

**PHYSIO  
CONTROL**



**CODE-STAT™ 9.0** DATA REVIEW SOFTWARE



More powerful post-cardiac-  
event review. Improved performance.  
A higher level of care.



## Improvement. Fueled by information.

### **New CODE-STAT 9.0 Data Review Software**

On the scene of a medical emergency. In the hospital responding to a cardiac arrest. When lives are at stake, the speed and quality of the care you deliver is everything. But while you and your teams work to save lives, we know you're also working to get better at what you do—to learn from your clinical and rescue experiences, improve response and protocols and discover how best to apply your training and expertise and make a difference for each patient whose future is in your hands.

But you need more than commitment alone to truly improve care. With guidelines placing even more emphasis on improving outcomes, data review has never been more critical to bringing best practices and measurable care improvement to both hospitals and EMS teams.

That's why there's CODE-STAT 9.0 from Physio-Control. The newest version of our innovative data review software is a simple, flexible and powerful tool for collecting and accessing patient and performance data. The result is unprecedented insight into the care you provide—and the opportunity to elevate that care across the entire resuscitation system.

---

Simple ▪ Practical ▪ Powerful ▪ Visual

---

# Time to manage what you measure

**Your EMS and hospital response teams do their work in a whirlwind of chaos and stress—it's the atmosphere they thrive in. To find ways to improve care, meet guideline recommendations and hit the quality targets you expect in these busy environments, post-event review is essential.**

For looking at a single patient case or examining trends across hundreds, CODE-STAT 9.0 data review software gives you the ability to quickly collect and access all your patient and performance data. How much time elapsed until intubation? How long was CPR performed? How much time passed before the first shock was delivered? Were chest compressions performed according to the new AHA Guidelines for CPR? With CODE-STAT 9.0, you have an easier, more visual way to gather and interpret all your data, get specific results faster and find the answers you need.

**“We now had the ability to look at our own data. You can't figure out what you can do better if you don't collect data. And you can't figure out what you can do better if you don't LOOK at the data. Our new philosophy is 'measure, improve, measure improve.' And I'm not talking about administrators, I mean the people on the scene, the people who are going to change things out on the scene, the people working on cardiac arrests.”**

**— Dana Yost, Paramedic  
Redmond (WA) Medic One**

## Improve care on the scene and in the hospital

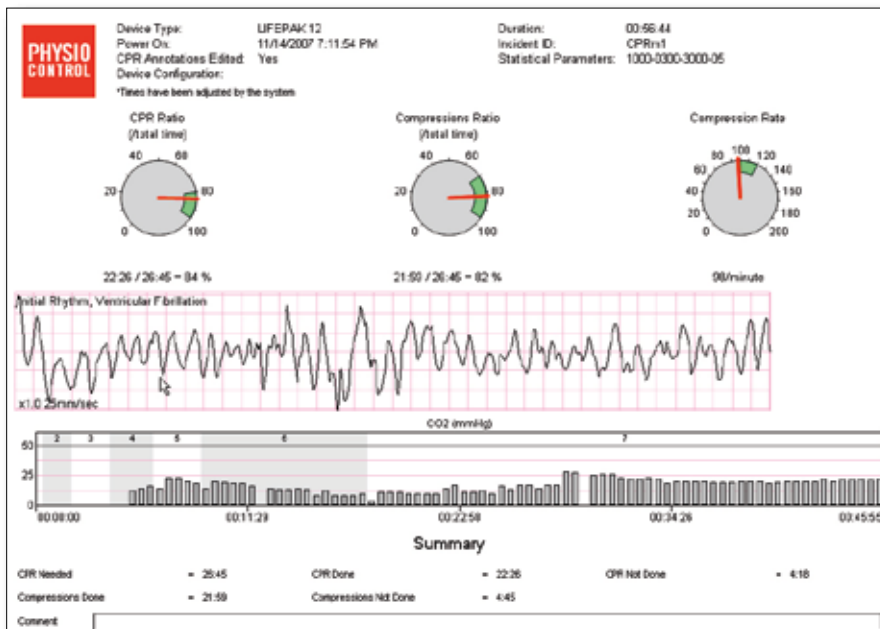
- 
- Simplify manual outcome data collection with automatic collection by LIFEPAK® devices
- 
- Re-create incidents by viewing waveforms in playback
- 
- Add notes, photos or annotations for a more comprehensive event record
- 
- Manage risk by documenting and storing a complete record of each event
- 
- Identify areas for improvement to raise care levels and meet guideline recommendations
- 
- Provide feedback to rescuers in a simple format as part of a debriefing process
-



