WIN A FREE CT X-RAY TUBE (see page 13)

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JANUARY 2009

Still a hot commodity



X-Ray Tubes
MRI Shielding
Monitors (EKG, Holter)

Technology Comfortable as **Slippers?**

hen a technology exists long enough to integrate with convention and lifestyles, we no longer see it as new. Instead, we tend to take it for granted, like the slippers we don at the end of a day.

Holter and ECG monitors, once only under the purview of hospitals, now appear in physician practices. To patients, and more so to clinicians, these technologies are as accepted as quartz timepieces. Patients may find reassurance in knowing these devices have become customary, albeit quasi-mysterious, technological paraphernalia.

As medical devices, Holter monitors and ECG systems belong as venerable and relied-upon clinical tools used daily in standard cardiography diagnostic processes. Moreover, we expect them to function sans problems, on every occasion; so, quality in manufacturing is a given.

Though significant in observing and recording cardiopulmonary health, they generally are not at the forefront of technology. Yet advances continue through direct research and development or as applied by-products of innovations to other medical devices.

Innovations are an added benefit, but they aren't as critical for these monitors due to their practical and reliable nature. Terry Schulze, Director, Biomedical Systems, a company that sells pre-owned ECG systems used in domestic clinical trials, said, "A quality monitor rarely, if ever, breaks, and better technology keeps the machines running even longer."

Even if they rarely fail, it is still important for a buyer to do his or her research when looking to purchase a used monitor. Schulze explains how to verify a system when looking to

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A Look at Holter Monitors and ECG Systems

By Becky Jacoby

purchase used. "A quick self-test or printout of an ECG makes you aware of the system's performance. GE is our largest supplier of ECGs and it makes a 'workhorse' machine. I'd advise a customer to do the research, find out the origin of the system, know from whom he is buying, and purchase a warranty."

Since monitor reliability is rarely an issue, upgrades most commonly consist of improvements in the speed of delivery for information, the device size and weight, ergonomic upgrades to aid in the comfort of the patient and care giver and accuracy of readings with add-ons like protection from RFID disruption.

Ron Smith, Director of Technology Services for Lifeline Biomedical, says he has seen Holter and ECG systems improve with signal evaluation and more accurate readings. He hopes to see more parameters in the same unit, that is, multiple readings being utilized in a single algorithm, but for now he confesses knobs and switches wear out quickest on a monitor system.

There is a strong chance those innovations will come from a top OEM since they typically have intact market presences and the dollars to put toward the clinical trials that lead to technological innovations.

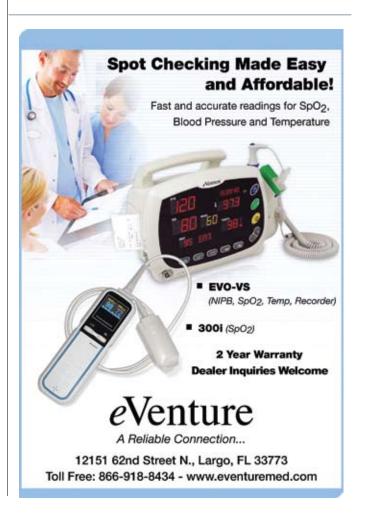
For proof, one need look no further than the GE MARS® Ambulatory ECG System. This system makes available to private practices what was previously only available to hospitals. It sells for less than \$9,500, and its data integrates with the GE MUSE® ECG Management solution, a workflow and data management tool.

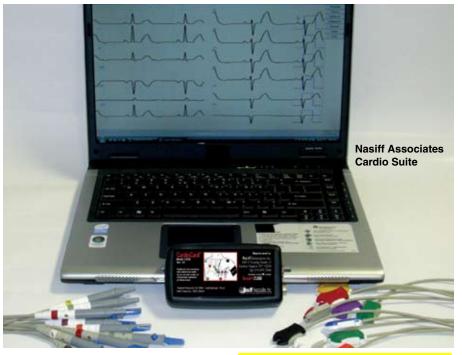
Philips is also busy in the market of Cardiography Systems. They offer the DigiTrak XT Holter System that can record up to seven days on a single AAA battery. The device sells for approximately \$9,000.

Another, Welch Allyn offers solutions from a PC-Based Resting ECG, which sells online for approximately \$3,000, to the CP 200^{TM} Electrocardiograph with optional spirometry, which online merchants list at nearly \$19,500.

