



## **Number of Healthcare Services Offering Online Doctor Consults Increasing**

Healthcare services that offer online doctor visits are increasing. Earlier this year, the Hawaii Medical Service Association (HMSA) launched their online care program. The program offers patients online doctor visits which cost \$10 for members and \$45 for nonmembers. The technology behind the HMSA program, created by American Well, a Boston company, is being picked up by other health insurance plans. Blue Cross & Blue Shield of Minnesota launched a pilot version this fall and plans to offer it to all members by mid-2010. A recent partnership between American Well and OptumHealth, a division of UnitedHealth Group, will take Online Care nationwide to all consumers, regardless of insurance provider. Then there is MDLiveCare, a national service with more than 100,000 members who may or may not be covered by a healthcare plan and who pay a flat \$35 per online visit to consult with primary-care providers, specialists, and therapists in the network.

Some healthcare plans, such as Kaiser Permanente, already let members E-mail doctors, review lab tests, make appointments, and refill prescriptions online. But virtual doctor visits are in real time and don't have to adhere to office hours. In Hawaii, some of the most remote patients now have 24-7 access to basic healthcare.

About 10,000 individuals, most of them residents of the New York metropolitan area, can already get an online (or phone) emergency consultation with one of 34 ER physicians who have signed on with a company called SwiftMD.

Patients in Brooklyn, N.Y., who don't have health insurance (and physicians who don't want to deal with insurance claims) have the option of joining Hello Health. After an initial face-to-face visit, patients pay \$100 to \$200 an hour for each encounter, whether it's in person or online. In addition, the \$35 monthly membership fee covers unlimited E-mail exchanges with Hello Health doctors. Online, patients can see their doctor's schedule and make their own appointments. If they run late, they can whip out a BlackBerry or iPhone and post a message on a Facebook-like "wall" on the physician's Web page. Hello Health internist Sean Khozin figures he spends as much as 40 percent of his time online - following up with chronic disease cases, for example, to coordinate care. Hello Health is in the process of rolling out nationally.

Such services offer more than convenience, however. An online encounter often is a substitute for an expensive trip to the ER. It's also likely to be cheaper than an office visit, plus it confers nearly instant access to a patient's choice of available doctors and - a boon for employers - may trim the number of workdays missed for minor maladies. Ninety-five percent of Harper's patients using the Hawaii service can be managed without a face-to-face visit, says the physician.

Many Americans are would-be prospects for online care. Half say they would be interested in using the Internet not only as an information source but to receive healthcare directly, according to a recent survey by an arm of PricewaterhouseCoopers. Consumers soon may be able to choose from a range of services.

*(Source: US News and World Report, October 27, 2009)*

## **Telehealth Use Gains Due to Physician Shortages, Insurance Acceptances**



Thanks to factors including a looming physician shortage, the health care reform debate and the increasing willingness of insurance companies to pay for the practice, telehealth is on the verge of becoming routine.

"More and more companies are seeing the benefits of telehealth," said Greg Billings, senior director at the nonprofit Center for Telehealth and E-Health Law in Washington. "If that doctor looking at that skin rash didn't diagnose it as skin cancer until later, the cost of treatment of that skin cancer is going to be a heck of a lot more."

Universities, technology companies and hospital systems, including the University of Maryland, have been experimenting with telehealth since the 1990s. A major insurance provider - UnitedHealthcare of Minnesota - recently announced a national push to persuade its network of professionals, including thousands here in Maryland, to adopt telehealth for their patients.

Remote consultation and diagnosis are ways for medicine to become more efficient even as physicians and other health professionals are increasingly in short supply, policy experts say. For patients living away from advanced hospitals in urban areas, they add, it's potentially lifesaving.

Telehealth systems can screen patients for diabetes, eye disease, kidney problems, nerve damage, vascular disease and complicated pregnancies. The technology is available and relatively inexpensive. It's the regulatory hurdles that present the challenge, experts say.

Because of licensing restrictions, specialists might have trouble treating and prescribing medicine for patients they are examining electronically across state lines. Also, only a handful of states require insurers to cover telehealth care - and Maryland isn't one of them.

