**PARAMETERS for CLINICAL ALARM SETTINGS:**

1. The Critical / Lethal Dysrhthmia Alarms will always be ON for all patients. If the monitor is capable, the alarm sound for these rhythms should be very loud, distinct (sound different than other alarms):
	1. Asystole
	2. Ventricular Fibrillation
	3. Ventricular Tachycardia
	4. Low Heart Rate <40
	5. High Heart Rate >140
	6. PVCs: Couplets, R on T, Multifocal
	7. Oxygen Saturations less than 90%
	8. Systolic Blood pressure <90 or > 190
	9. ETCO2 < 35
	10. ST segment deviation: >1 mm from baseline ECG for Acute Coronary Syndrome (ACS) / suspected ACS patients and 2mm from baseline ECG for all other patients.
2. Adjustable Alarms set based on patient condition:
	1. ACS / Suspected ACS patient – set ST segment monitoring to 1 mm above/below patient’s baseline ECG. To select the lead to monitor, use this criteria:
		1. Monitor Lead III:
			1. Inferior Wall STEMI / Ischemia
			2. Post-Intervention (PCI/Stent) to Right Coronary Artery
		2. Monitor Lead V3:
			1. Anterior Wall STEMI / Ischemia
			2. Post-Intervention (PCI/Stent) to Left Anterior Descending Artery
		3. Monitor Lead V5:
			1. Lateral Wall STEMI / Ischemia
			2. Post-Intervention (PCI/Stent) to Circumflex Artery
		4. If patient does not fit any of the above criteria, select lead with greatest degree of ST deviation on the patient’s 12 Lead ECG - use this lead for continuous monitoring.
	2. QT Intervals: most monitoring systems do NOT have the capability of monitoring QT Intervals, therefore the Primary RN should be responsible at least once per shift to measure and note the patient’s QT Interval, as measured from the beginning of the QRS to the end of the T wave. While normal limits fluctuate with patient heart rate, the following values are considered abnormal:
		1. QT Interval > 460ms in females
		2. QT Interval > 450ms in males
		3. U wave >1mm amplitude, U wave merged with T wave, U wave 100% or more size of T wave.
	3. To determine the best lead to use for continuous QT Interval monitoring, a baseline 12 Lead ECG should be obtained. The lead of the 12 Lead showing the greatest QT duration should be the lead used for continuous ECG monitoring. Typically leads V2 and V3 show the most predominant U waves. Keep in mind that U waves, when large enough, should be measured as part of the QT Interval when the U wave is:
		1. Is equal or greater amplitude (height) than the T wave
		2. Is equal to or greater than 1mm in size
		3. Is merged with the T wave (T wave does not return to isoelectric line before U wave begins)
	4. When QT Interval found to be prolonged, as per the above criteria, the nurse should notify the physician. The patient should be monitored carefully for development of Torsades de Pointes. The patient’s medications should be reviewed for any meds that prolong the QT Interval, and Electrolytes should be assessed. Abnormalities should be reported to the physician.
3. All patients who are required to be on continuous ECG monitoring should be transported with an ECG monitor that is capable of defibrillation / cardioversion unless otherwise noted in the physician orders.

Reference Sources:

Circulation 2004; American Heart Association: B. Drew et al: Practice Standards for ECG Monitoring in Hospital Settings