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Northern California Cart-Based Cardiology Ultrasound Trade-in and Bulk Buy Program

Environmental and Human Health Impact: Responsibly manage 3.7 tons of equipment at the end of life at Kaiser Permanente.
Business Impact: NCAL trade-in and bulk buy program is expected generate savings of about $130,550 in the fourth quarter of 2011.

Challenge

For the past several years Kaiser Permanente's Northern California Region, (NCAL) which is made up of 22 hospitals and 37 medical office buildings, has worked to phase out their 256 old technology Siemens' ultrasound machines. These old machines are large, weigh about 406 pounds, and have CRT (cathode ray tube) display monitors. In 2007 the Cardiology Ultrasound SST awarded a new contract to Philips Healthcare based largely on the ergonomics of their iE33 ultrasound system.

Recently, the NCAL biomedical engineers reached out to the Procurement & Supply cardiology sourcing team to negotiate a bulk purchase of 18 new Philips' iE33 ultrasound systems to replace their older machines. The sourcing team was able to provide an opportunity for savings in the bulk purchase of the 18 new Philips' iE33 cart-based ultrasound machines and negotiated a trade-in of the remaining 18 old Siemens' models. This bulk trade-in brings the NCAL conversion to approximately a 98 percent completion from old to new models.

Aim/Goal

- Trade-in and recycle 18 old Siemens' ultrasound machines for new Philips' iE33 ultrasound machines.

Team

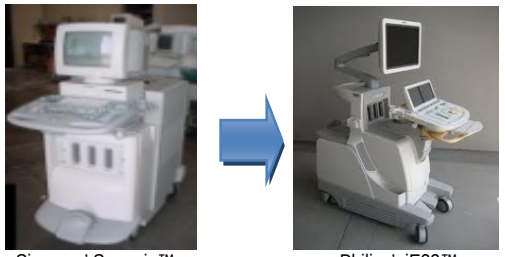
Scott Adelman MD, Chair - Cardiology Core Group/National Product Council and Chair -NCAL Cardiovascular Technology Committee
Eddie Acosta, Clinical Systems Engineer NCAL
Rick Denniston, Senior Biomedical Engineer NCAL
Vincent Paguia, Associate Sourcing Manager Cardiology
Chris Wojcik, Service Line Director Cardiology, MedAssets
Shannon Lin, Senior. Manager, Project Management, MedAssets

Actions Taken

- ✓ The sourcing team consulted with local Biomedical engineers and Clinical Systems engineers to get details on all old Siemens ultrasound machines including age, serial numbers, and hardware components which enabled the team negotiate the deal.
- ✓ The team researched the current process for disposing of old equipment in NCAL facilities when equipment is deemed to be at its "end of life" at KP. They found the process is as follows:
  - o Clinical tech engineers decommission the machine and send it to local materials management department.
  - o If the machine is operational it is normally donated. If it's determined that it is not functional, KP finds a third party to recycle the machines.
- ✓ In order to reduce KP workload and ensure proper end of life management, KP negotiated a trade-in program with Philips, so that as new machines were delivered, Philips takes old machines to be re-sold, used for spare parts, or recycled responsibly* regardless of condition.

Results

- **NCAL savings of $130,550 by end of 2011** and **diversion of 3.7 tons of electronic equipment from potentially improper or delayed disposal**.
- Smaller size of new machines requires vastly fewer chemical and material inputs like plastics and metals for manufacturing.



Siemens' Sequoia™ Philips' iE33™

Lessons Learned

- ✓ KP's existing process for old equipment disposal can take a long time to execute due to workload levels in clinical technology.
- ✓ Most large suppliers have a very robust recycling program that KP can take advantage of, especially with capital equipment that is very big and cumbersome to transport.

Next Steps

- ✓ The sourcing team will use the success of this project to have discussions with each KP region on how they can dispose of their old cardiology capital equipment.
- ✓ 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 all non-IT electronics.

*Recycling practices verified by KP.

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