**GWTG-Resuscitation Patient Management Tool (CRF)**  
Cardiopulmonary Arrest (CPA) Event  
*Updated August 2023*

**OPTIONAL:**

<table>
<thead>
<tr>
<th>Local Event ID:</th>
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</thead>
<tbody>
<tr>
<td>○ Yes</td>
</tr>
<tr>
<td>○ No/ Not Documented (Does NOT meet inclusion criteria)</td>
</tr>
</tbody>
</table>

**Date/Time the need for chest compressions (or defibrillation when initial rhythm was VF or Pulseless VT) was FIRST recognized:**

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**CPA 2.1 PRE-EVENT**

**OPTIONAL**

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**Was patient discharged from an Intensive Care Unit (ICU) within 24 hours prior to this CPA event?**

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**If yes, date admitted to non-ICU unit (after ICU discharge):**

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**Was patient discharged from a Post Anesthesia Care Unit (PACU) within 24 hours prior to this CPA event?**

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**Was patient in the ED within 24 hours prior to this CPA event?**

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**Did patient receive conscious/procedural sedation or general anesthesia within 24 hours prior to this CPA event?**

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**Enter vital signs taken in the 4 hours prior to the CPA event (up to 4 sets):**

<table>
<thead>
<tr>
<th>Date / Time</th>
<th>Heart Rate</th>
<th>Systolic / Diastolic BP</th>
<th>Respiratory Rate</th>
<th>SpO2</th>
<th>Temp</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ / :</td>
<td>❑ Not Documented</td>
<td>❑ Not Documented</td>
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<td>❑ Not Documented</td>
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**CPA 2.2 PRE-EXISTING CONDITIONS**

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**Did patient have an out-of-hospital arrest leading to this admission?**

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**Pre-existing Conditions at Time of Event (check all that apply):**

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<tr>
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<tr>
<td>Event Location (Area)</td>
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<tr>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Ambulatory/Outpatient Area</td>
</tr>
<tr>
<td>Adult Coronary Care Unit (CCU)</td>
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<tr>
<td>Adult ICU</td>
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<tr>
<td>Cardiac Catheterization Lab</td>
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Additional Personal Protective Equipment (PPE) Donned by the responders?

- Yes
- No/ND

Monitoring

- Apnea
- Apnea/Bradycardia
- ECG

Any Vasoactive Agent in Place?

- Yes
- No/Not Documented

Vascular Access

- Yes
- No/Not Documented

Part A: Interventions ALREADY IN PLACE when need for chest compressions and/or defibrillation was first recognized (check all that apply):

- Non-invasive assisted ventilation
  - Bag-Valve-Mask
  - Mask and/or Nasal CPAP
  - Mouth-to-Barrier Device
  - Mouth-to-Mouth
  - Laryngeal Mask Airway (LMA)
  - Other Non-Invasive Ventilation: (specify) ________

Invasive assisted ventilation, via an:

- Endotracheal Tube (ET)
- Tracheostomy Tube
- Intra-arterial catheter
- Conscious/procedural sedation
- End Tidal CO2 (ETCO2) Monitoring
- Supplemental oxygen (cannula, mask, hood, or tent)

Additional Infectious Disease

- SARS-COV-1
- SARS-COV-2 (COVID-19)
- MERS
- Other Emerging Infectious Disease

Illness Category

- Medical-Cardiac
- Surgical-Cardiac
- Obstetric
- Other (Visitor/Employee)

- Active or suspected bacterial or viral infection at admission or during hospitalization:
  - None
  - Bacterial Infection
  - Emerging Infectious Disease
    - SARS-COV-1
    - SARS-COV-2 (COVID-19)
    - MERS
    - Other Emerging Infectious Disease

- Hepatic insufficiency
- History of vaping or e-cigarette use in the past 12 months?
- Hypotension/Hypoperfusion
- Major trauma
- Metastatic or hematologic malignancy
- Metabolic/electrolyte abnormality
- Myocardial ischemia/infarction (this admission)
- Myocardial ischemia/infarction (prior to admit)
- Pneumonia

- Renal Insufficiency
- Respiratory Insufficiency
- Sepsis
- Recent delivered or currently pregnant

- CPA 2.2 INTERVENTIONS ALREADY IN PLACE

- CPA 3.1 EVENT

- CPA 3.2 COMPLICATIONS/OUTCOMES
### CPA 4.1 INITIAL CONDITION

**Condition that best describes this event:**
- Patient was PULSELESS when need for chest compressions and/or need for defibrillation of initial rhythm VF/Pulseless VT was first identified
- Patient had a pulse (poor perfusion) requiring chest compressions PRIOR to becoming pulseless
- Patient had a pulse (poor perfusion) requiring chest compressions, but did NOT become pulseless at any time during this event

