Telemedicine Applications

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Interstate Medical Licensure Compact

About the Compact
The Interstate Medical Licensure Compact offers a new, voluntary expedited pathway to licensure for qualified physicians who wish to practice in multiple states. Increasing access to health care for patients in underserved or rural areas and allowing them to more easily connect with medical experts through the use of telemedicine technologies.

While making it easier for physicians to obtain licenses to practice in multiple states, the Compact strengthens public protection by enhancing the ability of states to share investigative and disciplinary information. The Compact is being implemented in a growing number of states, with others expected to adopt it soon.

To learn more, call (202) 463-4900.

http://licenseportability.org/
Pennsylvania Joins Telehealth-Friendly Licensing Compact for Doctors

By Eric Wicklund on October 31, 2016

18 states now support The Interstate Medical Licensure Compact, which would help doctors looking to practice telehealth in multiple states. It’s set to take effect in 2017.

Pennsylvania has joined the group of states supporting the telehealth-friendly Interstate Medical Licensure Compact, which goes into effect in just over two months.

Payers urge CBO to Give Telemedicine a Fair Shake

By Eric Wicklund on October 24, 2016

Almost a dozen of the nation’s largest health plans say telemedicine and telehealth should play a more important role in the Congressional Budget Office’s review of Medicare bills.

Nearly a dozen national health plans have asked the Congressional Budget Office to pay more attention to telemedicine when scoring Congressional bills on Medicare.

In a letter to CBO Director Keith Hall, 11 health plans say telemedicine programs serve “as an important tool in increasing consumer access to high quality, affordable healthcare, improving patient satisfaction and reducing costs.” Yet federal legislation has thrown up roadblocks to the expansion of telemedicine platforms, especially in Medicare Advantage programs.

“While many of us are embracing telemedicine in our offerings outside of Medicare Advantage (MA), we want to clearly note that the barriers in Medicare hamper our ability to offer these services


Rural clinics turn to telehealth to combat addiction

Health professionals and policy makers think using telemedicine to connect patients with addiction specialists will help address the physician shortage. The potential direction is clear, as are the opportunities. But challenges, of course, persist.

More Than Half of Kaiser Permanente's Patient Visits Are Done Virtually

By Kika Kikilisbeau  @kikilisbeau OCTOBER 6, 2016, 7:15 PM EDT

Last year, patients and doctors interacted more than 110 million times in total.

“For the first time, last year, we had over 110 million interactions between our physicians and our members,” said Tyson, adding that 52% of them were done via smartphone, videoconferencing, kiosks, and other technology tools.

http://fortune.com/2016/10/06/kaiser-permanente-virtual-doctor-visits/

State Telehealth Laws and Medicaid Program Policies

Introduction
The Center for Connected Health Policy’s (CCHP) updated health-reform series of “State Telehealth Laws and Medicaid Program Policies” offers policymakers, health advocates, and other interested health-compromises the most current summary guide to telehealth-related policies, laws, and regulations for all 50 states and the District of Columbia. States continue to pursue their own unique set of telehealth policies as well as more legislation is introduced each year. Many states have incorporated telehealth into law, while others have addressed issues such as definition, reimbursement policies, licensing requirements, and other important issues in their Medicaid Program Guidelines.

While this guide focuses primarily on Medicaid fee-for-service policies, information on managed care is included in the report if it was available. The report does indicate any particular areas where we were unable to find information. Every effort was made to capture the most recent policy language in each state as of August 2016. Recently passed legislation and regulation have also been included in the version of the document with the effective date noted in the report. This information also is available electronically in the form of an interactive map and search tool accessible on our website at statusmap.org.

Consistent with previous editions, the information will be continually updated, as laws, regulations, and administrative policies are constantly changing.

