TICKER TESTER

Your heart may be just fine. Here’s how to keep track

Etienne Grima, CEO of CardioComm Solutions, Inc., describes his company’s new heart rate monitor as “disruptive” technology since the HeartCheck PEN Handheld ECG, shown above, lets consumers do an electrocardiogram (ECG) wherever they choose, without waiting for the usual appointment at a hospital or clinic. Using the company’s free GEMS Home software, they can download a 30-second heart reading to a PC and send it to their doctor or the company’s centralized server-based monitoring centre, where a physician skilled at reading ECGs interprets the patient’s recording. (A result comes back within 30 minutes.)

The Heart and Stroke Foundation estimates 350,000 Canadians have atrial fibrillation (AF). Some notice nothing untoward, but others experience dizziness or irregular heartbeats. People with AF have three to five times the risk of stroke than their friends, so diagnosis and treatment are crucial.

In 2012, a Canadian study concluded routine ECGs help doctors diagnose AF — and forecast adverse outcomes.

Arrhythmias also include bradycardia, where the heart beats too slowly, and tachycardia, where it’s too fast. Irregular heartbeats may develop as a result of high blood pressure or diabetes, both conditions that require monitoring. (To maintain health, you need to know what’s happening to your body.) Grima suggests people in their 40s use the handheld device to develop a baseline for comparison once age-related changes begin appearing on ECGs. He notes it’s often then people begin to feel less fit and healthy anyway and should begin using the PEN monitor. “This is a health-preservation tool,” he points out. Use it every three months — once a month if diabetes, hypertension, age (65 or older) and certain drugs put you at high risk. People under stress, active in sports or with a family history of cardiac disease should use it as needed, he says. It’s not for self-diagnosing heart attacks.

The heart rhythm device comes locked — only a pulsing heart icon and heart rate count are seen. The U.S. Federal Drug Administration required this condition to ensure a physician has interpreted a recording; the monitor has also been approved by Health Canada. Once the first user sends a heart rhythm recording (via free secure proprietary software) to the company’s ECG co-ordinating centre and receives a report, the device can be unlocked, ECG waveforms viewed and recordings sent to a doctor of the user’s choice. This first reading by the company’s ECG centre is free; later ones, available 24-7, are $12.50 each. Up to five people can use the monitor; Grima recommends having each one’s ECG read as well.

With only two leads, it shouldn’t replace the gold-standard 12-lead ECG. (A lead is a tracing of electrical activity occurring in a particular aspect of the heart.) But it does allow those diagnosed with arrhythmias to monitor their heart rhythm, even on vacation (and decide with their doctor if they need to come home for treatment) or to aid diagnosis by recording an arrhythmia that may not show up during a scheduled ECG.

The device sells for $259, shipping included. www.theheartcheck.com