In July 2003 the new Office of Care Coordination was formed within Patient Care Services in VHA. This new Office incorporates the Telemedicine Strategic Health Care Group and the Office of Social Work Service, who will work in partnership to define the future direction of care coordination in VHA. The specific new functions of the Office of Care Coordination are:

- Managing the national rollout of VHA Care Coordination programs that involve the widespread use of telehealth technologies.
- Coordinating the clinical input into e-health information to patients
- Coordinating the clinical input into VHA’s patient held record MyHealth-eVet.

So what are the implications for telemedicine/telehealth with these changes?

Essentially it will continue to be business as usual for telemedicine/telehealth with some upgrades. The creation of the Office of Care Coordination and the accompanying VHA investment in telehealth technology is a further vote of confidence in telemedicine/telehealth and a tribute to the pioneering work of people across VHA. Requests for proposals (RFPs) have just gone out for $7 million and in FY2004 there will be further RFPs for $12 million. These RFP’s will establish care coordination programs in all VISNs in VHA and 3 training centers.

To support myself, and John Peters in continuing the onward development of telemedicine/telehealth we are proposing to establish VHA leads in various areas of telehealth beginning with mental health. These national leads will be 2-year renewable honorary titles and recognize the leadership of individuals in their specialty and work in developing clinical practice, training and other processes necessary to consolidate the growth of telemedicine in their area. Details of these positions are being formulated and will be available soon.

As part of the current changes we would like to propose that we broaden the scope of the telemedicine support in VHA and call it telehealth, a term that is intended to encompass telemedicine. The reason for this change in nomenclature is that telehealth better describes the multi-disciplinary nature of how we are using new information-based technologies to deliver health care in VHA. Telemedicine is an important component part of this. We would like to invite you to comment for and against this change before deciding whether to adopt it. So please write to us with your comments and we will publish a synopsis of the various comments in the next edition of the newsletter. If you feel strongly one way or the other and would like to submit an article to the next edition of this newsletter we will be happy to print it.
A Department of Veterans Affairs (VA) telehealth project has won the top award in a national competition for excellence in patient education. The Patient Education and Service Kiosk, designed by Leonard Goldschmidt, M.D., Ph.D., at the VA Palo Alto Health Care System took the top prize in the first annual California Pacific Health Education Initiative Award for Excellence in Patient Education for 2003. The $2500 award and plaque is the culmination of a six-month evaluation of the 152 projects submitted in the competition.

The Patient Education and Service Kiosk began its life in a request for proposals by the California Telemedicine and Telehealth Center (CTTC), a nonprofit agency that seeks to promote telemedicine within the state of California. The VA initiative was the result of a federal partnership with a county hospital, San Joaquin General Hospital in Stockton, California, located at the site of VA community-based outpatient clinic (CBOC).

The resulting project constructed a technological tool that delivers validated and culturally sensitive educational materials, including Internet medical web sites, to patients in the clinic waiting areas as they wait to be seen by their health professional. Core educational materials are at the fourth to sixth grade reading level. The welcoming screen page is illustrated in Figure 1 and the kiosk itself in Figure 2. Besides submitting electronic questionnaire results and answering health content questions, participants are able to search Internet medical web sites (other sites are restricted), examine and print drug information, obtain vouchers for clinical care and services, enter free text on what they would like to see in future versions, and even, most recently, refill their prescriptions. To our knowledge, this is the only touch-screen, pharmacy refill mechanism in VA. It has been designed for use by visually impaired patients, as has the entire kiosk. In fact, the device records every screen-touch, with concomitant reports providing documentation of what patients are actually learning and where they are visiting in cyberspace. Since this was also designed for a local county hospital housing another VA CBOC, Spanish language translation of all core materials and many Internet sites is a component of the kiosk.

