Guidelines for Performing Electrocardiograms

Purpose
To standardize the role and training of Respiratory Care Services staff performing EKG’s.

Scope
Respiratory Care Services will assist the Heart Station department by performing EKG’s. (This will reduce response time and improve the timelines of patient care.)

Accountability/Training
- Licensed Respiratory Care Practitioners
- Trained by Heart Station Personnel and completed check-offs with EKG technician.

Equipment and Supplies
- EKG machine
- Adhesive electrodes
- Epic order/printed request for EKG

Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1    | Prepare the patient (see Section II of Operator's Guide). **Remember:**  
  - Verify patient using two identifiers.  
  - Explain procedure.  
  - Ask patient to relax, be still and quiet.  
  - Female patients appreciate privacy. |

**Note**  
Unlike limb electrodes, which can be placed anywhere on the arms or legs, the chest electrodes should be placed no more than a quarter of an inch (6mm) away from the designated location.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 2    | Position electrodes:  
  V1 - Fourth intercostal space at right Border of Sternum.  
  V2 - Fourth intercostal space at left Border of Sternum.  
  V3 - Midway between positions 2 and 4.  
  V4 - At the mid-clavicular line and the inter-space in which the apex is located (the 5th intercostal space is used if the apex is not palpable).  
  V5 - At the anterior axillary line on the same horizontal level as V4.  
  V6 - At the mid-axillary line on the same horizontal level as V4 and V5. |
## Procedure Continued

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
</table>
| 3    | Type information:  
|      | • Patient information per prompts.  
|      | • Unit history number  
|      | • Tech ID |
| 4    | Initiate EKG (see Section III of Operator's Guide).  
| Note:| • When an EKG is performed, the time printed on the EKG should be transposed onto the request.  
|      | • One copy should be made of all EKG's and kept with the request.  
|      | • Respiratory Care Services staff will perform STAT EKG’s from 1700 – 0500 and on weekends for UTMB and the Shriners Hospital.  
|      | • The Heart Station will pick up the EKG's and requests for the previous 24-hour period daily. |

### Infection Control
Follow procedures outlined in Healthcare Epidemiology Policies and Procedures #2.24; Respiratory Care Services.  

### References
- [The Journal of Interesting EKGs](http://www.ekgreading.com/)