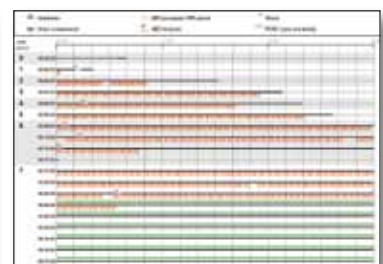
# Seeing the path to improvement

A powerful tool for collecting and accessing patient and performance data from multiple LIFEPAK devices. A central location to store this critical information once downloaded. And something more.

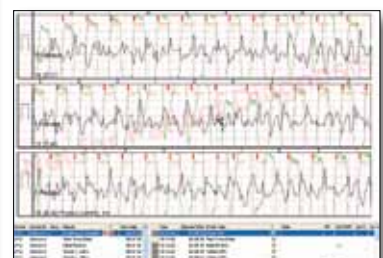
With its simple dashboard and easy-to-read dials, CODE-STAT 9.0 delivers data in a highly visual way. From at-a-glance view of a case or a replay of the entire event, it allows you to find and understand just what you're looking for in post-event review, making it simpler to analyze performance and identify the steps your teams can take to improve.



Dashboard view provides a quick overview of case statistics



CPR QUIK-VIEW™ data review program provides a quick snapshot of the case



Automatic annotation of chest compressions

- 
- Download, review, manage and analyze emergency medical data from LIFEPAK devices

---

  - Use continuous EtCO<sub>2</sub> waveform reporting to document intubation, verify tube placement during transfer and patient response to respiratory treatment (with enhanced LIFEPAK 15 monitor/defibrillator)

---

  - Get CO<sub>2</sub> trend data from the CODE-STAT 9.0 Summary Report

---

  - Identify CPR performance variations to improve quality

---

  - Organize a case summary by either CPR periods or minute increments

---

  - View multiple continuous waveforms such as continuous ECG, EtCO<sub>2</sub> and SPO<sub>2</sub> (not available on all equipment) alongside one another

---

  - Annotate chest compressions and ventilations on the patient's continuous ECG report

---

  - Calculate CPR statistics such as compression rate and hands-on time

---

  - Organize patient files electronically in a central location to eliminate manual storage and prevent loss

---

  - Improve event documentation with simple data entry forms and waveforms annotations

---

  - Create customized benchmarking and trending reports to measure performance

---

  - Export case data in XML format to other applications for further analysis

---

### What's new in 9.0

The latest release of CODE-STAT software is the most powerful ever, with new features to help improve performance and care. Continuous EtCO<sub>2</sub> waveform reporting from a LIFEPAK 15 monitor/defibrillator helps ensure proper and consistent intubation. CO<sub>2</sub> trend data is provided on the CODE-STAT 9.0 Summary Report. And new, flexible CPR periods will highlight variations in CPR performance—especially critical in light of the 2010 AHA Guidelines' focus on CPR quality.