Even if top OEMs have earned widespread brand equity, it usually comes with a price to correspond. This has given some smaller firms a chance to move into a lower price point niche.

Infinium Medical, Inc. is a prime example. Infinium makes Holter monitor systems using proprietary software and quality component parts. Suleyman Bilgutay, Product Manager, told





DOTmed Business News, "I have seen systems sell for \$1,500 to \$12,000 based on brand equity. Some customers may be more comfortable purchasing and paying more for a well-known brand."

He continues, "Just like major OEMs, Infinium systems use high end components and our systems have been tested and proven to a less than three percent margin of error."

Nasiff Associates is another smaller company manufacturing Holter monitors. Anita Bourdeau, head of marketing for the firm, discusses their manufacturing process. "When it comes to diagnostic heart products we believe new and high quality products are critical, and that high quality consists of more than just the monitor; it includes manufacturing procedures, parts and experienced technicians." Infinium Medical sells domestically but also exports to 37 countries. Their growth doubled last year and comes from their strength in global sales.

Holter monitors made by Nasiff Associates range from \$1,350 to \$3,995 depending upon whether buying individual components or an entire system.



Since Nasiff Associates monitors are inspected at the point of manufacturing, they are not tested in the field. Bourdeau said, "The feedback we receive is that our monitors are some of the most reliable and durable in the industry." Nasiff sells 90% of its products to domestic customers. The firm manufactures with a just-in-time process, and can fill and ship an order within two days.

Both Infinium Medical and Nasiff Associates manufacture their systems entirely in the U.S. with domesticallymade components.

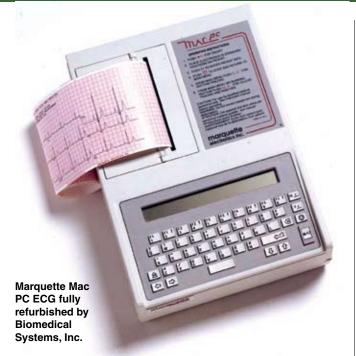
A strong market for used monitors

Dave Wayne is CEO of SE Medical Systems, an Atlanta-based company that sells and services a variety of medical equipment. He says that 80% of his business is selling refurbished monitors, including ECG and Holter systems, in the U.S. He adds a laundry list of advancements he's seen in equipment: color screens, smaller units, surge and RFI protection, compatibility with a variety of patient cabling systems, touch screens, flat screens and LCD panels.

Wayne considers the market strong for refurbished monitor systems, saying the "cost of new is too high for most private clinic practices." His largest concerns are keeping his prices down and keeping the monitor system uncomplicated for the clinician.

Judy Engle, Owner, Frontier Medical, Colorado, also sells refurbished ECG monitor systems in the U.S. for about half the cost of a new system, a range of \$700 to \$5,000. Engle's challenge is lack of manufacturing support for the equipment she sells, and a weaker market geographically. "For refurbished equipment, we find that keys, screens and printers need to be replaced. It is also important that a scheduled maintenance check be performed by a dependable biomedical professional," she said.

Among the pre-owned dealers there is even further specialization. Biomedical Systems sells approximately 25 preowned ECGs per month. These systems are used in domestic clinical trials. Terry Schulze, Director for Biomedical, says the market is on an upswing for the refurbished units he sells in the range of



\$995 to \$2,495. "My challenge is that the price for a refurbished model is getting too close to the price of a new one. New prices are dropping along with everything else in this economy."

In a case where price points are close, it's crucial that a customer gets the most value from the company they choose. "We offer a training CD or over-the-phone training," Schulze says.

When dealing in new and used, price point is less of an issue. Michael Parnell, President/CEO of Florida-based consulting firm Equipstat Medical Equipment, Inc. reports a banner year in sales of new and reconditioned monitors. His firm uses biomedical technicians to analyze monitor failures. He sells new and refurbished GE, Philips, Datascope, Datex and Mindray monitor systems, covering the high- and low-end of the market.

Imports, Exports and Quality Issues

Abe Sokol, Marketing Director, Absolute Medical Equipment finds that the market is weakening for monitors due to new, cheaper options from Asian manufacturers. His firm sells new and refurbished Holter and ECG systems. "Our customers are looking for solid performance and good value for the equipment dollars," he said. "We try to carry a line of equipment that meets this need. New monitors from Asian manufacturers are now on the market at low prices, but our customers still prefer used reconditioned brand-name monitors with a proven record."

