

21st Century

CANCER KILLER: Proton Tiller





DR and CR
De-Installation
Riggers and Craters
Sterilization Sales and Service
PLUS MORE...

A DOTmed EXCLUSIVE: Inside Digital X-ray Imaging

n the world of medical mysteries, monitors and other portable or fixed diagnostic cardiography systems serve as hard-working detectives, carefully gathering and analyzing patient data, in real time and after the fact. Whether a Phillips IntelliVue patient monitor checking vital signs, a GE Holter or ECG seeking heart arrhythmias, or a Quinton Stress Monitor looking for possible arterial blockage, monitors measure and evaluate critical body functions, allowing physicians to better diagnose and treat everything from high blood pressure to cardiac arrest.

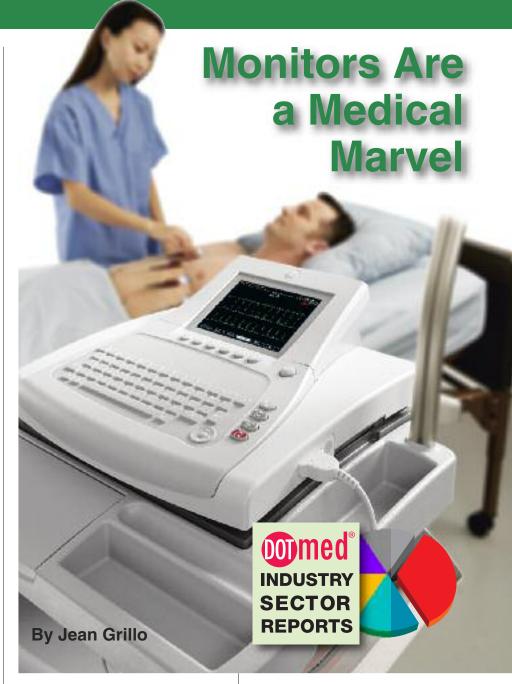
Phillips Cardiography Systems and GE Healthcare Diagnostic ECGs are generally considered the top two companies for patient monitoring systems. However, their expertise is pricey and Japanese (Nihon Kohden), Chinese (Mindray), and other global companies such as Welch Allyn and Schiller are coming forward with either low-end, or just lower priced, monitors making it "tough to compete," according to some monitor dealers who sell both new and re-furbished equipment.

For Scott Burke, however, GM/GE Healthcare ECG, his company's "heritage of research in ECG algorithms, dating back to its purchase of Marquette in 1998," clearly warrants its Number One position, globally, in resting ECG/EKG quality.

"Hands down, we are Number One," Burke says, insisting that while UK-based GE Healthcare is a global company with a "very strong presence" in Asia and the Middle East, poorlymade foreign monitors can sacrifice quality for cost.

"You're not just looking at cost, but the depth of research," he adds. "There are different classes of equipment that fit certain price ranges. For GE, we can provide ECG's from \$9500 to \$20,000, depending on the ruggedness of the equipment and the number of special features. But our resting ECG's are based on solid, proprietary and continual research, data, and science."

Pat Dorsey, global product manager for GE Healthcare's Holter Monitor System, notes that GE's legacy of research



goes back even further in this area, to the later 1970s.

"Not only do we have clinical excellence in how we detect and measure algorithms," Dorsey says, but we have products that measure three levels of disease: measuring anthemia, measuring diminished blood flow, and, since the 2006, new Holter software that can give a clinician a look at a patient's future risk of sudden cardiac death, which we introduced at the Heart Rhythm Society. This is huge for us."

According to Dorsey, GE's global market in Holter monitors represents about 15 percent of its total business, ranking it

Number Three of Four in the world, with Phillips Number One, overall.

Medical Electronics Co., Inc (MEDELCO), based in Boynton Beach, FL, sells, rents, and leases pre-owned equipment such as ECG/EKG machines, patient monitors, pulse oximeters, defibrillators, ultrasound and more. Ronald Tarr, its president for 24 years, has about \$400,000 worth of inventory on site at any time. And because of the imbalance of trade support, he says about 98 percent of his sales will be domestic.

"Too many global dealers care only about the cost of the equipment, they don't care about the quality or accuracy," Tarr begins. And many foreign competitors entering the US market also have unfair cost advantages. "You've got Chinese companies coming in with no overhead, offering a very low price for monitors," he adds, "That makes it very tough to compete."