"These are the thorny issues," said Dr. Elizabeth A. Krupinski, an assistant director in the radiology department at the University of Arizona and a past president of the American Telemedicine Association. "The nursing profession has done a lot more in that area than physicians in terms of cross-state licensure. The problem is that every state has their own twist on the regulations."

But telehealth is nevertheless growing. Johns Hopkins Medicine International has used telehealth technology to link its specialists with physicians and patients by videoconferencing in other countries, such as the United Arab Emirates, Lebanon, Panama, Singapore, Chile and Turkey.

Alex Nason, the telehealth program director at Hopkins, said the institution is exploring the possibility of applying telehealth approaches within Maryland. The hospital already has a partnership with Howard County General Hospital in which a robot with a video camera can act as a Hopkins doctor's eyes and ears during a patient consultation.

"Telehealth is not about geography; I really think it's about access," said Nason. "Whether you're 500 miles away or 5 miles away, if you can't get there, you can't get there."

UnitedHealthcare this summer kicked off a national tour that emphasizes the latest telehealth technologies. An 18-wheeler parked at a Cherry Hill school contained videoconferencing and digital diagnostic tools. UHC officials said the company, whose network includes 4,900 hospitals and covers 223,000 Marylanders, is building the first national telehealth network to help physicians cater to underserved areas, rural and urban.

"It's a fundamental new way to provide that connection" to specialist care, said James Cronin, chief executive of the Minnesota-based company's Mid-Atlantic division. Such technology isn't intended to replace patients' connection to a primary care physician, he said. Instead, it's meant to hook them up



quickly to specialized care that's sometimes difficult to find.

Telehealth equipment can be installed in physicians' offices, small clinics, hospitals, and even workplaces for from \$10,000 to \$100,000. Hardware could include an electronic records system, digital diagnostic equipment, video monitors and cameras.

With federal subsidies toward incorporating the latest electronic systems, physicians and hospitals have at least some incentive to upgrade their computer networks.

Last year the Maryland Hospital Association found that the state is 16 percent below the national average for the number of doctors available for clinical practice. The shortage was greatest in Southern and Western Maryland and on the Eastern Shore.

*(Source: Baltimore Sun, September 14, 2009)*

## **Background on Maine and New Hampshire's Enactment of Laws Mandating Private Insurance Reimbursement for Telemedicine**

*by Michael Edwards, Maine Telemedicine Service News, Sept. 11, 2009*

Both Maine and New Hampshire in the Summer of 2009 passed and obtained Governor signatures for laws which require insurance companies to pay for services delivered by telemedicine. Along with Oregon earlier this year, this brings the total to 12 for states with similar statutes (joining California, Colorado, Georgia, Hawaii, Kansas, Kentucky, Louisiana, Texas, and Oklahoma - see the [Telemedicine Information Exchange](#)). In the case of Maine, the new law supplements Medicaid reimbursement for telemedicine services delivered by interactive video sessions, whereas in New Hampshire, Medicaid does not cover telemedicine except in selected pilot waiver programs.

For the benefit of other states who may ponder such a step, we cover here some details about the similarities and differences in the laws and discuss some of what we know about how these laws got through the state legislatures.

### ***Process Leading to Maine Law***

The Maine Legislature passed the bill LD 1073, "An Act to Provide for Insurance Coverage of Telemedicine Services" on May 12, and Governor Baldacci signed it into law on June 11th. The law, Chapter 169 MRSA 4316, contains the following provisions:

1. Definition. For the purposes of this section, "telemedicine," as it pertains to the delivery of health care services, means the use of interactive audio, video or other electronic media for the purpose of diagnosis, consultation or treatment. "Telemedicine" does not include the use of audio-only telephone, facsimile machine or e-mail.
2. Coverage of telemedicine services. A carrier offering a health plan in this State may not deny coverage on the basis that the coverage is provided through telemedicine if the health care service would be covered were it provided through in-person consultation between the covered person and a health care provider. Coverage for health care services provided through telemedicine must be determined in a manner consistent with coverage for health care services provided through in-person consultation. A carrier may offer a health plan containing a provision for a deductible, copayment or coinsurance requirement for a health care service provided through telemedicine as long as the deductible, copayment or coinsurance does not exceed the deductible, copayment or coinsurance applicable to an in-person consultation.'



