GWTG-R 2017 Measures Webinar: Review of Pediatric, Neonatal and Newly Born

Monday May 22, 2017
11am – 12pm Central

Presenters: Elizabeth Foglia, MD
            Vinay Nadkarni, MD, MS
            Christina Sterzing, RHIA
            Tanya Lane Truitt, RN, MS
For more in-depth discussion of the Adult measure changes, please visit our webinars page at heart.org/quality to view the recorded webinar.

GWTG-R 2017 Measures Webinar: Measure Changes Overview

Tuesday May 16, 2017

Presenters: Steven Bradley, MD
Vinay Nadkarni, MD
Christina Sterzing, RHIA
Tanya Lane Truitt, RN, MS
Vinay Nadkarni MD, MS, FCCM, FERC, FAHA
Chair - Get With The Guidelines-Resuscitation Clinical Work Group
Endowed Chair, Professor, Department of Anesthesia and Critical Care Medicine
Medical Director, CHOP Center for Simulation, Advanced Education, and Innovation
Associate Director, University of Pennsylvania Center for Resuscitation Science

Elizabeth Foglia, MD, MSCE
Assistant Professor of Pediatrics
University of Pennsylvania Perelman School of Medicine

Christina Sterzing, RHIA
Healthcare Quality Informatics Analyst
Quality & Health IT
American Heart Association National Center

Tanya Lane Truitt, RN MS
Senior Manager QSI Programs & Operations: Resuscitation & HF
Get With The Guidelines®
Core Principles of Get With The Guidelines

- Focus is on quality improvement
- Success is in translating guidelines into clinical practice in the hospital setting
- Capitalizing on the ‘teachable moment’ for both patient and family
- Data drives change- moving from simply collecting data to driving process and system improvements by measuring trends in compliance in real time
- Celebrating success of improved compliance within one hospital, in a region, and across the country!
- Best Practice sharing within the network of hospitals
- Evaluation through analytics to highlight key insights as well as consider future efforts
2017 Recognition Awards

The American Heart Association/American Stroke Association recognize this hospital for achieving 85% or higher compliance with all Get With The Guidelines®-Resuscitation Achievement Measures for one calendar quarter to improve quality of patient care and outcomes.

2017 Recognition Awards

The American Heart Association/American Stroke Association recognize this hospital for achieving 85% or higher compliance with all Get With The Guidelines®-Resuscitation Achievement Measures for one calendar year to improve quality of patient care and outcomes.

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Moving Hospitals Toward A Performance Improvement Approach For In-Hospital Cardiac Arrest

Key Metrics Based On Data Of What Matters Varies with Patient Population

Adult
Pediatric
Neonate/Infant
Newly Born
Scope of Measures Updates

Populations groupings were updated to add a category of Newly Born, which is now distinct from Neonate

- **Adult** population is age $\geq 18$ years at the time of the CPA event.
- **Pediatric** population is age $< 18$ years and $\geq 1$ years at the time of the CPA event
- **Neonate/Infant** population is age $< 1$ year old and $\geq 24$ hours at the time of the CPA event (previously $< 2$ years)
- **Newly added: Newly born** population is age $< 24$ hours at the time of the CPA event
Located in the Files section of today’s webinar

Access online at 2017 GWTG- R Recognition Measures Guide
Crosswalk of Measure Changes
## Pediatric Measures Crosswalk

### Pediatric population is age $\geq$1 year and <18 years

<table>
<thead>
<tr>
<th>Current Measure</th>
<th>New Measure</th>
<th>Change Notes</th>
</tr>
</thead>
</table>
| *Device confirmation of correct endotracheal tube placement: Percent of CPA events in pediatric patients with which an endotracheal tube placement which was confirmed to be correct.* | *Confirmation of airway device placement in trachea: Percent of CPA events in pediatric patients who had confirmation of airway device placement in trachea.* | The name and data element to support this measure were updated to more accurately reflect current terminology.  
The measure was also updated to include patients who had a device placed prior to the arrest event, as measuring airway device confirmation is important in this group as well.  
- Updates were made to the data element: “Section 2.3 Interventions in place PRIOR” to capture ET and TT airway devices. If selected, “method of confirmation” question in Section 4.3 is required. |