The kiosk facilitates improved compliance with selected clinical guidelines by allowing patients to print vouchers for care that is appropriate for them. Twelve-month data for two kiosks show that 7460 user sessions have been recorded. Seven hundred thirty nine patients took the survey. Our latest data indicates that many patients are using this tool to print vouchers for diabetic eye and foot examinations as well as for adult immunizations (flu or pneumonia); additional patients are being reminded to ask their primary care providers for such services. Most significantly, our (VA Palo Alto Health Care System) immunization rate for flu vaccine increased 14% following the year of kiosk introduction, compared to the prior year. While it cannot be said with certainty that it is the kiosk intervention that is responsible, these devices raised awareness of the importance of flu shots in preventative care and was the major intervention introduced during this past flu season. Many different types of clinical guidelines could be targeted for improvement using this tool, and our future plans are in this direction.

Summarizing the highlights of our twelve-month kiosk data 84% found the kiosk easy to use, and 72% found the information they needed. Ninety-four percent found the information on diabetes helpful, and 90% said that the clinic offered more to patients because of the kiosk. Most intriguingly, 85% said they were very likely (59%) or perhaps likely (26%) to follow their health provider’s advice after viewing the material.
Continued from page 1)

Another issue I want to raise in relation to the changes to telemedicine/telehealth with the creation of the Office of Care Coordination is funding for telehealth. A major piece of work for the new office over the next year is to propose a mechanism to directly fund care coordination services in VHA. These services are delivered using telehealth technologies and this will mark our beginning to critically look at the economics of funding telemedicine/telehealth in VHA. This is a subject we will cover in future editions of the newsletter, in satellite broadcasts and in our VHA Care Coordination meeting that will take place February 17-19, 2004 in St Petersburg, FL.

Continued

Creation of New VHA Office of Care Coordination Benefits VHA Telemedicine

Adam W. Darkins, M.D.
Chief Consultant, VHA Telemedicine

(Continued from page 2)

The work is a national model for what can be accomplished in a large health care organization. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) awarded the kiosk project a special commendation for excellence in patient education when our hospital was reviewed in October of 2001. It has also been purchased by the Indian Health Service and by other VA Veterans Integrated Service Network (VISN) sites. With the pharmacy refill package, patients can now refill their prescriptions in the convenience of the patient waiting area, and our VISN plans to purchase additional units for patient use. In summary, the patient education and service kiosk has become a national model for bringing technologically advanced, but easy to use, health education to the population that truly needs it.

VA Palo Alto Kiosk wins 2003 CPHEI Patient Education Award

Leonard Goldschmidt, M.D., Ph.D.
Credentialing and privileging for telemedicine is an important issue and is one that the Veterans Health Administration (VHA) continues to work on in collaboration with other organizations, including the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) and the American Telemedicine Association (ATA).

VHA’s current policy for the credentialing and privileging of those using telemedicine in hospitals and clinics is described in VHA DIRECTIVE 2001-055 on CREDENTIALING AND PRIVILEGING OF TELEMEDICINE AND TELEHEALTH SERVICES PROVIDED IN HOSPITALS AND CLINICS that was issued in September 4, 2001 and is available on the Web at http://www.va.gov/publ/direc/health/direct/12001055.pdf. This directive was written to supplement the guidance for credentialing and privileging contained in VHA Handbook 1100.19 and to update VHA’s preexisting policy document (Information Letter IL 10-99-018) that was previously issued on December 8th 1999 in response to the then impending JCAHO standards in this area. In summary, Directive 2001-055 requires the following of VHA licensed independent practitioners (LIP):

1. If a clinician would normally make a referral to another institution and telehealth is chosen as the mechanism for undertaking this referral, then privileging requirements are the same as when making a conventional referral (in person, by letter, by fax or by telephone).

2. The usual basic credentialing and privileging requirements must be completed and maintained for all VA medical practitioners as a precondition to providing telehealth. The provider must be credentialed and privileged at the facility or site at which the provider is physically located when providing telehealth services.

3. Before a remote practitioner conducts telemedicine and/or telehealth with another facility or site, the facility or site where the patient is physically located must first query the National Practitioner Data Bank (NPDB) to check on the suitability of the practitioner to practice.

