



# Probe

## Exploring Medical Technology

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#### Feature: **Have telemetry, will travel. Tailored services make it happen.**

St. Anthony's Medical Center in St. Louis, MO wanted more than a frequency upgrade when they moved to the Wireless Medical Telemetry System. Learn about the gains they made in improved patient safety and staff productivity and satisfaction.

#### News: **Product and Services news**

What you need to know about the new Philips:

- IntelliVue MP40 and MP50 patient monitors
- IntelliVue Information Center upgrade
- TraceMasterVue and CareVue Chart
- HeartStart MRx monitor/defibrillator
- HeartStart Disposable Defibrillation Paddles
- And more

#### Q&As: **How to clear patient data from the new C3 Monitor and more...**

#### Education: **Improve your skills and maximize your technology investments with a Philips class. Sign up now!**

#### For More Information

Visit [www.medical.philips.com](http://www.medical.philips.com)

#### Response Center

Philips Cardiac and Monitoring Systems Response Center is a worldwide network of facilities dedicated exclusively to telephone customer support. Engineering and clinical applications specialists help biomedical professionals address operations and applications issues related to the company's cardiac and monitoring equipment. For fast, quality answers, call the number in your area.

**U.S.** (800) 548-8833 **Canada** (800) 323-2280

#### Parts Service/Phone Numbers

**Parts Orders and Identification:** (888) 561-5018

**PMS Business Centre in Canada:** (800) 291-6743 (for non-contractual customers)



# Probe

## Exploring Medical Technology



Before



After

### “Have telemetry, will travel:” Tailored services make it happen

When St. Anthony’s Medical Center, St. Louis, Missouri, decided to move to the Wireless Medical Telemetry System (WMTS), the hospital’s biomedical and cardiac services teams turned to Philips Customer Services to upgrade more than the frequency — and gains are being realized everyday in improved patient safety and staff productivity and satisfaction.

The medical center saw an opportunity to improve services by expanding antenna coverage, establishing a new protocol for tracking ambulatory patients, and creating a monitoring cockpit to support surveillance of more patients in more places.

With this vision in mind, St. Anthony’s Rich Kinard, senior CBET, and Kathy Britt, director of acute and outpatient cardiac services, worked with Philips to make it happen.

#### Handing it over with confidence

“I knew Philips would come through,” said Kinard, who advised using Philips for everything from project management to cable-pulling based on his 20 years’ experience working with the company.

“For a project of this size, it made sense to hand it all over. I have a lot of confidence in Philips. I’ve seen

how powerful it is to combine their manpower and support with ours.”

Britt sees that confidence as well-placed. Her monitoring technicians, delighted to report for their shifts in the ergonomically designed cockpit, are better able to manage additional work because the environment and technology streamline virtually every step.

Two technicians, each responsible for five displays, have the desk, shelf, cabinet and floor space they need, the result of good planning by Britt and her Philips advisors. With a tailored remote keyboard, video, and monitor solution (KVM), Philips created the work environment Britt and her team envisioned. The technicians wanted to have a mouse for each screen, but opted for a single keyboard that lets them choose the display to control. Full waveforms are displayed on the screens, but the servers are out of sight, securely set up in another room.

Philips also designed a solution that doubles the hospital’s existing antenna system, coverage essential to fulfilling a commitment to “track traveling patients,” says Britt. The tracking is managed by a set of contact and response rules.

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In the new cockpit, technicians have a mouse for each display, a single keyboard that lets them choose the display to control, a writing area and plenty of storage and workspace.

# PHILIPS

## Tailored services make it happen *continued*

*"I have a lot of confidence in Philips. I've seen how powerful it is to combine their manpower and support with ours."*  
— Rich Kinard, Senior CBET, St. Anthony's Medical Center

"We were asking our technicians to take on more responsibility, but we made it easier for them because the Philips technology simplified many steps," explains Britt, citing, for example, advanced documentation features of the Philips IntelliVue Information Center.

### A custom solution in every detail

"The solution was implemented as the users wanted it, based on Kathy [Britt] asking her users all the right questions and Philips doing the same," says Kinard.

"The result is wonderful to look at and even better to work with. We've reduced the heat from too many servers and people in a cramped space, as well as the clutter and confusion of 10 keyboards. The users have the flexibility and capabilities they asked for."

According to Britt, "Philips really came through in customizing how the new cockpit would function."

"We wanted our three stepdown units to retain control of admission, discharge and monitoring, using the cockpit only when patients traveled outside the unit. This isn't standard procedure for many hospitals or for a Philips implementation. But they made it happen.

"It was really incredible how they worked with us to do things the way we wanted them to be done."

Key to making it all come together, agree Kinard and Britt, was open communication from the start and ongoing process checks.