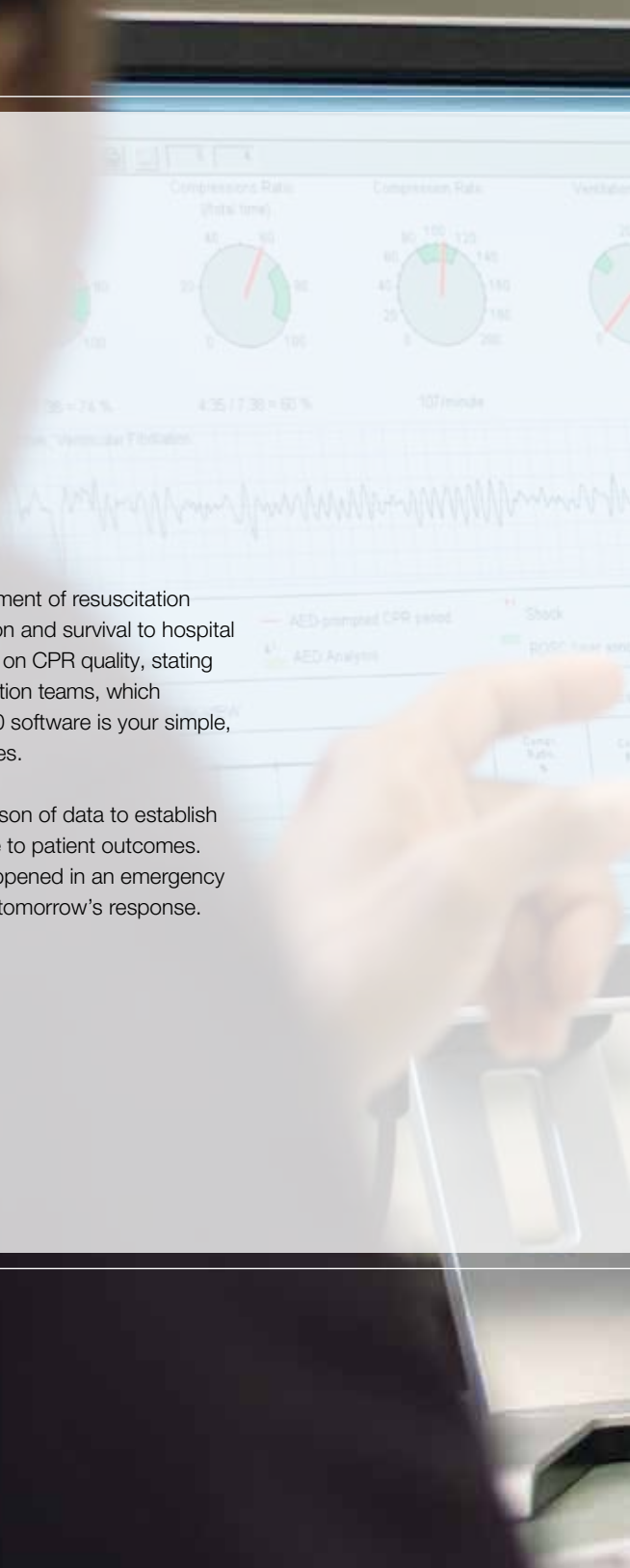
### CODE-STAT Software and LIFENET® System

In the field and in the hospital, Physio-Control technology works together to provide a seamless system of superior care. Our LIFENET System allows EMS crews to wirelessly transmit LIFEPAK 12 and LIFEPAK 15 monitor data into CODE-STAT 9.0 software right from the rig, using the same secure connection used to transmit 12-lead ECGs. In the hospital, data can be routed to CODE-STAT 9.0 through the internet, using either DT EXPRESS™ or a wireless gateway for LIFEPAK 12 or LIFEPAK 15 devices.

## Meeting and exceeding standards

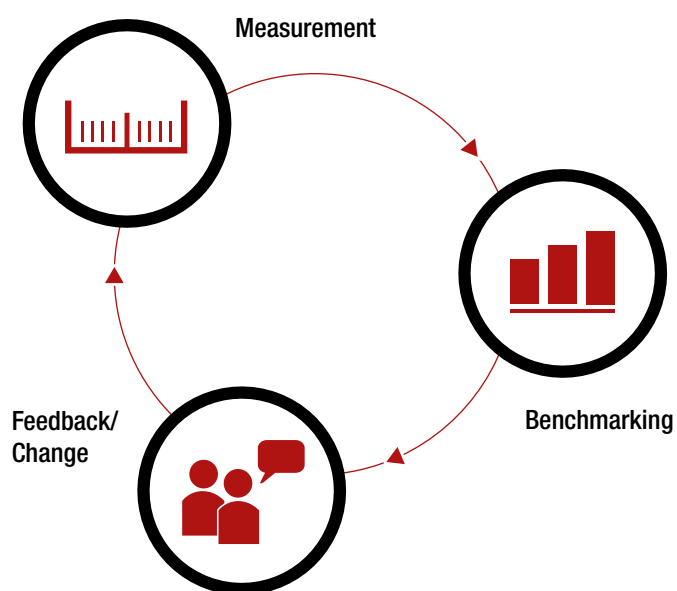
The 2010 AHA Guidelines note that quality improvement relies on valid assessment of resuscitation performance and outcome, and lists rate of bystander CPR, time to defibrillation and survival to hospital discharge among core performance measures. There is also an increased focus on CPR quality, stating the data downloaded from defibrillators provide valuable information to resuscitation teams, which can improve CPR performance and thus help save more lives. CODE-STAT 9.0 software is your simple, powerful tool for collecting and accessing information on these critical measures.

