Recent Telehealth News Relevant to Northeast –*June 1, 2012*

--Content compiled by Michael Edwards, consultant to NorthEast Telehealth Resource Center.

The Vermont telehealth bill (H.37, An Act Relating to Telemedicine), which paved the way for private insurance and Medicaid coverage for telemedicine, was signed into law as Vermont Act 107 in May by Governor Shumlin. Congratulations to the legislators who sponsored the bill and members of NETRC Team from Fletcher Allen Health Care who advocated or provided testimony in support of the bill. Because of the interest in similar bills in Connecticut and New York, a reflection on the process leading to the passage of the bill is provided below. A government affairs specialist with Fletcher Allen Health Care participated in a national webinar on May 31 which discussed lessons learned (details below).

On the policy front, a legislative commission of the New York Assembly recently produced a public report on their findings and recommendations on the alignment of telehealth with the Medicaid and health care reform process going on in the state last year. The report is based on a discussion forum held in January with a broad range of stakeholders and practitioners. Several telehealth bills are included in the recommendations.

We are excited to report that we have redesigned our website Northeast Telehealth Resource Center (www.northeasttrc.org) and have added a variety of resources. Over the next several months, we will continue to expand the offerings.

The relevant news selected this month is copious due to coverage of the American Telemedicine Association convention, which was attended by several members of the NETRC team.

A significant news item that we just became aware of is that the Telemedicine and Distance Learning Grant program of the Department of Agriculture Rural Utilities Services this year won't be accepting new grant proposals. Instead, they will be using the 2012 appropriation of $15 million for the program to fund the highest scoring of the proposals not funded last year (see Federal Register notice from May 8.)

We encourage your feedback and welcome your requests for services. Please feel free to contact Kim Mohan at kmohan@mcd.org or call our toll-free number 1-800-379-2021.

UPCOMING WEBINARS

- Store & Forward Software -June 7, 2012
- Beyond Skype for Reimbursement –June 4, 2012

UPCOMING CONFERENCES

NEWS STORIES *(select number to jump to story)*

UPCOMING WEBINARS

Store & Forward Software -*June 7, 2012*
National TRC Webinar Series, HRSA htm

The TRC Webinar Series provides timely information and demonstrations to support and guide the development of your telehealth program by experienced telehealth professionals from the HRSA-designated Telehealth Resource Centers (TRCs). These webinars are FREE to the public on the 3rd Thursday of each month at 2:00-3:00PM EST:

This Webinar and the next two in the series are all to be delivered by the Telehealth Technology Assessment Center:

- July 5, 2012 - Portable Ultrasound
- August 23, 2012 - Telehealth Carts

Recorded Webinars from the past are available at the link above, including trainings on: Selecting the Right Technology, Intra-Oral Cameras, Digital SLR Cameras, Retinal cameras, and Fetal monitors.

To join the live Webinars: http://anthc.adobeconnect.com/TelehealthTAC/

Beyond Skype for Reimbursement –*June 4, 2012*
50+ HIPAA-Compliant Technology Companies and their Added Features

TeleMental Health Institute, Marlene M. Maheu, Ph.D.

FREE 1-hour Training Webinar (LIVE), June 4, 2012, 3 PM EST, 12 Noon PST

Register here

Many professionals falsify their billing statements by identifying their location as "in-office" when using Skype. Such falsified billing practices can be illegal and unethical.

Why is Skype unacceptable to Medicare, Medicaid or many 3rd party insurance carriers? Which video platforms are legitimate? What else do these HIPAA complaint video platforms offer the mental health professional, clinic or hospital?

In this upcoming webinar, she will answer these frequently asked questions about video platforms, and a lot more:

- What types of systems are available?
- How are they similar?
- How do they differ?
- Which basic features are needed in a video platform?
- Which "add-on" features might be desirable?
- How does email fit into the picture?
- How does video services interface w/ practice management?
- How does video interface w/ Electronic Health Record (EHR)?
- What are the average price ranges for video platforms?

* If you still have questions about Skype, you may want to see our 2 previous Skype webinar recordings for 1 CE unit here.

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UPCOMING CONFERENCES

Best Practices in Telehealth & Healthcare Technologies
June 21 – 22, 2012, Boston, MA htm

This conference is organized by Mindsteam Education, Milwaukee, WI. Topics of discussion will include:

- Technology's impact on hospitals and health systems
- Data security and investment obstacles to telemedicine
- Telehealth & telemedicine as the standard of care
- Security and investment obstacles to telemedicine
- Healthcare technology alliances – building strong and sustainable hit vendor relationships
- Developing a remote patient monitoring program to ensure proper coverage of your icu, er and other departments
- Implementation initiatives for telemedicine, distance education and e-learning activities
- The rise of virtual medical centers of advanced technology: adding emerging technology to your programs/service lines
- A shift away from reimbursement models industry
- Top marketing strategies and techniques – learn how to effectively market your telehealth program and services

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TELEHEALTH POLICY NEWS

1. Vermont Passage of Bill on Private Insurance and Medicaid Coverage of Telemedicine: Lessons for Other States
NorthEast Telehealth Resource Center, May 25, 2012, Michael Edwards

Augusta, ME—Medical Care Development's NorthEast Telehealth Resource Center (NETRC) would like to acknowledge some of the leaders that made it possible for the Vermont legislature to achieve passage of "An Act Concerning Telemedicine" on April 28 and the subsequent signing into law of Act 107 by Governor Shumlin.

A review of the processes behind the completion of the Vermont Bill H.37 is intended to provide some guidance to other states considering a similar bill, such as Connecticut and New York. This conforms to the mission of the Resource Center program, which was funded by the Health Resources and Services Administration to provide technical support for organizations seeking to develop or improve clinical telehealth programs and to help advance an effective policy environment.

Reimbursement for medical services delivered at a distance through technology has often been cited as a key barrier for fulfillment of the promise of telemedicine to enhance health care access and alleviate rural health care disparities. Although Medicare reimburses for many services delivered by live interactive videoconferencing and over half of state Medicaid programs do so, only 12 states so far require private insurance providers to cover services delivered by telehealth (California, Colorado, Georgia, Hawaii, Kentucky, Louisiana, Maine, New Hampshire, Oklahoma, Oregon, Texas, and Virginia). A law recently enacted by Maryland will go into effect in the fall.

The case of Vermont is of particular concern to NETRC because Fletcher Allen Health Care, affiliated with the University of Vermont College of Medicine, is a major partner for the delivery of technical assistance in the Telehealth Resource Center. Our knowledge of the sequence of steps leading to an approved bill benefits from interviews with Jason Williams at Fletcher Allen Health Care in Burlington. His position as Government and Community Relations Strategist led him to attend closely to the bill from its first introduction into the Vermont House in January 2011 by State Representatives George Till and Suzi Wizowaty.

Williams notes that Till, being a doctor with Fletcher Allen and an associate professor of obstetrics and gynecology with the medical school, was a substantial factor in the successful design of the bill. He also contributed to garnering the trust of his colleagues in the House on the benefits of passing the bill. Additionally, Representative Wizowaty, had a special motivation to support the bill due to her interest in seeing that the services of Planned Parenthood reach remote rural communities. Williams reports that the specific goal of some providers and legislators in assuring coverage of telemedicine services delivered by distant providers into the home setting of clients was not fulfilled in the final language of the bill, which calls for the patient site to be a health care facility. An addition to the bill calls for a workgroup to study the issue of non-health care facilities and report back on potential benefits and challenges of such an extension of the law.

Williams reports that the reason the bill didn't make progress in the 2011 session of the Vermont Assembly had less to do with any specific objections than with the fact that the legislature had its hands full with passage of major health care reform bills. The lack of serious challenges to the bill and its near unanimous support in the final vote he feels owes much to the alignment of telemedicine delivery of health care with the goals of the health reform package to enhance patient access and decrease overall delivery costs. The testimony of the Director of the Fletcher Allen Telemedicine Program and Co-Director of the NETRC, Dr. Terry Rabinowitz, and his associate Judith Amour at the House Committee on Health Care included an emphasis of this complementarity, as did that of Jason Williams before the Senate Committee on Health and Welfare.

So often in state legislative reviews of bills to expand telemedicine reimbursement, the representatives of health insurance providers render testimony that the cost impact is uncertain and put the brakes on passage of the bill with the prospect that enactment might lead to higher insurance premiums. Williams noted that in this case, major insurers and an administrator of the state Medicaid program were either supportive or only mildly cautious in their assessments. It is possible that the lack of an obvious floodgate of new claims associated with passage of a similar bill in other states had a mitigating effect. Concessions to insurance carriers in the final bill include provisions that the companies can restrict providers to those in their network

and that documentation can be required to account for why service delivery is being carried out by telemedicine instead of face-to-face.

A final lesson from the story in Vermont concerns the inclusion of reimbursement for so-called "store-and-forward telemedicine", that is, health care delivery involving transmission and specialist review of medical images without making use of live interactive videoconferencing. In his testimony to the House committee, Dr. Rabinowitz noted how this mode of service delivery has proven very efficient and effective in the case of certain exams in ophthalmology and dermatology. Although the bill was modified to allow reimbursement for such services, it does not require such coverage. The final bill also includes a provision that the patient may request and receive a face-to-face visit if they do not wish to receive services by the store-and-forward method.

On May 31, Jason Williams participated, along with that of an experts on Maryland and Virginia's recent laws, in a national online "webinar" on how states achieve success in passage of bill that mandate private insurance coverage of telehealth. The webinar was organized by the Center for Telemedicine and e-Health Law.

The NorthEast Telehealth Resource Center, located at Medical Care Development in Augusta, Maine, is one of 12 regional Telehealth Resource Centers in the United States. It focuses on providing technical assistance to interested organizations in the six New England states and New York.

Note: For an excellent overview on the subject of state legislation on telehealth coverage in insurance programs and talking points in advocacy with stakeholders, see this 2011 paper by the American Telemedicine Association: *State Legislation for Telehealth-Provided Covered Services* pdf

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2. PA Governor Corbett Improves Access to Quality Health Care through Telemedicine Initiative
Press release, Pennsylvania Dept. of Public Welfare, May 24, 2012 htm

Harrisburg – Committed to helping the 2.1 million Pennsylvanians covered by the Medical Assistance program, Governor Tom Corbett today announced that Pennsylvania will increase recipients' access to specialist care by expanding coverage for telemedicine.

By using proven technology, like interactive audio and video equipment, physicians and patients will now be able to connect from remote locations. This practice is commonly referred to as telemedicine and allows for two-way, real-time interactive communication between the patient and the physician.

"By fully embracing telemedicine, we will improve a person's ability to receive care, especially for Pennsylvania's large rural population who can now receive diagnosis and treatment from distant medical centers," said Governor Corbett. "This expansion will help more Pennsylvanians receive the quality health care they need from anywhere in the state."

The use of telemedicine had previously been limited to specific specialist consultations. Now, it has been expanded to include additional specialty physicians who will be able to perform consultations and diagnose patients, recommend and monitor treatment, and even order tests or prescribe medication.

To expand the use of telemedicine, the following changes have been made to the Department of Public Welfare's Medical Assistance program:

- Establish the use of real-time interactive technology, such as audio and video equipment as a method of delivering consultation services;
- Consultations can now occur between all physician specialists like cardiologists, obstetricians or neurologists;
- Remove the requirement that telemedicine consultations can only be performed with participation from the referring physician.

Telemedicine leads to better results for patients because of increased choice and access to quality care. It is one of the fastest-growing trends in health care as many employers, insurance carriers and now, Pennsylvania's Medical Assistance program, are more fully embracing the technology.