The cost differential is significant. For example, a GE DASH monitor, offering high-performance and mobile monitoring that includes an integrated wireless LAN option, sells anywhere from \$5500 and \$8000, depending on features. Full ECG/EKG monitors can start at \$20,000 and up. "Some lowend companies can offer their own monitors for half that," Tarr notes. "I've had doctors in here asking why should they pay so much more, and I answer, 'Do you ever walk into a hospital and see those low-end names?' No, you don't."

Jeff Corliss, global marketing manager for Philips Cardiography Systems, says pressure exists from Chinese, Japanese and Korean monitor manufacturers, but more for smaller sites than for hospitals settings that mandate cutting edge care.

"The individual drivers for the monitor markets are quite distinct," Corliss notes. "You have clinics and doctors' offices, where much is driven by cost, and you have hospitals where 12-lead ECG's are among the most pervasive, highest volume procedures. Hospitals are driven by three concerns: streamline workflow, maximize connectivity, and handle real clinical pressure. Philips has built our business on the hospital setting and we offer the best seamless, wireless ECG, stress and Holter integration. We're the only ones doing 16 lead ECG's for example. That is very important when it comes to adult chest pain where every second counts."

Corliss points out Philips is supporting the American Heart Association's "Door-to-Balloon" initiative which seeks to cut down the time it takes when someone walks in with chest pains to when that person receives angioplasty. "We are looking to do it within less than 90 minutes. None of our Asian competitors have the kind of seamless/integrated integration required to accomplish this."

Quality Costs

"Quality costs money," says Roger Nasiff, president, Nasiff Associates. His Brewerton, NY company, although small, is credited with having created the first PC-based CardioCard monitoring ECG's, Stress and Holter machines. In 1996, Nasiff Associates built the first PC-based CardioSuite, a PC-based system that monitors all three. Separately, Nasiff sells its ECG's for \$2195, its Stress Monitors for \$3395 and its Holter Monitors for \$3195, with the Suites going for \$6295. These prices are very competitive when put up against GE, Phillips, and other big companies.

Low cost doesn't have to mean low quality, however, as Nasiff pointedly explains.

"I would say GE and Phillips are tops in EKGs, GE and Quinton are tops in Stress Monitors, and Phillips still leads in Holters," Nasiff explains, "but these guys are huge and will make and create 1000 of them a month. My company will make 50 to 70 Holters a month, but many people who bought them in the early 1990's are still using them. Our quality is very high. I definitely think we offer the best value for the price."

Nasiff, with two degrees in biomedical engineering and a PhD in electronic engineering, began in the basement of his house, but, today, he says his craftsmanship creates a level of accuracy that trumps cost.

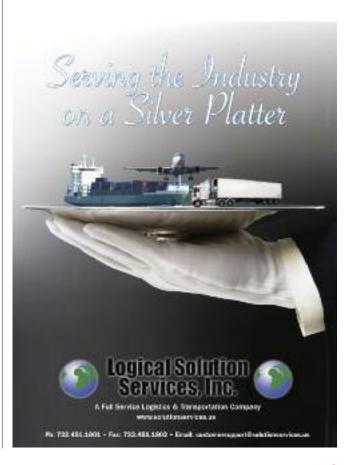
"Schiller or Welch Allyn has a nice breadth of products, but what they sell isn't quite as accurate yet. To Nasiff, better diagnosis is the only "blue sky" parameter worth pursuing, now or in the future.

"To me, to increase our depth and accuracy in any monitoring system is, in itself, major blue sky advancement. We all need to work to make the systems better, more accurate, and to avoid settings that lead to wrong diagnoses," Nasiff says, adding, "While everyone's all excited about wireless, Nasiff hasn't pursued it yet, outside of our own research, because we feel it's still not as accurate as what we have out there. You can still lose data."

Refurbishing/Repairing Monitors

Companies offering used and refurbished monitors suggest a mixed bag in terms of market strength. Owners are split in terms of whether sales are weak or strong.

John Newbury, sales and service manager for Medelco, describes a variety of monitor repairs and refurbishing used on previously owned monitors.



"We clean the entire inside with a blow out from an air gun," he says. "We then have qualified engineers inspect all the interior electronics. Sometimes we need to replace external cables, and, if the unit needs it, we'll professionally repaint the outside."