"We started the planning with a house-wide assessment," explains Britt. "And we were in meetings with Philips very early on. All along, they provided options and then individualized solutions for our hospital."

### Train the trainers, promote new processes

Britt also depended on Philips to provide hands-on training with the IntelliVue Information Center and telemetry monitors, while she focused on training hundreds of clinicians and technicians on the new protocol. "Have telemetry, will travel,' that's our theme," says Britt.

"Everything is just as we wanted it. And it all came together on deadline."



With an extended antenna system and a set of contact and response rules, St. Anthony's has improved its ability to track "traveling patients" who wear Philips telemetry monitors.

*"It was really incredible how they worked with us to do things the way we wanted them to be done."*  
—Kathy Britt, Director of acute and outpatient cardiac services, St. Anthony's Medical Center

### How Philips delivered at St. Anthony's

Among the Philips **CUSTOMerCARE** Value-Added Services customized for St. Anthony's Medical Center:

- **Project Management Services** — Leveraging the experience and expertise of a Philips-certified project manager for on-time, on-budget implementation.
- **Facilities Services** — Planning and implementing the room set-up, including cabling, installation of mounting hardware and testing while minimizing the impact on staff and patients.

- **Remote Monitoring Solutions** — Tailoring a remote keyboard, video, and monitoring (KVM) solution to maximize the efficiency of staff while providing improved patient care.
- **Wireless Solutions** — Designing an expanded telemetry monitoring antenna system.

Ask your Philips representative about these and other solutions to meet your organization's unique needs and challenges.

# News



The new IntelliVue MP40 and MP50 monitors use the familiar Philips multi-measurement servers, compatibility that supports ease of use and supportability.

## Portable, networked IntelliVue MP40 and MP50 are easy to use and maintain

Combining portability and measurement flexibility with features that make them easy to maintain and configure, the new MP40 and MP50 extend the IntelliVue family of networked patient monitors.

Designed with rugged housing — and without a fan or separate hard drive — the IntelliVue MP40 and MP50 can be mounted at the bedside, on a roll stand or easily carried from patient to patient using the sturdy handle. Each can be configured to suit patient acuity, department protocols or specific procedure requirements.

Both monitors have highly flexible screen configurations; extensive clinical measurements menus; and built-in clinical support tools such as Event Surveillance, EASI derived 12-lead ECG and arrhythmia analysis.

The MP40 and MP50 are compatible with the multi-measurement server used with the IntelliVue MP60 and MP70, enabling data continuity between monitors and data storage throughout the patient's stay. IntelliVue monitors also share a common user interface and Philips' innovative portal technology.

## Philips IntelliVue Information Center upgrade extends network, full disclosure capabilities

Release E.01 of the Philips IntelliVue Information Center, available in a combination of software and hardware upgrades, brings important new communication and analysis capabilities to this combined central station and clinical workstation.

With the latest release, installed base customers can upgrade to get touch screen capability, 96 hours of full disclosure, alert data export and support for up to 1,280 beds on a single network.

## Microsoft.NET is platform of choice for Philips TraceMasterVue and CareVue Chart

Philips has introduced TraceMasterVue ECG management system and CareVue Chart, each leveraging Microsoft.NET, a set of software technologies that makes it easier to share information between computer systems.

Philips TraceMasterVue, available as a hardware-independent software application, automates the processing and storage of ECGs. Support for XML and HL7 export enables seamless integration with other systems across the hospital enterprise, including the Philips IntelliVue Information Center.

Philips CareVue Chart automatically collects and charts physiological data in HL7 format from patient monitors, bedside devices and laboratory information systems. CareVue Chart can be accessed from wireless tablet PCs, remotely from home, at the bedside PC or from Philips IntelliVue patient monitors and Information Center.

Built on open standards, both TraceMasterVue and CareVue Chart are easy to install, use, maintain and support. Plus .NET enables new levels of manageability, scalability and security.

## Philips HeartStart MRx features long battery life, self tests and compatibility with patient monitors, cardiographs

The new Philips HeartStart MRx monitor/defibrillator combines monitoring technology with diagnostic measurements and Philips' patented resuscitation therapies in a single, lightweight yet rugged device.

The HeartStart MRx offers the longest battery-powered operating time, largest color display and fastest time to shock of any monitor/defibrillator. It takes less than five seconds to administer a shock.



Recent enhancements to the Philips IntelliVue Information Center include alert data export and a larger, 1,280-bed network overview.

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The Philips HeartStart MRx meets the monitoring and defibrillation needs of the varied and demanding hospital environment

Automated self-tests check the HeartStart MRx for readiness, and the monitor/defibrillator also incorporates easy-to-run routine operational checks. Results of both test types are automatically stored internally and can be viewed and printed.