"Healthier patients lead to a higher quality of life for the individual and their family," Corbett said. "When we have the opportunity to embrace an initiative that delivers proven results for those in our care, we welcome the opportunity because the ultimate outcome is a stronger, healthier Pennsylvania."

"The Department of Public Welfare is pleased for the opportunity to expand options such as telemedicine to our Medical Assistance patients and their medical providers," said Secretary of Public Welfare Gary D. Alexander. "We look forward to finding additional ways to offer effective and innovative care for those that we serve."

The Department of Public Welfare, which oversees the Medical Assistance program, expanded telemedicine to all participating Medical Assistance providers on May 23, 2012.

For more information, visit www.pa.gov.

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3. Q&A with ATA CEO Jonathan Linkous: Part I
*EHR Intelligence News, May 22, 2012***,** *Kyle Murphy* htm

Since 1993, the American Telemedicine Association (ATA) has advocated for changes in legislation to have grow the use of telemedicine not only in the United States but also worldwide. We caught up with Jonathan Linkous, the CEO of ATA, to discuss how telemedicine and his organization has helped pave the way for innovation in terms of leverage the potential of new technologies to bring distant individuals together.

American Telemedicine Association

Jonathan D. Linkous
CEO, American Telemedicine Association

Note: we only show here responses to a couple of interview questions. See link above for answers to these questions:

- What is the ATA and what does it do?
- How does telemedicine today compare to yesteryear?
- What do mobile devices mean to telemedicine?
- How are relationships formed between providers and institutions?
- How do you monetize telemedicine?
- What can traditional healthcare learn from telemedicine?
- What's holding back healthcare from health IT innovation?
- What is the future of telemedicine technology?
- How do you perceive innovation in the telemedicine space?

- What does telemedicine think of meaningful use?

It is a tar pit and in danger of becoming meaningless use to the point that we get bogged down in administrative support systems that only protect the status quo. Then we're not going to be improving the care of the patient, which is centrally what we're all here for. There have been misperceptions that have hurt the HIT world. It may reduce costs in some areas, but in a lot of areas it will actually increase cost. It's not a reason not to do it, but we're going under some fallacious arguments to start off with. I think we need to restructure it. Meaningful use, electronic records, electronic healthcare systems — those are all important and

very helpful. But we have to be careful not to be so enmeshed in that system that we're bogged down by the complexity and the conundrum they face.

- What makes telemedicine truly different from medicine in general?

Most of the administrative IT systems that are being put in place are hospital-centric. A hospital puts in a new electronic medical record and another hospital puts one in, then they ask, "How can those two communicate with each other?" There is a completely different way of viewing things in telemedicine which says, "It doesn't matter where you're located, it should be where the patient is and healthcare is the doctor who travels to the patient, not the patient traveling to the doctor." It's all done seamlessly and electronically. You're not talking about a dermatologist talking to another dermatologist treating a patient in another institution and somehow coordinating their approach. It's all one approach; it's all one system. It doesn't matter where it is. That's the ironic difference, the ironic change between the two approaches. One's very much focused on a facility and an ownership, and the other one is pretty much ubiquitous.

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4. New York Legislative Commission Releases Report on Telehealth

Rural Futures: NYS Legislative Commission on Rural Resources, Winter Issue, 2012 pdf

As a long-standing partner with the health care community, providers and all those it serves, the Legislative Commission on Rural Resources – in conjunction with the Senate and Assembly Health and Insurance Committees – sponsored a telehealth/telemedicine roundtable on January 9, 2012, Telehealth and Telemedicine, Putting the Pieces Together.

The roundtable brought together leading experts representing a broad cross-section of the health care industry, from home care to telepsychiatry to niche markets – all with the goal of identifying barriers to the implementation of a statewide telehealth network, while simultaneously highlighting successes and working models. Some participants spoke about the availability of health technology services in specific regions of New York, but it was clear that the majority of the funding to develop health technology has traditionally been invested in large-capacity health care centers (medical research facilities, university research centers, etc.) in the State's urban and metropolitan areas. Although some suburban areas may have the capacity to tap into neighboring health technology systems, the vast majority of rural areas have been responsible for developing their own systems and models that, while successful, have not received the proper funding to help build them into a cohesive statewide health technology network

Barriers…

Benefits…

Existing Statewide Programs and Successes

Proven statewide telehealth partnerships do exist across New York State, such as: Western New York Rural Broadband Health Network (WNYRBHN)/Western New York AHEC; Fort Drum Regional Health Planning Organization (FDRHPO); North Country Telemedicine Project; Finger Lakes Community Migrant Health; Rochester General Health; At Home Care, Inc.; and Visiting Nurse Services of Rochester and Monroe County, Inc., each serving different populations, but all with the same goal of bringing health care to rural New Yorkers. In light of ideas and suggestions presented at the January roundtable, the Commission has introduced three bills which address the following issues:

- *Credentialing* – permits patient site hospitals to rely on information from a distant site hospital in granting or reviewing the credentials of a health care provider based in the hospital which is providing telehealth services to the patient site;
- *Reimbursement parity* – requires health insurers and Medicaid to provide coverage for the provision of telehealth services; and

- *State policy* – establishes the "New York State Telehealth/Telemedicine Development Act," to coordinate and focus state policy and program planning for telehealth and telemedicine (S.662/A.3793, Valesky/Morelle).

The full report is available here: http://www.nysenate.gov/report/telemedicine-and-telehealth-report

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5. Bill Would Block Grants for Using Telehealth to Prescribe Abortion Drug
iHealthBeat.org, May 14, 2012 htm

Last week, Rep. Steve King (R-Iowa) introduced a bill (HR 5731) that would prohibit federal telehealth grants from going to clinics and doctors who use videoconferencing technology to prescribe the abortion medication mifepristone, also known as RU-486, *The Hill*'s "Floor Action Blog" reports.

The bill has 47 co-sponsors, including Republican Study Committee Chair Jim Jordan (R-Ohio) (Kasperowicz, "Floor Action Blog," *The Hill*, 5/11).

The bill states that "no funds made available under a telemedicine law ... may be used for telemedicine abortions or for assistance to facilities that offer telemedicine abortions." It also would prohibit any equipment or other infrastructure purchased with federal telehealth grants from being used for abortion care (Norman, *CQ HealthBeat*, 5/11).

King claimed that RU-486 is dangerous ("Floor Action Blog," *The Hill*, 5/11). He said the bill is aimed at cutting off telehealth funding to Planned Parenthood and other abortion clinics.

Planned Parenthood officials said that providing abortion medication represents a very small percentage of the services that the organization provides through telehealth technology. They said that outcomes for telehealth patients are identical to those with conventional office visits.

In 2011, King sponsored an amendment with similar language that was attached to an appropriations bill. The provision later was dropped when the bill was integrated with other appropriations measures (*CQ HealthBeat*, 5/11).

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6. Why telemedicine, health IT camps need each other
Government Health IT, May 11, 2012 htm

The telemedicine and health IT camps need to overcome their traditional way of operating in silos and develop partnerships to make a significant impact on improving the quality of care in the healthcare system.

If anyone is reaching out, however, it's the telemedicine side, according to four industry executive panelists who discussed whether there is any synergy or required partnerships between telemedicine and health IT at the American Telemedicine Association's 17th Annual International Meeting and Exposition in San Jose last week.

AT&T has a holistic and inclusive view of all healthcare technologies, services and products, with telehealth having fewer components, said Ed Simcox, director of AT&T's telehealth solutions. "Telehealth is a way to execute on old visions around delivering care for our customers," he said.

With many emerging telehealth projects being proposed by evangelists within the practitioner community, Simcox said it's important to build the bridge between telehealth and health IT by developing a level of trust and sharing lessons learned.

Telehealth can learn from electronic medical record (EMR) vendors in the areas of financial sustainability, budgeting and other economic factors, the need for standards and overcoming cultural and generational resistance to technologies.

Simcox advised attendees to "keep a finger on the pulse of what's going on in telehealth" on the state and federal levels and be involved in special interest groups and organizations such as the Health Information and Management Systems Society (HIMSS) to start raising awareness of the importance of telehealth. "If we wait for other organizations, we're going to wait a long time," he said.

Hon Pak, MD, FAAD, CEO of Diversinet, pointed out that the fact that EHR vendors are not at the ATA 2012 conference "says something."

"Politically, commercially – it's an issue," he added. He said that for his company, EHRs, mobility and health information exchange must be integrated and part of the healthcare ecosystem for the last mile of care coordination.

While telemedicine is critical, it is part of a large strategic movement, Pak said. He contends that if the telehealth community adds "significant value," the health IT community will come. Telehealth already has successes in mobile health, engaging patients, changing behaviors and amassing data. These areas represent where telehealth providers can highlight their value.

Michael Lemnitzer, CPA, senior director of strategic business development for BU Connected Care for Philips Home Healthcare Solutions, said his company is "working aggressively" with EHR vendors to develop interfaces, given that 90 percent of the company's contracts require an interface before the customer will sign on. "It has become very critical," he said.

Lemnitzer predicts that by 2015 the majority of EHR vendors will have interfaces for telemedicine applications, but it will require developing national standards in IT through the collaboration with vendors to address the fragmentation in EHR and HL7 applications.

"Telemedicine is the answer to so many challenges we face in 10 years in healthcare," said Carl Keldie, MD, CMO of Corizon, a telemedicine provider for correctional systems – which, he noted, with 460 patient-centered medical homes in 30 states, is one of oldest accountable care organizations in the country. Corizon has been successful, he said, because it has leveraged a number of relationships and a broad range of IT.

What's critically important to the success of telemedicine, Keldie pointed out, is the need to change culture and the payment methodology. Everyone has to be part of those changes, he emphasized.

Privacy and security, data integrity and interoperability are all part of the health IT world, but they "will come home" to the telemedicine world, said moderator Jim Murphy, vice president of healthcare strategy and business development for Sykes Assistance Services.

Given the convergence, Murphy added, both sides will need to work together to leverage best practices and lessons learned.

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7. Maryland becomes 13th state to mandate telehealth services coverage
American Psychological Association Practice Update, May 10, 2012 htm

Law may be part of a growing trend toward reimbursement for telehealth services

On October 1, 2012, Maryland will become the 13th state to require private sector insurance companies to pay for telehealth services. Maryland joins California, Colorado, Georgia, Hawaii, Kentucky, Louisiana, Maine, New Hampshire, Oklahoma, Oregon, Texas and Virginia in mandating that private payers cover telehealth services that are considered medically necessary and would otherwise be covered when provided face-to-face.

While reimbursement varies by insurer and state, this latest legislation seems to be part of a growing trend toward reimbursement for telehealth services.

Maryland's law defines telemedicine (or telehealth) as "interactive audio, video or other telecommunications or electronic technology... to deliver a health care service." As such, the law does not apply to audio-only phone conversations, email messages or faxes between providers and patients.

The law requires that health insurers and managed care organizations (MCOs) provide coverage for health care services provided appropriately using telehealth technology, and that coverage cannot be denied because services were provided through telehealth rather than in-person. Insurers are not required to cover telehealth services if the health services would not be a covered benefit even if provided in person, or if the provider is out-of-network.

Some additional key provisions of Maryland's law are:

- Insurers and MCOs may require deductibles, copayments or coinsurance for telehealth services as they would for in-person services.
- Telehealth services may be subject to an annual dollar maximum (as permitted by federal law) but not a lifetime dollar maximum.
- Insurers and MCOs may apply utilization review methods, such as preauthorizations, to telehealth services so long as those same methods are applied to reviewing in-person consultations.
- Insurers and MCOs may not distinguish between rural and urban patients in determining coverage for telehealth services.

