Wireless System Aims to Ease Task Management

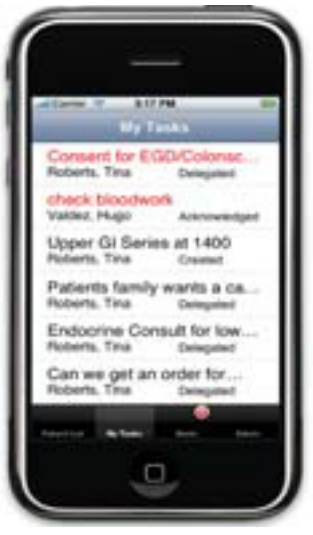
BY PATRICE WENDLING

CHICAGO — A new Web site and iPhone application could render hospital paging systems as obsolete as eight-track tapes.

Designed around existing wireless technology, the MComm communication system allows for task-oriented and priority-based messaging in real-time fashion, hospitalist Vineet Chopra and his colleagues at the University of Michigan Health System in Ann Arbor reported at the annual meeting of the Society of Hospital Medicine.

Hospitalists or other members of a medical team can create patient-specific tasks using either a wireless device or a Web-based portal. Tasks are assigned to individuals or to multiple members of the team and labeled as either urgent (requiring action within 30 minutes) or nonurgent.

Caregivers receive either an audible or silent vibratory alert based on task priority. This sets MComm apart from traditional paging systems that cannot distinguish between urgent and mundane messages, Dr. Chopra said. MComm also signals the original creator of a task that a message has been received and lets users note when they've completed a task, thereby closing the loop on the one-way flow of information that is a significant limitation of paging systems.



Tasks can be organized by patients and team priorities.

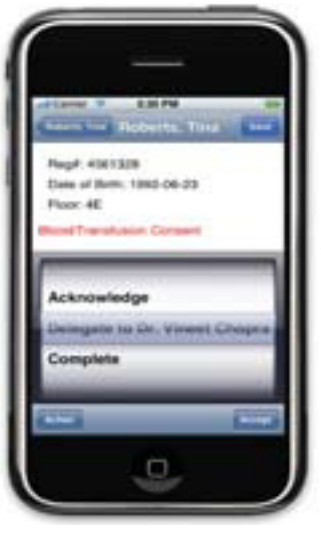
"We believe that MComm represents a technological breakthrough in medical communication via work flow process improvements," Dr. Chopra said. "The use of mobile devices that organize tasks by patients and priority using a team-based approach is unprecedented."

Tasks can be filtered across patients according to priority, assignee, creator, and/or status, allowing for immediate work flow prioritization. MComm, which is in beta testing, is expected to be launched for use by the university's hospitalist group and its medicine-pediatrics residency program within the next few months, once testing is complete, Dr. Chopra said in an interview.

The university's medical school has a keen interest in using the technology at its newly acquired Pfizer campus where most of the animal and basic science labs will be placed. "Task delegation and defined roles are key features to all of these settings," he said.

In light of the movement toward patient- and family-centered care, session moderators asked if the researchers could imagine a day when patients or their advocates could be tied into the MComm system in real time.

"Absolutely," Dr. Chopra said. "We've looked at even giving patients iPhones so that they could look at their progress" and keep tabs on scheduled tests or other details. "I think that kind of patient empowerment is coming. We are certainly hopeful that this will actually enhance that movement."



PHOTOS COURTESY DR. VINEET CHOPRA

Users report back when delegated tasks are done.

The moderators cautioned that increased access to patient information has a flip side: the need to protect patient privacy. MComm will use secure technology, and all activities will be archived for HIPAA compliance, Dr. Chopra said. Management of individual patient information is shared by the team, along with individual devices and user accounts, which can be passed on at the end of each workday to night coverage teams.

Future upgrades under development include capabilities for voice communication via both cellular and WiFi technology, and for sending laboratory reports to providers. Integration of MComm into the existing electronic medical record system will happen almost immediately, Dr. Chopra said.

"We designed this to be a new version of the pager for many years to come," he said.