4. When the provider is providing telemedicine and telehealth services, a copy of the practitioner’s current credentialing information must be immediately available at the facility, or site where the patient is physically located; i.e., where the telemedicine and/or telehealth services are being provided. Making this information available may be accomplished by using the Credentials Transfer Brief or VetPro.

5. When telemedicine and/or telehealth services are being provided that direct, diagnose, or otherwise provide clinical treatment to a patient via a telemedicine link, the provider must be credentialed and privileged at the facility which receives the telemedicine service (remote site) as well as at the site from which the provider provides (Continued on page 5)
2004 PROPOSED JCAHO CHANGES SIGNAL NO CHANGE FOR VHA TELEMEDICINE CREDENTIALING & PRIVILEGING
By Adam Darkins and Kate Enchelmayer

(Continued from page 4)

services. This would require meeting all requirements for credentialing and privileging in accordance with VHA Handbook 1100.19 http://www.va.gov/publ/direc/health/handbook/1100-19HK(3-6-01).pdf

6. When a practitioner provides only teleconsultation services to another site, a copy of the provider’s current clinical privileges must be made immediately available to the facility or site where the patient is physically located.

VetPro, the VHA’s credentialing database, makes the administrative requirements of implementing this directive relatively straightforward. Also, many telemedicine programs had privileged telemedicine providers at the site where the patient was physically located because telemedicine service was often supplementing a service that had previously required providers to physically drive to a remote clinic.

For many health care organizations outside VHA (without VetPro), especially ones in remote rural areas, the administrative burden of credentialing and privileging in response to the JCAHO standards was seen as a barrier to telemedicine development and led them to request JCAHO relax its standards. Following a widespread consultation process new JCAHO standards are proposed for implementation from January 2004.

Proposed JCAHO Revisions to the Medical Staff Telemedicine Standards

The pre-publication edition of the proposed changes is available at JCAHO’s Web site at the following location: http://www.jcaho.org/accredited+organizations/hospitals/standards/new+standards/ms_hap.pdf

Please note that this newsletter article relates to the JCAHO document (above) as of September 2003 and subsequent changes may occur. These proposed JCAHO standards focus on LIPs with responsibility for the care of a patient (authority to write orders and direct care) using telemedicine.

If the clinical situation is one where an LIP provides official readings of images, tracings or specimens via telemedicine then credentialing and privileging takes place under the contracted services standard LD.3.50.

In the event that an organization has a pressing clinical need for telemedicine a practitioner can be temporarily privileged under JCAHO standard MS.4.100 for an individual clinical instance.

JCAHO defines the site at which the patient is physically located during a telehealth/telemedicine consultation as the originating site and proposes that the originating site should now be able to accept credentialing and privileging decision of LIPs that have been determined at the distant site, (the site where the practitioner providing the professional service is located). In doing this, organizations must be following applicable laws and regulations (for VHA this means complying with VHA Handbook 1100.19 requirements).

Specifics of Proposed New JCAHO Standards at the Originating Site MS.4.120.

MS.4.120: LIPs who are responsible for the care, treatment, and services of the patient via telemedicine link are subject to the credentialing and privileging processes of the originating site.

Rationale for MS.4.120: The originating site retains responsibility for overseeing the safety and quality of services offered to its patients.

Elements of Performance for MS.4.120: All LIPs who are responsible for the care of the patient via telemedicine link are credentialed and privileged to do so at the originating site, through one of the following mechanisms:

1. The originating site may fully privilege and credential the practitioner

   a) according to standards MS.4.10 though MS.4.110

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(Continued from page 5)
b) The practitioner may be privileged at the originating site, using credentialing information from the distant site if the distant site is a JCAHO-accredited organization; or
c) The originating site may use both the credentialing and privileging information from the distant site if all the following requirements are met:
   1) The distant site is JCAHO accredited
   2) The practitioner is privileged at the distant site for the services being provided
   3) The originating site has evidence of an internal review of the practitioner’s performance of these privileges and sends to the distant site information useful to assess the practitioner’s quality of care, treatment, and services for use in privileging and performance improvement to the distant site. At a minimum this information must include all adverse events related to telemedicine services; and complaints about the distant site LIP from patients, LIPs, or staff at the originating site.