| Time to first chest compressions $\leq$ 1 min in pediatric patients: Percent of events where time to first chest compressions $\leq$ 1 minute | Time to first chest compressions $\leq$ 1 min in pediatric patients: Percent of events where time to first chest compressions $\leq$ 1 minute | No significant change |
| Time to IV/IO epinephrine $\leq$ 5 minutes for asystole or Pulsless Electrical Activity (PEA) Quality: Percent of events in pediatric patients where time to epinephrine $\leq$ 5 minute of asystole or pulseless electrical activity. | Time to IV/IO epinephrine $\leq$ 5 minutes for asystole or Pulsless Electrical Activity (PEA): Percent of events in pediatric patients where time to epinephrine $\leq$ 5 minute of asystole or pulseless electrical activity. | This measure was promoted from Quality to Achievement and replaced the “Time to first shock <=2 mins in VF/pulseless VT first documented rhythm.” |
| Percent pulseless cardiac events occurring in an ICU setting: Percent of pulseless cardiac events occurring in an ICU setting (Adult ICU, PICU, Pediatric Cardiac ICU) versus a general inpatient area (General inpatient area, Step down/telemetry) | Percent pulseless cardiac events occurring in an ICU setting: Percent of pulseless cardiac events occurring in an ICU setting (Adult ICU, PICU, Pediatric Cardiac ICU) versus a general inpatient area (General inpatient area, Step down/telemetry) | This measure was promoted from Reporting to Achievement. This measure also replaces the “Percent Pulseless Cardiac events monitored or witnessed” measure. Data shows pediatric patients who arrest in ICU settings have better survival rates and outcomes. |
# Neonate/Infant Measures Crosswalk

**Neonate population is age >=24 hours old and <1 year**

<table>
<thead>
<tr>
<th>Current Measure</th>
<th>New Measure</th>
<th>Change Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Device confirmation of correct endotracheal tube placement: Percent of CPA events in neonatal patients with which an endotracheal tube placement was confirmed to be correct.</em></td>
<td><em>Confirmation of airway device placement in trachea: Percent of CPA events in neonatal patients who had confirmation of airway device placement in trachea.</em></td>
<td>The name and data element to support this measure were updated to more accurately reflect current terminology. The measure was also updated to include patients who had a device placed prior to the arrest event, as measuring airway device confirmation is important in this group as well. - Updates were made to the data element: “Section 2.3 Interventions in place PRIOR” to capture ET and TT airway devices. If selected, “method of confirmation” question in Section 4.3 is required.</td>
</tr>
<tr>
<td>Time to first chest compressions ≤1 min in pediatric patients: Percent of events where time to first chest compressions ≤ 1 minute</td>
<td>Time to first chest compressions ≤1 min in pediatric patients: Percent of events where time to first chest compressions ≤ 1 minute</td>
<td>No significant change</td>
</tr>
<tr>
<td>Time to IV/IO epinephrine ≤ 5 minutes for asystole or Pulseless Electrical Activity (PEA)</td>
<td>Time to IV/IO epinephrine ≤ 5 minutes for asystole or Pulseless Electrical Activity (PEA): Percent of events in neonatal patients where time to epinephrine ≤ 5 minute of asystole or pulseless electrical activity.</td>
<td>This measure was promoted from Quality to Achievement and replaced the “Time to first shock &lt;=2 mins in VF/pulseless VT first documented rhythm.”</td>
</tr>
<tr>
<td>Percent pulseless cardiac events occurring in an ICU setting: Percent of pulseless cardiac events occurring in an ICU setting (Adult ICU, PICU, Pediatric Cardiac ICU) versus a general inpatient area (General inpatient area, Step down/telemetry)</td>
<td>Percent pulseless cardiac events occurring in an ICU setting: Percent of pulseless cardiac events occurring in an ICU setting (Adult ICU, PICU, Pediatric Cardiac ICU) versus a general inpatient area (General inpatient area, Step down/telemetry)</td>
<td>This measure was promoted from Reporting to Achievement. This measure also replaces the “Percent Pulseless Cardiac events monitored or witnessed” measure. Data shows patients who arrest in ICU settings have better survival rates and outcomes.</td>
</tr>
</tbody>
</table>
## Newly Born Measures Crosswalk