"I think the market is still strong," reports Ronald Tarr, president of Medelco Co. in Boynton Beach, Fl. "Smart hospitals and clinics are buying the pre-owned equipment for 25 or 35 cents on the dollar, and, as I mentioned, technology has not really changed in the last 10 years."

Ron Smith, of Lifeline Biomedical in Nashville, TN, agrees.

"The market is strong. With the state of reimbursements, doctors and administrations are looking to upgrade older units with newer equipment, but need to be frugal in acquiring same."

Adds Alan Avitt, sales manager, Display Resources, Inc: "Smaller clinics and doctors' offices now can utilize equipment never before available to them."

"The market for used is strong as always, especially the parts market insists Mitchell Guier, broker, North American Medical, Sweet Springs, MO. "Manufacturers stop making specific models and BioMed departments are scrambling to service the 50 monitors they still have in service."

Randy Lowers, president of L&R Services in Miramar, FL, takes the opposite view.

"Recently, I see the market as weak due to the fact that many manufacturers from abroad are starting to sell product here in the USA at cheaper prices then we are accustomed to. Also, domestic manufacturers are quick to make a product obsolete after a short selling period. One manufacturer I won't name will sell something, support it 100 percent for five years, and then discontinue parts production. This makes selling their products refurbished and/or used harder because the seller cannot support the product for a warranty unless they have an inventory of their own."

Having said that, Lowers acknowledges a 32 percent increase in total sales for refurbished or used ECG/EKGs, the only medical monitors he deals with.

"It all comes down to price," says Charles Moore, president of Moore Medical Sales & Service, Cartersville, GA. "Manufacturers are starting to discontinue certain models. The industry is pushing for new equipment because they make more money. Plus, the Japanese are dropping their prices on new items, in order to get into the market. Mindray (Chinese) is very cheap but parts are a real problem."

Poor operator performance also throws a wrench (literally) into how new equipment becomes problematic and in need of repair.

"Never use a monitor without proper training from a vendor," says Robert Keller, president, Travelmed, Northridge, CA. "Malfunctions can be due to several issues such as testing and training," he says, adding, "A monitor should be operator friendly, as easy to operate to avoid human mistakes from a non-understanding operation."

"Operators of monitors and EKGs are the biggest problem in the field," Randy Lowers says. "Ninety percent of my service calls are due to operator error." Biggest issue is getting

continued on page 46



DOTmed Registered Monitors Sales and Service Companies

For convenient links to these companies' DOTmed Services Directory listings, go to www.dotmed.com and enter [DM 5374] Names in boldface are Premium Listings.

-1						
	Name	Company – Domestic	City	State	Certified	DM100
ı	Robert Keller	Travemed	Northridge	CA		
ı	Aaron Frye	Doctors Depot, Inc.	Jupiter	FL		
ı	Randy Lowers	L & R Services	Miramar	FL	•	
ı	Ronald Tarr, CBET	Medelco	Boynton Beach	FL		
ı	John Pritchard II	Venture Medical ReQuip, Inc.	Tampa	FL		
ı	Charles Moore	CMoore Medical Sales & Service	Cartersville	GA		
ı	Alan Avitt	Display Resources, Inc.	Des Moines	IA		
ı	Jay Jordan	State of the Art Medical	Bardstown	KY		
ı	Rick Roehl	UHS	Edina	MN		
ı	Anwar Syed	MDIC	St. Louis	MO		
ı	Mitchell Guier	North American Medical	Sweet Springs	MO		
ı	Boyd Campbell	Southeastern Biomedical Associates, Inc.	Granite Falls	NC		
ı	David Ogren	OMED of Nevada	Reno	NV		
ı	Jeovanni Rivas	Biomedical Technical Specialties	Staten Island	NY		
ı	Roger Nasiff	Nasiff Associates, Inc	Brewerton	NY		
ı	Chris Miller	Zoetek Medical	Victor	NY		
ı	William Kulp	ScottCare	Cleveland	OH		
ı	Ron Smith	Lifeline Biomedical	Nashville	TN		
	Mike Davies	ProNet Medical	Salt Lake City	UT		
	Name	Company – International	City	State	Certified	DM100
	Rabi Avvali	Sondos Medical Equipment	Dubai	U.A.E.		