Specifics of Proposed New JCAHO Standards at the Originating and Distant Sites: MS.4.130.

MS.4.130: The medical staff at both the originating and distant sites recommends the clinical services to be provided by LIPs through a telemedical link at their respective sites.

Rationale for MS.4.130: Telemedicine will continue to evolve making novel services and approaches through technology more readily available. Medical staff at the originating site evaluates the organization’s ability to safely provide services on an ongoing basis. Medical staff at the distant site evaluates performance of these services as part of privileging and as part of the reappraisal conducted at the time of reappointment or renewal or revision of clinical privileges.

Elements of Performance for MS.4.130
1. The medical staff recommends which clinical services LIPs can appropriately deliver through this medium.
2. The clinical services offered are consistent with commonly accepted quality standards.

JCAHO Reasoning for Modifying Its Standards
1. Offsetting the burden to the originating site of credentialing and privileging large numbers of LIPs who might provide the service;
2. Recognizing that the distant site has more relevant information on the practice of the LIP in general to use in the privileging process; and
3. Acknowledging that the originating site may have little experience in privileging a given specialty.

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Kiosks Take Patient Education to a New Level

California Telehealth & Telemedicine Center

A quiet revolution in patient education is taking place in the hinterlands east of San Francisco; one that includes an unlikely soldier, 79-year-old Frank Martino. Tucked in a corner of the third-floor waiting room at the Veterans Administration Medical Center in Livermore sits a cutting-edge, touch-screen computer kiosk that just might qualify as a doctor’s or nurse’s dream machine. On visits to the VA from Modesto, Martino, a World War II veteran who, aside from battling arthritis and hypertension, is on the verge of developing glaucoma and diabetes, taps the kiosk to improve his understanding and control of these and other ailments. He’s proof that interactive high tech, if it’s intelligently designed yet basic enough, can promote better health not only among the younger generation, but among the older, less-tech-savvy generation and other populations, too. Picture an ATM-like device that enables quick access to medical information stored in both a local database and on the Web, with hundreds of times the breadth and depth the bank machine offers. That’s the power at Martino’s fingertips when he sits down at the attractive, teal-and-gray console and takes the kiosk for a virtual spin. Step by simple step, using a mix of text, voice-overs of that text, still images, and video, the kiosk can tell Martino in English or Spanish nearly anything he wants to know about a host of medical conditions—from diabetes and high blood pressure to heart disease, cancer, stroke, high cholesterol, and back pain.

But that’s not all. Patrons can also access the “Best of the Internet” (the National Library of Medicine and Mayo Clinic, among other premier Web sites), order prescription refills, and even ask the console to print out a voucher for a diabetic eye or foot exam, a flu or pneumonia shot, or mental-health appointment. An ever-present menu of “BACK,” “FORWARD,” “PAGE UP,” “PAGE DOWN,” “HELP,” “PRINT,” and other buttons on the left side of the touch screen, along with uncluttered content choices on each electronic page, make navigation a breeze.

“When I first saw it, I was amazed, very much amazed,” says Martino, noting that the kiosk answers many questions he might otherwise have to ask his ophthalmologist, and prompts questions he might otherwise forget to ask. “Just touch the screen and you’ve got it.”

Equally dazzled, apparently, was the California Pacific Health Education Initiative at California Pacific Medical Center in San Francisco. Of 153 highly competitive entries from around the country, and after lengthy reviews by physicians, staff, and volunteer advisers, it selected the kiosk as the grand winner of the 2002 California Pacific Award for Excellence in Patient Education. (Please see related article by award recipient, VA Palo Alto’s Dr. Leonard Goldschmidt, beginning on Page 2 of this newsletter.)

"The design was elegant," says Jane Binger, a registered nurse who oversees the initiative, citing the kiosk’s ability to accommodate a wide range of patients, regardless of their socioeconomic status and whether they be adept or clueless computer-wise, young or old, English or Spanish speakers. Combined, its see-hear-do functions are an effective teaching and retention tool, Binger says. “All of that is just wonderful learning methodology.”