**Newly Born population is event occurred at delivery (and less than 24 hours old)**

<table>
<thead>
<tr>
<th>Current Measure</th>
<th>New Measure</th>
<th>Change Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable (similar to the “Time to first assisted ventilation &lt;=1 min” Quality measure).</td>
<td>Time to positive pressure ventilation &lt;1 minute from CPA recognition: Percent of CPA events in newly born patients where the positive pressure ventilation was within 1 minute of event recognition.</td>
<td>Similar to time to the “Time to first assisted ventilation &lt;=1 min” quality measure. However, has been updated to include LMA, ET, and TT. Measure also gives credit for positive pressure ventilation in place prior to the start of the event.</td>
</tr>
<tr>
<td>Time to invasive airway ≤ 2 min in newborn/neonates: Percent of newborn/neonatal events with an invasive airway inserted within 2 minutes of event recognition</td>
<td>Advanced airway placed prior to the initiation of chest compressions: Percent of CPA events in newborn patients who had an advanced airway (either laryngeal mask airway (LMA), endotracheal tube (ET) or tracheostomy tube) placed prior to initiation of chest compressions.</td>
<td>The “Time to invasive airway &lt;=2 min in newborn/neonate” is being replaced with “Advanced airway placed prior to the initiation of chest compressions” to reflect the appropriate sequence of action in a newly born event.</td>
</tr>
<tr>
<td>Not applicable</td>
<td>Pulse oximetry in place prior to the initiation of chest compressions: Percent of CPA events in newly born patients where pulse oximetry was in place prior to the initiation of chest compressions.</td>
<td>This is a new measure to evaluate the sequence of events during a newly born resuscitation event. The 2010 NRP guidelines included the use of pulse oximetry for oxygen monitoring; this monitor also provides a continuous and objective heart rate assessment during newborn resuscitation.</td>
</tr>
<tr>
<td><em>Device confirmation of correct endotracheal tube placement: Percent of CPA events in newly born patients with which an endotracheal tube placement was confirmed to be correct.</em></td>
<td><em>Confirmation of airway device placement in trachea: Percent of CPA events in newly born patients who had confirmation of airway device placement in trachea.</em></td>
<td>The name and data element to support this measure were updated to more accurately reflect current terminology. The measure was also updated to include patients who had a device placed prior to the arrest event, as measuring airway device confirmation is important in this group as well. Updates were made to the data element: “Section 2.3 Interventions in place PRIOR” to capture ET and TT airway devices. If selected, “method of confirmation” question in Section 4.3 is required.</td>
</tr>
</tbody>
</table>
# Adult Measures Crosswalk

**Adult population is age \( \geq 18 \) years**

<table>
<thead>
<tr>
<th>Current Measure</th>
<th>New Measure</th>
<th>Change Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to first shock ( \leq 2 ) min for VF/pulseless VT first documented rhythm: Percent of events in adult patients with VF/pulseless VT first documented rhythm in whom time to first shock ( \leq 2 ) minutes of event recognition.</td>
<td>Time to first shock ( \leq 2 ) min for VF/pulseless VT first documented rhythm: Percent of events in adult patients with VF/pulseless VT first documented rhythm in whom time to first shock ( \leq 2 ) minutes of event recognition.</td>
<td>No significant changes</td>
</tr>
<tr>
<td>Time to IV/IO epinephrine ( \leq 5 ) minutes for asystole or Pulseless Electrical Activity (PEA) Quality: Percent of events in adult patients where time to epinephrine ( \leq 5 ) minute of asystole or pulseless electrical activity.</td>
<td>Time to IV/IO epinephrine ( \leq 5 ) minutes for asystole or Pulseless Electrical Activity (PEA): Percent of events in adult patients where time to epinephrine ( \leq 5 ) minute of asystole or pulseless electrical activity.</td>
<td>This measure was promoted from Quality to Achievement and replaced the “Time to Chest Compressions ( \leq 1 ) min” Achievement measure.</td>
</tr>
<tr>
<td>Percent Pulseless Cardiac events monitored or witnessed: Percent of pulseless cardiac patient events were monitored or witnessed</td>
<td>Percent Pulseless Cardiac events monitored or witnessed: Percent of pulseless cardiac patient events were monitored or witnessed</td>
<td>No significant changes</td>
</tr>
</tbody>
</table>

