

## Long-Term Ambulatory Electrocardiograms (LT-ECG) Improve Outcomes and Produce Minnesota Medicaid Cost Savings in 1st Year

Nothing kills more Americans than heart disease and stroke, and it is the most expensive medical condition in the U.S.

### **What is an Electrocardiogram (ECG)?**

- It is a test that measures the electrical activity of the heart. An Ambulatory ECG may be prescribed when a doctor suspects their patient is having bouts of an abnormal heart rate or rhythm (arrhythmia).
- There are three different types of Ambulatory ECGs used anywhere from 1-30 days
  - Traditional Holter Monitor (48Hr)
  - Long-term ECG (2-15 days)
  - Mobile Cardiac Telemetry or MCT (24 hr to 30 days)
- Long-term ECG differs from traditional 48hr. Holter monitor by:
  - Surveilling a patient's cardiac rhythm for 2-15 days vs 48hrs.
    - This significantly increases the detection of arrhythmias that could otherwise remain unnoticed.
    - When an arrhythmia is accurately diagnosed, the appropriate therapies and interventions will be prescribed, lessening the chance of it progressing to a costly adverse clinical event (e.g., syncope, cardiac arrest).
  - Addressing health equity by improving patient access for rural and disabled residents by offering a mail-to-patient solution; eliminating the burden of finding local providers and Medicaid Non-Emergency Transportation.

**Ask:** Minnesota Medicaid Coverage of 2-7- and 7-15-day LT-ECG at 100% of the Medicare Rate provided by Independent Diagnostic Testing Facilities.

### **Anticipated Initial Costs**

	<b>Current MA</b>	<b>Current Medicare</b>	<b>Difference</b>	<b>Year 1 (+2.5%)</b>	<b>Year 2 (+4.4%)</b>	<b>2-Year Cost</b>
0-7 days	\$ 179.28	\$ 253.30	\$ 74.02	\$ 75,870.50	\$ 77,276.88	
8-15 days	\$ 186.04	\$ 262.72	\$ 76.68	\$ 78,597.00	\$ 80,053.92	
				\$ 154,467.50	\$ 157,330.80	\$ 311,798.30

Currently there are approximately 1,000 Medicaid patients per year who are being prescribed Ambulatory ECG monitoring. This is based on real claims data from the definitive health database. We used the logic that when LT-ECG is sufficiently covered in the state of MN we don't expect to see much change in the baseline year. In year 1 we expect to see an increase 2.5% and in year 2 an increase of 4.4%. This follows what we saw when Medicare started to cover LT-ECG and there was an NCD in place.

### **Medicaid savings anticipated to surpass costs by more than \$200k over biennium**

1. Decreasing subsequent ECG tests. Patients prescribed Holter monitoring have a much higher % of being retested
2. Three patients could be tested with LT-ECG for every one patient undergoing MCT. Patients prescribed expensive MCT often do not need real time monitoring and can instead be prescribed LT-ECG, the more cost-effective solution.
3. Eliminating downstream adverse clinical events (syncope and cardiac arrest) associated with missed or undiagnosed arrhythmias.