



CALIFORNIA HEALTHCARE FOUNDATION

# Innovations In Health Care Delivery: Telehealth

Examining Health Care Competition  
Federal Trade Commission  
March 20, 2014



# Overview

- What is Telehealth?
- Telehealth Policy, with a Focus on California
- Types of Telemedicine/Telehealth
- Deeper Dives into a Few Examples
- Issues and Challenges Ahead

# What is Telehealth?

- The Institute of Medicine defines **telemedicine** as "the use of electronic information and communication technologies to provide and support health care when distance separates the participants"
- Telemedicine is associated with direct patient clinical services
- *Telehealth* is often associated broader definition of remote healthcare and is sometimes also perceived to be more focused on other health related services



A doctor's diagnosis "by radio" on the cover of the February, 1925 issue of Science and Invention magazine

# Policy Across the States

- Every state has its own unique set of telehealth policies
- Some states have incorporated policies into law, while others have addressed issues such as definition, reimbursement policies, licensure requirements , etc. in their Medicaid Program Guidelines

# Telehealth Resource Centers

Home | Operations Tools | Reimbursement | Legal & Regulatory | Marketing | Training | Program Development | Webinars



Expanding Our Reach »  
Telehealth Resource Centers are located across the country.

## TelehealthResourceCenter.org

- Established in 2006, funded by the Office for the Advancement of Telehealth
- Twelve regional centers
- One national technology assessment center
- One national policy center
- Collectively form a network of telehealth program expertise and experience
- Independently serve a designated region



# Natl. Telehealth Policy Resource Center



STATE POLICY MAP

REIMBURSEMENT >>

About the Program

What is Telehealth?

Telehealth Policy

Legal Issues

Health Information Technology

## TELEHEALTH POLICY

Medicare

Medicaid

State Laws and Reimbursement Policies

Pending Laws & Regulations

Advanced Search

## iHEALTHBEAT

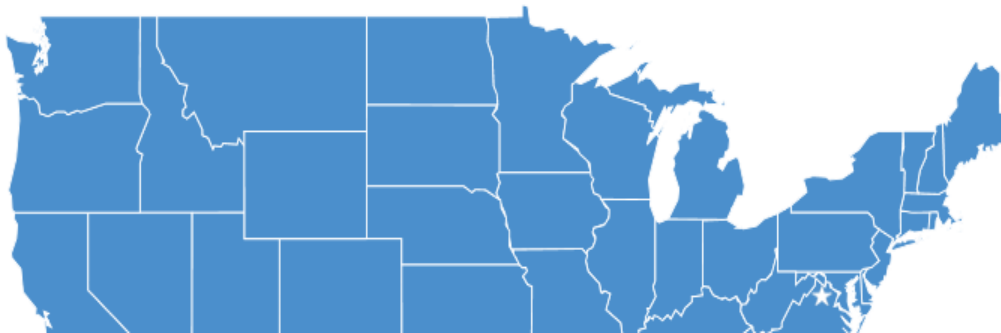
3.12.14

Group Calls on CMS To Expand Remote Monitoring in Medicare >

Home / Telehealth Policy

## State Laws and Reimbursement Policies

Select a state to view telehealth-related laws, regulations, and Medicaid programs. You can also view a list of [pending laws](#), or do an [advanced search](#).



# NTPRC Searchable Database

## TELEHEALTH POLICY

[Medicare](#)

[Medicaid](#)

[State Laws and Reimbursement Policies](#)

[Pending Laws & Regulations](#)

[Advanced Search](#)

## iHEALTHBEAT

3.13.14  
[NIST Outlines Steps To Improve Integration of EHRs Into Workflow »](#)

3.13.14  
[Global HIE Market To Reach \\$878M by 2018, Report Estimates »](#)

[Home](#) / [California](#)

## California

Use these filters to view specific areas or types of law. Use the "status" filter to view pending law.

### Area of Law

- Telemedicine/Telehealth Definition
- Live Video Reimbursement
- Store and Forward Reimbursement**
- Remote Patient Monitoring Reimbursement
- Email / Phone / Fax
- Online Prescribing
- Consent
- Location
- Cross-State Licensing

### Law Type

Medicaid Program

### Status

Current

Apply

## STORE AND FORWARD REIMBURSEMENT

### Medicaid Program

Medi-Cal will reimburse for store and forward services for tele-dermatology and tele-ophthalmology.

