

Case Study

Putting Patients in Charge: Internet-Based Room Service

At the hospitals of the Heritage Valley Health System in Pennsylvania, every patient meal tray is on time and precisely to order, thanks to new technology that supports patient-centered nutrition care, says Steve Mihalick, System Director of Dietetics. In fact, there is no such thing as a “late tray” or “second tray,” he explains. The Internet-based room service system provided by Vision Software Technologies (VST) is an excellent solution, says Mihalick.

Advantages of an Internet-based Solution

A hosted service means that the complex application software is located on an Internet server, which the dietary staff uses through secure Internet channels and user-friendly Web interfaces. Advantages of the hosted solution include centralized management for the dietary systems, with minimal overhead, as well as virtually no capital expenditure.

“We used our existing equipment,” says Mihalick, “with the start-up addition of three new PCs for each call center.” He adds that the health system did not have to invest in customized networking because the network oper-

ates on existing Internet connectivity. “We did not purchase software, either,” he notes. “Instead, we operate on a monthly subscription basis.”

Heritage Valley Health System is the first hospital in the nation to use a turnkey hosted solution to drive a room service model. “It is not only low-overhead in terms of capital budgets, it requires minimal in-house labor for maintenance of daily operations. Costs are fixed and predictable, and healthcare industry experts say hosted solutions (also called application service providers or ASPs) save 30-50 percent or more in computer-related operational costs. Hosted solutions leverage the technologies already in place in today’s sophisticated high-security HIPAA-compliant health information networks for reliable, cost-effective performance.”

Press Ganey Scores Soar

As a result of the room service implementation, Press Ganey satisfaction scores are soaring, says Mihalick. “At Sewickley Valley Hospital (Sewickley, PA), we started out at the 5th percentile for meal satisfaction in 2003,” he explains. “Three months

after starting room service, we registered at the 90th percentile.” In 2004 Mihalick revved up the same Internet-based system at The Medical Center in Beaver, PA, with impressive results: “We’re now at the 90th percentile here, too,” he notes.

All this is because patients order meals on their own terms, in their own time. Each tray is custom-prepared on demand in a true room service model. In their rooms, patients receive a standing restaurant-style menu based on diet assignments. For example, a patient following a sodium-controlled diet receives a menu with suitable choices. The menu touts “the best of the old cycle menu,” says Mihalick, along with familiar brand-name products. Fare also includes single-service entrees such as chicken breasts and pizza, baked to order in a flash bake oven.

Timing is Key

Ultimately, the secret is in the timing, according to nutrition staff. Any time from 6 a.m. to 7 p.m., a patient can order a meal by picking up the phone or asking a hostess. “It’s entirely on-demand,” says Computer Systems Specialist Diane Peck, “so the patient is in complete control.” A



Photo courtesy of Heritage Valley Health System.

patient dials the meal call center, and speaks to a service specialist who has the patient's menu up on the screen.

Explains Mihalick, "As soon as we type in the patient's room number, we have all the details, including diet order. We go down the menu together with the patient, suggest sides and beverages, click a mouse, and complete the transaction in under 70 seconds. The tray reaches the patient in less than 45 minutes."

Diet Checking

"We actually have 20 different restaurant menus to accommodate various therapeutic diets," explains Roberta Sams, Manager, Nutrition Services. In addition, she says, automated diet-checking software behind the scenes addresses multiple diet restrictions and allergens. "It keeps us from having to create thousands of specialized combination menus," she says. "The system is the failsafe. It's interfaced with the diet order so that only permitted options even show up on the screen. Patients feel like they are ordering exactly as if they were in a restaurant. The only difference is that they receive feedback and always receive foods that match their diets," Sams says.

The system is fully integrated with the hospital information system, she adds. "We receive HL7 messages, admissions, discharges, transfers, and diet orders automatically and in real time." They also receive records of all patients' medications and lab results, which are used as data for the food/drug interaction and nutritional risk screening software systems. As part of the hospital's HIPAA compliance program, data is fully secured.

Patient-Centered Production

Just what does a patient-centered food production system look like? Once issued from the call center, each

meal request prints out as a tray ticket, which is picked up for assembly on three assembly stations: cold/deli foods, beverages, and hot foods. Orders for hot foods enter the production area, says Mihalick, where two employees custom-produce the tray. This system replaces a traditional trayline of 12 positions, he adds. "Everything is made to order, so there's less food waste."

Employees load trays on carts and run them to patient units, where hosts and hostesses take over. "Patients just can't believe the choice and the service," says Mihalick, who reinforces the first-class room service image with staff members dressed in tuxedos and bow ties.

Former trayline employees are now in the units offering face-to-face service as personal ambassadors, explains Sams. "They do a lot of troubleshooting for patients. Before, a patient was an anonymous entity to a dietary worker. Now, our empowered staff members truly interact and provide personalized service," she says.

In one of the many system controls, adds Mihalick, a routine exception report identifies any patients who have not placed a meal order. "The hostess visits the patient in person to provide assistance," he says.

Food Costs Plunge

This system presents a situation previously unimaginable in the sphere of hospital food service, says Mihalick: *No late trays*. "It's not a guessing game anymore," he points out. "We have completely eliminated second trays." The upshot: at \$6.21 per tray, and 2,500 late trays per month for the two hospitals (160 beds at Sewickley and 300 at The Medical Center), food costs have plunged by 20 percent, says Mihalick. Besides paring away duplicate tray costs, he adds, "Patients are ordering what they

want," which means no wasted food on first trays, either.

Employee Morale is High

While bringing high scores to client satisfaction ratings, this room service solution has one more gratifying effect, according to Mihalick. "Staff morale is absolutely unbelievable. The system has the whole-hearted backing of nursing and administration, too."

He adds, "The VST system has transformed dietary workers, who used to make three meals per day and never actually see a patient, to professional employees. Even our kitchen staff members interact with patients, families, nurses, and others as part of the team. They see their input as valuable, and their efforts rewarded." With no change in FTEs from the traditional trayline system, adds Mihalick, nearly every dietary employee functions in a new role where effectiveness and teamwork rule, and employees feel important.

Among the roles of dietary staff are to maintain close coordination about individualized meal times with nursing staff, who often administer medications before or after meals. "Schedules are not as predictable," says Mihalick, "but nurses buy in because the system is absolutely patient-centered." He adds that the room service model extends to day areas such as emergency room, catheter labs, and IV therapy.

"It's amazing what this system is doing for dietary services. The service stays upbeat and the menu is fresh every day," says Mihalick, who adds, "There is no downside. If you're cost-conscious and patient-driven, it's the ultimate solution."

For more information, contact Vision Software Technologies, Inc., by phone (412) 373-8696, or visit www.vstech.com.