



# Insights

4th Quarter, 2004

ScottCare — The Leader in Cardiopulmonary Rehab Patient Monitoring

## Upcoming Trade Shows

### October 7-10:

AACVPR  
Long Beach, CA

### October 16:

MOKSACVPR  
Kansas City, MO

### October 21:

MACVPR  
Framingham, MA

### October 26:

KCRA  
Louisville, KY

### October 26:

MACVPR  
Timonium, MD

### October 27-28:

MNACVPR  
Rochester, MN

### November 3-4:

LAEP  
Baton Rouge, LA

### November 9:

TACVPR  
Nashville, TN

### November 13:

ACVPR  
Little Rock, AR

*The AACVPR conference is right around the corner.*

*For more information, go to [www.AACVPR.org](http://www.AACVPR.org).*

## Join us at AACVPR in Long Beach

We are looking forward to seeing you at our Booth (#401) at the AACVPR National Meeting in Long Beach on October 7-9.

If you would like to take the opportunity to address specific issues, perhaps get additional training on a certain element of your system, or have other in-depth discussions, please contact me at [kenz@scottcare.com](mailto:kenz@scottcare.com) or Theo Jordanides at [theo@scottcare.com](mailto:theo@scottcare.com) so that we can set aside a sufficient amount of time and personnel required to adequately address your needs without interruption.

Once again, we will be holding a **Customer Appreciation Night Reception** to thank you for your support of ScottCare. We had a great turnout in Kansas City last year and are expecting a larger crowd for this year's event. Please join us for cocktails and heavy hors d'oeuvres at the Renaissance Long Beach-Sicilian Ballroom on Friday evening, **October 8**, from 5:30 to 7:30 p.m. We look forward to seeing you there!

— Ken Zajackowski, President

## ScottCare releases Advantage 1.4

ScottCare released an updated version (1.4) for TeleRehab™ Advantage users in early September. The new release addresses anomalies in earlier releases and includes new features, the most significant of which is the ability to retain all full disclosures on all patients for an indefinite period of time.

If you have not received the update or need assistance in installing the software, please contact customer service at 1-800-243-9412, option 2.

### Utilizing the system for pulmonary or unmonitored patients

There are two options to complete reports for this population:

The **first option** is putting a patient on the monitoring screen. The patient can be recorded but will not have a transmitter on, therefore, the EKG will show a flat line or triangle waves. All data, such as blood pressures, change of modality, blood sugars, etc., can be entered while the display is showing a flat line. This data will then be utilized when completing reports. One disadvantage of monitoring patients that are not on a transmitter is that the heart rates would not be accurate. Therefore, all heart rates will need to be edited in the report.

The **second option** is not putting the patient on the monitor. An unmonitored report can be created in program management under single session reports. Click on "unmonitored report" and assign the report a date. At this time an unmonitored report appears and you do have the capabilities to change the report style if desired. All data will need to be entered in for the report to be completed.

Due to the increased need to track Phase III patients, we will also be revising the Advantage software to allow more efficient data input for unmonitored patients. If you have any suggestions, please email them to [harrys@scottcare.com](mailto:harrys@scottcare.com).

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## ScottCare and HIPAA Compliance



While there is no means to assert HIPAA compliance for products – *it is the organization that is compliant, not the product* – ScottCare is uniquely positioned to facilitate your cardiopulmonary rehabilitation department compliance by April 2005.

The TeleRehab™ Advantage software is presently undergoing modifications that will incorporate core features to assist with your HIPAA compliance as well as FDA 21 CFR Part 11 regulations covering Electronic Records and Electronic Signatures.

**All TeleRehab Advantage users will automatically receive the updated software with these HIPAA related features.**

These features will include:

- User authentication and authorization to manage information flow, to identify users with different levels of access control, and to restrict access to create, view or change information based on the user profile.
- Security that automatically locks down the operating system to only the required

services. After a select period of inactivity, Advantage also automatically removes access to patient health information and logs-off.

- Audit trail security tools will log key user parameters such as data access and transfers, logins/logouts and network associations.
- Secure Socket Layer (SSL) 128-bit encryption to protect data from being easily intercepted and interpreted by parties other than the intended recipients.
- Electronic signatures.
- Transmission of electronic order data – diagnoses, test results, observations, billing information and reports-in an HL7 format.