SOURCE:



# CA Policy Activity – AB415

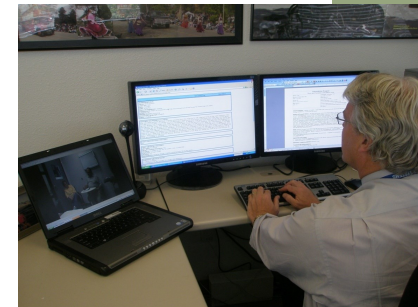
- AB 415:
  - Removes ban on email & telephone
  - Removes restrictions on locations where telehealth may take place
  - Removes CA Medicaid rule that providers document barrier to in-person services before using telehealth
  - Replaces written, telehealth-specific patient consent form with verbal consent
- AB415 Does not:
  - *require* telehealth use by public or private insurers
  - change scope of practice for any licensed CA health professional
  - change any interstate licensure laws

# Telehealth and the Triple Aim – CCHP

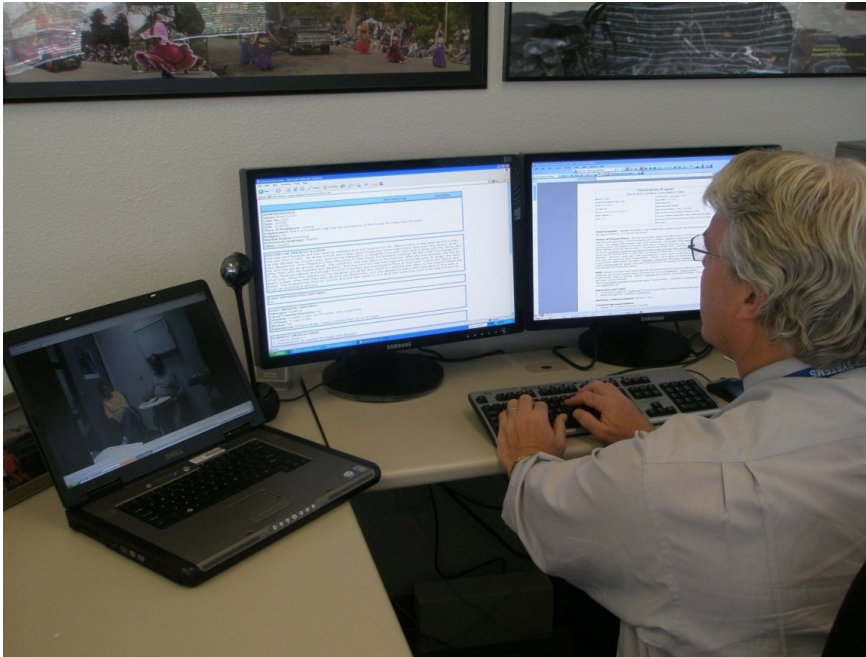
- Report to the field to be published in June 2014
  - Meta analysis of telehealth studies done to date classified by Triple Aim goals
  - Profiles of maturity for teledermatology and tele-mental health
  - Short and long term recommendations to accelerate adoption
- State focused telehealth conference in CA Winter 2014 with an aim to provide a model for other states
- Telehealth Research Conference Spring 2015
- Catalogues of research classified by Triple Aim objectives, including:
  - Peer Reviewed Meta Analysis Research to date
  - Teledermatology and Tele-mental health Research to date
  - Projects in the field

# Telehealth Technologies

- Store & Forward
- Live video
- Remote patient monitoring



# Store & Forward



- Often low bandwidth, still images, can store video clips
- Most used in Dermatology, Ophthalmology, Pathology, Radiology
- Evolving uses in Psychiatry, Endocrinology, Hepatology, Orthopedics, etc.