While these 13 states now mandate coverage, not all require reimbursement rates on par with rates for face-to-face services, and there is still no universal definition of what constitutes telehealth services. APA is part of the Joint Task Force on the Development of Telepsychology Guidelines for Psychologists, which is working to develop guidelines for the professional use of technology in the delivery of psychology services.

And while there seems to be growing coverage by payers for telehealth services, reimbursement policies still differ widely among Medicare, Medicaid and private payers (PDF, 792KB) across states, causing confusion for the health provider community.

Psychologists outside these 13 states should check with individual payers to see if reimbursement is provided for telehealth services and if so, what services are reimbursable. Practitioners should always check with any applicable payers to find out telehealth reimbursement policies before providing and billing for telehealth services.

For more information, contact the Legal & Regulatory Affairs department by email or at (202) 336-5886.

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NEWS ON THE PRACTICE OF TELEMEDICINE

8. Telemedicine wins big in first round of CMS Health Care Innovation awards

ATA News Brief, May 23, 2012 htm

Telemedicine initiatives were a significant feature of the first round of projects announced by the Centers for Medicare and Medicaid Innovation (CMMI).

Established by the Affordable Care Act, CMMI has been appropriated $10 billion over ten years to fund initiatives that foster health care transformation. The CMMI Health Care Innovation Awards provide grants to support the most compelling new ideas to deliver better health, improved care and lower costs to people enrolled in Medicare, Medicaid and Children's Health Insurance Program.

The leadership of the Center has been eager to include telemedicine as a priority since its inception. In response to an early request from the Center, ATA provided an analysis of some of the leading areas for the Center to fund.

The first round of Innovation Awards were just announced. Out of the total of 26 approved projects, 7 went to projects involving telemedicine for a total of $46 million in funding. The projects using telemedicine are projected to yield a combined 3-year savings of $76 million.

A description of the approved projects involving telemedicine is available here: www.americantelemed.org/files/public/policy/CMMI_Projects_Telemedicine.pdf.

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9. Health system builds telehealth network, sees nearly 100 percent ROI
Healthcare Finance News, May 22, 2012 htm

ERIE, PA – Bluetooth-capable stethoscopes, allowing doctors to hear heart sounds from across the country, are just one innovation Saint Vincent Health System is using in its new telehealth network, which has reduced hospital readmissions and generated a 100 percent ROI in less than two months, officials say.

Pleasanton, Calif.-based Polycom, a video conference and communications company, is helping Saint Vincent Health System build a telehealth network with technology that seeks to make healthcare more accessible by visually connecting healthcare professionals and patients in virtual environments across 26 facilities in Pennsylvania.

With the issue of location eliminated, using video rather than traveling, doctors can see more patients, and patients receive high-quality care with access to the expertise of the best specialists, regardless of physician practice location, officials say.

Saint Vincent's telehealth program began with a regional telemedicine network that used Polycom video to connect understaffed rural hospitals with remote specialists who consult and assist primary care physicians with evaluations and treatment recommendations.

Its telehealth services include providing cardiology and oncology services to patients in rural areas; collaborative telestroke care and virtual, remote-patient rounds conducted by multidisciplinary teams of specialists. The video technology also supports a bariatric wellness program that educates and treats patients suffering from obesity.

The program achieved a 100 percent return on investment within two months by expanding the reach of Saint Vincent's bariatric services, say Saint Vincent officials.

"Rural medicine is such a challenge due to the distances that must be covered and limited resources," said Philip Wolford, coordinator of Saint Vincent's regional telemedicine network. "Our tele-cardiology program is a great example of how Polycom video collaboration helps us overcome that challenge and has literally changed the way we practice medicine," Wolford continued. "It is patient-centered care in the purest form.

By reducing rehospitalizations, our program is driving costs down for patients and other payers."
Saint Vincent's telehealth technologies include Bluetooth electronic stethoscopes that enable clinicians to listen to lung and heart sounds from hundreds of miles away. The health system is also using Polycom Video Content Management solutions to increase multidisciplinary collaboration as another means to improve patient treatment.

"Teams of doctors collaborate remotely on grand rounds, exchanging observations, recommendations, and patient information to improve and accelerate patient care," said Wolford. These grand rounds are recorded, archived and published for staffers to view later on-demand as part of their continuing medical education.

Saint Vincent also facilitates a weekly tumor board conference using Polycom video. Oncologists with a variety of specialties from remote locations review malignant tumors, using Polycom's high-definition content sharing capabilities. They work together to determine the best course of treatment, giving patients the benefit of having an entire team of experts examining their medical records.

The Saint Vincent telestroke program was implemented in 2011. This program enables Saint Vincent physicians to immediately consult with on-call neurologists at a renowned nonprofit medical center and allows stroke patients' CT scans to be shared across the telehealth network, giving Saint Vincent patients access to some of the best stroke care in the world. Within four months of launching telestroke, Saint Vincent successfully treated 65 stroke patients. That success led to an expansion of the program, which will include six facilities by the end of 2012.

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10. Telehealth cuts readmission rates, earns system a speedy return on investment
Fierce Health IT, May 23, 2012 htm

Saint Vincent Health System in Erie, Pa., reports that using telemedicine technology has reduced readmissions in its 26 Pennsylvania facilities--and also netted a 100 percent return on investment in just two months.

St. Vincent's success story echoes the findings of Geisinger Health Plan's two-year study of home telemonitoring. That trial showed a 44 percent drop in readmissions among the monitored patients compared to a control group.

The Geisinger study looked at the use of an interactive voice response system for monitoring patients with congestive heart failure. The IVR system enabled the patients to report their weight and answer a series of questions about their symptoms.

Another recent study showed that telemonitoring had a sustained positive effect on the outcomes of patients with diabetes. Building on an earlier trial involving veterans, the study showed that these effects persisted even as the intensity of monitoring decreased, *FierceHealthIT* reported yesterday.

Payers and providers are increasingly recognizing the financial benefits of remote healthcare and adjusting their payment models accordingly. Pennsylvania just announced it will expand coverage of telemedicine in its Medicaid program, for example. Earlier this year, the VA has said it will waive co-pays on telehealth visits because the visits cost less to provide.

Saint Vincent's telemedicine program includes Bluetooth-enabled stethoscopes that let physicians listen to patients' heart and lung sounds remotely, videoconferencing between primary care physicians in rural hospitals and specialists in bigger facilities, stroke, cardiology, and oncology telehealth offerings and a bariatric wellness program.

The expansion of Saint Vincent's bariatric program accounted for most of the return on investment in the technology, which was provided by Pleasanton, Calif.-based Polycom, the company said in a statement.

"Rural medicine is such a challenge due to the distances that must be covered and limited resources," Philip Wolford, coordinator of Saint Vincent's regional telemedicine network, said in the statement. "By reducing rehospitalizations, our program is driving costs down for patients and other payers."

To learn more:
- read the Saint Vincent/Polycom statement
- see the Geisinger announcement
- see the state of Pennsylvania's announcement

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11. Report: Mobile Devices Could Improve Care, Reduce Medical Costs
iHealthBeat.org, May 23, 2012 htm

Mobile devices offer an opportunity to improve care and reduce medical costs, according to a new report by the Brookings Institution, the *Washington Post* reports.

The report -- titled, "How Mobile Devices Are Transforming Healthcare" -- outlines some recent findings about the mobile health market.

Key Findings
The report noted that Brookings economist Robert Litan has found that the use of mobile health monitoring devices could reduce U.S. health care costs by about $197 billion over the next 25 years.

Darrell West -- author of the report, vice president and director of governance studies for Brookings and founding director of its Center for Technology Innovation -- said devices like "Gluco Phones" -- which

monitors blood sugar levels -- could help patients take control of their care and decrease the burden on health care providers.

Mobile devices also could help reduce medical errors, according to the report.

The report cited research finding that 16% of nurses who rely on mobile devices said their device helped them avoid at least one medical error and 6% said their mobile device helped them avoid errors on several occasions.

Policy Changes Necessary
West said, "There needs to be policy changes that recognize the new landscape of medical care and the benefits of remote monitoring devices, preventive medicine, text reminders to take medication and electronic consultations."

He added that the health care system will need to reward physicians who adopt mobile technologies for the technology to become more widespread (Kolawole, *Washington Post*, 5/23).

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12. Web-Based Management Program Significantly Reduces High Blood Pressure, According to New Data from the Center for Connected Health
Press Release, Center for Connected Health, Partners Healthcare, May 22, 2012 htm

Boston--A recent study conducted by the Center for Connected Health demonstrated that a web-based self-management program helped patients with hypertension achieve significantly lower blood pressure by the conclusion of the program. Blood Pressure Connect enables patients to easily collect their blood pressure readings, monitor trends and securely share their personal data with their providers using a home blood pressure cuff and web portal. Blood Pressure Connect, developed by the Center for Connected Health, Partners HealthCare, empowers patients to better self-manage their health and facilitates improved communication between patients and providers. These results were presented earlier this month at the American Heart Association's Quality of Care and Outcomes Research (QCOR) in Cardiovascular Disease and Stroke - Scientific Session in Atlanta.

Participating patients measured their blood pressure from home and upload the readings to a secure website. 219 hypertensive patients, aged 22 to 90 years old, were enrolled in the program. Patients were on different medications, and were treated for varying lengths of times by several provider practices. Despite these differences, for all patients, systolic blood pressure decreased significantly, on average, by 6mmHg. Patients with elevated baseline blood pressures (stage 1 or 2 hypertension) reported the most significant change, achieving reductions of 12mmHg and 25mmHg, respectively.

"High blood pressure is an independent cardiovascular risk factor," said Kamal Jethwani, MD, MPH, Lead Research Scientist, Center for Connected Health. "Just a 5mmHg decrease in blood pressure can reduce mortality due to stroke and heart disease by 14% and 9%, respectively."

The program's secure website allows patients to track trends, provide commentary and review helpful education resources. Providers have access to a dashboard where they can view their patients' blood pressure data and trends, at both an individual as well as population level, making it easy to manage a large number of patients more efficiently.

"Our Blood Pressure Connect program is helping to empower patients to be better informed to make healthier lifestyle choices and self-manage their health, while facilitating improved communication between patients and providers," said Joseph C. Kvedar, MD, Founder and Director, Center for Connected Health. "It's particularly important to note that for patients with hypertension, their blood pressure was significantly lower after the program than at the beginning. These results clearly demonstrate that self-management tools can effectively manage chronic conditions and improve clinical outcomes."

Hypertension is a preventable cause of stroke and other cardiac complications. However, according to the American Heart Association, 76.4 million U.S. adults have been diagnosed with high blood pressure.

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13. Editorial: Promise of telemedicine –*to restore services to closed rural NY VA clinic*
The Daily News Online (Batavia, NY), May 21, 2012 htm

The new director of the VA Medical Center in Batavia didn't offer any promise to restore all veterans clinic service in Wyoming County when he spoke at a meeting in Warsaw May 10. But what Brian G. Stiller of the VA Western New York Healthcare System did promise was to pursue the possibility of using telemedicine to restore services, which were shut down March 3.

Doctors pharmacists, mental health counselors and laboratory and radiology services had been offered two days a week at the Warsaw clinic, and 798 veterans from Wyoming, Livingston and Allegany counties used the services. After the shut down, they had to travel 20 or 30 miles or more to health services in Batavia. Even if buses are provided, the extra travel takes extra time out of a patient's day. During winter, the travel also exposes patients to the hazards of snowy highways.

The VA did restore some laboratory work for veterans in Warsaw by appointment, but not the other services.