*Device confirmation of correct endotracheal tube placement: Percent of CPA events in adult patients with which an endotracheal tube placement which was confirmed to be correct.*

*Confirmation of airway device placement in trachea: Percent of CPA events in adult patients who had confirmation of airway device placement in trachea.*

*This new measure and the old measure will be offered in tandem for 2017. With automated awards, AHA will use whichever value is higher. However, sites must be fully transitioned to the new measure by 2018.*

The name and data element to support this measure were updated to more accurately reflect current terminology.

The measure was also updated to include patients who had a device placed prior to the arrest event, as measuring airway device confirmation is important in this group as well.

- Updates were made to the data element: “Section 2.3 Interventions in place PRIOR” to capture ET and TT airway devices. If selected, “method of confirmation” question in Section 4.3 is required.
POPULATIONS:
PEDIATRIC, NEONATE/INFANT
Measure: Time to first chest compressions ≤1 min in pediatric patients: Percent of events where time to first chest compressions ≤ 1 minute

NO CHANGE FOR 2017
Measure: **Time to first chest compressions ≤1 min in pediatric patients:**

Percent of events where time to first chest compressions ≤ 1 minute

**Guideline Recommendation**

The Basic Life Support (BLS) healthcare provider pediatric cardiac arrest algorithm for single and for 2 or more rescuers recommendation is to begin cycles of compressions and breaths if no pulse is felt within 10 seconds in an unresponsive child.¹
Rationale
Short duration between onset of cardiac arrest and the start of chest compressions has been shown to be predictive of survival and neurologic outcomes in a variety of settings. It is well documented that early cardiopulmonary resuscitation (CPR), including by-stander CPR, is associated with improved survival and neurologic outcomes in patients who suffer out-of-hospital cardiac arrest.\textsuperscript{15, 16} For every minute without adequate chest compressions, chances of survival after out-of-hospital cardiac arrest decrease by 5\% to 10\%.\textsuperscript{15, 17}
LITERATURE CITED


Measure: Time to IV/IO epinephrine ≤ 5 minutes for asystole or Pulseless Electrical Activity (PEA): Percent of events in pediatric patients where time to epinephrine ≤ 5 minute of asystole or pulseless electrical activity.

CHANGES for 2017

- Measure was promoted from Quality to Achievement and replaced the “Time to first shock <=2 mins in VF/pulseless VT first documented rhythm.”
Measure: Time to IV/IO epinephrine ≤ 5 minutes for asystole or Pulseless Electrical Activity (PEA): Percent of events in pediatric patients where time to epinephrine ≤ 5 minute of asystole or pulseless electrical activity.

Guideline Recommendation:

The 2010 American Heart Association Cardiopulmonary Resuscitation guidelines recommend administering epinephrine 0.01mg/kg IV/IO (1:10,000) or 0.1mg/kg ETT (1:1000) every 3-5 minutes during pediatric cardiac arrest as initial pharmacological treatment in patients with asystole or pulseless electrical activity (PEA)\(^1\).

<<Class I B >>
Rationale:
Epinephrine is a potent vasoconstrictor, inotrope and coronary vasodilator, and therefore may improve coronary and cerebral perfusion pressure during cardiopulmonary resuscitation.\textsuperscript{22-23} It does, however, have potential to increase myocardial oxygen demand and worsen myocardial function.\textsuperscript{24} Studies examining high-dose versus low-dose epinephrine in pediatrics show a lack of benefit for the higher dosage range in both in-hospital and out of hospital cardiac arrests.\textsuperscript{25-28} One prospective study of 68 children randomized to receive either standard or high-dose epinephrine demonstrated no statistically significant difference in Return of Spontaneous Circulation (ROSC), 24-hr survival, and overall survival to discharge. However, no child who received high-dose epinephrine survived to discharge, and subgroup analysis of those arrests precipitated by anoxia showed a statistically significant decrease in survival to discharge among the high-dose (0/12 vs 7/18, p=0.02)\textsuperscript{5} These findings lend a degree of support to standard dosing guidelines.
LITERATURE CITED


