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COL. DAVID GILBERTSON,
DEFENSE DEPARTMENT

Envisioning troop-centric health care

The military's personal health record projects — which aim for convenience, lower costs and better health outcomes — are shaking up deeply rooted business processes

BY PETER A. BUXBAUM

The two military departments — Defense and Veterans Affairs — thrive on obedience to a chain of command. In matters of health care, no less than in engineering or combat management, orders move from the top down.

That's why the departments' joint development of personal health record systems is innovative and potentially revolutionary. Such records give patients a measure of control over their health care services and clinical records, and the systems push service members and veterans to the center of the health care chain of command.

"We would like to deliver health care that is more patient-centric," said Dr. Madhulika Agarwal, chief patient care services officer in VA's Veterans Health Administration. "We want veterans to be more empowered about their own health care."

PHRs offer many functions, several of which might be included in any given system. The VA and DOD systems began as portals through which users could access health care information. PHRs can also act as electronic repositories in which patients can securely store or share health-related data with designated providers. Still other PHRs allow patients to refill prescriptions,

set appointments and view their medical records.

Secure e-mail messaging between patients and providers — a feature planned for but not activated in the VA and DOD systems — would allow physicians to answer routine questions, provide lab results, and authorize prescription refills without having to talk to patients on the phone or bring them in for an office visit.

PHRs also serve a larger role beyond acting as a convenience for patients and providers. Advocates say their use promotes patient involvement, responsibility and self-management — key factors for producing better results in the care of chronic diseases with high social costs, such as diabetes.

At the annual State of the Military Health System Conference in January, Dr. Meera Kanhouwa, physician executive in Microsoft's Health Solutions Group, said 50 percent of new diabetes cases could be prevented if people lost 10 percent to 15 percent of their body mass.

"We're talking about a chronic disease that could bankrupt economies in coming years," she said. "Containing this disease entails personal responsibility."

The military PHRs

VA's PHR, My HealtheVet, was launched in November

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2003, which makes it one of the oldest in existence. It is also one of the largest, with more than 500,000 active users. About 50,000 of them have signed up for upgraded accounts through which they can access enhanced features. The Web-based system has handled 5 million prescription refills since August 2005 and hosted more than 15 million visits since its launch.

VA health executives consider My HealtheVet an enhancement to medical care. "The way we think of this technology is as an enabler and not to replace the current health system," Agarwal said. "It complements the delivery of health care services that clinicians provide to patients."

MHS' Tricare Online also started as a health information portal. In December 2007, officials added PHR applications, and it now has about 375,000 active users. Although VA's PHR has more advanced features than its DOD counterpart, both systems are still in their infancy.

"The whole concept of Tricare Online was to get beneficiaries engaged in the health care system, not just the health care information system but the system in general," said Col. David Gilbertson, AHLTA program manager at DOD's Clinical Information Technology Program Office.

Authentication

Going beyond portal functions to more

advanced PHR features requires that users undergo a registration and authentication process. Veterans who want an upgraded PHR account must go to a VA facility to verify their identities. They are also required to watch an orientation video that explains their responsibilities for keeping their health information confidential.

DOD has a simpler authentication solution via Common Access Cards, which all of its employees are required to carry. The electronic certificates embedded in the cards authenticate users, who can set up IDs and passwords for their PHRs in a matter of minutes.

"Due to the sensitivity of the data displayed to a user, access to the PHR will only be available to users who log in to Tricare Online with their CAC," Gilbertson said.

Cardholders have read-only access to their demographic, allergy and medication information via the Tricare Online PHR system. Officials are working to make more and richer data available to patients, but first they must refine various business rules for the system.

"There are legal, privacy and business considerations we have to work through first," Gilbertson said. "A big stumbling block involves who has access to what information and how we ensure that we are not providing inadvertent access to some-

PHR ADOPTION:

Generation gap

The success of the Defense and Veterans Affairs departments' personal health record systems will be measured by provider and patient acceptance.

"For younger providers, it is a natural thing," said Col. David Gilbertson, AHLTA program manager at DOD's Clinical Information Technology Program Office. "But older providers are

sometimes reluctant to interact with a patient who is not sitting right there."