Mr. Stiller was appointed to his position in February, the month before the clinic was closed. He may not have had anything to do with the decision to close, but he surely has had to deal with the repercussions of that closure. To his credit, he was willing to meet with veterans in a town hall meeting at the Village Park. About 75 veterans and their spouses attended, as did Assemblyman Daniel Burling and representatives from U.S. Senators Charles Schumer and Kirsten Gillibrand's offices.

The new director suggested that telemedicine might be useful in helping restore clinic services in Warsaw.

"We are on the cutting edge and pushing this," he said. "In my thoughts, this would be a great way for us to get our presence back ... and start to get that access going again."

Using specially-equipped examination rooms and computer connections, a doctor or nurse practitioner would be able to see and consult with a patient. The telemedicine concept could be expanded to include specialist and mental health services through remote video connection, he said. Mr. Stiller sees it as not only an answer for Warsaw, but also for other regions where veterans lack immediate health care access.

Is it a sure thing? No. The idea still needs higher-level approval and would need to cycle through the federal contracting process, he said. He declined to offer a timetable. But he promised to push for a telemedicine system as a means of restoring services.

"I think this has got great potential," he told his audience. "I don't want to sell you a pig in a poke, but I really think this is a good thing to get back to the start of what you had."

Here's hoping the higher-ups at VA think so, too.

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14. Doctoring from afar: Maine telemedicine boom is saving lives, time and money
Sun Journal (Lewiston-Auburn, ME), May 19, 2012, by Lindsay Tice htm

The woman wasn't getting enough oxygen to her brain.

Her husband thought she simply wasn't feeling well that day and just needed to lie down for a while. But the Androscoggin Home Care and Hospice nurse on the other end of the phone wouldn't hear of it. The elderly woman had been short of breath the day before and now her words were slurred.

"You need to call 911 immediately, or we are," the nurse told him.

An ambulance rushed the Wilton-area woman to the emergency room, where she was immediately transferred to the intensive care unit. Her lung disease had caused a life-threatening situation.

Had the woman gone to lie down as her husband suggested, said Androscoggin Home Care and Hospice nurse Shane Levasseur, "she probably wouldn't have been able to get up."

It wasn't a doctor's visit that intercepted the crisis, or a nurse dropping by the house to check in. It was telemedicine.

Less than two decades after Maine started diagnosing and treating patients remotely using computers, high-tech medical equipment and other technology, telemedicine's popularity has exploded.

— Hospitals use off-site doctors to rapidly diagnose and treat stroke patients with help from a local CT scan, a high-speed connection and a TV screen, or watch over people in the ICU using high-tech monitoring equipment and in-room cameras sensitive enough to see a patient's pupils.
— Clinics use secure, Skype-like technology to connect patients with specialists the patients otherwise would have to travel for hours to see.
— Lewiston-Auburn's school-based health centers will use technology this fall to treat sore throats and rashes, even when a nurse isn't in the building.

Experts say telemedicine can save time, money and lives, and they'd like to see more of it.

"We've started catching things much quicker than we ever would have before," Levasseur said.

From four monitors to 213

Telemedicine began building momentum in Maine in the mid-1990s. The goal: connect patients to specialists they would otherwise only be able to see by traveling far from home, if they could see those specialists at all. By the early 2000s, rural community health centers were beginning to connect to hospitals in hopes of using their doctors to help patients. But it wasn't always easy.

"Equipment used to be very expensive," said Michael Edwards, director of research and evaluation at the Regional Medical Center at Lubec and a member of the Maine Telehealth Collaborative's advisory committee. "It used to be on the order of $20,000 or $30,000 for the system, and the bandwidth was expensive. For 10 years most of the systems in Maine were using ISDN (integrated services digital network) lines through the telephone company."

Even when there was money for telemedicine, some doctors were hesitant to try it. They liked interacting with patients in person, and the technology's sometimes-grainy images and sometimes-stuttering connections weren't like being in the same room.

A number of small projects got off the ground, most tied to hospitals that had the money and manpower to experiment. It helped that Medicaid and Medicare — seeing potential cost-savings and faster care — agreed to pay for services provided via telemedicine. In 2010, Maine began requiring private insurance companies to pay for telemedicine, too.

As technology improved, costs went down. As costs went down, more health care providers were willing to try it. For some, like Central Maine Medical Center in Lewiston, that meant using teleconferencing-like equipment and a secure network to connect patients with Massachusetts stroke experts, who could quickly tell whether those patients needed a potentially lifesaving but potentially dangerous clot-busting drug.

For others, like St. Mary's Regional Medical Center in Lewiston, it meant using cameras and monitors to link ICU patients to a Portland hub where their blood pressure, heart rate, oxygen levels and other vital signs could be constantly monitored by medical personnel, rather than just by those staffing the ICU floor.

"It helps us catch those moments that people aren't always seeing, aren't always vigilant about," said Rich Kahn, an intensivist with St. Mary's ICU. "I do rounds once, sometimes twice a day. This is doing rounds continuously throughout the day."

Systems that once cost $20,000 to $30,000 now cost $3,000 to $5,000, with faster connections and better equipment. And as people get used to doing regular tasks remotely — paying bills online or talking to the grandkids over Skype, for example — they are more willing to try remote medicine.

When Levasseur began at Androscoggin Home Care and Hospice five years ago, the organization had 25 monitors that could take a patient's vital signs in her home and send that information to nurses in the office. Only four were being used.

"I began going to conferences, reading up on it, and started realizing and believing, wow, this is really something that could take off and benefit our patients," said Levasseur, who is now Androscoggin Home Care's telehealth coordinator. "So I really started focusing on doing a lot of internal marketing."

While nurses still visited patients a couple of times a week, the monitors could measure and relay weight, blood pressure and other information every day. The system asked patients if they were taking their medication, if they were having more trouble breathing than usual, if they needed a nurse to call them, and it relayed that information.

Levasseur focused first on getting the monitors to patients with congestive heart failure, then to people with lung disease, recovering from surgery or dealing with other health problems. When all 25 monitors were being used, the nonprofit got a grant to buy more. Soon it was using 50 and had a waiting list. Then 91, with a waiting list. Then 190. It won another grant to buy more.

Androscoggin Home Care now has 213 monitors, some of which use Samsung tablets to connect patient and nurse.

Levasseur believes the system has helped save lives "quite regularly," including that of the Wilton-area woman who wasn't getting enough oxygen. She'd reported being short of breath one day, but refused medical attention when a nurse called and offered to drop by. When the woman didn't complete her remote vital signs check the next day, it was a red flag. The nurse called again, learned the woman wasn't doing well and got her to the hospital.

"You can see the benefit," Levasseur said.

The future of health care

Although there have been national studies on the effectiveness of telemedicine — one published last year in the Journal of the American Medical Association showed a significant reduction in the mortality rate of patients in UMass Memorial Medical Center's eICU — few wide or published studies have been done in Maine. That will soon change.

The Northeast Telehealth Resource Center, an Augusta-based group that provides technical assistance to health care providers interested in starting telemedicine programs, plans to evaluate the impact of telemedicine in the state.

In the meantime, advocates say, anecdotal evidence shows that telemedicine saves lives by getting people faster care, saves money by heading off crisis situations that can require new or longer hospitalizations and saves time because rural Mainers don't have to travel hours to Lewiston, Portland or Boston to see a specialist.

Marian Marks and her husband, Joseph, say telemedicine has done all that and has given them peace of mind.

The Wales couple began using Androscoggin Home Care's monitors in December after he underwent pancreatic surgery in Boston. Although the surgery wasn't for cancer, it was major, removing part of his pancreas, gallbladder and part of his intestines. Afterward, he developed diabetes and a pancreatic draining problem. He lost 40 pounds.

In the past five months, the remote monitor helped the couple and his doctors track his blood pressure, diagnose a medication problem and watch for sudden water weight gain, an early sign of congestive heart failure or kidney failure.

Although the couple say they could do without being awakened every morning by a chipper computer voice telling Joseph to step on the scale, they're happy with the system.

"It just provides a little more freedom and a little more security," Marian Marks said. "Freedom to go home and then security in staying home. It adds a layer of safety that is just wonderful."

Although Maine-based statistics are hard to come by and evidence is largely anecdotal, most Maine hospitals and an increasing number of clinics, medical practices and health care organizations have some form of telemedicine.

"Everybody in Maine is interested in participating as much as they can," said Edwina Ducker, rural health manager for the Maine Office of Rural Health and Primary Care.

Programs vary widely. In one, city-based Maine dermatologists see rural patients over a computer screen. In another, paramedics feed a patient's information instantly to emergency room doctors so those doctors can advise treatment while the patient is in an ambulance.

The Department of Veterans Affairs has grown its telemedicine program in Maine over the past five or six years to include nearly a dozen specialities. Its new community-based outreach clinic in Lewiston is expected to offer

several specialties relying on telemedicine, including audiology, dermatology, retinal imaging, counseling and wound care consultation. It may also offer smoking cessation and a pharmacy program.

VA officials said they could never afford to pay specialists to staff all 12 sites in Maine, and they probably couldn't find enough specialists even if they could pay them. In the past, veterans had to travel to Boston or Connecticut for some of that care. Now, they go to their local clinic.

"It's kind of exciting," spokesman Jim Doherty said. "Ten years ago, nobody would have even dreamed of this stuff."

Students in Lewiston-Auburn this fall will find telemedicine in both public high schools, both middle schools and at Lewiston's Longley Elementary School.

The five schools share two nurse practitioners. With help from a $337,000 federal grant, telemedicine technology will allow those two to cover all five schools at once and get second opinions without students leaving the school. High-tech equipment also will allow the nurse practitioners to record parts of an exam, such as the sound of a student's heartbeat, store it electronically or share it off-site with a doctor.

The change won't happen without some planning. The health centers have to make sure they comply with insurance company rules so they're reimbursed for telemedicine, when possible. They also have to make sure their workers know how to use the new technology.

"It has to be done correctly; people have to be trained," said Jim Lysen, executive director and chief financial officer of St. Mary's Health System's Community Clinical Services, which runs the school-based health centers. "We're not assuming this is a miracle thing, but I think it's a tool that can help us increase service."

As telemedicine grows, there will be challenges for other groups, too. More providers need to be trained. Patients need to be educated about what to expect.

Hospitals and clinics also need to deal with credentialing issues, since a specialist in one location won't be automatically credentialed to serve another. That recently became less of a challenge, with new federal rules that allow the receiving hospital to accept the credentials of the sending hospital. However, out-of-state specialists still must deal with cross-state licensing issues.

So far, it hasn't been much of a deterrent to growth. Experts say they see telemedicine only getting bigger.

"I think it's the future of health care," said Tiffiny Rooney, facility telehealth coordinator for the VA.

Telemedicine examples in Maine

- Psychiatry at St. Mary's Regional Medical Center in Lewiston: connects emergency mental health patients to remote counselors at night and after hours via computer and camera. Off-site counselors have instant access to the patient's chart and medical records.
- Tele-ICU or eICU at several hospitals, including St. Mary's Regional Medical Center, Franklin Memorial Hospital in Farmington and Maine Medical Center in Portland: connects ICU patients to off-site medical personnel using computers, monitors and in-room cameras that allow doctors and nurses elsewhere to zoom in close enough to see a patient's pupils.
- Dermatology, retinal imaging, audiology, pre- and post-surgery care, mental health, orthopedics, pharmacy, vascular care, education for patients with congestive heart failure and more through the VA via teleconferencing.
- Neurology at Central Maine Medical Center and other Central Maine Healthcare hospitals: connects patients to Massachusetts General Hospital experts who can quickly diagnose a stroke using local CT scan results and a patient exam conducted via camera and screen. Those experts can then advise for or against the use of powerful clot-busting medication. A second program is planned for patients with seizure disorders and other problems.
- Speech therapy, using home or school computers to connect children and adults with therapists from Waldo County General Hospital.
- Home monitoring by Androscoggin Home Care and Hospice: allows nurses to track patients' vital signs remotely every day using special networked equipment.