Measure: Percent pulseless cardiac events occurring in an ICU setting: Percent of pulseless cardiac events occurring in an ICU setting (Adult ICU, PICU Pediatric Cardiac ICU) versus a general inpatient area (General inpatient area, Step down/telemetry)

CHANGES for 2017

- Measure was promoted from Reporting to Achievement.
- Measure replaces the “Percent Pulseless Cardiac events monitored or witnessed” measure.
Measure: Percent pulseless cardiac events occurring in an ICU setting:
Percent of pulseless cardiac events occurring in an ICU setting (Adult ICU, PICU Pediatric Cardiac ICU) versus a general inpatient area (General inpatient area, Step down/telemetry)

Guideline Recommendation

Cardiac arrest should occur in an ICU setting versus ward setting as rates of ROSC are increased in these patients (Class IIa, LOE b).
Rationale
Implementation of MET teams for deteriorating patients has been shown to decrease incidence of cardiac and respiratory arrests as well as hospital mortality.\(^{31-34}\) Guidelines recommend that implementation of a pediatric MET/RRT may be beneficial in facilities where children with high risk illnesses are on the general ward with the goal of transferring children to an ICU setting prior to decompensation and cardiac arrest (Class IIa, LOE b). Furthermore, cardiac arrests that are witnessed and/or monitored are associated with improved outcomes due to rapid recognition, implementation of resuscitative efforts and care.\(^{35}\)


POPULATION: NEWLY BORN
Measure: Confirmation of airway device placement in \textit{trachea}: Percent of CPA events in pediatric patients who had confirmation of airway device placement in trachea.

**CHANGES for 2017**

- Name and data element to support this measure were updated to more accurately reflect current terminology.
- Measure was updated to include patients who had a device placed \textit{prior to the arrest event}.
- Updates were made to the data element: “Section 2.3 Interventions in place PRIOR” to capture ET and TT airway devices.
Measure: Confirmation of airway device placement in trachea: Percent of CPA events in pediatric patients who had confirmation of airway device placement in trachea.

Guideline Recommendation
Continuous waveform capnography is recommended in addition to clinical assessment as the most reliable method of confirming and monitoring correct placement of an endotracheal tube (Class I, LOE A). Given the simplicity of colorimetric and nonwaveform exhaled CO2 detectors and esophageal detector devices (EDD), these methods can be used in addition to clinical assessment as the initial method for confirming correct tube placement in a patient in cardiac arrest when waveform capnography is not available (Class IIa, LOE B).
Rationale

Guidelines recommend that providers always use both clinical assessment and devices to confirm endotracheal tube location immediately after placement and throughout the resuscitation. Two prior studies demonstrated waveform capnography achieved 100% sensitivity and specificity for the identification of correct endotracheal tube placement in victims of cardiac arrest.\textsuperscript{1-2} However, 3 studies demonstrated a 64% sensitivity and 100% specificity when waveform capnography was used for victims with prolonged resuscitation and transport times.\textsuperscript{3-5}


Measure: **Time to positive pressure ventilation <1 minute from CPA recognition:** Percent of newly born CPA events in newly born patients <24 hours old where the positive pressure ventilation was within 1 minute of event recognition.

**CHANGES for 2017**

- Similar to time to the “Time to first assisted ventilation <=1 min” quality measure
- Updated to include LMA, ET, and TT
- Measure gives credit for positive pressure ventilation in place prior to the start of the event
Measure: **Time to positive pressure ventilation <1 minute from CPA recognition**: Percent of newly born CPA events in newly born patients <24 hours old where the positive pressure ventilation was within 1 minute of event recognition.

**Guideline Recommendation:**
The AHA/AAP Neonatal Resuscitation Program (NRP) recommends positive pressure ventilation for infants who remain apneic/gasping or have heart rate <100 beats per minute after 30 seconds of providing warmth, drying, and stimulating. (1). Assisted ventilation should be initiated at a rate of 40 to 60 breaths per minute to promptly achieve or maintain a heart rate of 100 per minute (Class IIb, LOE C).
Rationale:
Most infants successfully transition to the extrauterine environment independently. When resuscitative interventions are indicated, the following sequence of action is recommended (1):

A. Initial steps in stabilization (provide warmth, clear airway if necessary, dry, stimulate)
B. Positive pressure ventilation
C. Chest compressions
D. Administration of epinephrine and/ or volume expansion
LITERATURE CITED


Measure: **Advanced airway placed prior to the initiation of chest compressions**: Percent of CPA events in newly born patients <24 hours old who had an advanced airway (either laryngeal mask airway (LMA), endotracheal tube (ET) or tracheostomy tube) placed prior to initiation of chest compressions.