The Governor's office included this statement of support in a [press release](#) after a signing ceremony:

"Telemedicine offers opportunities to increase the accessibility of health care, ensure that appropriate medical information is available, reduces medical errors and reduces health care costs," Governor Baldacci said. "This bill makes sense and I am pleased to sign it."

The sponsor of the bill was Rep. Anne Perry, a Family Nurse Practitioner in Washington County. Co-sponsors included Rep. Hannah Pingree, Linda Sanborn, Meredith Strang Burgess, and Sharon Anglin Treat. Surprisingly, the final bill passed in the House on May 7th with a 136 to zero roll-call support; the Senate passed the bill "in concurrence" on May 12th. During the committee review process, hearings, and sub-committee sessions, the bill received major support from the Maine Hospital Association and major hospital corporations with active telemedicine programs, including [Eastern Maine Healthcare](#) and [Maine Health](#). Major health insurance providers opposed the bill. At the final hearing, a presentation by Tom Key, Director of [Maine Telemedicine Services](#) and the Northeast Telehealth Resource Center, made three major points: 1) the law would promote the use of telemedicine, 2) substantial evidence supports the benefits of telemedicine on the efficiency and efficacy of health care delivery, and 3) the improvements in timeliness and rural access for services acts to enhance the quality of health care.

The strategic role played by Rep. Perry in devising and shepherding the bill through and the Governor's readiness to sign it into law was founded on extensive prior planning efforts. As a member of the Board for the Regional Medical Center at Lubec, Perry was well attuned over the years to the promise of telemedicine in Maine and advised by the health center's Maine Telemedicine Services and project staff of its Northeast Telehealth Resource Center. She was "kept in the loop" during the 2007 review proceedings of the Governor's Telehealth Workgroup, and she participated in the development of a plan for rural health that included strategies to advance telemedicine solutions.

Both planning efforts recognized reimbursement as a major barrier for widespread development of telehealth services in Maine. Whereas the Telehealth Workgroup proposed group efforts to produce more convincing documentation of telehealth benefits, the Rural Health Work Group called more directly for action to address reimbursement issues. Under the mandate of the 2006-2007 Maine State Health Plan, the Telehealth Workgroup involved many stakeholders to "to develop strategies to help Maine achieve an appropriately-developed, utilized and reimbursed telemedicine infrastructure that serves the best interest of patients". The effort was coordinated by Peter Kraut of the Governor's Office of Health Policy and Finance and Kim Crichton of the Maine Health Access Foundation. Also commissioned by the Governor under recommendation of the State Health Plan, the 14 member Rural Health Work Group, in teamwork with the Maine Office of Rural Health and Primary Care and Center and Maine Center for Disease Control and Prevention, had a broader mission to "to assess the capacity of Maine's rural health system to deliver essential health services necessary to promote and preserve the health of Maine's rural citizens.



The April 2008 "[Report of Maine's 2006-2007 State Health Plan Telemedicine Workgroup](#)" [pdf] found that three major Maine insurance providers (Cigna, Aetna, and Harvard Pilgrim) had policies not to pay for patient visits with providers using distance technology, while one (Anthem) did reimburse for some telehealth services. The insurance providers participating in the workgroup's meetings argued that there is neither sufficient demand from patients, providers, and employers, nor sufficient data on the quality and effectiveness of telemedicine services, for them to modify their reimbursement policies. Citing [reviews from Agency for Healthcare Research and Quality](#), the report agreed there was not sufficient data to make any conclusions about outcomes, leading to a recommendation in the [Maine 2008-2009 State Health Plan](#) [pdf] that the State Office of Rural Health and Primary Care lead a discussion forum with a goal of "creating an evidence-base (which services telemedicine is used for; what the outcomes, costs and benefits are, etc.) to establish the business-case for telemedicine and share this information with insurers, providers, and employers." The Feb. 2008 report of the Rural Health Work Group, "A Plan for Improving Rural Health in Maine" [pdf], commended the efforts of the Telehealth Workgroup, but recommended more explicitly that "commercial insurers should address reimbursement issues, especially adequate reimbursement for host site transmissions" and that both they and the State Medicaid program, MaineCare, "explore the use and reimbursement of store and forward services; and establish reimbursement for tele-home health services".