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15. Telemedicine sees record use for mental health-31,000 in Ontario
Northern News, Sudbury Life, May 15, 2012 htm

A record 31,000 patients in northeastern Ontario were connected with mental health and psychiatric care last year using telemedicine.

At 61 per cent of all clinical telemedicine activity in the North East Local Health Integration Network (North East LHIN) region last year, that's more than four times greater than the next highest uses (internal medicine and oncology), and up from 56 per cent the previous year.

Telemedicine is an eHealth solution that's a critical part of the North East LHIN's plan to improve access to care for all northeastern Ontarians, according to a press release from the organization.

It uses two-way videoconferencing through the Ontario Telemedicine Network (OTN) to care for patients. The northeast is the highest user of the technology among Ontario's 14 LHINs.

"As we heard time and again in our recent community engagement sessions, expanding technologically based solutions is one way to improve access to care for fellow northerners," Louise Paquette, CEO of the North East LHIN, said in a press release.

"As we mark Mental Health Week, it's important to consider innovative ways of providing access to mental health and addictions care, when and where these are needed."

Clinical telemedicine activity in the northeast involves mental health and addiction services from Methadone treatment to psychogeriatric assessments, with participation from hospitals, family health teams, community agencies, and long-term care homes, the press release said.

In 2010-11, telemedicine helped northern Ontario patients avoid more than 61 million kilometres of travel, according to Ed Brown, head of the Ontario Telemedicine Network.

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16. Employers, Insurers Embracing Telehealth, but Barriers Remain
iHealthBeat.org, May 07, 2012 htm

More health insurers and employers are beginning to offer virtual physician visits via telehealth technology as a way to curb costs and improve access to care, *Kaiser Health News/USA Today* reports.

Aetna, Cigna and United Healthcare are among the insurers that are offering virtual physician visits. Employers such as Delta Airlines and General Electric also are providing such services.

Proponents of virtual physician visits cite several benefits, including lower-cost consultations and a greater availability of appointments.

Obstacles to Growth in Virtual Visits
However, many state medical boards make it difficult for health care providers to participate in telehealth programs because they require a prior physician-patient relationship before virtual consultations can take place. Some medical boards also require a prior medical exam before allowing virtual appointments, making telehealth consultations especially difficult for physicians and patients who are located in different states.

Gary Capistrant -- senior director of public policy at the American Telemedicine Association -- said, "The situation seems to be getting worse, not better."

Humayun Chaudhry -- CEO of the Federation of State Medical Boards -- said that state boards require physicians to be licensed for treating patients in their states because they want patients to be able to seek help at a state agency if they are injured. Chaudhry said, "It's about accountability," adding, "We want to enable telemedicine to flourish, but at the end of the day we want patients protected."

However, he said that some medical boards are easing restrictions, noting that nine boards in recent years have passed rules to make the licensing process easier for physicians (Galewitz, *Kaiser Health News/USA Today*, 5/6).

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17. Telehealth network can be used to certify nurses in chemotherapy biotherapy
Oncology Nurse Advisor, May 4, 2012 htm

New Orleans—A telehealth network is effective at delivering certification courses in chemotherapy biotherapy to oncology nurses living in rural areas, according to research presented at the Oncology Nursing Society (ONS) 37th Annual Congress.

In Kansas, availability of certified chemotherapy/biotherapy trainers is limited to metropolitan areas of the state. To meet the growing demand for chemotherapy certified nurses, The Midwest Cancer Alliance (MCA), The University of Kansas

Cancer Center, and The University of Kansas Center for Telemedicine and Telehealth (KUCTT) partnered to deliver a chemotherapy/biotherapy training course using interactive televideoconferencing (ITV).

The MCA, established in 2007, is a membership-based organization that supports health care professionals to increase access to cancer research and to advance the quality and reach of cancer prevention, early detection, treatment, and survivorship in Kansas and western Missouri. The overlying goal of the MCA is to provide more options to patients and professionals closer to their communities.

In order to promote evidence-based care, the MCA uses ITV to broadcast their professional education courses to members, some as far as 400 miles away. This technology has been used for over 20 years by KUCTT to deliver clinical telemedicine services, saving time, expense, and ultimately facilitating the speed at which evidence-based care is adopted into practice.

The course is delivered biannually to MCA member oncology nurses with less than 2 years of oncology experience, as well as newly hired nurses who don't have current ONS certification.

As a result of this initiative that began in 2008, 174 nurses from seven communities across the state have completed the course via ITV and received their provider card.

“The increased number of nurses certified in ONS Chemotherapy Biotherapy through the MCA demonstrates that this method of delivery is successful and supports our plan to expand our professional development opportunities using ITV as the delivery mechanism,” the researchers concluded.

While the MCA members have access to the ONS Chemotherapy Biotherapy course online, they indicated that they would prefer to participate in an in-person delivery of the course.

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18. Telemedicine Can Make Money for Tertiary Centers
Medscape Medical News, May 3, 2012 htm

Providing services through telemedicine can make money for a tertiary medical center, researchers reported here at the American Telemedicine Association 17th Annual International Meeting.

After the deployment of telemedicine, pediatric transports increased by 142 patients per year at the University of California at Davis (UCD) Children's Hospital, resulting in a jump in hospital revenue of $1.6 million and in professional billing of $374,000, according to Madan Dharmar, MBBS, PhD, who is an assistant professor there.

"If you invest...by deploying telemedicine to a rural hospital, then your annual increase in hospital and professional revenue, based on the increase in the number of transfers, is quite substantial," said Dr. Dharmar.

Many studies have found benefits from technology, such as video cameras, that allows specialists to diagnose and treat patients who are far away. But most of this research has focused on patient and provider satisfaction or health outcomes.

Relatively few studies have examined cost effectiveness; the ones that have have looked at the issue from a variety of perspectives — patients, providers, and society as a whole.

"We have never talked about whether there is a benefit for a hospital to invest in telemedicine," said Dr. Dharmar. He and his colleagues were forced to look at the question when his department's video conferencing unit broke.

The department's chief administrative officer said the $15,000 to replace the unit was not in the department's budget.

"We had collected data where patients were very satisfied," Dr. Dharmar told *Medscape Medical News*. "We had data showing better provider satisfaction.... We had data showing better outcomes. The response was: 'It's not in the budget'."

So Dr. Dharmar and his colleagues set out to show that telemedicine could make money for the hospital. They evaluated 13 rural hospitals that had begun telemedicine relationships with their hospital in 2003.

They found that 2056 children were transferred to UCD Children's Hospital after telemedicine consultations began. The number per year increased from 143 to 285, and the average hospital revenue per year increased from $2.4 million to $4.0 million during that period, said Dr. Dharmar.

The researchers defined hospital revenue as total revenue resulting from the transferred patient minus direct costs related to that patient.

Still, the chief administrative officer pointed out that increased revenue for the hospital as a whole did not equate to revenue for the department.

So Dr. Dharmar and his colleagues looked further and found that average professional billing revenue increased from $314,000 to $688,000 per year. They defined professional billing revenue as the total reimbursement from insurance providers for the transferred patients.

The increased income from each hospital was about $23,000 per year, Dr. Dharmar said.

Even these figures did not convince the chief administrative officer to pay for the new unit out of the department budget, but the hospital as a whole finally picked up the tab, Dr. Dharmar said.

The study raised questions from session moderator Ricardo Muñoz, MD, chief of the cardiac intensive care unit at the Children's Hospital of Pittsburgh in Pennsylvania.

In the first place, the increase in transfers could be due to other factors. "How do you know it's telemedicine?" he asked.

Dr. Dharmar admitted that the data he has now don't answer that question. The researchers are looking at patients' zip codes to establish more clearly that the increased transfers came from hospitals that established new telemedicine relationships with UCD.

He thinks they will be able to show that association. "There are hospitals from which there were zero referrals before we started the telemedicine relationship; after we started the relationship, they started to transfer patients," he said.

That prompted Dr. Muñoz to raise another issue. Telemedicine is supposed to prevent the need for transfers by providing services remotely, he pointed out.

"In the ideal society, that's how it should work," Dr. Dharmar acknowledged. "But our healthcare system is broken and it depends on a fee for service. If a tertiary hospital invests in something like this, they have to make money off it."

Dr. Dharmar and Dr. Muñoz have disclosed no relevant financial relationships.

American Telemedicine Association (ATA) 17th Annual International Meeting: Abstract 600. Presented May 1, 2012.

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19. Telemedicine financing takes center stage at ATA
Healthcare Finance News, May 02, 2012 htm

SAN JOSE, CA – Two panel discussions Monday at the American Telemedicine Association's conference in San Jose, Calif., tackled money issues. Healthcare providers are looking for a return on investment in telemedicine applications and venture capitalists are looking for a reason to invest in the growing industry.

Neither issue is going to be easy to solve said the panelists.

The four participants in Monday's "Paying for Telemedicine" industry executive panel discussion agreed very quickly on one key fact: Forget, for now, about reimbursements. Once you get beyond expecting the government to pay you back for your services, they said, you can get creative and find new sources of ROI.

"You need to rethink the value proposition," said Roy Schoenberg, MD, CEO of American Well, and "look at all the (other) pieces of the puzzle," like payers and patients. He said the traditional concept of thinking solely about how physicians will be paid is too short-sighted.

"There are models and innovative ways," added Kathleen Plath, vice president of sales and marketing for Specialists on Call, "so that we don't have to wait for reimbursement."

Moderated by Cardiocom CEO and President Daniel L. Consentino and featuring Schoenberg, Plath and Randall Swanson, vice president of business operations for Intel GE Care Innovations, the discussion tackled what many consider to be the chief barrier to full-on acceptance of telemedicine as a standard of care. And the panelists generally agreed that instead of waiting for the government to embrace and reimburse for telemedicine providers need to look for other sources of value.

"Where is telehealth generating value that people are willing to pay for?" asked Schoenberg.

For instance, he said, health plans might be willing to pay to help their members stay healthy and avoid unnecessary hospital visits, patients themselves might be willing to pay if it helps them avoid much more expensive healthcare encounters down the road, and employers – both large and small – might be willing to pay to ensure their workforce is healthy and productive and isn't taking time off from work to visit the doctor or nurse a cold.

"Self-insured employers … have a big interest in controlling the exploding growth of healthcare costs in their space," said Swanson.

Schoenberg said the development of accountable care organizations (there are some 150 proposals before the Centers for Medicare & Medicaid Services, said Consentino) will spur telemedicine because they require payers and providers to assume a portion of the risk in preventing avoidable health problems, and "risk is a great thing because it forces people to think about innovation."

"It's not cookbook medicine any more," Swanson said.

On the other hand, Schoenberg said, ignorance is one of the bigger barriers to telemedicine adoption. As an example, he pointed out a recent bill before California's legislature that was designed to curb illegal use of online pharmacies, but was worded to basically eliminate telemedicine in the state.

"One of the biggest obstacles is we don't know what we don't know," added Plath.

The panelists agreed that telemedicine will continue to grow, regardless of whether the Obama administration's healthcare reform efforts are overturned by the Supreme Court or how long it takes for reimbursement to catch up. Consentino then pointed out that it has taken 20 years for telemedicine to get this far, and most of that growth has been seen in just the last couple of years.