**CHANGES for 2017**

- The “Time to invasive airway <=2 min in newborn/neonate” is being replaced with “Advanced airway placed prior to the initiation of chest compressions” to reflect the appropriate sequence of action in a newly born event.
Measure: **Advanced airway placed prior to the initiation of chest compressions:** Percent of CPA events in newly born patients <24 hours old who had an advanced airway (either laryngeal mask airway (LMA), endotracheal tube (ET) or tracheostomy tube) placed prior to initiation of chest compressions.

Guideline Recommendation:

The 2015 AHA/AAP Neonatal Resuscitation Algorithm (Figure 1) recommends placement of an advanced airway, either laryngeal mask airway (LMA) or endotracheal tube, prior to the start of chest compression.¹
Rationale:
Approximately 10% of all newborns require some resuscitative interventions after birth, but less than 0.2% require chest compressions or vasoactive medications. Asphyxia is the predominant cause of cardiovascular collapse in the newborn, and effective resuscitation requires significant focus on ventilation. When resuscitative interventions are indicated, the following sequence of action is recommended:

A. Initial steps in stabilization (provide warmth, clear airway if necessary, dry, stimulate)
B. Positive pressure ventilation
C. Chest compressions
D. Administration of epinephrine and/or volume expansion


Measure: **Pulse oximetry in place prior to the initiation of chest compressions: Percent of CPA events in newly born patients where pulse oximetry was in place prior to the initiation of chest compressions**

**CHANGES for 2017**

- This is a new measure to evaluate the sequence of events during a newly born resuscitation event.
- The 2010 NRP guidelines included the use of pulse oximetry for oxygen monitoring;
- This monitor also provides a continuous and objective heart rate assessment during newborn resuscitation.
Measure: **Pulse oximetry in place prior to the initiation of chest compressions**: Percent of CPA events in newly born patients where pulse oximetry was in place prior to the initiation of chest compressions.

**Guideline Recommendation:**
Objective monitoring of heart rate, via either pulse oximetry or ECG should be in place prior to initiation of chest compressions.
Rationale:
Approximately 10% of all newborns require some resuscitative interventions after birth, but less than 0.2% require chest compressions or vasoactive medications. Asphyxia is the predominant cause of cardiovascular collapse in the newborn, and effective resuscitation requires significant focus on ventilation. When resuscitative interventions are indicated, the following sequence of action is recommended:

A. Initial steps in stabilization (provide warmth, clear airway if necessary, dry, stimulate)
B. Positive pressure ventilation
C. Chest compressions
D. Administration of epinephrine and/ or volume expansion

POPULATION: NEWLY BORN


Patient Management Tool (PMT) and Recognition Program Updates

Christina Sterzing, RHIA
Healthcare Quality Informatics Analyst
Quality & Health IT
American Heart Association
National Center
Recognition Program and PMT Updates

- Locate where to find the recognition measures and new logic and rationale statements for 2017
- Understand the CRF changes to support the measure changes.
- Understand recognition program options for the “Confirmation of Airway Device…” measure
- Demonstrate the impact to data entry to support the “Confirmation of Airway Device…” measure
- Communicate non-recognition measure changes
### Recognition Measures Location

Measures are grouped by population.