### ***Process Leading to New Hampshire Law***

The New Hampshire Legislature passed the bill, SB 138, on June 13th, and Governor Lynch signed it into law on July 16th. The [New Hampshire Telehealth Act](#), Chapter 259, specifies that:

1. It is the intent of the general court to recognize the application of telemedicine for covered services provided within the scope of practice of a physician or other health care provider as a method of delivery of medical care by which an individual shall receive medical services from a health care provider without in-person contact with the provider.
2. An insurer offering a health plan in this state may not deny coverage on the sole basis that the coverage is provided through telemedicine if the health care service would be covered if it were provided through in-person consultation between the covered person and a health care provider.
3. Nothing in this section shall be construed to prohibit an insurer from providing coverage for only those services that are medically necessary and subject to the terms and conditions of the covered person's policy.

The legislative process accelerated when an earlier version of the bill was amended and passed by the Senate in March (with a 17-5 vote). It was championed by sponsor Senators Kathy Sgambati and Peter Burling, and sizable set of co-sponsors: Senators Debbie Reynolds, Matthew Houde and John Gallus and Representatives Liz Merry, Sharon Nordgren, James Aguiar, Thomas Donovan, Alida Millham, and Peter Batula. The New Hampshire Telehealth Program, a consortium led by Director Louis Kazal, M.D. and Co-Director David Price, helped write both the bill and the amendment. The New Hampshire Hospital Association and New Hampshire Medical Society both have noted on their Websites the support they provided for the bill during its review by the legislature ([NHHA](#), [NHMS](#)), while major health insurance providers in the state



opposed the bill, as did the New Hampshire House Republican Alliance ([NHRA](#)) [pdf]. As reported in the [New Hampshire Business Review](#), supporters argued that passage would reduce health care costs and enhance rural patient access to specialty care services. Opponents expressed the view that passage would drive up health care premiums and foster unsupervised experimental medicine.

As a precursor to the development of the bill, the [New Hampshire Telehealth Program](#) engaged many health care stakeholders in 2007-2008 during their strategic planning for a statewide telehealth network. Maine Telemedicine Services of the Regional Medical Center at Lubec was contracted to facilitate the discussions and help draft the report. The report and prior needs assessment work in 2006 explicitly highlighted the barrier that limited reimbursement plays in implementation of telemedicine services in the state, setting the stage for the legislative efforts.

The amendment to the bill made by the House in June involved revising the definition of telemedicine services to be subject to reimbursement. Dr. Kazal favored the original definition, which was meant to include clinical services delivered by e-mail data exchange (termed "store-and-forward", as common in teleradiology and teledermatology practice). In part influenced by the wording in the Maine bill and that used in Medicare provisions for telemedicine coverage, Kazal reports that some legislators favored a definition that sanctioned only interactive video sessions as reimbursable. The compromise definition finally adopted does leave open store-and-forward services:

"Telemedicine," as it pertains to the delivery of health care services, means the use of audio, video, or other electronic media for the purpose of diagnosis, consultation, or treatment. Telemedicine does not include the use of audio-only telephone or facsimile.

According to the NH Hospital Association, before the new law goes into effect (Oct. 14th), providers, carriers and the NH Insurance Department will meet to work on the carriers' guidance to providers.

### ***Summary***

The success of these two states in enacting laws to mandate private insurance reimbursement was founded on a prolonged period of planning. In both cases, hospitals and provider groups were supportive and insurance providers were not. Concern for the evidence base for telemedicine is often raised as an issue, but the prospects of enhanced access and cost savings from more timely care seemed to motivate passage of the bills with very few legislators voting against them. The resulting laws are similar, except that the New Hampshire version is more open to store-and-forward applications.

### ***About the Author***

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at Lubec, Maine, where his work includes 12 years of service with its division Maine Telemedicine Services and recent OAT-funded project Northeast Telehealth Resource Center.

*(Source: Author Submission, September 11, 2009)*

## **HHS Extends Funding to Center for Telehealth and eHealth Law to Operate National Telehealth Resource Center**

The Health and Human Services Department recently indicated that it received no applications to operate the National Telehealth Resource Center. Because no one applied, HHS said it is extending funding for the existing operator of the National Telehealth Resource Center, the Center for Telehealth & E-Health Law (CTeL) until a new competition can be held in 2010, according to a Federal Register notice published Aug. 26. HHS is providing \$225,000 in noncompetitive supplemental grants to the existing center for the year ending Aug. 31, 2010.