Designed with alarms and algorithms consistent with Philips patient monitors and cardiographs, the HeartStart MRx is optimized for a variety of uses, including crash cart defibrillator, critical care transport monitor, cardioverter, pacemaker and AED.

## Philips and Epic combine strengths for the sake of integration

Philips has formed an alliance with Epic Systems Corporation, a leader in enterprise-wide, integrated healthcare information systems, to provide enterprise software, medical imaging and monitoring IT solutions that will integrate patient information enterprise-wide.



With new Philips HeartStart Disposable Sterile Internal Defibrillation Paddles, there's no need to test, track or investigate failures of reusable paddles. Compatible with the Philips family of defibrillators and patient monitors, the disposable paddles increase ease-of-use and create a safe, cost-effective alternative to reusable paddles.

This cooperative agreement combines Epic's strengths in patient-centric, enterprise-wide healthcare information systems with Philips strengths in medical imaging, PACS and patient monitoring technology.

The first integrated solutions are expected to be introduced late 2004.

## Correction on Blease agreement and availability

In the Fall 2003 *Probe*, a news article referenced a Philips agreement with Blease, a UK anesthesia and critical care ventilator manufacturer. That agreement, regarding the integration of the Frontline Sirius anesthesia workstation from Blease with the Philips IntelliVue MP70 patient monitor, does not apply to North America. We regret the error and apologize for any inconvenience.

## Customers again rank Philips at the top for overall service performance

For the fifth consecutive year, Philips Medical Systems earned the highest marks for patient monitoring services in IMV Limited's 2003 annual survey of healthcare facilities.

And for the second year in a row, Philips has set the highest record for Overall Service Performance. In 2002, Philips became the first and only company to earn top honors for such a wide array of medical technology disciplines.

With this year's responses from more than 4400 users from hospitals across the U.S., Philips achieved number one rankings in Patient Monitoring, Nuclear Medicine (tie), PACS/IT,

Ultrasound Cardiology, Ultrasound Radiology/OB-GYN, X-ray Angiography and X-ray Mammography.

Philips also ranked number one in the summary reports for Computed Radiography, Diagnostic Imaging, and Ultrasound-All Systems.

Factors rated included engineer competence and attitude, troubleshooting effectiveness, emergency service, hardware and software reliability, and the system installation process.

IMV Limited, based in Greenbelt, MD, is an independent healthcare research firm





## Q & A

The Q&A column features questions biomedical professionals have asked recently of engineering and clinical applications specialists at the Philips Cardiac and Monitoring Systems Customer Support Center in Atlanta.

### How do you clear the patient data from the new C3 monitor?

C3 monitor models 862474 and 862478 do not have a menu choice to clear patient data. By design, the monitor is to be used “patient-to-patient” without the need to clear data. The unit can store 12 hours of trended data. Each power cycle creates a new trend record. If trended data must be cleared, setting the monitor back to factory default settings will clear all patient data. However, *this also clears all configuration settings from unit.*

Reference Service Manual, part number 989803129451, chapter 5 for instructions.

### What tools are available to communicate with Viridia transmitters, to assist with programming and configuration?

Three end-user support tools<sup>1</sup> have been offered to date.

#### End User Support Tool 1

The June 1997 introduction of the Viridia telemetry system included the Wave Viewer, model M2605A — an HP 200LX palmtop computer with a proprietary flashcard containing the support tool software. As the Viridia transmitter firmware has been revised, the Wave Viewer flashcard has been updated to support new transmitter features. An abbreviated compatibility chart<sup>2</sup> is listed below. Please note that, at minimum, a Revision A.02.02 flashcard is needed to set Extended UHF frequency,

and only Revision B.00.01 flashcards allow display of raw EASI leads for viewing on Wave Viewer.

#### End User Support Tool 2

Beginning in November 2001, due to unavailability of the HP 200LX palmtop, the M2605A was discontinued<sup>3</sup> and a new Service Configuration Tool was introduced. This new configuration tool part number M2600-67020 consists of the following items: software M2605A-11005, User Guide M2600-9523C, and Infrared port (Jeteye) M2601-63020. The software and infrared converter provides the same Wave Viewer functionality except the ability to view patient waveforms.

#### End User Support Tool 3

Customers with Viridia TeleMon, model M2636B, may use their TeleMon to service Release C<sup>4</sup> Viridia transmitters. Model M2636B TeleMon will prompt the user during the boot process to “push check button for service.” After selecting “TeleMon and Transmitter configuration” and entering the correct password, the user is presented with service menu choices. Only Release C transmitters are compatible with the TeleMon models M2636A<sup>5</sup> or M2636B. The first release of TeleMon, model M2636A, did not support servicing of Viridia transmitters.