<table>
<thead>
<tr>
<th>REPORT 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognition Measures:</strong></td>
</tr>
<tr>
<td>CPA &amp; PCAC Measures:</td>
</tr>
<tr>
<td>ARC Measures:</td>
</tr>
<tr>
<td>MET Measures:</td>
</tr>
<tr>
<td>Cross Form and Admission &amp; Discharge Measures:</td>
</tr>
<tr>
<td>Historic Measures:</td>
</tr>
<tr>
<td>Format:</td>
</tr>
</tbody>
</table>

**Select Measure**

**Adult**
- **GW/TGRecogGroup (Adult)**
  - CPA: Time to first shock <= 2 min for VF/pulseless VT first documented rhythm
  - CPA: Time to IV/IO epinephrine <= 5 minutes for asystole or Pulseless Electrical Activity (PEA)
  - CPA: Percent Pulseless Cardiac events monitored or witnessed
  - CPA: Confirmation of airway device placement in trachea

**Pediatric**
- **GW/TGRecogGroup (Pediatric)**
  - CPA: Time to first chest compressions <= 1 min
  - CPA: Time to IV/IO Epinephrine <= 5 min for asystole or pulseless electrical activity
  - CPA: Percent pulseless cardiac events occurring in an ICU setting versus a ward setting
  - CPA: Percent of cardiac pulseless events in specific event location

**Neonate/Infant**
- **GW/TGRecogGroup (Neonate/Infant)**
  - CPA: Time to first chest compressions <= 1 min
  - CPA: Time to IV/IO Epinephrine <= 5 min for asystole or pulseless electrical activity
  - CPA: Percent pulseless cardiac events occurring in an ICU setting versus a ward setting
  - CPA: Percent of cardiac pulseless events in specific event location

**Newly Born**
- **GW/TGRecogGroup (Newly Born)**
  - CPA: Time to Positive Pressure Ventilation < 1 Min from CPA Recognition
  - CPA: Advanced airway placed prior to the initiation of chest compressions
  - CPA: Pulse oximetry in place prior to the initiation of chest compressions
  - CPA: Confirmation of airway device placement in trachea
Recognition Measures Location (cont.)

New Logic and Rationale for each recognition measure
CPA and CPA Newly Born CRF Updates

CRF updates to support the “Confirmation of Airway Device Placement in Trachea” Recognition Measure:

- The measure was also updated to include patients who had a device placed prior to the arrest event, as measuring airway device confirmation is important in this group as well.
- Updates were made to the data element: “Section 2.3 Interventions in place PRIOR” to capture Endotracheal Tube and Tracheostomy Tube airway devices. If selected, “method of confirmation” question in Section 4.3 is required.
Section 2.3 Invasive Assisted Ventilation Requires a Confirmation of Device

If Endotracheal Tube or Tracheostomy Tube is checked off in section 2.3

- Invasive assisted ventilation, via an:
  - Endotracheal Tube (ET)
  - Tracheostomy Tube
Go to section 4.3 and select the method of confirmation used

<table>
<thead>
<tr>
<th>Method(s) of confirmation used to ensure Endotracheal Tube (ET) or Tracheostomy Tube placement in trachea (check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waveform capnography (waveform ETCO2)</td>
</tr>
<tr>
<td>Capnometry (numeric ETCO2)</td>
</tr>
<tr>
<td>Exhaled CO2 colorimetric monitor (ETCO2 by color change)</td>
</tr>
<tr>
<td>Esophageal detection devices</td>
</tr>
<tr>
<td>Revisualization with direct laryngoscopy</td>
</tr>
<tr>
<td>None of the above</td>
</tr>
<tr>
<td>Not Documented</td>
</tr>
</tbody>
</table>
Additional Information for the “Correct Airway Device Placement” Measure

- Each population has a “Confirmation of airway device placement in trachea” that replaced the “Device confirmation of correct endotracheal placement” measure.
- The change to this measure includes adding mechanical method of confirmation for all airway devices in place, placed or replaced during the event.
- The 2016 and prior the measure only required the confirmation of placement for airway devices placed or replaced during the event.
- To assist in the transition, please check nurse, respiratory therapist and physician notes for documentation of a method of confirmation.
Confirmation of airway device placement in trachea
Measure: Recognition Impact

• 2017 Recognition is a transition year.
  – With automated awards, AHA will use whichever value is higher.
  – By 2018, sites will need to be fully transitioned to the new measure. The transition period is for the airway device confirmation measures only.

• Hospitals will be able to qualify for recognition in all patient populations by using the old or new airway device confirmation measure in 2017.