"We need to build an evidence base that shows and demonstrates a clear value proposition," he said.

Value propositions were also the focus of another panel discussion, titled "Financing Telemedicine."

When it comes to investing in telemedicine technology and services, venture capitalists typically won't give the time of day to anything intended for a market of less than $500 million. The reason is simple: It costs the same amount of money to develop a product for a small market as it does a large market, but large markets offer more profit potential.

"You want something to pay off big," said Barbara Lubash, managing director of the investment firm Versant Ventures.

In fact, when it comes to health IT, she said, her firm turns down "nine of 10 – and maybe more" of all requests for funding, and that's because most are intended for a niche audience that health plans won't reimburse.

Along with Lubash and Jack Young, senior investment manager for Qualcomm Ventures, the panel discussion featured moderator Molly Coye, MD, chief innovation officer for the UCLA Health System Institute for Innovation in Health. The session's goal: To explain what the investment community looks for when sizing up potential opportunities in telemedicine.

In addition to market size, that includes "something that solves a top 1, 2 or 3 problem for decision makers," Lubash said. "It has to be compelling."

For example, with the rise of accountable care organizations, reducing readmissions is a big issue for hospitals.

"In the past, it was more about getting revenue," Lubash said. "Now the top problem is not getting heads in the bed, but controlling the underlying costs."

Also, investors like to work with entrepreneurs that have a track record of success.

"If you can find a person who investors are already crazy about, do it," she said. "If you can't, it's better to come alone than with a runner-up."

When seeking investment dollars, healthcare entrepreneurs should be able to explain how their product or service will benefit payers, patients, doctors and device makers. How will it reduce costs (payers), improve care (doctors), create conveniences (patients) or drive revenue (device makers)?

"It's easy to say, 'I've got this great thing,' but have they thought about how it will satisfy these four constituencies?" he said.

If the product or service is intended for a consumer audience, it should be easy to use, and, if possible, allow for passive adoption. That's because people are more likely to use a product if it doesn't require them to change behavior or learn something new, Young said.

When it comes to mHealth, convincing an investor to provide funding can be a difficult task, Lubash said.

"In general, they tend to be (products) with narrow applications and short lifecycles," she said. "It's not a sustainable model."

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20. Physicians take new look at telemedicine
Healthcare IT News, April 26, 2012 htm

The argument for telemedicine has been that it allows patients to access doctors at anytime and from any place. Now doctors are finding that they can use telemedicine platforms to improve – and in some cases expand – their practice.

Telemedicine vendors like American Well, Teladoc and Ring-A-Doc are launching or have launched business plans aimed at physicians, enabling them to create platforms to communicate with their existing patients. Company executives say the platforms can also be used by physicians to enhance their practice, either by reaching out to more patients or developing a specialty service.

"We've introduced a whole different model of selling our system to private practices," says Roy Schoenberg of American Well, which launched its physician-facing services earlier this year after "playing around" with the concept for most of 2011. "This is all completely brand-new to them."Schoenberg, president and CEO of the Boston-based company, says physicians are looking at online services for different reasons. Some want to launch concierge medicine services, offering more or directed services for a higher fee. Others want to expand their practice to bring in more clients or take advantage of their specialties. Still others see telemedicine as an important tool to becoming part of an accountable care organization or patient-centered medical hom

At Mountain View, Calif.-based Ring-A-Doc, which is looking to launch a physician-facing telemedicine platform this summer, the focus is on adding tools to a doctor's existing workflow.

"Doctors are becoming more and more conscious of how valuable their time is," says company CEO Jordan Michaels. "They were wary of telemedicine at first, but now they see it as a way to monetize their time."

Michaels says physicians are gradually learning to accept telemedicine, but they need to be assured that it won't disrupt their workflow or cause more headaches than it cures. Too many features, he says, and a doctor will feel overwhelmed. Too few, and he or she won't see the need to adapt.

"We don't want to come in and take over their whole practice," he says. "We want to fill in the gaps, and give them the tools that they need. They need to be eased into that process."

Dallas-based Teladoc, which bills itself as the nation's first and largest telehealth provider, rolled out its physician-facing product at the HIMSS12 Conference and Exhibition this past February in Las Vegas. Called TeladocConnect, the service is designed to enhance the physician's services.

"Since its inception, Teladoc has provided patients with access to U.S.-based, board-certified physicians, 24/7 via telephone or secure online video to resolve many medical conditions when the individual's primary care physician is not available," company CEO Jason Gorevic said in a press release. "TeladocConnect wraps around a physician's practice, providing patients with around-the-clock care and allowing physicians to offer a higher level of personal service at a time when demand is overwhelming resources. This new offering helps to solve some of the greatest challenges healthcare faces today, including access, patient volume and reimbursement challenges."

Gorevic, who was on hand at HIMSS12 to show off the new product, says forward-thinking physicians will see the benefits of creating a specialized platform for their practice. Aside from promoting better communication with their regular patients, the platform can be used to attract new patients who might live farther out, or allow the physician his or her services as a specialist or consultant to patients, other providers and health plans. It could even be used, says Gorevic, to enable physicians to continue their work while on vacation.

Schoenberg said telemedicine capabilities will certainly help a small physician's office adopt an ACO model or become part of the PCMH model of care. The ability "to care for patients at any time, from any place, that you're acquiring risk for," he says, will compel physicians to develop their own platforms.

"A telephone call between the doctor and the patient won't do it any more," he says.

Not everyone is convinced that independent physicians are ready to embrace telehealth for their own practices. Jack Karabees, senior vice president for Miami-based Consult-A-Doctor (which launched its own physician-facing product last year) says it will take another three or four years for the incentives to catch up.

For now, he says, the motivated doctors will sign on to serve as on-call resources or develop their own platforms, but most of the solo doctors or those in small practices won't feel compelled to redesign their practices.

“They’re not ready to pick up the telephone at midnight,” he says. “The incentives aren’t there yet, and there’s no pain in terms of lifestyle. They’re thinking, ‘At 9 o’clock in the evening, I can do without the $40.’”

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21. Mobile Stroke Unit with Telemedicine Link Cuts Time to Treatment
Medscape Medical News, April 11, 2012 htm

Using a mobile stroke unit (MSU) equipped with a computed tomography (CT) scanner, laboratory, and telemedicine connection cuts "door to needle" time in half, a new study shows.

"There is much clinical and experimental evidence showing that the earlier thrombolysis treatment starts, the better the outcome, the 'time is brain' concept," study author Klaus Fassbender, MD, PhD, Department of Neurology, University of the Saarland, Homburg, Germany told *Medscape Medical News*. "Thus, if the delay until treatment can be halved by pre-hospital stroke diagnosis and treatment, outcome is considered to be better."

Dr. Fassbender pointed out that thrombolysis is underused, with only 2% to 5% of patients receiving it, mostly because of delays in accessing it within the first crucial hours after symptom onset. "So every effort should be made to accelerate stroke management. Pre-hospital stroke treatment is the now the fastest solution."

The study was published online April 11 in *Lancet Neurology*.
…
Dr. Fassbender noted that the study was not statistically powered to show significant differences in clinical outcome. "For showing differences in clinical endpoints, studies that are 10-fold larger and multicenter would be required for statistical reasons."
…
The research is kind of a "proof of concept" study, commented Alastair M. Buchan, professor, Nuffield Department of Medicine, Oxford University, United Kingdom, who along with Peter M. Rothwell, also of Oxford University, wrote an editorial accompanying the study.
…
The MSU approach makes sense in an urban, densely populated setting but may make less sense in areas that are more spread out, said Dr. Buchan. "In rural areas, you need to get the patients as quickly as you possibly can to a stroke center rather than sending an ambulance out which adds to the delays," he said. "It's faster to get local ambulance to bring in the patient."

Dr. Buchan noted that although the study was not powered to demonstrate superiority in neurologic outcomes from a mobile stroke unit, one way to demonstrate a surrogate benefit would be to show that scanning patients earlier leads to healthier brains.

"I always regard the ASPECT [Alberta Stroke Program Early CT' score as the ECG [electrocardiogram] for the brain, and the CT scan as the cardiogram of the brain," said Dr. Buchan. "To be able to get it in a mobile setting is fantastic and whether you can do this in a way that's cost-effective and reproducible will, I think, require some further developments to the technology to make it really, really simple." …

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TELEMEDICINE TECHNOLOGY NEWS

22. Community Connect Broadband Grant Program
USDA Rural Utilities Service

The provision of broadband transmission service is vital to the economic development, education, health, and safety of rural Americans. The purpose of the Community Connect Grant Program is to provide financial assistance in the form of grants to eligible applicants that will provide currently unserved areas, on a "community-oriented connectivity" basis, with broadband service that fosters economic growth and delivers enhanced educational, health care, and public safety services. Rural Utilities Service will give priority to rural areas that it believes have the greatest need for broadband services, based on the criteria contained herein.

Grant authority will be used for the deployment of broadband service to extremely rural, lower-income communities on a "community-oriented connectivity" basis. The "community-oriented connectivity" concept will stimulate practical, everyday uses and applications of broadband facilities by cultivating the deployment of new broadband services that improve economic development and provide enhanced educational and health care opportunities in rural areas. Such an approach will also give rural communities the opportunity to benefit from the advanced technologies that are necessary to achieve these goals. Please see 7 CFR 1739, subpart A for specifics.

Deadline: June 18, 2012

Minimum grant amount: $100,000; *maximum grant amount*: $1,500,000

Application packets: htm

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23. Layered Partnering at Vidyo
Wainhouse Research, Vol 13(12), May, 22, 2012 htm
Vidyo, which brought you layered media known as scalable video coding (SVC) and a layer switching architecture, has shown itself to be adept at layered partnering. In just the past few weeks the company has announced three interesting partnerships in two totally different directions. Two weeks ago we mentioned that Vidyo announced a deal with Philips under which Philips will basically embed Vidyo's videoconferencing technology into a variety of medical devices and solutions from the company's Philips Healthcare business unit, and we mentioned its deal with AMD Global Telemedicine. These relationships of course are possible because Vidyo's Adaptive Video Layering Technology is an all-software solution.

This week Vidyo announced a different type of partnership. Juniper Networks, through its Junos Innovation Fund, is making a strategic investment in the company, bringing Vidyo's total capital raised so far to $97 million. The amount of money being invested by Junos isn't that large, but the implications and possibilities are huge.

Wainhouse Research Bulletin, Vol.13(11), May, 8, 2012, Andrew Davis htm
In one of several announcements that came out in sync with the American Telemedicine Association annual meeting, *Vidyo* and *AMD Global Telemedicine* have signed a collaboration agreement that will integrate Vidyo's software in AMD's telemedicine platform. The combined service complements the Vidyo for Healthcare line, as the companies have integrated Vidyo's software-based videoconferencing platform with AMD Global's telemedicine platform. The service encompasses the diagnostic medical devices, Agnes information aggregation system, and tConsult Encounter Management Software that is equipped with device management, case creation, workflow and archival tools. Vidyo and *Philips* also announced that they are teaming to offer health system providers an approach for extending telehealth services across the enterprise to improve patient care and clinician workflow. Philips Enterprise Telehealth Services will incorporate remote physiologic monitoring, advanced clinical decision support, and Vidyo's Adaptive Video Layering Technology into a clinical platform for communications and collaboration.

What Andrew Thinks: While no product announcements were included in the news release, it is likely that the two companies will work towards a future where Vidyo's videoconferencing software and APIs are integrated into the Junos Operating System. We've heard the term "network aware applications" before; this could be the next incarnation where Juniper-based networks become optimized for scalable video-based videoconferencing. Any developments that will make real-time video and IP networks more compatible will be welcomed by all.