<sup>1</sup>Reference Document M2600-90321 for instructions covering each tool

<sup>2</sup>Reference Service Note M2600A-008H for complete software history

<sup>3</sup>Reference Service Note M2600A-056 for M2605A discontinuance

<sup>4</sup>Reference Service Note M2600A-008H for compatibility

<sup>5</sup>Reference Service Note M2636A-004 for software corrective action

Date	Revision	Language	Flash Card Part Number	Notes
July 2000	B.00.01	English, French, German & Dutch	M2605-73102	<b>Release C</b> — Change to allow display of EASI directly acquired (“raw”) waves (AI, AS, ES). SN M2600A-038
April 2000	A.02.02	English, French, German & Dutch	M2605-73101	<b>Release B</b> — Change to allow the frequency of extended band transmitters (option 020) to be set.
Sept. 1998	A.02.01	English, French, German & Dutch	M2605-73100	Twelve languages now available, help screens modified for worldwide use. SN M2600A-022
Dec. 1997	A.01.00	English	M2605-72101	FLASH card overwrite protection. No longer displays ECG wave during ECG Equipment Malfunction inop. SN M2600A-011
June 1997	A.00.11	English	M2605-72100	Initial release.



# Education

Improve your skills and maximize your technology investments this year with a class offered by the Philips Education Center. All courses are developed and tested by professionals you can rely on for their technical expertise.

For more information or to register for a class, call (800) 548-8833 (Option 3) in the U.S. For Canada, please check the URL noted here for the latest information. Prices listed here are for tuition only and do not include accommodations. Prices are subject to change.

Please contact the Education Center (800) 548-8833 (Option 3) for more information on the accommodations package for classes in Atlanta, including lodging, breakfast, lunch and shuttle transportation.

The schedule is subject to change. **For the latest course listings and to register online:** [www.medical.philips.com](http://www.medical.philips.com). **Click Customer Services/Education Services/Biomedical Service Training.**

**Shed some light for a pocket flashlight at [www.spo2center.com/rev](http://www.spo2center.com/rev)**

There's still time to share your thoughts on ways Philips can further improve SpO<sub>2</sub> reusable sensors. Go to [www.spo2center.com/rev](http://www.spo2center.com/rev) to complete a short questionnaire and receive a pocket flashlight for responding. A URL included in the Fall 2003 *Probe* was incorrect.

## Classroom Instruction for March-August

**Network Concepts for Biomedical Professionals (3 days): \$2,090 U.S. H1580A+12H**

Atlanta, GA	March 10	Atlanta, GA	May 17
Paramus, NJ	April 28		

**Philips IntelliVue MP60/70 monitors (3 days): \$2090 U.S. M8007A+12H**

Atlanta, GA	March 15	Bothell, WA	May 3
Livonia, MI	March 31	Atlanta, GA	June 16
Atlanta, GA	April 21	Atlanta, GA	June 23

**Philips Anesthetic Gas Module (2 days): \$1,815 U.S. M1026A+12H**

Atlanta, GA	March 18	Paramus, NJ	April 26
Atlanta, GA	April 6	Bothell, WA	May 6

**Philips IntelliVue Information Center (4 days): \$3,165 U.S. M3150A+12H**

Atlanta, GA	March 9	Atlanta, GA	April 13
Bothell, WA	March 23	Atlanta, GA	May 24
Livonia, MI	March 23	Atlanta, GA	June 15
Paramus, NJ	April 12		

**Philips IntelliVue Information Center Network/Database Server**

**(3 days): \$2,690 U.S. M3154A+12H**

Atlanta, GA	March 16	Atlanta, GA	June 8
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**Philips OB TraceVue Rel. D (5 days): \$3,440 U.S. M1383D+12H**

Atlanta, GA	April 12	Atlanta, GA	June 7
Atlanta, GA	May 10	Atlanta, GA	August 16

**Philips Digital Telemetry System (2 days): \$1,815 U.S. M2600A+12H**

Bothell, WA	March 29	Atlanta, GA	April 19
Livonia, MI	March 29	Atlanta, GA	June 21

**Philips SONOS 4500/5500/7500 (4 days): \$6,000 U.S. M2424A+12H**

**(Please enroll via your local service representative)**

Cleveland, OH	March 30	Cleveland, OH	June 22
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**Philips Component Monitoring System (3 days): \$2,090 U.S.**

**M1100A+12H**

Atlanta, GA	April 27
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**Philips TraceMaster ECG Management System (3 days): \$2,690 U.S.**

**M3700A+12H**

Atlanta, GA	May 11
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