cardiopulmonary arrest (CPA)

***Questions 17 &18 relate to Patient Scenario D. Select the answer that would be entered for the data element stated.***

*Question 17*

System Entry Time

1. 0150
2. 0400
3. 1350
4. 1600

*Question 18*

Illness Category

1. Medical-Cardiac
2. Medical-Noncardiac
3. Surgical-Cardiac
4. Surgical-Noncardiac

*Question 19*

A patient has a CPA event in the field is defibrillated with Return of Circulation (ROC). Prior to Emergency Department (ED) arrival, pre-hospital providers inserted an invasive airway (tracheal tube) and the patient goes into VF and is shocked into a Sinus Rhythm with a pulse immediately prior to arrival. Twenty minutes after arriving in the ED, the patient develops PEA requiring chest compressions. She has ROC for 10 minutes goes back into PEA and dies after prolonged resuscitation event. For this scenario…

1. Do not include this patient into GWTG-Resuscitation
2. Include one event as an ARC event that ends in a CPA event
3. Include one CPA event
4. Include two CPA events

*Question 20*

A visitor collapse in the cafeteria. Staff call a code and start Chest Compressions at 1310. AED is brought to the patient, shock is advised and delivered. Pulse returns and patient is transferred to the Emergency Department via stretcher at 1340. System entry time would be:

1. 1310
2. 1340
3. Event would not be entered because the visitor was not a patient at the time of the event
4. Patient/event would not be entered because it does not met inclusion criteria

*Question 21*

A man collapsed at the bus stop in front of the hospital. Bystanders call 911 and start compression only CPR. EMS and hospital staff respond. After 10 minutes EMS transports the patient to the Emergency Department with CPR in progress. Upon arrival to the hospital, ED staff continue CPR and Advanced Cardiac Life Support (ACLS).  The patient survives and is later admitted to the hospital. This event is...

1. Excluded because the man was not a patient at the time he had his cardiac arrest
2. Excluded because EMS provided care and transportation to the ED
3. Included because hospital staff responded and ACLS was provided by ED staff
4. Included because the event began on facility campus.

*Question 22*

In pulseless CPA events, the beginning of Return of Circulation (ROC) should be determined by:

1. Return of pulse (e.g. palpated, Doppler, auscultated, arterial blood pressure waveform or documented blood pressure).
2. Record of Normal Sinus Rhythm (NSR) on the code sheet.
3. Record of paced rhythm with electrical capture on the code sheet
4. All of the above.

*Question 23*

A monitored patient’s Heart Rate drops to 48, nurse finds the patient is unresponsive and pulseless. The first line on the code sheet shows a time of 0215 with a rhythm of "Unknown."  At 0220 a cardiac monitor/defibrillator is applied.  The Code Sheet reflects Junctional Rhythm with no pulse at 0220.  The first documented pulseless rhythm for this patient would be:

1. Bradycardia
2. Junctional Rhythm
3. Pulseless Electrical Activity (PEA)
4. Unknown/Not documented

*Question 24*

Cardiopulmonary Arrest (CPA) events end when:

1. Return of Circulation (ROC) occurs
2. Return of Circulation (ROC) occurs that is sustained for 20 minutes or Resuscitation efforts are terminated without ROC
3. The documentation states “Code End”
4. The patient is transferred to the ICU

*Question 25*

A 32 year old male was admitted to ICU post traumatic injury. He was intubated on Mechanical Ventilation when he went into VF. He was removed from the ventilator and bagged, Defibrillated 360J, had a Return of Circulation (ROC) and placed back on Mechanical Ventilation. Please select the type of ventilation/airway USED during the event, including those already in place.

1. Bag Valve Mask
2. Endotracheal Tube (ET)
3. Other Non-Invasive Ventilation
4. None, Unknown/Not Documented