Sokol cites the "performance over time" advantage to purchasing a refurbished brand-name monitor over a no-name new one. He said, "A good monitor from a good manufacturer should hold up for many years without failure. Typically, bad readings on a monitor are attributable to faulty accessories. Yearly inspections are certainly needed to assure calibration,



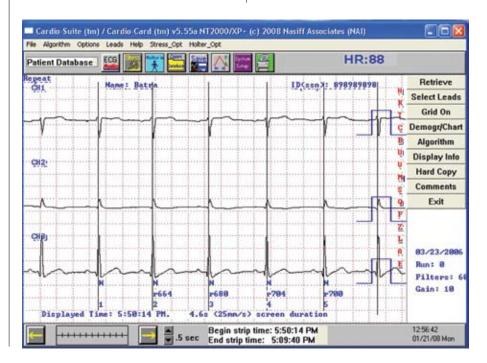
and batteries are another point that needs attention."

Cardio Analytics is an independent cardiac investigation and monitoring service specializing in service to the clinical trials industry in the United Kingdom. Martin Shingler heads equipment maintenance and logistics for the firm which sells a few refurbished systems but relies on leasing monitor systems for clinical trials.

Shingler says the market in the UK is weak because "discounts on new are good and the feel-good factor and warranty of new products are hard to beat." Like Smith of Lifeline Biomedical, Shingler warns against paying for features that will not be used. He sees lots of new add-ons and few seem of merit for experienced operators. "The useful ones are missed by less experienced operators because they always seem too busy to find out how to use more of the potential of the equipment," he said.

Nearly 70,000 of the over 350,000 cases of sudden cardiac death in the US each year involve individuals who display no obvious signs of serious heart disease. Knowledgeable of this fact, researchers continue to search for methods to identify ECG patterns that foreshadow SCD, in hopes that they can monitor the heart and correct the arrhythmias before they cause death. If this research is ultimately successful, instead of being taken for granted like a pair of slippers, Holter and ECG monitors may find their way into a very special place in our hearts.

Online: dotmed.com/dm7716



DOTmed Registered Holter Monitors & ECG Systems Sales & Service Companies

For convenient links to these companies' DOTmed Services Directory listings, go to www.dotmed.com and enter [DM 7716] Names in boldface are Premium Listings.

Name Ata Khojasteh Ryan Davis Judy Engle Marc Gorski Ronald B. Tarr Suleyman Bilgutay John Sobczak **Michael Parnell Dave Wayne** Jerry Byrd James Vollbracht **Bob Gaw Garret Purrington** John Gladstein **Terry Schulze** Jason Eden Jeff Rhinehart Neil Little **Roger Nasiff** Abe Sokol Mark Rosoff **Ben Holloway** Ron Smith

Name Mauricio Nieto Reno Itzhaki Pedro Pestana Martin Shingler **Company - Domestic C-Scan Corporation Davis Medical Electronics. Inc.** Frontier Medical, Inc. Vital Signs Medical, LLC MEDELCO Infinium Medical, Inc. Quest Medical Equipment, Inc. EquipStat Medical Equipment SE Medical Systems Tech Global, Inc. **MESA Medical, Inc.** PRN **Medical Equipment Dynamics Medical Device Depot Biomedical Systems Bio Basics Global** Metropolitan Medical Services **Topline Medical** Nasiff Associates, Inc. Absolute Medical Equipment Scottcare **Southwest Medical Corporation** Lifeline Biomedical

Company – International Hospielema Co. Ltd Eltec Ena Spacemedical Cardio Analytics Ltd

City	State	Certified	DM100
Los Gatos	CA		
Vista	CA		
Wheat Ridge	CO	•	
Rocky Hill	СТ		
Boynton Beach	FL		
Largo	FL		
Sarasota	FL		
Tampa	FL	•	
Stockbridge	GA		
Algonquin	IL		
Wood Dale	IL		
Fall River	MA	•	•
New Bedford	MA		
Ellicott City	MD		
Maryland Heights	MO		
Park Hills	MO	•	
Asheville	NC		
Fargo	ND		
Brewerton	NY		
Wesley Hills	NY	•	
Cleveland	OH		
Broken Arrow	OK	•	
Nashville	TN		
City	Country	Certified	DM100
Manta	Ecuador		
Kiriat Ata	Israel		
Lisboa	Portugal		
Plymouth	United Kingd	lom	
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