Procedure Guidelines

<table>
<thead>
<tr>
<th>Protocol Title:</th>
<th>Impedance Threshold Device/ITD (ResQPOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Adoption Date:</td>
<td>08/2010</td>
</tr>
<tr>
<td>Past Protocol Updates</td>
<td>NOT APPLICABLE PROTOCOL NEW IN 2010</td>
</tr>
<tr>
<td>Date of Most Recent Update:</td>
<td>December 26, 2013</td>
</tr>
<tr>
<td>Medical Director</td>
<td>Chad Torstenson M.D.</td>
</tr>
</tbody>
</table>

Introduction:
ResQPOD® is an impedance threshold device (ITD) that enhances the vacuum formed in the chest during the chest recoil phase of CPR. Studies have shown that this process draws more blood back to the heart (increases preload), and increases cardiac output, blood pressure, perfusion to vital organs and survival rates.

Indications:
To be used on all patients 20 pounds or 10 kg in cardiac arrest.

Contraindication:
- Where cardiopulmonary resuscitation (CPR) is not indicated
- Patient WITH a pulse or spontaneous breathing
  - If CPR is discontinued remove ResQPOD immediately from ventilation circuit.
- Patients under <20 pounds or 10 kg
- Patients with a flail chest

Procedure:
Used with either basic or advanced life support during cardiac arrest, with a bag-valve mask attached to a face mask, an endotracheal (ET) tube, or other airway devices (e.g. - King-LTD®).
1. Select airway adjunct (tube or mask).
2. Attach bag-valve to air intake port on ResQPOD.
4. Begin CPR
   - Allow for complete chest release/recoil after each compression.
   - Follow recommended ventilation rates.
   - DO NOT hyperventilate.
   - Use 30:2 compressions:ventilation ratio (15:2 for infants and children with 2 rescuers) for basic life support when using a facemask.
   - Ventilate intubated patients 8-10 breaths/minute with each breath lasting 1.5 seconds (maximum) to optimize CPR and ResQPOD efficacy.
     - Excessive ventilation rates will reduce the effectiveness of the ResQPOD.
*Clean or suction vomit and secretions from the ResQPOD by removing it from the airway adjunct and shaking or blowing debris out, using a ventilation source.

**NOTE:** After pulse and/or spontaneous respirations have been restored, immediately remove ResQPOD from ventilation circuit and help patient breath as needed.