

## Improved technology highlights the shortcomings of conventional tools.

### *Disadvantages of conventional Holter monitoring, event recorders, and wired telemetry*

- Arrhythmic events may be missed.
- 12 electrode leads interfere with patient's activities of daily living.
- Holter monitoring duration is only 24 to 48 hours.
- Event recorders offer only intermittent tracking, because patients must activate device at time of symptom onset.
- Data evaluation is retrospective, not real time.

### *What about patch monitoring?*

- Data evaluation is only retrospective.
- High consumer cost due to non-reusability.
- Report is unavailable until days after device submission.



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## TeleSense Technical Specifications

### Monitor Physical Characteristics

Dimensions: 3.7" x 2.3" x 0.7" (9.4 x 5.8 x 1.8 cm)

Weight: 4 oz (113 g)

### Technical Characteristics

Transmission mode: 802.11 Wifi

RF transmission range: 328' (100 m) open space

Recording period: 3 channels, up to 30 days

### Electrical Characteristics

Number of electrodes: 3

Input impedance: > 20 Mohm

Frequency response: > 0.05 - 100 Hz

Pacer ID: Yes, 2 mV to 700 mV, 100 usec to 2 msec

Dynamic range:  $\pm 5$  mV

DC offset:  $\pm 400$  mV

CMMR: 80 dB @ 60 Hz minimum

### Environmental Characteristics

Operating temperature: 50°F to 104°F (10°C to 40°C)

Transport and storage temperature: -4°F to 149°F  
(-20°C to 65°C)

Relative humidity: 25% to 95%, nc

Water resistance: IP22

### Recording Resolution

Samples per second: 128

Sample resolution: 8, 10, 12 bits

### Battery

Battery type: Rechargeable 3.7 V lithium ion

Battery life: Up to 50 hours before recharge

Reverse battery protection: Yes

Low-battery signal: Yes

On/off indicator: Yes

CMMR=common-mode rejection ratio

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# TeleSense™ Mobile Cardiac Telemetry



## *Improve patient care and increase your reimbursement with simple, continuous heart monitoring.*

- Better rhythm detection<sup>1</sup>
- 24/7 expert attention to incoming data
- Patient-friendly device
- Significantly reduced capital outlay<sup>a</sup>

<sup>a</sup> Providers bill both professional and technical components.  
Details available on request.





## TeleSense empowers patients and providers and can help reduce hospitalizations.

Cardiac arrhythmias can lead to significant morbidity and mortality (eg, stroke, cardiomyopathy, heart failure).<sup>2</sup> *Timely diagnosis and treatment are essential.*

Atrial fibrillation (AFib), the most common type of arrhythmia, can be asymptomatic. An estimated **2.7 to 6.1 million people in the US have AFib**, and this number is expected to rise.<sup>3</sup> AFib:

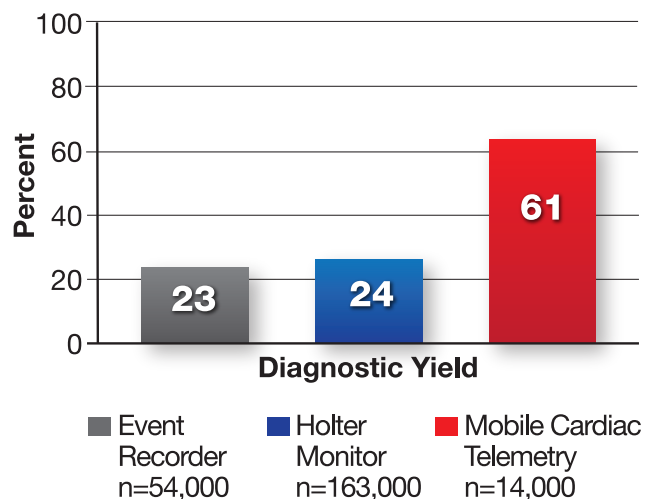
- Is vastly under-diagnosed.<sup>2</sup>
- Is often first diagnosed in the setting of acute ischemic stroke.<sup>2</sup>
- Increases stroke risk by four to five times<sup>3</sup>
- Causes >750,000 hospitalizations annually<sup>3</sup>
- Contributes to an estimated 130,000 deaths each year.<sup>3</sup>

## Diagnostic yield is significantly higher with mobile cardiac telemetry (MCT).<sup>1</sup>

In a retrospective analysis spanning 57 months of claims data from January 2007 to September 2011 (N=200,000 patients), the diagnostic yield of patients monitored with MCT was 61%—significantly higher than for the Event recorder (23%) or the Holter monitor (24%).<sup>1</sup>

Use of MCT versus Holter and Event devices also produced significant hospital cost savings.<sup>1</sup>

### MCT Diagnostic Yield Significantly Higher<sup>1</sup>



#### References

1. Tsang J-P, Mohan S. Benefits of monitoring patients with mobile cardiac telemetry (MCT) compared with the Event or Holter monitors. *Med Devices (Auckl)* 2014;7:1-5.
2. Fung E, Jarvelin M-R, Doshi RN, et al. Electrocardiographic patch devices and contemporary wireless cardiac monitoring. *Front Physiol* 2015;6(149).
3. Centers for Disease Control. Atrial Fibrillation Fact Sheet. 2015. Accessed November 7, 2016 at [http://www.cdc.gov/dhbsp/data\\_statistics/fact\\_sheets/fs\\_atrial\\_fibrillation.htm](http://www.cdc.gov/dhbsp/data_statistics/fact_sheets/fs_atrial_fibrillation.htm)

## Additional advantages of TeleSense Mobile Cardiac Telemetry

- **Continuous** measurement of heart rate and rhythm, up to 30 days
- **Sensitive** detection of infrequent and asymptomatic arrhythmias not recorded by other devices
- **Instantaneous** transmission to an expert monitoring center
- **Immediate** report of urgent event sent to physician
- **Secure** cloud-based system allows limitless memory
- **Timely** diagnosis and treatment

### Everything a Holter can do . . . only better.

- Detection of dysrhythmias; atrial fibrillation; cause of cryptogenic stroke; status following ablation procedure; evaluation of pre-syncope, syncope, palpitations, or dizziness
- Diagnosis of previously unrecognized aberrations
- Evaluation of anti-arrhythmic drug therapy

### You receive:

- Assessment and translation of data
- Report with graphs and trends
- Signature of certified cardiologist (optional)
- Integration with electronic health records
- Administrative and clinical queries at your convenience