HHS' Health Resources and Services Administration (HRSA) is releasing the supplemental funding to the CTeL, which serves as the current National Telehealth Resource Center, so it can continue to provide technical assistance services to regional telehealth centers, the department said.

"HRSA received no applications for the National Telehealth Resource Center," the Federal Register notice states. "Since no organization applied to serve in the capacity as a NTRC, it is urgent that the Center for Telehealth & E-Health Law continue to provide its services until next year without disruption when HRSA can conduct a new competition for the provision of these services."

The Center for Telehealth and e-Health Law has been operating since 1995. It was selected as the National Telehealth Resource Center in 2006.

*(Source: Federal Computer Week, August 27, 2009)*

## **New Study Finds Online Therapy is Effective in Treating Depression**

People suffering from depression should get counseling online to avoid long waiting times to see a doctor, according to new research. A UK study of almost 300 patients found that those given online cognitive behavioral therapy (CBT) were two-and-a-half times more likely to recover from their mental health problems than those who received standard care from a GP. One in six adults suffer from depression or chronic anxiety, and online CBT may offer an alternative to the growing problem.

Dr David Kessler, a senior primary care researcher at the University of Bristol and a part time GP, said: "The patients get up to ten one hour appointments which are carried out online by instant messenger.

"Maybe it is the writing things down that helps so much because you have to think more when you do this. It is like being in a chat room with your therapist.

"It would greatly improve access to therapists for people who are disabled, housebound or living in remote locations.

"And you don't have to be some whizzy computer geek to use it. Some of our patients were in their seventies although the average age of people with depression is surprisingly young  $\frac{1}{2}$  around the 30s and 40s mark."



In the study, patients aged from eighteen into their 70s were recruited from Bristol, London and Warwickshire and 149 were given online CBT along with the usual care while 148 got the customary GP sessions.

After a four month follow up completed by 113 patients in the intervention group and 97 in the control group, almost two fifths of those who got the online CBT recovered from depression compared with one in four of those who did not. After eight months the proportion grew further, according to the findings published in The Lancet.

"Cognitive behavioral therapy seems to be effective when delivered online in real time by a therapist, with benefits maintained over eight months. This method of delivery could broaden access to CBT in primary care," Dr Kessler said.

"The number of patients for whom online CBT is feasible and attractive will grow. It could be useful in areas where access to psychological treatment is scarce, and for patients whose first language is not English.

"It could make access to psychotherapies more equitable by providing a service to patients in areas or even countries where psychological treatment is not readily available."

*(Source: The Telegraph, August 21, 2009)*

## **Insurance Group, Technology Company Plan National Telemedicine Network**

Two corporate giants are cooperating in what they call an effort to expand the availability of telemedicine in both rural and urban areas that are medically underserved. UnitedHealth Group, the country's largest health plan by revenue, and Cisco, the Silicon Valley networking corporation, recently announced that they will cooperate on equipping a national network of doctors to care for patients via high-definition cameras and remote monitoring devices.

The project, called Connected Care, is expected to connect clinics, physician offices, workplace-based clinics, mobile clinics and even patients' homes, said Jim Woodburn, MD, vice president and medical director of telehealth for United.

The project kicked off a pilot program in New Mexico in collaboration with the Washington-based nonprofit Project HOPE, which works to expand access to medical care and education across the world.

"From the perspective of Project HOPE, this is a huge deal," said Rand Walton, a spokesman for the nonprofit.

The Connected Care network, meanwhile, will set up in multiple locations, including work sites, doctors' offices and mobile clinics, Dr. Woodburn said. He said United likely would build the Connected Care network beginning with primary care physicians in an effort to address the shortage of primary care in underserved areas.

United will pay for the telemedicine visits and expects the claims and payments to work in basically the same way face-to-face visits work, Dr. Woodburn said.

For United, which said in its announcement it would spend "tens of millions of dollars" on the project, the



opportunity for savings is a part of the motivation to invest in telehealth, Dr. Woodburn said.