**Did patient receive chest compressions (includes open cardiac massage)?**
- Yes
- No/Not Documented
- No, Per Advance Directive

**Compression Method(s) used (check all that apply):**
- Standard Manual Compression
- Open chest CPR (direct [internal] cardiac compression)
- IAC-CPR (interposed abdominal compression cardiopulmonary resuscitation)
- Automatic Compressor
- Unknown/Not documented

**Date/Time compression started**

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
<th>Time</th>
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</table>

- Time Not Documented

**If compressions provided while pulse present:**
- Accelerated idioventricular rhythm (AIVR)
- Bradycardia
- Pacemaker
- Sinus (including Sinus Tachycardia)

**If pulseless at ANY time during event: Date/Time pulselessness first identified:**

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<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
<th>Time</th>
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</table>

- Time Not Documented

**First documented pulseless rhythm:**
- Asystole
- Pulseless Electrical Activity (PEA)
- Pulseless Ventricular Tachycardia

**CPA 4.2 AED AND VF/PULSELESS VT**

**Was automated external defibrillator (AED) applied or manual defibrillator in AED/Shock Advisory mode applied?**
- Yes
- No/Not Documented
- Not Applicable (not used by facility)

**Date/Time AED or manual defibrillator in AED/Shock Advisory mode applied?**

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
<th>Time</th>
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</table>

- Time Not Documented

**Did the patient have Ventricular Fibrillation (VF) OR Pulseless Ventricular Tachycardia ANY time during this event?**

**Date/Time of Ventricular Fibrillation (VF) OR Pulseless Ventricular Tachycardia?**

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
<th>Time</th>
</tr>
</thead>
</table>

- Time Not Documented

**Was Defibrillation shock provided for Ventricular Fibrillation (VF) OR Pulseless Ventricular Tachycardia?**
- Yes
- No/Not Documented
- No, Per Advance Directive

**Total # of Shocks**

- Unknown/Not Documented
Details of Each Shock (maximum of 4):

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Energy (Joules)</th>
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Documented reason(s) (patient, medical, hospital related or other) for not providing defibrillation shock for Ventricular Fibrillation (VF) or Pulseless Ventricular Tachycardia (VT) in first two minutes?

- Initial Refusal (e.g. family refused)
- ICD in place which shocked patient within first 2 minutes of identification of VF or Pulseless VT
- LVAD or BIVAD in place
- Rhythm change to non-shockable rhythm within 2 minutes of identification of VF or Pulseless VT
- Spontaneous Return of Circulation within first 2 minutes of identification of VF or Pulseless VT

Patient Reason(s):
- Initial Refusal (e.g. family refused)
- ICD in place which shocked patient within first 2 minutes of identification of VF or Pulseless VT
- LVAD or BIVAD in place
- Rhythm change to non-shockable rhythm within 2 minutes of identification of VF or Pulseless VT
- Spontaneous Return of Circulation within first 2 minutes of identification of VF or Pulseless VT

Medical Reason(s):
- Initial Refusal (e.g. family refused)
- ICD in place which shocked patient within first 2 minutes of identification of VF or Pulseless VT
- LVAD or BIVAD in place
- Rhythm change to non-shockable rhythm within 2 minutes of identification of VF or Pulseless VT
- Spontaneous Return of Circulation within first 2 minutes of identification of VF or Pulseless VT

Hospital Related or Other Reason(s):
- Equipment related delay (e.g., defibrillator not available, pad not attached)
- In-hospital time delay (e.g. code team delays, personnel not familiar with protocol or equipment, unable to locate hospital defibrillator)
- Other → (Please Specify) ______________________

CPA 4.3 VENTILATION

Types of Ventilation/Airways used
- None
- Unknown/Not Documented

Ventilation/Airways Used (Select all that apply)
- Bag-Valve-Mask
- Mask and/or Nasal CPAP/BiPAP
- Mouth-to-Barrier Device
- Mouth-to-Mouth
- Laryngeal Mask Airway (LMA)
- Endotracheal Tube (ET)
- Supraglottic Airway
- Tracheostomy Tube
- Other Non-Invasive Ventilation, Specify

Was Bag-Valve-Mask ventilation initiated during the event?
- Yes
- No
- Not Documented

Date/Time

Was any Endotracheal Tube (ET) or Tracheostomy Tube inserted/re-inserted during event?
- Yes
- No

Date/Time Endotracheal Tube (ET) or Tracheostomy Tube inserted if not already in place and/or re-inserted during event:

Method(s) of confirmation used to ensure Endotracheal Tube (ET) or Tracheostomy Tube placement in trachea (check all that apply):
- Waveform capnography (waveform ETCO2)
- Capnometry (numeric ETCO2)
- Chest X-Ray
- Exhaled CO2 colorimetric monitor (ETCO2 by color change)
- Esophageal detection devices
- Point of Care Ultrasound
- Visualization with direct laryngoscopy
- None of the above
- Not Documented

CPA 5.1 EPINEPHRINE

Other Interventions

Was IV/IO Epinephrine BOLUS administered?
- Yes
- No
- Not Documented

Date/Time

Total Number of Doses

Unknown/Not Documented
If IV/IO Epinephrine was not administered within the first five minutes of the event, was there a documented patient, medical, hospital related or other reason for not providing Epinephrine bolus?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Reason(s)</td>
<td>Initial Refusal (e.g. family refused)</td>
<td></td>
</tr>
<tr>
<td>Medical Reason(s)</td>
<td>Patient already receiving vaspressor (e.g. Epinephrine) as a continuous IV infusion prior to and during arrest</td>
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<tr>
<td>Hospital Related or Other Reason(s)</td>
<td>Spontaneous Return of Circulation within first 5 minutes of the date/time pulselessness was first identified (or the need for chest compressions was first recognized (pediatric only))</td>
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<tr>
<th>Patient Reason(s)</th>
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<tbody>
<tr>
<td>Initial Refusal (e.g. family refused)</td>
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<tr>
<th>Medical Reason(s)</th>
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<tbody>
<tr>
<td>Spontaneous Return of Circulation</td>
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<tr>
<th>Hospital Related or Other Reason(s)</th>
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<tbody>
<tr>
<td>In-hospital time delay (e.g., delay in locating medication)</td>
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**CPA 5.2 OTHER DRUG INTERVENTIONS**

Select all either initiated, or if already in place immediately prior to, continued during event.

- None (select only after careful review of options below)
- Vasopressor(s) other than epinephrine bolus:
  - Dobutamine
  - Dopamine > 3mcg/kg/min
  - Epinephrine, IV/IO continuous infusion
  - Norepinephrine
  - Phenylephrine
  - Other Vasopressors:
- Atropine
- Calcium Chloride/Calcium Gluconate
- Dextrose Bolus
- Magnesium Sulfate
- Reversal agent (e.g., naloxone/Narcan, flumazenil/Romazicon, neostigmine/Prostigim)
- Sodium Bicarbonate
- Other Drug Interventions: _______

**CPA 5.3 NON-DRUG INTERVENTIONS**

Select each intervention that was employed during the resuscitation event.

- None (review options below carefully)
- Pacemaker, transcutaneous
- Pacemaker, transvenous or epicardial
- Pericardiocentesis
- Other non-drug interventions _______

**CPA 6.1 EVENT OUTCOME**

Was ANY documented return of adequate circulation [ROC] (in the absence of ongoing chest compressions return of adequate pulse/heart rate by palpation, auscultation, Doppler, arterial blood pressure waveform, or documented blood pressure) achieved during the event?

- Yes
- No/Not Documented

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

- Time Not Documented

**Reason resuscitation ended**

- Survived – ROC
- Died – Efforts terminated, no sustained ROC

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

- Time Not Documented

**CPA 6.2 POST-ROC CARE**

Highest patient temperatures during first 24 hrs. after ROC: Temperature

<table>
<thead>
<tr>
<th>Site</th>
<th>C</th>
<th>F</th>
<th>Temperature Not Documented</th>
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<tbody>
<tr>
<td>Axillary</td>
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</tr>
<tr>
<td>Bladder</td>
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<tr>
<td>Blood</td>
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<tr>
<td>Brain</td>
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<tr>
<td>Surface (skin, temporal)</td>
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<tr>
<td>Other</td>
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<tr>
<td>Oral</td>
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<td>Rectal</td>
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<td>Unknown</td>
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<tr>
<td>Tympatic</td>
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**Date/Time Recorded:**

- Time Not Documented
### CPA 7.1 CPR Quality

**Was performance of CPR monitored or guided using any of the following? (Check all that apply)**

- None
- Waveform Capnography/End Tidal CO2 (ETCO2)
- Arterial Wave Form/Diastolic Pressure
- CPR mechanics device (e.g. accelerometer, force transducer, TFI device)

