

**MEDICAL DIRECTION COMMITTEE**  
**PILOT PROGRAMS OF RECORD**

April 16, 2009

*Point of Care Cardiac Markers and ECG in Pre-Hospital Environment*

Jack Potter, M.D. is conducting a pilot program for the Lord Fairfax EMS Region, *Point of Care Cardiac Markers and ECG in Pre-Hospital Environment*. This pilot program will evaluate the following criteria:

- Facilitate decision making to transport patients to the most appropriate hospital in the setting of acute coronary syndrome (ACS).
- Decrease interval between the onset of symptoms and definitive care for patients that might otherwise initially go to non-PCI hospitals.

This pilot will be accomplished via utilization of pre-hospital wireless EKG and cardiac enzymes testing.

- Communications gateway installed in EMS vehicle for wireless Internet connection
- Current default is cellular signal using a four (4) watt signal amplifier, but multiple alternate technologies are possible including radio frequency (requires data capable radios) or satellite.
- Laptop computer connects gateway to data device (12 lead monitor or lab analyzer).
- If cardiac marker is positive the hospital physician contacts the nearest typical destination hospital to discuss enzyme findings and arrange transport (I-Stat Analyzer Platform).

The placement of mobile wireless Internet in the ambulance with a 4 watt booster improves reception/transmission with a laptop computer being used as an analyzer for the 12 lead EKG. The Dell equivalent of "toughbook" laptops are being used along with a V pro chip for remote management which works as a Wi-Fi in and around the ambulance.

- 5 analyzers being used in the field on ALS ambulances
- 6 month measurement end points are being evaluated

For additional pilot project information, please contact Jack Potter, M.D. at [jpotter@valleyhealthlink.com](mailto:jpotter@valleyhealthlink.com) or by phoning (540) 536-8000.