The brains behind this venture are Dr. Leonard Goldschmidt, who is Martino’s ophthalmologist and director of the Eye Clinic at the Livermore VA, and Dr. Ellen Shibata, deputy chief of staff there. In 2000, they received an $85,400 grant from the Sacramento-based California Telehealth & Telemedicine Center to help pay for the design and placement of one kiosk each at the Livermore facility and San Joaquin General Hospital (a collaborator on the project) near Stockton, where vets, a large Hispanic population, and many others receive care. A third kiosk, purchased last September, is at an outpatient clinic in Monterey.

Each unit costs about $22,000, including hardware and software. The annual license renewal fee for content that the kiosk project team itself hasn’t created is $3,500 per unit.

“Patients are very reluctant to try something new, reluctant about new technology,” Dr. Goldschmidt says. “We’re trying to demystify it.” He and Dr. Shibata also are striving for the highest-quality content possible, so patients can make better health care decisions, and to improve patients’ compliance with clinical guidelines for diabetes and immunizations. Which is where the vouchers fit in: They pare the time it takes to get a doctor appointment, and thus are a small incentive for patients to follow up.

Wariness about things high-tech is problematic among older and less-affluent patients, the Livermore VA’s primary clientele. Indeed, married couples 25-35 years old are 150% more likely than adults 65 or older to use the Web for health-

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JCAHO has decided not to directly address telemedicine equipment standards and is leaving these to be covered in clinical privileging decisions that come under environment of care standards and standards for equipment maintenance.

**Recommended VHA Response to New JCAHO Standards**

The Office of Care Coordination and the Office of Quality and Performance have been working with JCAHO and ATA as these new standards have been created. The recommendations of both VHA offices is that VHA continue to use VHA DIRECTIVE 2001-055 on CREDENTIALING AND PRIVILEGING OF TELEMEDICINE AND TELEHEALTH SERVICES PROVIDED IN HOSPITALS AND CLINICS as its policy for credentialing and privileging for telemedicine.

This recommendation is in accordance with JCAHO standard performance element a) of MS.4.120 (above) that requires that all LIPs who are responsible for the care of the patient via telemedicine link are credentialed and privileged according to standards MS.4.10 through MS.4.110. Adopting this approach means that VHA will exceed the proposed new JCAHO minimum standards.

The reasons for making this recommendation are:

1. Although it may appear more onerous, the current VHA policy has worked well
2. Considerations that have surfaced through using the current policy, e.g. in relation to contracting with outside organizations have shown that the current policy has a patient safety role
3. The performance standards that JCAHO are suggesting in place of formal credentialing and privileging are not defined in detail and VHA would prefer to work with JCAHO to develop such standards and ensure one standard of care throughout VHA in this important area.

**JCAHO Revisions have no effect on VHA Directive 2002-042**

The accompanying VHA directive on credentialing and privileging for telemedicine is Directive 2002-042 that covers CREDENTIALING AND PRIVILEGING OF VHA HEALTH CARE PROVIDERS REMOTELY DELIVERING CARE TO PATIENTS AT HOME, IN VET CENTERS, AND IN NON-HEALTH CARE SETTINGS VIA TELEMEDICINE/TELEHEALTH. These policy requirements remain and are not impacted by the proposed new JCAHO recommendations.

**Your role in VHA Policy making**

The Offices of Care Coordination and Quality and Performance would like to engage in a dialogue with current VHA users of telemedicine/telehealth and get their response to the above recommendation before forwarding this proposal to the Undersecretary for Health. Initiating this dialogue, together with providing information, is what has prompted this article. In future it is planned that credentialing and privileging for telemedicine/telehealth will become a sub-section of the VHA Credentialing and Privileging Handbook.
related reasons, according to a July 2003 survey of 25,000 consumers nationwide by Solucient, a provider of strategic health care intelligence. And households earning at least $100,000 a year are nearly 60% more likely to seek online health information than are households earning less than $50,000, Solucient found. Though more time and study are necessary to gauge the full impact of the patient education kiosks in Livermore, Stockton, Monterey, and elsewhere, they appear to be chipping away at such barriers.