For more information on these HIPAA-related software features and the cost of upgrading your current TeleRehab system to an Advantage monitoring system, please contact your ScottCare sales representative at **(800) 243-9412, ext. 116**, or [sales@scottcare.com](mailto:sales@scottcare.com).

### Contact Us

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## Abstract: Remote Electrocardiographic Monitoring of a Patient with Paroxysmal Atrial Fibrillation

*Moss BJ, Sparks KE, Shaw DK. Physical Therapy Department, Texas State University-San Marcos, TX, and Physical Education Department, Cleveland State University, Cleveland, OH.*

**OVERVIEW:** In 2003, the Department of Physical Therapy Telehealth Program at Texas State University-San Marcos began operation. This program, made possible by several grants, grew from a need to bring enhanced rehabilitation services to rural Texas citizens. Specific program focus is on cardiopulmonary rehabilitation with patients simultaneously voice and ECG monitored during exercise. Our first client was an obese 58 year old white female with a history of paroxysmal atrial fibrillation (PAF). During her three month program participation, no exercise-related PAF was observed. However, by month two, the patient's systolic blood pressure (SBP) began to drop at heart rates  $\geq 110$  b/min. The SBP drop elicited no symptoms. In addition, she complained of intermittent tingling in both hands; a manifestation not always occurring during exertion. Although arrhythmias occurred less frequently, she had several nocturnal tachycardic events which were assumed to be PAF. These resolved spontaneously. Concern over a possible worsening physical condition prompted follow-up with her cardiologist. A nuclear stress test was subsequently ordered with reversible ischemia documented. This was followed by heart catheterization which revealed only minimal narrowing of the left anterior descending artery. Her left ventricular ejection fraction was 60% with normal wall motion noted. Although the PAF and SBP issues were not entirely resolved, her cardiologist felt the patient was in no imminent danger. She was cleared to resume exercise therapy completing a total of 40 monitored sessions. Now essentially free of cardiac anxiety and feeling physically stronger, the patient returned to work after 13 years of self-imposed home isolation. **RELEVANCE:** Patients with cardiac disease living in rural areas are at a disadvantage relative to participation in cardiac rehabilitation programs. The present case study provides support for the use of telehealth technology in reaching these isolated individuals.

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## Questions & Answers:

### Should the computer & hardware components be turned off each night?

**Daily Routine:** The computer should be shut down every day. Complete this first by shutting down the software by clicking on ScottCare TCP/IP at the bottom of the screen. Then click on “quit” and the Advantage Server is now turned off. After shutting down the Advantage Server, you may now shut down the Windows operating system (normal shut down).

**End of Week:** The additional hardware and equipment should be turned off at the end of the week (the last day of use before the weekend). First, shut down the software by clicking on ScottCare TCP/IP at the bottom of the screen. Then click on “quit” and the Advantage Server is now turned off. After shutting down the Advantage Server, you may now shut down the Windows operating system (normal shut down). Once the computer system is turned off, you may now shut down the hardware and equipment that is used for Advantage. This can be done by shutting off all power strips that are used for the Advantage system. Complete this by just hitting the rocker switch (on/off) that is lit (color red) on the power strip.

**Tip:** When you come in on Monday to start your computer, please remember to turn the rocker switch back on that is located on the power strips. Without the power strips on the computer and all related equipment will not have any power.

### Quotable Quotes

“The quality of life  
is in the mind,  
not in material.”

— *Malcolm S. Forbes*

### What is an HL7 Interface?

There is much confusion in the market about what constitutes an HL7 Interface, and the meaning of “integration with the hospital information system (HIS).”

An interface with an HIS is much more than the ability to email a report to another party. In fact, emailing a document or report in a word or PDF format that contains Protected Health Information does not comply with HIPAA as the data is not encrypted.

ScottCare’s HL7 Interface for TeleRehab™ Advantage is seamless and transparent to the clinician and provides the following benefits:

- Patient Search screen allows rehab personnel to pull patient demographics, billing and other medical information by simply entering the patient’s social security or hospital ID number. This feature alleviates the need to key enter new patient data for any patient already registered in the HIS.
- Once a rehabilitation session is performed and result is available, the result is automatically transferred from the Advantage System to the HL7 module to be processed to HL7 Result message (ORU) and sent back to the HIS for billing or other purposes.
- The HL7 interface module can be customized to automatically transfer discrete patient data, custom resources, session result data, and patient reports from the Advantage System to HIS in a HIPAA compliant (hex encoded encryption) format.
- The HL7 Interface allows integration with all leading HIS and Cardiovascular Information systems.