Telehealth Policy Trends

While many states are beginning to expand telehealth reimbursement, others continue to restrict and place limitations on telehealth delivered services. Although each state’s laws, regulations, and Medicaid program policies differ significantly, certain trends are evident when examining the various policies. Line item definition and reimbursement, for example, continues to be examined to ensure that tele-visit and tele-visit monitoring and remote patient monitoring services. However, over the past six months there has been a slight update in Medicaid policy allowing for store-and-forward as well as remote patient monitoring reimbursement, although generally on a limited basis. For example, Connecticut allows for store-and-forward reimbursement for physician to physician email consults known as “telecollaboration,” while Minnesota has added store-and-forward and remote patient monitoring reimbursement, but limited to specific conditions. Nevada also made significant changes in July, passing one of the most comprehensive and progressive telehealth laws in the country. A unique element of Nevada’s law is that as of Jan. 1, 2017, liability insurance or “No Fault” will be required to provide additional coverage for providers delivering services via telehealth, expanding the rate at which they would charge for providers doing the same services in person.

A few additional significant findings include:

• Fuyihealth sales and Washington DC provide reimbursement for some form of tele visit in Medicaid fee-for-service. This is up one state from CCHP’s March 2016 edition of the report, due to Utah waiving telehealth fees in their provider manual, which was unintentionally pulled out of a prior version.
Connected Health

http://www.nonin.com/buynonin/noninconnect#wp-prettyPhoto[LCD]/0/

Images intended as examples of technology and not as an endorsement of companies or products.
http://techfaqs.net/articles/choose-fitness-tracker-best-offers-segment/

Images intended as examples of technology and not as an endorsement of companies or products.

http://gadgetmac.com/reviews/ihealth-bp5-wireless-blood-pressure-monitor-review.html

Images intended as examples of technology and not as an endorsement of companies or products.
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https://ihealthlabs.com/wireless-scales/ihealth-core/

Using Telehealth, mHealth to Fight the Flu

By Eric Wicklund on November 02, 2016

Virtual visits, mHealth tools and other telehealth platforms have become powerful weapons in the battle to contain the flu and other fast-moving and dangerous viruses.

Healthcare providers may have a new cure for the flu this winter. The virtual visit.

mHealth tools and platforms have for years been used to identify outbreaks of the flu and other highly infectious viruses and direct doctors and drugs to where they’re most needed. But now some health systems and telehealth vendors are pitching the platform as a way of enabling doctors to treat patients without coming into direct contact with them – or forcing a contagious patient to visit a busy doctor’s office, clinic or hospital ER.


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Research

JAMA | Original Investigation

Effect of Wearable Technology Combined With a Lifestyle Intervention on Long-term Weight Loss
The IDEA Randomized Clinical Trial

John M. Jakicic, PhD, Gallivan K. Beals, PhD, Heo E. J., Rogers, PhD, Wendy C. King, PhD; Stanko P. Marcus, PhD; Eliseo Heber, PhD, RS, Amy D. Robinson, PhD, RD, EDN, Abass S. Wohed, PhD; Steven H. Siegel, PhD

Key Points

**Question** Is the addition of a wearable device to monitor and provide feedback on physical activity effective for improving weight loss within the context of a behavioral weight loss intervention?

**Findings** In this randomized trial that included 470 young adults, weight loss was significantly less (by 2.4 kg) in response to a behavioral intervention when a wearable device that monitored and provided feedback on physical activity was included within the intervention.

**Meaning** Devices that monitor and provide feedback on physical activity may not offer an advantage over standard behavioral weight loss approaches.

http://jamanetwork.com/journals/jama/fullarticle/2553448?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jama.2016.12858
Telemedicine Applications

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The Provision of Medical Care

- Clinical care
- Evaluation/research
- Continuing education
Who are the Referring Clinicians?

- General
  - MD/DO/PhD/DDS
  - NP/PA

The Clinic Structure

- Hub Site
  - Medical Director
  - Site Coordinator
- Spoke Site
  - Medical Director
  - Site Coordinator
- Referring Clinicians
Scheduling: Real-Time and Store-Forward

- Teleclinic Appointment
- Ad Hoc Appointment

The Teleclinics

- Psychiatry
- Rheumatology
- Pain Clinic
- Cardiology
- Dermatology
## Telemedicine Protocols

- Pulmonary
- Cardiology
- Neurology
- Musculoskeletal
- Psychiatry
- Dermatology
- General Medicine

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**How does a medical consultation become a telemedicine consultation?**
Goals of Teleconsultation

- Increase access to specialty care
  - rheumatology
- Confirm diagnosis
  - polymyositis
- Assist in triage
  - cervical spine injury

What makes a good teleconsultation?