**CPR Quality Tab**

- CPR Quality Coach
- Metronome
- Other, Specify: __________

**If CPR mechanics device (e.g. accelerometer, force transducer, TFI device) used:**

1. **Average Compression Rate** __________ (Per Minute)  □ Not Documented
2. **Average Compression Depth**
   - O __________ mm
   - O __________ cm
   - O __________ inches  □ Not Documented
3. **Compression Fraction** __________ (Enter number between 0 and 1)  □ Not Documented
4. **Percent of chest compressions with complete release** __________ (%)  □ Not Documented
5. **Average Ventilation Rate** __________ (Per Minute)  □ Not Documented
6. **Longest Pre-shock pause** __________ (Seconds)  □ Not Documented
7. **Was a team debriefing on the quality of CPR provided completed after the event?**
   - O Yes
   - O No  □ Not Documented

### CPA 7.2 Resuscitation-Related Events and Issues

**OPTIONAL: □ No/Not Documented**

**Universal Precautions**

- □ Not followed by all team members (specify in comments section)

**Documentation**

- □ Signature of code team leader not on code sheet
- □ Missing other signatures
- □ Initial ECG rhythm not documented

**Alerting Hospital-Wide Resuscitation Response**

- □ Delay
- □ Pager Issues

**Airway**

- □ Aspiration related to provision of airway
- □ Delay
- □ Delayed recognition of airway misplacement/displacement
- □ Intubation attempted, not achieved

**Vascular Access**

- □ Delay
- □ Inadvertent arterial cannulation

**Chest Compression**

- □ Delay
- □ No back board

**Defibrillations**

- □ Energy level lower/higher than recommended
- □ Initial delay, personnel not available to operate defibrillator
- □ Initial delay, issues with defibrillator access to patient

**Medications**

- □ Delay
- □ Route
- □ Dose

**Leadership**

- □ Delay in identifying leader
- □ Knowledge of equipment
- □ Knowledge of medications/protocols
- □ Knowledge of roles

**Protocol Derivation**

- □ ACLS/PALS
- □ NRPs

**Equipment**

- □ Availability
- □ Function

**Comments**

**Was this cardiac arrest event the patient’s index (first) event?**

- O Yes
- O No

**Comments & Optional Fields:** Do not enter any Personal Health Information/Protected Health Information into this section.

| Field 1 | Field 2 | Field 3 | Field 4 |
**Maternal In-Hospital Cardiac Arrest**

If Recently delivered or currently pregnant was selected under Pre-existing conditions, please select one of the following:

- **Patient recently delivered fetus**
  - If patient recently delivered a fetus, select delivery date: `___/___/_______ ____:____` (MM/DD/YYYY HH:MM)
  - Not Documented

- **Patient is currently pregnant**
  - If patient is currently pregnant, enter EDC/Due Date: `___/___/_______` (MM/DD/YYYY)
  - Not Documented
  - Gestational Age __

### Select Number of Fetuses (Single Select)

- Single
- Multiple
- Unknown
- Not Documented

### The patient had the following delivery or pregnancy complications

- Alcohol Use
- Chorioamnionitis
- Cocaine/Crack use
- Gestational Diabetes
- Diabetes
- Eclampsia
- GHTN (Pregnancy induced/gestational hypertension)
- Hypertensive Disease
- Magnesium Exposure
- Major Trauma
- Maternal Group B Strep (Positive)
- Maternal Infection
- Methamphetamine/ICE use
- Narcotic given to mother within 4 hours of delivery
- Narcotics addiction and/or on methadone maintenance
- Obstetrical hemorrhage
- Pre-eclampsia
- Prior Cesarean
- Urinary Tract Infection (UTI)
- Other (specify) ___________

### Total # of pregnancies (gravida)

- (Integer Field)
- Unknown/Not Documented

### Total # of deliveries (parity)

- (Integer Field)
- Unknown/Not Documented

### Delivery Mode (Single Select)

- Vaginal/Spontaneous
- Vaginal/Operative
- VBAC
- C-Section/Scheduled
- C-Section/Emergent
- Manual Uterine Displacement
- Left Lateral Tilt
- Unknown/Not Documented

### Left Lateral Uterine Displacement:

- Yes
- Unknown/Not Documented
- Time recognized ___:___
- Select Method(s) (select all that apply)
- Manual Uterine Displacement
- Left Lateral Tilt
- Unknown/Not Documented

### Neonatal Outcome (Single Select)

- Delivered (If delivered, enter Apgar Scores):
  - Enter 1 min. Apgar score (integer field range: 0-10) _________
  - Enter 5 min Apgar score (integer field range: 0-10) _________
  - Unknown/Not Documented
- Undelivered
  - IUFD (intrauterine fetal death)
- Viable
- Unknown/Not Documented

### Was a CPA event completed for the newborn?

- Yes
- No
- Unknown/Not Documented

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END OF FORM