Implementation and Early Evaluation of a Quantitative Electroencephalography Program for Seizure Detection in the PICU

101/1510 (6.7%) children underwent quantitative EEG monitoring

12% of cohort had electrographic seizures diagnosed by neurophysiologists

100% of seizures detected by PICU clinicians (100% sensitivity)

Results:

- Median time to seizure detection: 25 mins
- False positive diagnosis: 11 patients

Early evaluation of a quantitative EEG program to detect electrographic seizure by PICU clinicians suggested good sensitivity for electrographic seizure detection. However, the high false-positive rate is a challenge.