

Southern California Region - Electrocardiograph (ECG) Cart Buyback

Environmental and Human Health Impact: In 2011, Southern California will resell 110 ECG machines for re-use and will be avoiding approximately **four tons** of waste.

Business Impact: SCAL trade-in and buyback program is expected to generate savings of over **\$100,000**.

Challenge

Kaiser Permanente's Southern California Region (SCAL), made up of 13 hospitals and 68 medical office buildings, has been working on converting 110 older model GE ECG machines to the newer model, which represents about 18.8 percent of the installed base of ECG machines. ECG or EKG is a measurement of the electrical activity of the area between the ribs that contains the heart and lungs (transthoracic) over time which is captured and externally recorded by skin electrodes. It's a non-invasive recording produced by an electrocardiographic device. Life expectancy for each ECG machine is usually 10 – 11 years and each machine weighs about 70 pounds.

Aim/Goal

- To avoid disposal of ECG machines in SCAL and direct them to reuse.

Team

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Actions Taken

- ✓ SCAL clinical tech engineers partnered with the Cardiology sourcing team to discuss the ECG new system conversion and options on how to dispose of the old ECG machines.
- ✓ The sourcing team consulted with local KP biomedical engineers and clinical systems engineers to get details on all old GE ECG machines including age, serial numbers, and hardware components.
- ✓ **Since it was determined that the average age of the SCAL ECG machines was seven – nine years, the team decided to resell the ECG machines instead of disposing as they still had a few more years of life in them.**
- ✓ The sourcing team reached out to three vendors to buy back KP's old ECG machines and selected the best vendor.

Results

- Achieved savings of over \$100,000 and diverted **four tons** of electronic equipment from the KP waste stream in SCAL.



Lessons Learned

- ✓ It's valuable to assess the quality and functionality of machines in the process of determining if they should be disposed of or not. There are many health care facilities that would be very interested in buying an older, but fully functional, piece of medical equipment.
- ✓ Facilities now have an option to resell old capital equipment for additional savings versus disposing of old equipment.

Next Steps

- ✓ Kaiser Permanente's Supply Chain team is developing an asset disposition program for all clinical technology equipment to ensure responsible end of life management of clinical electronics.