- Complete data
  - Avoid the incomplete consult!
- Diagnostic images
- Steps in review:
  - Site Coordinator
  - Medical Director
  - Specialist
Telemedicine Consultation

- Visual specialties
  - ie range of motion
- Technology provides images/sounds
  - echocardiography
- “The talk is the treatment”
  - telepsychiatry

Visual specialties

- Rheumatology
- Orthopedics
- Dermatology
- Neurology
The Joint Exam

Teledermatology
Teleneurology

Technology provides images/sounds

- Cardiology
- Pulmonary
- Otorhinolaryngology
- Retinal screening
- Colposcopy
- Radiology
- Pathology
Electronic Stethoscope

Dr. Conrad Clemens uses real-time video conferencing and digital stethoscope technology to evaluate a child's asthma.
Tele-echocardiography

Otorhinolaryngology
Teleophthalmology

“CoxHealth, a Missouri-based health system and payer announced that it has improved its HEDIS quality measures using Intelligent Retinal Imaging Systems (IRIS) diabetic retinopathy telemedicine solution, according to a recent case study. For the case study, Cox Health administered the diabetic retinopathy exam (DRE) to 1,865 patients over an initial 100-day period, diagnosing 305 (16%) with diabetic retinopathy who otherwise would have gone undiagnosed.”

“Key Results

Of the 305 patients diagnosed with diabetic retinopathy, 283 were found to have non-proliferative diabetic retinopathy and 22 were given proliferative, vision-threatening diagnoses. These results enable CoxHealth to achieve Healthcare Effectiveness Data and Information Set (HEDIS) quality outcomes that provide the best level of patient care and increased revenue from quality incentives. HEDIS is a tool used by more than 90 percent of America’s health plans to evaluate performance on process and outcomes in both clinical care and members’ care experience. Elevating HEDIS scores reflects a healthier population and results in reduced healthcare costs and increased health plan rankings and revenue.”

Teleradiology

Fetal Ultrasound
Fetal Ultrasound

Telemammography
Telepathology

“The talk is the treatment”

- Psychiatry/psychology
- Genetic Counseling
- Pain Management
- Nutrition
- Support group
- Hospice care
Telepsychiatry

Cancer Genetic Counseling
“Genetic counseling and testing open a world of proactive care and treatment. But depending on where you live, the scarcity of geneticists and genetic counselors with medical degrees in many parts of the country may make these services seem out of reach. Yet, times are changing.

Through telehealth — in this case, telegenetics — and with some involvement from your local doctor, you can use your computer and a wireless network to access genetics counseling. Also, even if you live near available genetics counseling services, in some cases a shared medical appointment can offer some unique advantages.”

https://health.clevelandclinic.org/2016/07/telegenetics-tech-can-bring-rare-genetic-counselors/
Health Care System

- Teleconsultation system in:
  - Hospital
  - Community health center
  - Office practice
  - The Home

Home Health Care Applications

- Wound care
- Post-operative care
- Pre-organ transplantation
- Physical therapy
Tele–Home Health

Wound Management
Cross-Cultural Issues

"The inmates just palpably seem more relaxed and satisfied with the entire encounter and experience than they used to. It used to be a very negative experience," Dr. Vinh Pham, right, of NYU Langone's Hospital for Joint Diseases, speaking with Dr. Zachary Rosner.

http://www.modernhealthcare.com/article/20161022/MAGAZINE/310229981
Limitations

Virtual Reality Palpation
The Future is Now!

Newest Health Care Tool
Medical Self–monitoring

The AMA guidelines say physicians who provide health advice electronically should:

- Be prudent in making a diagnosis or prescribing medicine;
- Tailor informed consent, when needed, to include information about the distinctive nature of telehealth;
- Strive to promote continuity of care;
- Support further refinements of telehealth technologies;
- Advocate for policies and initiatives to promote access to telehealth services; and
- Monitor the telemedicine landscape for positive and negative consequences of technologies.

Inform users about the limitations of the relationship and services provided;
Advise users on how to arrange for followup care, when needed;
Encourage users to inform their primary care physician about their telehealth encounter;
Be comfortable using digital technologies and interacting with users electronically;
Understand the limitations of telehealth technologies and ensure they can make well-grounded clinical recommendations in the absence of a physical examination.

Thank you

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