Drs. Goldschmidt and Shibata know that because another bell among the whistles they built into the units is an on-screen satisfaction survey. A review of responses from 739 patients one year after the Livermore and Stockton kiosks were installed, in September 2001, revealed that:

- Nearly 68% thought the on-screen instructions were easy to follow.
- About 58% found the information they needed.
- Close to 71% indicated they would likely use the kiosk again.
- Almost 60% said they would be "more likely to follow a health care provider’s advice" as a result of their kiosk experience.

Research elsewhere is affirming the important role computers can play in educating patients of all ages Deborah Lewis, a PhD and registered nurse at the University of Pittsburgh’s Center for Biomedical Informatics, reviewed 101 published articles about this topic in peer-reviewed journals. In her study, published in 2003, she concluded, "Clinical outcomes have improved significantly as a result of computer-based learning. "She reported that computer-educated patients with diabetes, for example, were able to reduce the amount of glucose bound to hemoglobin in their blood, pare their insulin requirements, and improve mealtime glucose levels.

Patient education kiosks are springing up in a number of health-care settings around the country, such as the University of Washington Medical Center in Seattle. There, units are situated in the emergency room, Medical Specialties Center, Women’s Health Care Center, General Internal Medicine Center, the cancer library, and university bookstore.

At the Livermore VA, Dr. Goldschmidt recalls the mouse-activated PC with a CD-ROM drive he set up in the waiting area of his first-floor Eye Clinic in 1995 to make more information available to patients. "A big surprise," he says, was that 90% of them indicated they were more likely to follow their doctor’s instructions after using it. That project laid the foundation for the touch-screen kiosks, which take interactivity and ease of use to a considerably higher level.

"What I call the ‘killer application’ has been the pharmacy refill," Dr. Goldschmidt says. It’s been a godsend for patients on multiple medications who may have trouble with the often-confusing voice menus that are a staple of telephone-based ordering systems. To reorder using the kiosk, they simply enter their Social Security number and one or more prescription identifiers by touching an on-screen number pad.

"A lot of elderly patients know they need to renew their meds, but this business of having to call a number and punch in all those codes it’s not a visual process over the phone," says Dr. Shibata. "We get a lot of complaints that the guys have trouble doing that. "We’re hoping this touch-screen venue will be much more user friendly for them."

The kiosks also boost operating efficiency, she adds, an important consideration in this age of nursing shortages and pinched health-care budgets, by taking over routine patient education tasks. That frees nurses to provide more hands-on care. As for the next evolutionary step in all this, Dr. Goldschmidt envisions more sophisticated, less expensive, stand-alone consoles targeted to particular medical conditions, like heart disease. Patients would answer a half-dozen questions after their interactive tour, a tool for gauging their understanding of the materials. And they would automatically be noted in the computerized medical record as having fulfilled the heart-disease clinical guidelines.

"It’s a new paradigm," says Dr. Goldschmidt. "And in a new paradigm, there has to be a period of becoming accustomed to getting information on your own. Most of our patients are accustomed to having things taken care of for them and being relatively passive. But all health care systems are striving to change that."

*Reprinted by permission of the California Telehealth & Telemedicine Center (CTTC at www.cttconline.org). CTTC funded development of the VA Palo Alto Health Care System Patient Education Kiosk as a result of a grant from The California Endowment (TCE www.caendow.org). TCE is a private foundation committed to expanding access to affordable, quality health care for underserved individuals and communities, and to promoting fundamental improvements in the health status of all Californians.*

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**Kiosks Take Patient Education to a New Level**

California Telehealth & Telemedicine Center
The mission of this newsletter is: “to serve as a conduit to share information, strengthen resources, and promote community for telemedicine within the BHA and with the goal to provide the best quality of care to our patients despite the barriers that distance may impose.:

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