Diagnostic yield and optimal duration of continuous-loop event monitoring for the diagnosis of palpitations. A cost-effectiveness analysis. 
Zimetbaum PJ, Kim KY, Josephson ME, Goldberger AL, Cohen DJ

Abstract
BACKGROUND: Continuous-loop event recorders are widely used for the evaluation of palpitations, but the optimal duration of monitoring is unknown. OBJECTIVE: To determine the yield, timing, and incremental cost-effectiveness of each week of event monitoring for palpitations. DESIGN: Prospective cohort study. PATIENTS: 105 consecutive outpatients referred for the placement of a continuous-loop event recorder for the evaluation of palpitations. MEASUREMENTS: Diagnostic yield, incremental cost, and cost-effectiveness for each week of monitoring. RESULTS: The diagnostic yield of continuous-loop event recorders was 1.04 diagnoses per patient in week 1, 0.15 diagnoses per patient in week 2, and 0.01 diagnoses per patient in week 3 and beyond. Over time, the cost-effectiveness ratio increased from $98 per new diagnosis in week 1 to $576 per new diagnosis in week 2 and $5832 per new diagnosis in week 3. CONCLUSIONS: In patients referred for evaluation of palpitations, the diagnostic yield of continuous-loop event recording decreases rapidly after 2 weeks of monitoring. A 2-week monitoring period is reasonably cost-effective for most patients and should be the standard period for continuous-loop event recording for the evaluation of palpitations.