Cape Fear Valley Health System uses iTMS and Tablet PCs to enhance staff productivity by creating a paperless work order process.

Client Profile
Since 1956, Cape Fear Valley Health System has grown from a 200-bed, one-building hospital to a regional health system with 616 beds, four hospitals, and primary care physician offices throughout Cumberland County and surrounding areas. The health system consists of Cape Fear Valley Medical Center, an acute-care hospital; Highsmith-Rainey Memorial Hospital, a long-term acute care as well as a 24-hour urgent care facility; Southeastern Regional Rehabilitation Center, a physical rehabilitation facility; Behavioral Health Care, a comprehensive psychiatric hospital; HealthPlex, an award-winning fitness and wellness facility; and physician offices located throughout Fayetteville and surrounding counties.

Business Issue
The computerized maintenance management system deployed by the three facility engineering groups at Cape Fear Valley Health System had become obsolete. A cross functional team was assembled to conduct a search for a new system. The following were the primary goals of the project:

1) Replace the current computerized maintenance management system to maintain regulatory and JCAHO compliance.
2) Enhance staff productivity by creating the paperless processing of preventative and corrective maintenance work orders.
3) Provide qualitative cost analysis for labor, materials and equipment by way of creating an automated paperless operation.
4) Reduce over all costs associated with unnecessary paperwork.
5) Improve overall patient and customer satisfaction.

Cape Fear Valley Health System consists of four hospitals and physicians offices supported by 42 technicians in three engineering groups. It was vital that the new system be Web-based, support a segmented database, and utilize the existing wired and wireless networks.

Solution
The team selected iTMS from Four Rivers Software. For the technicians, the HP TC1100 Tablet PC was selected. The entire technician workforce was equipped and trained.
following a successful trial period. Web Request from Four Rivers was also implemented to take the paper out of the service request process. The result was a new streamlined work order process that has increased customer satisfaction and improved the efficiency and productivity of the maintenance staff.

Customers now enter requests directly into a web page where they can also check on the status of their work order(s) 24 hours a day. The request is electronically converted to a work order and available immediately online by the technicians in the field via their Table PC with its wireless connection to iTMS. Once the work is completed, the work order status is updated by the technician in the field and the data is immediately available online to the customer and to management.

Some of the initial results of this new process are as follows:

1) The work order process was simplified, the paper eliminated and the accuracy, completeness, and timeliness of information has increased.
2) Customer satisfaction has increased significantly.
3) Technicians are no longer paper bound and can spend more of their time in the field working on equipment.
4) The latency from the time a work order was completed until the information was available online has dropped from 2-3 weeks to immediately.
5) Service request / work order accountability has increased and communications issues have been eliminated.

Looking forward, the team is planning on extending the use of the Table PCs by making facility and equipment engineering drawings available online to the technicians to reference from the field.

Quotes

“The web based capabilities of iTMS combined with the mobile access provided to our technicians through the Tablet PCs have proven to be a winning combination that has allowed us to achieve our goals. The work order process is no longer bound by paper and the promise of increased customer satisfaction and improved technician productivity is being realized.” Fred McMillan, Director of Engineering

“The project to implement iTMS and the Tablet PCs went very smoothly. We were able to leverage the hospital’s existing wireless infrastructure to seamlessly interface iTMS to the Tablet PCs, out of the box without any need for adaptations.” Brandie Allen, Systems Analyst