• Reminder to review the Recognition Guide which is provided as a handout on this webinar.
Checking the 2016 Measure in Historic

**GWTGRecogGroup - Historic**
- CPA: Percent pulseless cardiac events monitored or witnessed - Historic
- CPA: Time to first chest compressions <= 1 min in adult and pediatric patients, and newborn/neonates >= 10 min old - Historic
- CPA: Time to first chest compressions <= 2 min in newborn/neonate < 10 min old - Historic
- CPA: Device confirmation of correct endotracheal tube placement - Historic
- CPA: Time to invasive airway <= 2 min in newborn/neonates - Historic

FILTER OPTIONS
- Include Only Complete Records
- Compare selections (ctrl-click to select multiple)
Confirmation of Airway Placement: Impact to data entry

- This change impacts to the CRF impacts all records with a core date on or after January 1, 2017.
  - Note: You will still need to enter a method of confirmation if an Endotracheal Tube or Tracheostomy Tube was placed or replaced during the event (this was in place prior to 2017).
- Next slides reviews how to ensure proper data entry
Review patient records for accurate data entry

The easiest way to review your patient records from Jan. 1, 2017 to present is to run the “Confirmation of airway device…” Recognition Measure report in Configurable Measures reports.

- Go to Configurable Measures Reports
- Dates: January 1, 2017 to present
- Report Format: Select Patient Records then use “Patient Records”
Date range begins with Jan. 1, 2017

Select “CPA: Confirmation of airway device…

Format: Patient Records
Review patient records for accurate data entry (cont.)

- Once the report generates in a new window, click on “Show Filters”.
- Under “CPA Endotracheal Tube”, select the “Checked” filter.
- Under “method of confirmation…” , select the blank filter. Don’t leave the filter blank, so you will need to select the filter that is blank.
Click on show filters

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>In Numerator?</th>
<th>Date/Time need for chest compressions FIRST recognized</th>
<th>Age at Event</th>
<th>Age units</th>
<th>Date of Birth</th>
<th>CPA Endotracheal Tube (ET)</th>
<th>CPA Tracheostomy Tube</th>
<th>ET/Tracheostomy Tube inserted/re-inserted</th>
<th>Method(s) of Confirmation, ET or Tracheostomy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no filter</td>
<td>no filter</td>
<td>no filter</td>
<td></td>
<td></td>
<td>Checked</td>
<td>no filter</td>
<td>no filter</td>
<td>blank</td>
</tr>
</tbody>
</table>

CPA Endotracheal Tube = checked

Method of confirmation = blank
Review patient records for accurate data entry (cont.)

• This is the list of patients that will require you to go back and enter a method of confirmation. You can export this list so you have the patient IDs to look up. Or you can click on the patient IDs in the list to edit the records.

• Go through steps 1-7 again for tracheostomy tube. For step 5, use “CPA Tracheostomy Tube” instead.
List of patients that need a method of confirmation entered

Click on patient ID to enter method of confirmation

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Included in Results?</th>
<th>In Numerator?</th>
<th>Date/Time need for chest compressions recognized</th>
<th>Age at Event</th>
<th>Age units</th>
<th>Date of Birth</th>
<th>CPA Endotracheal Tube (ET)</th>
<th>CPA Tracheostomy Tube</th>
<th>ET/Tracheostomy Tube inserted/re-inserted</th>
<th>Method(s) of Confirmation, ET or Tracheostomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>stafftrainingmay9</td>
<td>Included</td>
<td>No</td>
<td>05/08/2017</td>
<td>67</td>
<td>Years</td>
<td>01/01/1950</td>
<td>Checked</td>
<td>no filter</td>
<td>no filter</td>
<td></td>
</tr>
</tbody>
</table>

Optional: export to excel

Print | Export to Excel | Export to .csv
Non-Recognition Measures Changes

- Due to population changes, the Quality, Reporting, and Descriptive Measures will need to be updated.
- Changes are coming later this year.
QUESTIONS
Contact Us to Learn More

Tanya Lane Truitt, RN MS
Senior Manager QSI Programs & Operations: Resuscitation & HF
Get With The Guidelines®
tanya.truitt@heart.org

Liz Olson, CVA
Program Manager, Get With The Guidelines – Resuscitation
liz.olson@heart.org
Thank you for your active participation and contributions to GWTG-Resuscitation!
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