More information about the MComm system is available at www.synaptin.com. Dr. Chopra's work with coinventor and joint patent holder Dr. Prasanth Gogineni earned the society's "best of innovation" award. ■

Screening Program Improved Palliative Care Beyond the ED

BY PATRICE WENDLING

AUSTIN, TEX. — A program designed to address unmet palliative care needs among frail, elderly patients who repeatedly sought acute care at Beth Israel Medical Center's emergency department led to a steady increase in palliative care consultations.

The BriefPal Program at the New York City–based hospital identified elderly patients who had a Karnofsky Performance Status score below 80 (0-100 scale, with 100 being healthy), at least a moderate decline in functional status, and a specific life-limiting condition: advanced dementia, severe congestive heart failure or chronic obstructive pulmonary disease, advanced malignancy, or AIDS.

Stage 2 of the screening protocol identified subgroups of patients with a recent loss of activities of daily living, high symptom burden, extremely poor functional status, and high levels of caregiver burden.

During the 3-month pilot phase, 864 patients older than 65 years were screened; 131 patients met the initial criteria, and 62 met stage 2 criteria. Although 35% of the 62 patients died within 60 days of their index visit, none was receiving palliative care services, coinvestigator Myra Glajchen, D.S.W., reported at the annual meeting of the American Academy of Hospice and Palliative Medicine.

The team, also led by Dr. Knox Todd, identified multiple barriers to providing palliative care services in the ED. In almost half of cases (49%), the primary care physicians admitting the patients did not want to make the referral, because they felt they were more familiar with the patients or were unfamiliar with palliative care services, Dr. Glajchen said.

In 25% of cases, the patient or family said no. In another 25% of cases, the ED physician balked at making the referral because of concerns about more paperwork or phone calls, time constraints, or a failure to realize the value of palliative care.

Lessons learned by the team included the need for specifically targeted palliative care education in the ED, the crucial role of champions in project implementation, and the importance of rapid quality indicator initiatives to demonstrate tangible results, Dr. Glajchen said.

Ultimately, the team provided brief training in palliative care and quality indicators to 41 emergency physicians, exceeding its goal of 21, and to four of eight physician assistants, 31 of 45 nurses, and three of five social workers. Classes were offered at all hours to accommodate various shifts, and were repeated to address staff turnover.

The team also implemented standardized screening based on the two-stage protocol, and began offering palliative care interventions and referrals for appropriate patients.

Palliative care consultations originating in the ED increased steadily over the course of the project, and by the first quarter of 2008, accounted for fully one-half of all palliative care consultations in the hospital, Dr. Glajchen reported. The team screened 2,451 patients and provided 94 palliative care consultations and 168 ED palliative care interventions in 245 patients identified as having unmet needs. Interviews with 264 caregivers revealed particularly high rates of caregiver burden.

"Caregiver burden is often a driving force of why people come to the ED in the first place," she said.

Beth Israel uses the National Consensus Project (NCP) for Quality Palliative Care as a framework for its palliative care and will be exploring a range of quality indicator approaches for implementing best practices, said copresenter Dr. Russell Portenoy, chair of pain medicine and palliative care at Beth Israel. Because the NCP model was designed as an inpatient consultative model of specialist care, it is not an exact fit in the ED, he said. However, it can be adapted to fit the ED.

The NCP calls for comprehensive interdisciplinary assessment of patients with advanced illness, goal setting based on patient/family preferences, and an environment that provides privacy. That may require a shift from current ED care, Dr. Portenoy said, in which triage often is done by a registered nurse, care is problem focused and standardized, and treatment is delivered by a continually rotating group of physicians.

In addition, social workers and psychiatrists may not be a core part of the team—and privacy often means pulling a thin curtain around the patient to have very difficult discussions frequently conducted through the help of an interpreter or family member.

Finally, misaligned financial incentives are one of the biggest challenges. Optimal ED-based palliative care will mean getting patients home rather than admitting them, Dr. Portenoy said—and that may make it less attractive to the hospital.

He suggested that palliative medicine specialists focused on the ED will need to refine systems to increase reimbursement for palliative care services delivered by physicians, physician assistants, or nurse practitioners. They also will need to negotiate with hospitals based on the overall quality and potential for cost savings that palliative care can provide on the inpatient side.

"If the only way that EDs around the country are going to be able to implement best practices for palliative care is through volunteerism and grants, then it's not going to work," he said. ■

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