



## GREENVILLE HEALTH SYSTEM

### **Press Release**

**Date:** April 15, 2013

**Contact:** Karen Potter, 797-7558

### **Patient tracking system helps hospital save time, money**

**GREENVILLE, S.C.** – Giant dry-erase boards detailing operating room schedules are a thing of the past at Greenville Health System's flagship hospital Greenville Memorial thanks to a novel patient tracking and surgery scheduling system called OR-Max™.

The new system is the only one of its kind in the nation and was developed by South Carolina-based Integrated Business Systems and Services (IBSS) in collaboration with GHS.

“Like all health care organizations, GHS is challenged with increasing efficiency and reducing costs while continuing to provide high quality care,” says Gilbert Ritchie, director of anesthesia and perfusion services at GHS. “This new technology allows us to broaden communication and gain real-time information that can help drive decisions, increase efficiency and ultimately reduce costs.”

Upon admission to Greenville Memorial, surgical patients are assigned a case number, and a Radio Frequency Identification Device (RFID) is affixed to their chart. The RFID technology, along with interfaces to GHS' surgical and anesthesia information systems, tracks the patient's status as they move through the perioperative process and updates the information in the system. This information is then broadcast to a set of digital display boards located in critical care areas like pre-op and post-op.

“The display boards operate like arrival and departure boards at an airport,” says Ritchie. “Instead of a flight number, staff follows a case number. And instead of an arrival or departure, they are watching for a change in status from pre-op to intra-op to post-op.”

In addition to display boards, the OR-Max system communicates up-to-the-minute circumstances to key staff via text message or other alert and pinpoints the source of delays so that corrective action can be taken immediately. For example, a surgeon may receive a text message stating that there has been a

delay in getting a patient from pre-op to the operating room or that a surgical case has been canceled. Armed with this information, staff can immediately make changes to the surgery schedule to minimize or avoid further delays.

“The beauty of the system is that it allows complete transparency with regard to what is happening with each patient. Pre-op knows what is happening in the OR and the OR knows what is happening in pre-op,” says Dr. Wendell James, medical director of perioperative services and chair of the anesthesiology department at GHS. “This is hugely important in running an OR because one delay can create a domino effect that can impact an entire day’s surgery schedule. Our goal is to not waste time or resources if we can prevent it.”

According to Dr. James, there have been a number of other benefits since implementing OR-Max. Prior to implementation, nurses spent a great deal of time on the phone contacting physicians to get information about their patients. With this new system, nurses have the information at their fingertips and can spend less time on the phone and more time administering care. Physicians are also better able to manage their work flow and be where they are supposed to be and when, says Dr. James. Staff is also more engaged now that they can see how their role impacts the entire perioperative process. In fact, the hospital has seen a 13 percent increase in staff productivity, equating to more than \$1.5 million in savings each year.

A digital display board located in the hospital’s outpatient surgical waiting area is also improving communication with family members. Using the patient’s assigned case number, family members can monitor their loved one’s progress throughout the entire perioperative process.

Greenville resident Tim Holland has spent many hours over the past few years in the outpatient surgical waiting area of Greenville Memorial, but Nov. 6 was the first time he saw OR-Max in action.

“Anticipation and anxiety are high when you’re waiting on your loved one to get out of surgery. With the new display boards, I felt at ease and connected throughout the entire procedure,” said Holland. “I felt like I knew what to expect. For example, when my wife’s status changed from intra-op to post-op, I knew a physician would be out to talk with me within 20 minutes.”

According to Ritchie, the hospital’s outpatient surgery patient satisfaction scores have greatly improved since OR-Max was implemented. For example, during fiscal year 2010 outpatient surgery ranked in the 17<sup>th</sup> percentile compared to the first quarter of fiscal year 2013 when it ranked in the 90<sup>th</sup> percentile. While a number of factors likely contributed to the improvement, Ritchie says OR-Max is often cited on patient satisfaction surveys as a positive method of communication.

Greenville Memorial is a Level 1 Trauma Center with 30 operating rooms. More than 20,000 surgical cases are performed at the hospital annually. OR-Max is currently being used in the perioperative area of Greenville Memorial, but GHS plans to expand it to other areas of its health system in the near future.

### **About IBSS**

Integrated Business Systems and Services, Inc. (IBSS) focuses on applying technology to help customers in healthcare and other industries improve business processes.

IBSS applies its patented core technology, Synapse™, to build and distribute its family of application products that are optimized for specific industries. Highly adaptable, leveraging RFID, wireless and emerging technologies, Synapse makes ongoing business process improvements truly sustainable.

In healthcare, IBSS solutions deliver reduced cost while increasing the efficiency of many key clinical and supporting processes. The IBSS flagship solution, OR-MAX™, achieves significant measurable improvements in the efficiency of the complex processes driving a hospital's perioperative departments.

IBSS is headquartered in Columbia, South Carolina. For more information about IBSS and its Synapse™ technologies and services, visit [ibss.net](http://ibss.net).

### **About Greenville Health System**

Greenville Health System (GHS) is committed to medical excellence through patient care, research and education. GHS offers patients a comprehensive network of expertise and technologies through its five medical campuses, tertiary medical center, research and education facilities, community hospitals, physician practices and numerous specialty services throughout upstate South Carolina. It also is home to one of the nation's newest medical schools – University of South Carolina School of Medicine Greenville.

Among the largest healthcare networks in the Southeast, this not-for-profit system contains 1,268 beds, 14 medical residency and fellowship programs, and the state's largest number of active clinical trials. Recent honors include being named one of the Top 100 Integrated Healthcare Networks, Top 50 Teaching Hospitals and 10 Best-led Hospitals.

For more information, visit [ghs.org](http://ghs.org).

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