Emergency Professionals:

About sudden cardiac arrest and syncope or seizures in the young

- In one study, "on average, children with sudden cardiac arrest had three syncope episodes or unexplained seizures before SCA. Half did not receive an ECG", From the Annual Meeting of the North American Primary Care Research Group 12/2010
- Most SCD in the young is due to genetic conditions including Long QT Syndrome (LQTS), Hypertrophic Cardiomyopathy, Brugada Syndrome, etc.
- These conditions are frequently misdiagnosed as vasovagal syncope, asthma or epilepsy.

Remember: Syncope is not benign. But is a diagnosis of exclusion. Everyone deserves at least one ECG.

Evaluating syncope in a young person; perform an ECG if:

- Syncope or seizure during or immediately after exercise, emotional excitement or sudden auditory arousal ("alarm clock").
- Syncope associated with palpitations or irregularities of the heart.
- Family history of recurrent syncope or sudden death (including drowning).

Special Alert for LQTS: Epinephrine can trigger torsades in LQTS. If the patient has LQTS and keeps going back into torsades or polymorphic VT or VF, then you should avoid epinephrine, if possible. Try treatments like magnesium and pacing for LQTS arrhythmias.

Make a Referral: to an electrophysiologist—or let them know they should have their heart checked if their EEG is negative.