The Guidelines also stress the need for systematic internal review and comparison of data to establish effective benchmarks and create a feedback system that results in real change to patient outcomes. With CODE-STAT 9.0 software, you don't just have data on what's already happened in an emergency event—you have the ability to analyze it and find ways to make care better for tomorrow's response.





## Quality improvement elements of a resuscitation system



---

### Christenson study and CODE-STAT software

A recent study released by Dr. John Christenson, et al. shows that chest compression fraction appears to be an important determinant of survival from cardiac arrest. CODE-STAT 9.0 makes it easier to measure and analyze chest compression performance by annotating relevant data onto the patient's continuous ECG report and automatically calculating CPR statistics such as compression rate and hands-on time.<sup>1</sup>

---

# Your performance improvement starts now

Science-driven. Guidelines-consistent.

A powerful, simple visual tool for driving resuscitation performance improvements across your EMS and hospital teams—and changing outcomes for your patients. Contact a Physio-Control representative and find out how easy and affordable it is to bring CODE-STAT 9.0 software to your care system.

Call **1.800.442.1142** or visit **[www.physio-control.com](http://www.physio-control.com)** today.



## SYSTEM RECOMMENDATIONS

### COMPUTER

The hardware and software described below include the minimum and recommended system capabilities needed to set up and run CODE-STAT software.

For running under Microsoft® Windows® 2000 and Microsoft Windows XP: computer with Pentium® II processor of 400 MHz or higher (Pentium IV processor of 1.7 GHz is recommended).

For running under Microsoft Windows Vista® and Microsoft Windows 7: computer with a 1 GHz or higher processor (Pentium IV processor of 1.7 GHz is recommended).

### OPERATING SYSTEM

Microsoft Windows 2000 Professional with Service Pack 4, Windows XP SP3, Windows Vista or Windows 7.

Microsoft Data Access Components version 2.7 or later.

### WEB BROWSER

Internet Explorer version 5.01 or later.

### MEMORY

Minimum of 256 MB of RAM (512 MB recommended) for running under Microsoft Windows 2000 and Microsoft Windows XP.

Minimum of 512 MB of RAM (1 GB recommended) for running under Microsoft Windows Vista.

Minimum of 1 GB of RAM (2 GB recommended) for running under Microsoft Windows 7 (32-bit).

Minimum of 2 GB of RAM (4 GB recommended) for running under Microsoft Windows 7 (64-bit).

### CD-ROM

CD-ROM drive, 4x or faster.

### HARD DISK

80 MB of free space for installation purposes.

100 MB of free space for the data import process.

700 MB of free space for the database (required only if a computer stores that database).

### SOUND

Sound Blaster®-compatible sound card and speakers (required to play back audio reports that are associated with continuous ECG).

### SERIAL PORT

Required to receive reports through a direct connection.

### MODEM

Required to send and receive reports through a telephone connection.

### IrDA PORT OR ADAPTER

Required to receive reports from LIFEPAK CR Plus defibrillator, LIFEPAK 20/20e defibrillator/monitor, LIFEPAK 1000 defibrillator and LIFEPAK EXPRESS® defibrillator.

### MONITOR

At least 800 × 600 pixel resolution (1024 × 768 pixel resolution is recommended).

## REFERENCES

1 Christenson J, et al. Chest compression fraction determines survival in patients with out-of-hospital ventricular fibrillation. *Circulation* 2009;120:1241-1247.

For further information, contact Physio-Control at 800.442.1142 (U.S.), 888.870.0977 (Canada) or visit our website at [www.physio-control.com](http://www.physio-control.com).



### **Physio-Control Headquarters**

Redmond, WA 98052  
[www.physio-control.com](http://www.physio-control.com)

### *Customer Support*

P. O. Box 97006  
Redmond, WA 98073  
Toll free 800 442 1142  
Fax 800 426 8049

### **Physio-Control Canada**

Physio-Control Canada Sales, Ltd.  
7111 Syntex Drive, 3rd Floor  
Mississauga, ON  
L5N 8C3  
Canada  
Toll free 800 895 5896  
Fax 866 430 6115



**Physio-Control, Inc.**, 11811 Willows Road NE, Redmond, WA 98052 USA