For information and pricing on the Advantage HL7 Interface module please contact your ScottCare sales representative at (800)-243-9412, extension 116 or [sales@scottcare.com](mailto:sales@scottcare.com).



### What is the best way to connect all equipment in terms of power strips and UPS?

ScottCare recommends that all equipment be connected to a power strip. When using two power strips, do not daisy chain or piggyback the power strips together. In other words, do not plug a power strip into the other. Make sure both power strips are plugged into their own electrical outlet, preferably to a wall outlet. If a UPS (Uninterrupted Power Supply) is available, each power strip should be plugged into the UPS.

The printer should never be plugged into the UPS. Please plug all printers on its own electrical outlet.





## User Profile: St. Joseph's Mercy of Macomb, Clinton Twp., MI Peggy Mellett, RN, Nursing Supervisor

St. Joseph's Mercy of Macomb in Clinton Township, Michigan, offers a comprehensive cardiac rehabilitation program that combines prescriptive exercise training with coronary risk factor modification for patients with diagnosed heart disease. The goals of the program include not only improved functioning and quality of life, but also a reduction in illness and death related to cardiovascular illness. St. Joseph's Mercy's affiliation with the Henry Ford Heart and Vascular Institute is instrumental in its ability to bringing world class care to Macomb County, just outside of Detroit.

In partnership with Henry Ford, St. Joseph's program teaches individuals about their disease, symptoms and management and helps those with heart disease modify their risk factors. The program gives patients the opportunity to start exercising slowly in a supervised, comfortable setting. While they exercise on a treadmill, NuSteps, stationary bike, rowing machine or other equipment, certified staff monitor them for discomfort or changes in symptoms.

The Phase II and Phase III programs see bypass and heart attack patients as well as patients from Henry Ford's transplant program. Phase III includes supervised aerobic exercise designed to increase and maintain physical fitness. In addition, participants are educated on heart healthy eating, weight loss, the importance of quitting smoking and ways to relax and reduce stress.

Peggy Mellett, RN, St. Joseph's Mercy Cardiac Rehabilitation Nurse Manager, said, "Often times, patients enter the program feeling down, and when they see others in the program experiencing the same cardiac problems, it helps them realize they are not alone. Many program participants keep in contact with each other even after

*Kay Pomeroy, Registered Dietician, in conference with a patient. Patients can schedule a session with Kay regarding any aspect of their dietary questions.*

their treatment is through and develop exercise routines together."

Peggy has been a cardiac

rehab nurse for 17 years. She was responsible for setting up the liaison between St. Joseph's Mercy and Henry Ford 12 years ago when she worked with Henry Ford. "This is the best job I've ever had," added Mellett. "It's rewarding to help patients with lifestyle modification."

In addition to Mellett, the cardiac rehab staff includes: a physician, Dr. Desai; Elaine Gray, RN; two exercise specialists, Nicole Borque and Shannon Siegwald; a dietician, Kay Pomeroy; and, Barbara Szczesiul, a secretary. The program offers five classes with 12 patients each.

St. Joseph's maintenance program is called Working on Wellness (WOW). The program includes not only cardiac patients but people with cardiac risk factors, such as diabetes, high blood pressure and obesity. Some bariatric programs send St. Joseph's their patients to fulfill pre-surgery requirements. For example, Henry Ford requires that all patients exercise and lose weight before the surgeons will do bariatric surgery. Education classes focus on dietary, behavior modification and exercise. The dietician sees patients on a one-on-one basis in Phase II and WOW.

St. Joseph's Mercy Cardiac Rehabilitation Program started using ScottCare's TeleRehab™ Advantage in March 2004. There were lots of challenges at first, however, ScottCare's technical support staff worked closely with St. Joseph's to troubleshoot and solve the problems.

"ScottCare's technical support staff listened to our needs and made the necessary improvements to Advantage," said Mellett. "Kudos to Theo and Luigi -- they've been great. I would recommend the system to anyone."

Peggy noted that the ScottCare system makes life much easier. "Now I can always look back at other strips if there's a concern over a patient. We can also readily go back to the strips needed by Medicare," said Mellett.



St. Joseph's Mercy of Macomb cardiac rehabilitation staff