*(Source: American Medical News, August 14, 2009)*

## **Survey Finds Healthcare Consumers Open to Different Forms of Telehealth Consults**

Universal coverage could clog the healthcare system unless new care-delivery models are created, such as telehealth and online doctor appointments, according to a survey from PricewaterhouseCoopers. Fifty percent of consumers surveyed said they would be willing to seek healthcare through the internet or other computer technology instead of face-to-face, non-emergency visits. E-mail consultation was the top choice (76 percent), followed by telehealth, question-answer consults and an online forum monitored by a doctor.

The second alternative to access was retail and worksite clinics for patients. Of consumers surveyed, 37 percent said they would likely use a worksite clinic, and 36 percent said they would use a retail health clinic.

The third alternative was the use of telehealth technologies. This method could expand access to specialty physicians for patients in remote and underserved areas. Seventy-three percent of consumers said they would use biometric electronic remote monitoring services to track their condition and vital signs.

A fourth alternative is shared medical appointments (SMAs). Of consumers surveyed, 28 percent said they would be willing to participate in a shared medical appointment. This would consist of a 60- to 90-minute session that includes a private or personal exam, integrated with patient education and discussion with a group of 10-to-15 people. Instituting SMAs could increase patient access and a physician's productivity by an additional six patients during a four-hour clinic session, according to PricewaterhouseCoopers.

*(Source: Modern Medicine, August 27, 2009)*

## **Report Finds Need for Research into eICU Outcomes and Costs**

Nearly 10 percent of U.S. hospital intensive care unit beds use advanced telemonitoring, yet no one has studied how it affects cost and quality of care, according to a new report. In a study recently published in Health Affairs, researchers from the Center for Studying Health System Change found hospital clinical leaders hold strong views about the use of telemonitoring "or eICU" but they have little information to go on.

"The rapid diffusion of eICUs in hospitals across the country, which remains largely unstudied, illustrates the need for comparative effectiveness initiatives to include innovations in how we care for patients not just specific drugs, devices and services," said HSC Senior Consulting Researcher Robert A. Berenson, MD.

"Proponents and detractors of eICUs feel strongly that their assessments are correct," Berenson said. "But without a rigorous assessment, who knows which side is right?"

The Health Affairs article, titled "Does Telemonitoring of Patients 'The eICU' Improve Intensive Care?" was a follow-up study from HSC's 2007 site visits to 12 communities "Boston, Cleveland,



Greenville, S.C., Indianapolis, Lansing, Mich., Little Rock, Ark., Miami, northern New Jersey, Orange County, Calif., Phoenix, Seattle and Syracuse, N.Y. HSC has been tracking these markets since 1995.

During the visits, HSC researchers learned that hospital systems in Indianapolis, Little Rock, Miami, Phoenix and Seattle had adopted eICU systems. In a follow-up study, researchers interviewed clinicians in the five hospital systems with an eICU, as well as those in 19 non-eICU hospitals in the other 12 markets and national experts on ICU staffing, quality and ICU telemedicine.

An eICU system combines telemedicine with software applications to manage ICU patients from a central monitoring station, usually located off-site from the actual ICU and staffed with physicians with advanced training in critical care (known as intensivists), critical care nurses and administrative personnel.

HSC researchers found that hospitals adopting eICUs generally were motivated by the potential to improve clinical quality and patient safety rather than expectations of cost savings from reduced complications and lengths of stay.

Among hospitals not adopting eICUs, there was general agreement that the limited potential benefits did not justify significant upfront and ongoing operating costs – estimated at \$3 million to \$5 million in startup costs for 100 ICU beds, along with ongoing annual operating and staff costs of \$1.3 million to \$2.3 million per 100 beds. Virtually all of the hospitals without eICUs believed their current on-site ICU staffing was adequate and preferable to off-site staff.

The lack of third-party reimbursement also was seen as an argument against adopting eICUs.

Despite the lack of specific payments or other incentives, most hospitals in the study, with and without eICUs, were working to improve ICU performance, primarily by adding more intensivists and adopting ICU-specific quality improvement tools to help prevent ventilator-associated pneumonia and central-line infections, the study showed.

In all but one of the five eICU hospitals, poor interoperability between the eICU software and the hospitals' enterprise-wide information technology systems created barriers to using the eICU's advanced monitoring and outcome analysis features, according to the study.

*(Source: Healthcare IT News, August 19, 2009)*