We've said this for a long time: videoconferencing is morphing from being a stand-alone application to being a feature added to something else. Software solutions are the enabling technology for this. Unified communications (think Lync) is the most common substantiation of this argument, but these examples from Vidyo's partnerships are equally valid, yet different. In the Philips case as an example, we'll see video being embedded into high-level patient monitoring applications for hospital intensive care units. In the Juniper case we have video-enabling technology being embedded (potentially) into the bowels of networking infrastructure. Both point the way to the day when visual communications become truly ubiquitous. And both point back to the importance of software as a solution.

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24. WR Soapbox: A Tale of Two "Pities"-*Polycom and Cisco*
Wainhouse Research, Vol 13(12), May, 22, 2012 htm

Could the end be near for the videoconferencing world as we know it?

Several weeks ago Polycom reported on its Q1 financial results and the results weren't pretty. The stock was hammered. While executive management there remains optimistic about its future prospects, confident in its current product line's competitiveness, and strident about its future plans to take video to the cloud (like everyone else on planet earth), there must be some concern about the global economy and the potential meltdown in certain markets. These affect Polycom and all its competitors. We were waiting to hear from Polycom's biggest competitor before commenting, and now we have. Cisco reported results May 9 of quarterly revenues of $11.6 billion, up 7% annually. Total product revenue was up 5%. But, collaboration revenues, which include many bits and pieces for Cisco, and which are still only a small piece of the overall revenue pie for Cisco, were flat. Color Mr. Chambers unhappy.

Here's how we think the videoconferencing piece shaped up for the two leading vendors in this space during Q1-2012.

	Polycom	Cisco
Q1 Videoconferencing revenues	$131	$216
Q1 VC units	24,358	24,869
VC revenue sequential growth	-13%	-30%
VC revenue annual growth	-10%	+28%
VC units sequential growth	-13%	-22%
VC units annual growth	-10%	+55%
Multi-codec (TP) unit annual growth	-15%	-33%
Infrastructure revenue annual growth	0%	+9%

Note: Cisco's quarter of a year ago was a real down period, making some of the annual comparisons better than they would otherwise be.

Indeed, there are many negative numbers in the growth statistics here. Several potential explanations exist, including the Euro crisis, political stalemates in parts of Europe as well as the USA, slowing growth in China and India, the shift to software solutions rather than hardware, movement to the cloud, interest in tablet-based videoconferencing instead of room systems, introduction of HD videoconferencing in web conferencing and UC offerings, and so on. We're still waiting to hear from several more vendors, including our China-based friends, before we can calculate the total worldwide market for Q1-2012 in our SpotCheck report.

Meanwhile, we recall the immortal words of Phineas T. Bluster, “it’s always darkest just before total disaster.”

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25. DHS: Mobile Technology Poses Security Risks to Health Data
iHealthBeat.org, May 18, 2012 htm

The health care industry's adoption of mobile technology poses certain security risks to health data, according to a report by the Department of Homeland Security, *Government Computer News* reports (McCaney, *Government Computer News*, 5/16).

DHS' National Cybersecurity and Communications Integration Center issued the report, titled, "Attack Surface: Healthcare and Public Health Sector" (Horowitz, *eWeek*, 5/16).

About the Security Risks
The report stated, "Since wireless medical devices are now connected to medical IT networks, IT networks are now remotely accessible through the medical device."

It added that "communications security of medical devices to protect against theft of medical information and malicious intrusion is now becoming a major concern" (Kurtz, *Becker's Hospital Review*, 5/17).

The report noted that security threats against mobile devices -- such as smartphones and tablet computers -- include:

- Introduction of spyware and other malicious software;
- Loss of treatment records or test results; and
- Theft of patient data.

DHS Recommendations
In the report, DHS recommended that health care organizations:

- Purchase only devices that have well-documented security features and can be configured safely to the organization's IT network;
- Require vendor support for firmware, software patches and antivirus updates;
- Operate well-maintained firewalls;
- Create and enforce password policies to protect patient data; and
- Protect communication channels -- particularly wireless channels -- by using authentication and encryption (*Government Computer News*, 5/16).

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26. FCC Aims To Allocate Spectrum for Wireless Medical Technology
iHealthBeat.org, May 17, 2012 htm

On Thursday, the Federal Communications Commission announced a plan to allocate spectrum bandwidth for wireless medical sensors that could be used to monitor patients' health, *The Hill*'s "Hillicon Valley" reports (Feinberg, "Hillicon Valley," *The Hill*, 5/15)..

If the plan is approved, the U.S. would be the first country to allocate spectrum for medical body area networks, or MBANs, according to *CNN's* "The Chart."

How the Plan Would Work
MBANs are wireless systems that use wearable sensors to monitor patients' vital signs, such as blood glucose levels, blood pressure, pulse, respiratory health and temperature.

Under FCC's plan, MBANs would use the newly allocated spectrum to form a wireless network, aggregate information from the wearable sensors and transmit the data to a centralized computer system. Health care providers then could conduct real-time monitoring of patients who use wireless medical devices.

According to manufacturers of MBAN systems, the use of wireless medical sensors could drive down health care costs (Dellorto, "The Chart," *CNN*, 5/17).

Next Steps
On May 24, FCC is scheduled to vote on the plan to allocate the spectrum for MBANs (Carew, *Reuters*, 5/17).

If the commission approves the plan, FCC and FDA have an agreement to collaboratively streamline the process for approving MBAN devices. FCC would review the technical aspects of a device, while FDA would review its medical features ("Hillicon Valley," *The Hill*, 5/15).

MBAN devices would need to receive FCC and FDA approval before they could be used in hospitals ("The Chart," *CNN*, 5/17).

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27. Telemedicine, mHealth will connect with EHRs when providers are motivated
Fierce Health IT News, May 14, 2012 htm

In a discussion at the recent American Telemedicine Association (ATA) conference, panelists bewailed the absence of electronic health record vendors from the meeting, according to a post in NHIN Watch.

"Politically, commercially--it's an issue," said Hon Park, M.D., CEO of Diversinet, which provides secure two-way connectivity for mHealth applications. Pak said that mHealth apps, EHRs, and health information exchanges must be integrated for effective care coordination, according to the post.

Michael Lemnitzer, an executive with Philips Home Healthcare Solutions, said his company is "working aggressively" with EHR vendors to develop interfaces, because 90 percent of Philips' contracts with healthcare providers require connectivity with EHRs. Lemnitzer predicted that by 2015, the majority of EHR companies would have interfaces for telemedicine applications. For that to happen, he said, more interoperability standards would be necessary, according to the post.

This technical approach to the issue, however, leaves out economic and workflow factors that must be addressed before telemedicine and mHealth data can travel "the last mile" to the point of care, to use Pak's metaphor.

In a recent iHealthBeat commentary, Health IT executive and former Accenture consultant David Chase described the problem this way: Current EHRs were designed for a "do more, bill more" system that's on its way out, and they're not nimble enough to cope with the pace of healthcare transformation. In other words, EHRs were not designed for quality improvement or population health management, but for helping practices do things a little faster while enabling them to increase their charges through better documentation.

Even more troubling, the Consumer Partnership for eHealth accuses some EHR vendors of purposely blocking providers' ability to connect with other systems. In comments to the Centers for Medicare and Medicaid Services (CMS) about CMS' proposed Meaningful Use Stage 2 regulations, the Partnership, which represents 23 consumer groups, said CMS should bar such EHRs from getting certification for the purpose of showing Meaningful Use.

To be sure, EHR vendors aren't as bad as these observers make them sound. For one thing, the leading EHRs are all capable of generating and transmitting standardized clinical summaries known as Continuity of Care Documents (CCDs). CCDs convey only key data, but in theory, it should be able to flow into the discrete fields of disparate EHRs. So the vendors won't be able to "block" interoperability.

To Chase's point, the vendors did what he said because that's what the market demanded. Until very recently, physicians purchased EHRs because they believed it would make them more efficient and help them code patient visits higher. Only with the advent of Meaningful Use and the healthcare industry's first tentative steps toward accountable care are we seeing any real interest among providers in using EHRs to improve quality or manage population health. So, while EHR vendors are beginning to offer registries, health

information exchanges, and the like, their applications in these areas remain inferior to those offered by third party vendors.

What does this all mean for telemedicine and mHealth? Remember that we're only in the foothills of the major transformation that Chase sees coming. Most providers still derive most of their income from fee for service, so they're still in a "do more, bill more" mindset. Until the reimbursement system changes completely, the percentage of customers who demand that EHRs provide capabilities to thrive under that new payment system will remain small.

As a result, telemedicine and mHealth vendors will have to spend a lot to create interfaces to the leading EHRs, and a minority of the providers who use those systems will be interested in their products. But in the long run--assuming that the industry continues along its current trajectory--the new technologies will play a key role in coordinating care and in engaging patients in self-management.

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28. Vendors Unveil Mobile Device Participation in Video Networks at ATA
Wainhouse Research Bulletin, Vol.13(11), May, 8, 2012 htm

At ATA 2012, Polycom demonstrated RealPresence Mobile, which is part of the company's RealPresence unified communications (UC) platform. The mobile app enables doctors and first responders to participate in an HD video session away from a health facility and patients at home to communicate with caregivers.

Polycom RealPresence Mobile iPadRealPresence Mobile allows patients in the hospital to communicate on the iPad with doctors who may be outside the facility. The app is also available on Android devices. Video conferencing sessions can be shared among conference rooms, smartphones and tablets, allowing multiple care providers to collaborate. In addition to video, RealPresence incorporates instant messaging and a Jive Software social business tool to enable collaboration between doctors and patients.

Cisco TelePresence Enables Remote CarePictured here, Cisco's TelePresence VX-Clinical Assistant is a mobile telemedicine cart that enables high-definition video collaboration between doctors and patients. At ATA 2012, Cisco unveiled a rugged TelePresence VX Tactical platform for field use. "Video is the killer application here that is as good as and over time may be even better than interfacing one-to-one with a health professional," John Chambers, Cisco's chairman and CEO, said in a company video.

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29. Enterprise Networking: Telehealth Technology Takes Center Stage at ATA 2012
eWeek, May 7, 2012 htm
Telehealth technology, which leverages wireless and enterprise networking, is changing the model of how we think about going to the doctor. It can help patients avoid traveling long distances to hospitals and clinics, particularly when they reside in remote or rural areas. The technology can also reduce overcrowding in hospitals. By combining Webcam and inputs from standard medical instruments, such as an ophthalmoscope, peak flow meters and blood glucose meters with Internet connectivity, doctors can get real-time data on patient health from afar and share the results with specialists on hospital networks. At the American Telemedicine Association show (ATA 2012) in San Jose., Calif., from April 30-May 1, companies such as AT&T, Cisco, Consult A Doctor and Polycom demonstrated telehealth technology. The health care industry hopes to reduce costly readmissions by remotely monitoring patients when they leave the hospital. In addition to avoiding hospitalization, telehealth and remote monitoring allow patients to remain in their homes longer and avoid being moved to elder-care centers. The telehealth market will grow to about $1 billion by 2016 and $6 billion by 2012, according to a Sept. 15, 2011 report by InMedica, a unit of IMS Research. Here, eWEEK showcases some of the latest telehealth technology that allows doctors and patients to connect remotely.

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30. Finding the broadband pipes for rural telemedicine
TechTarget Health IT News, May 4, 2012 htm

SAN JOSE, CA -- At this year's American Telemedicine Association's annual meeting, many new topics governed the conversation, such as how remote patient care via live video streams will fit into accountable care organizations and their patient-centered medical homes. But an old topic -- getting rural telemedicine practitioners access to broadband pipes that will support this mode of care -- lingers on.