The Office of Management and Budget set a goal for VA's My HealtheVet PHR system to have 282,000 registrants by 2008, and it has already exceeded that goal by registering more than 540,000 users.

However, the number of vet-

erans who have signed up for upgraded accounts with enhanced features remains at less than 10 percent of the total.

VA officials say they do not have specific goals for the upgraded accounts but are making a concerted effort to increase the number.

"Our focus during this five-year anniversary [of the PHR system] is to promote the in-person authentication process," said Theresa Hancock, My HealtheVet program director.

"Statistics show that increased features produce increases in registrations. As My HealtheVet is enhanced with features to make this personal health record more robust, registrations will increase."

Gilbertson said he has a similar hope for Tricare Online. With the deployment of additional features, including PHRs, "it is anticipated that Tricare Online usage will increase over the next three years," he said.

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TERESA HANCOCK, VETERANS AFFAIRS DEPARTMENT

one who shouldn't have it. We are also concerned about providing test results to patients without proper physician intervention and discussion.”

Patient vs. physician control

VA and DOD are confronting the classic PHR conundrum: How much control should patients have over their clinical records? The main concern is that too much patient involvement could compromise the integrity of the records.

“A provider may not believe the information inputted by the patient,” Kanhouwa

said. “The patient may not have complete information or may be hiding something.”

The My HealtheVet PHR system encourages patients to enter their information, but VA has taken a number of steps to protect records. First, officials say they emphasize VA's expectations regarding responsibility and accountability when users register. Future releases of My HealtheVet will include help files and online support to ensure that patients enter information accurately.

Furthermore, health care providers who use My HealtheVet are encouraged to review patient-entered information in person with the patient.

“The proviso is that the patient owns the information and has the right to say how much visibility will be given to clinicians, family, friends and advocates,” said Theresa Hancock, My HealtheVet program director.

Tricare Online also gives users the opportunity to correct erroneous information, usually involving personal or family medical histories. “We get patients involved in this part of the process to make sure that data is complete and accurate,” Gilbertson said.

Secure messaging

VA and DOD officials say they plan to add secure messaging to their PHR systems. VA's approach would enable patients to request appointments, ask routine questions or request prescription renewals. Providers could use the feature to send lab results to patients.

“This could take a huge burden off providers,” Hancock said. “Preliminary findings based on studies of other systems show that providing secure messaging reduces appointment no-show rates and reduces the number of necessary visits.”

Gilbertson said he envisions a system that would enable patients to ask routine follow-up questions. “A patient may take a medication and wake up with red blotches the next morning,” he said. “He can message the provider to ask if this is normal. This way, the patient can get access to care without necessarily having to make an appointment.”

My HealtheVet officials are testing secure messaging and an enhanced feature that would give patients access to lab results. Af-

ter testing, the features will be launched incrementally, with the initial releases coming as early as the end of this year.

“One VA hospital is not the same as another,” Hancock said. “We want to make sure we get it right to ensure clinical adoption. We want to make sure we do our homework and that the features are released when they are ready. It is not a question of implementing just functionality but a business process.”

On the drawing boards

My HealtheVet has several other features on the drawing board, including one that would give patients limited access to VA's electronic health record system, the Veterans Health Information Systems and Technology Architecture. Another feature would send clinical reminders to patients and providers.

Hancock said VistA information available for patient viewing includes co-payment balances, radiology reports, physicians' notes, admission and discharge summaries, vital statistics, and allergy information.

The reminders would alert patients and providers to the need for appointments or tests. “When patients come in for a visit, they want to address whatever is bothering them at that moment,” Agarwal said. “But patients with chronic conditions need to have certain things taken care of periodically.”

For example, a diabetic patient and his or her health care provider might receive reminders to perform blood tests and eye and foot examinations, she said.

DOD and VA are in the midst of a protracted effort to enable their electronic medical record systems to share information. They are also working on harmonizing their PHR systems, and officials want to standardize the processes and interfaces of the two systems.

“We have been working with DOD, and we both sit on the same working groups to build and share the same policies, procedures, requirements, and training and outreach materials with each other,” Hancock said. “We are working toward the goal of a single access point so that veterans and wounded warriors could receive information from both portals.” ■