Why? Because it's still an issue, despite federal initiatives to expand rural broadband access. While urban centers are enjoying the benefit of high-speed wired and wireless access supporting every use from consumer Netflix downloads to extending the access of in-demand medical subspecialists, patients living in sparsely populated states like South Dakota still have to drive hours to receive the same care their urban counterparts enjoy. Telemedicine can bridge the gap in some patient care scenarios, but only if practitioners can get the Internet connection to support it.

In the case of the Avera McKennan Hospital network serving the Dakotas, patients drive up to five or six hours each way for care, depending on the type of specialist needed. The health system reaches patients and providers in five states, some of them small critical-access facilities a hundred miles from the next facility -- and that next one might not necessarily be bigger. An acute dearth of specialists -- for example, only two colorectal surgeons and five neurosurgeons cover the whole territory -- compounds the issue of geographical distance.

Avera McKennan's Donald Kosiak Jr., M.D. said that the health system is aggressively developing telemedicine initiatives in those remote regions, which includes implementing e-ICUs -- intensive care units staffed remotely by physicians via video feed. But getting broadband access to those remote locations continues to be a sticky issue.

Kosiak, a practicing emergency physician and medical director of Avera eCARE, believes that in the future 4G wireless networks could potentially be the key to expanding telemedicine initiatives to the furthest outposts of Avera McKennan's patients. Using 4G, mobile devices appear to work as fast as those using wired broadband access, he said -- it's that quick. Lack of 4G coverage is the issue. "If I'm in San Jose, I have 4G network; if I'm in Wishek, North Dakota [population: 1,002], I'm lucky to have 1G," Kosiak said.

A recent Deloitte survey affirms that 4G mobile networks hold much potential for many business sectors, none more than health care. For now, Apple's iPhone, while popular among physicians and consumers alike, does not have a 4G-compatible device.

Verizon, which sells both iPhones and 4G-compatible Android phones, appears to be pushing Android devices ahead of iPhones, an interesting twist for rural health care IT decision makers desperate to get more bandwidth into their practitioners' hands: Wait on Apple, or move on with Android-based telemedicine implementations. Or, like Avera McKennan still must do with remote locations, forego wireless and patch in old-school T1 lines.

Speaking of T1 lines, Kosiak's also warming up to another solution for getting high-speed Internet to critical access hospitals and other locations requiring video-ready throughput that's recently been discussed: Tapping into existing wired high-speed infrastructure, specifically the dedicated T1 lines already in place in small communities by banks and other businesses. Sharing such bandwidth as a community resource could also work to enable rural telemedicine and extend physicians' reach.

"We need to reach out to other industries that are leaps and bounds ahead of us in sharing data and pushing it back and forth," Kosiak said. "So maybe I can just piggyback off of existing technology that's already in rural communities -- banks, high-tech industries, big mills, big meat packing plants probably have all sorts of connectivity for data, and maybe the hospital doesn't need their own."

Kosiak sees wired high-speed networks as the solution for health care, at least for the short term. In 18-36 months, he thinks both AT&T and Verizon's 4G networks will blanket most of the country and revolutionize wireless data. But even then, 4G might fall short. When looking at a national map, "those little gaps in coverage are where I need to connect," he said.

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31. Telehealth tech gets smaller, cheaper; docs remain wary
Fierce Health IT, May 2, 2012 htm

The devices are getting smaller and the technology's getting cheaper--but barriers to mHealth have pretty much stayed the same.

At this week's meeting of the American Telemedicine Association in San Jose, Calif., presenters shared ways they're using smartphones and other hand-held devices to deliver remote care. One example comes out of George Washington University Hospital in Washington, D.C., which has been testing a wound triage program that uses patient-submitted cell phone pictures. Emergency physician Neal Sikka, director of innovation practice at GWU, gave the audience an update on the pilot study.

Patients took up to four photos of their wound on their cell phone cameras and emailed them to a dedicated address. A clinician reviewed the photos to determine whether or not the wound was severe enough to require stitches. Later, the study compared the in-person diagnosis to the one made from the patient-submitted photos and found 95 percent of the wounds diagnosed by photo were properly classified and those patients received appropriate triage.

The study showed that triaging patients by phone can be useful for diagnosis and may cut down on unnecessary ED and office visits, but Sikka noted that user images (and users' cell phones, for that matter) have to be high-quality for the concept to work.

The challenges will sound familiar to anyone's whose tried to implement similar programs: protecting patient privacy, training patients and providers to use the technology, managing the data and adding photos to patients' electronic health records, Sikka said.

Then there's liability. What about the 5 percent who were not properly classified? Sikka said providers must make clear that they're giving advice, not making a diagnosis.

In Bangor, Eastern Maine Medical Center trauma surgeons are using video chat to perform consults. Trauma surgeons conducting consults via a $229 iPod Touch are using the free video chat program Skype. The surgeon makes a call, gets a report from the treating physician, conducts a visual exam of the patient and gives his or her recommendation for care.

The solution is smaller, simpler, more intuitive and less expensive than traditional telemedicine, with its expensive, large, and often stationary equipment such as wall-mounted cameras, Rafael Grossman, a trauma surgeon at Eastern Maine, said during a session on tele-trauma care.

That said, the organization is still grappling with privacy and security issues and, naturally, physician adoption.

The referring physicians love it, Grossman said. The consulting surgeons? Not so much.

Part of the problem is that Skype can be glitchy--it can sometimes take a few tries to get a connection and then connections sometimes drop out in the middle of a consult. Surgeons want technology that's as easy to use as their smartphones, Grossman told the audience. When a tele-consult is as easy as making a phone call, physicians won't think twice about conducting them.

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HEALTH INFORMATION TECHNOLOGY NEWS

32. Report: HIEs failing at true interoperability
Government Health IT News, May 14, 2012 htm

While some $560 million in federal health information exchange funding may soon run dry, changing reimbursement models mean market-driven growth will continue, says a new report on HIEs from Chilmark Research.

Profiling 22 HIE vendors, the study, "2012 HIE Market Report: Analysis and Trends," shows a market that's evolving, making the shift toward serving healthcare organizations of all sizes as they position themselves for payment reform, its authors say.

Increasing HIE technology adoption is spurred by two factors, say researchers. First is the need to meet proposed Stage 2 meaningful use requirements, which put a far greater emphasis on data exchange. More crucially, big changes on the horizon with regard to reimbursement means healthcare organizations are implementing HIE technology to support community-wide care coordination.

"As federal incentives drive the adoption of electronic health record (EHR) technology in the U.S., we will quickly move into the post-EHR era where the value of patient data is not what is locked in an EHR data silo, but the cumulative patient data that resides in the community HIE network," said John Moore, founder and managing partner of Chilmark Research.

Vendors are taking note. Chilmark researchers point out that, since publishing its first HIE report in January 2011, one third of the firms profiled in that report have been acquired, merged or have exited the market. Nonetheless, the 2012 report profiles even more vendors, all of them seeking to capitalize on the double-digit growth exhibited by the HIE market in recent years.

"Last year, we commented on an increasingly crowded and competitive market," said Moore. "Today's market is more competitive than ever, but just as immature as it was last year."

Be they public networks or enterprise set-ups, most HIEs nowadays exchange fairly simple data sets, such as lab results and patient summaries – falling far short, researchers say, of the vision of an integrated record that can facilitate care as patients move between care providers and settings.

Until EHR vendors incorporate a shared set of standards, HIEs will remain in a state of stunted development, said Moore: "Across the board, legacy systems fail to support true interoperability, and vendors are doing little to remedy this situation."

That said, reporting and analytics capabilities have become a top priority for most HIE developers, the Chilmark report finds. That's in response to the Centers for Medicare & Medicaid Services' plans with regard to outcomes-based reimbursement – and the market need for more accurate reporting that goes along with that. Every vendor profiled in the report offers some form of analytics and reporting capabilities, but most offerings remain limited, say researchers.

At present, that's not a big deal, as there's still a relative lack of computable data originating from EHRs and flowing through the HIE network, they argue. But as standards come into greater use, the need for more robust analytical tools will accelerate.

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33. Recent Full Text Telemedicine Resources

Evaluation of Human Immunodeficiency Virus and hepatitis C telemedicine clinics.
Saifu HN, Asch SM, et al. *Amer. J. Manag. Care*. 2012;18(4):207-12 htm

Background: Geographical barriers to subspecialty care may prevent optimal care of patients living in rural areas. We assess the impact of human immunodeficiency virus (HIV) and hepatitis C telemedicine consultation on patient-oriented outcomes in a rural Veterans Affairs population.

Methods: This was a pre- and post-intervention study comparing telemedicine with in-person subspecialty clinic visits for HIV and hepatitis C. Eligible patients resided in 2 rural catchment areas. The primary binary outcome was clinic completion. We estimated a logistic regression model with patient-level fi xed effects. This approach controls for the clustering of visits by patient, uses each patient's in-person clinic experience as an internal control group, and eliminates confounding by person-level factors. We also surveyed patients to assess satisfaction and patient-perceived reductions in health visit–related time.

Results: There were 43 patients who accounted for 94 telemedicine visits and 128 in-person visits. Clinic completion rates were higher for telemedicine (76%) than for in-person visits (61%). In regression analyses, telemedicine was strongly predictive of clinic completion (OR 2.2; 95% confi dence interval [CI]: 1.0-4.7). The adjusted effect of telemedicine on clinic completion rate was 13% (95% CI: 12-13). Of the 30 patients (70%) who completed the survey, more than 95% rated telemedicine at the highest level of satisfaction and preferred telemedicine to in-person clinic visits. Patients reported a signifi cant reduction in health visit–related time (median 340 minutes, interquartile range 250-440), mostly due to decreased travel time.

Conclusions: HIV and hepatitis C telemedicine clinics are associated with improved access, high patient satisfaction, and reduction in health visit–related time.

Impact of telemedicine intensive care unit coverage on patient outcomes: a systematic review and meta-analysis.
Young LB, Chan PS, Lu X, Nallamothu BK, Sasson C, Cram PM. *Arch. Intern. Med*. 2011 Mar 28;171(6):498-506. htm

Background: Although remote intensive care unit (ICU) coverage is rapidly being adopted to enhance access to intensivists, its effect on patient outcomes is unclear. We conducted a meta-analysis to examine the impact of telemedicine ICU (tele-ICU) coverage on mortality and length of stay (LOS).

Methods: We conducted a systematic review of studies published from January 1, 1950, through September 30, 2010, using PubMed, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Global Health, Web of Science, the Cochrane Library, and conference abstracts. We included studies that reported data on the primary outcomes of ICU and in-hospital mortality or on the secondary outcomes of ICU and hospital LOS.

Results: We identified 13 eligible studies involving 35 ICUs. All the studies used a before-and-after design. The studies included 41 374 patients (15 667 pre-tele-ICU and 25 707 post-tele-ICU patients). Tele-ICU coverage was associated with a reduction in ICU mortality (pooled odds ratio, 0.80; 95% confidence interval [CI], 0.66-0.97; P = .02) but not in-hospital mortality for patients admitted to an ICU (pooled odds ratio, 0.82; 95% CI, 0.65-1.03; P = .08). Similarly, tele-ICU coverage was associated with a reduction in ICU LOS (mean difference, -1.26 days; 95% CI, -2.21 to -0.30; P = .01) but not hospital LOS (mean difference, -0.64; 95% CI, -1.52 to 0.25; P = .16).

Conclusion: Tele-ICU coverage is associated with lower ICU mortality and LOS but not with lower in-hospital mortality or hospital LOS.

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