*Store & Forward technologies electronically transmit patient information between primary care providers and medical specialists. Information could include digital images, X-rays, video clips and photos*



# Real Time Video Consultation



- × *Variety of high-speed digital telecom platforms*
- × *Outpatient or Inpatient specialty consultation*

*Live Video is used for real-time patient-provider consultations, provider-to-provider discussions, and language translation services.*



# Remote Patient Monitoring (RPM)



- Hospital emergency departments and intensive care units
- At-home management of patients with chronic conditions



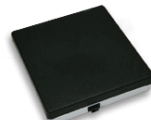
Blood Pressure Monitor



Glucose Meter



Pulse Oximeter



Medical Scale



Peak Flow Meter



**RPM uses telehealth technologies to collect medical data from patients in one location and electronically transmit it to health care providers in a different location, either real-time or store and forward**

# Tele-Dermatology Overview



- Primary care provider or medical assistant takes picture of skin condition
  - Uploads photo and sends w/patient info to dermatologist via secure email
  - Dermatologist reviews image and patient info; sends back treatment advice
- Treatment is provided in patient's primary care "medical home"



- Providers and patients can use off-the shelf cameras; program is turnkey
- Software is HIPAA compliant
- Pay per use pricing model
- **Reduces patient wait times from 3-12 months to within 48 hours**
- \$85 per consult vs. \$150 to \$400 per consult

#### HOW DIRECT DERMATOLOGY WORKS

### Three Easy Steps



1. Describe problem



2. Upload pictures



3. Get answers

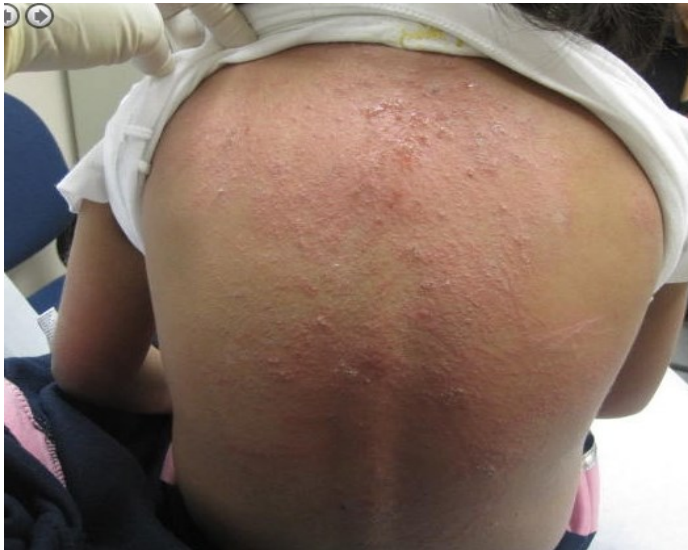
#### Online access to **board-certified dermatologists.**

Learn about Direct Dermatology in our 3 minute video.



# Case Example: 12-year old girl

Before DirectDerm



Two weeks after DirectDerm



8 PCP visits for same problem spanning **6 months**  
10 prescriptions given; no improvement

DirectDerm saw patient in: **1 day**

Diagnosis: Contact dermatitis

Two weeks after follow up: Complete resolution

# Pediatric Clinical Care Telemedicine



- UC Davis Pediatric Critical Care Department connects with remote sites across the state
- Offers remote clinicians access to academic medical center resources
- Allows patients to be treated near home and support system



# Mental/Behavioral Health Consults



Breakthrough

How it works Why Breakthrough Log in

## Therapy from your own couch

Live video therapy from expert therapists.  
Start feeling better wherever you are.

[Find a therapist](#) [Watch the video](#)



HealthLinkNow

How It Works Our Providers

Our mental health experts are here to help, wherever you are.

[FIND A DOCTOR](#)

[SIGN UP NOW](#)

# Mental/Behavioral Health Consults

Journal List > Perm J > v.17(3); Summer 2013 > PMC3783076



Perm J. 2013 Summer; 17(3): 80-86.  
doi: [10.7812/TPP/12-123](https://doi.org/10.7812/TPP/12-123)

PMCID: PMC3783076

## Telepsychiatry in Correctional Facilities: Using Technology to Improve Access and Decrease Costs of Mental Health Care in Underserved Populations

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### Abstract

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### Related citations in PubMed

Growth of mental health services in state adult correctional facilities, 1988 to 2000. [Psychiatr Serv. 2004]

Telepsychiatry and e-mental health services: potential for improving access to mental health care. [Psychiatr Q. 2006]

Prison telemedicine and telehealth utilization in the United States: state and federal perceptions of benefit [Telemed J E Health. 2004]

[Forensic telepsychiatry in Portugal: a few reflections]. [Acta Med Port. 2011]

Empirical evidence on the use and effectiveness of telepsychiatry via videoconferencing: implications for forer [Behav Sci Law. 2008]

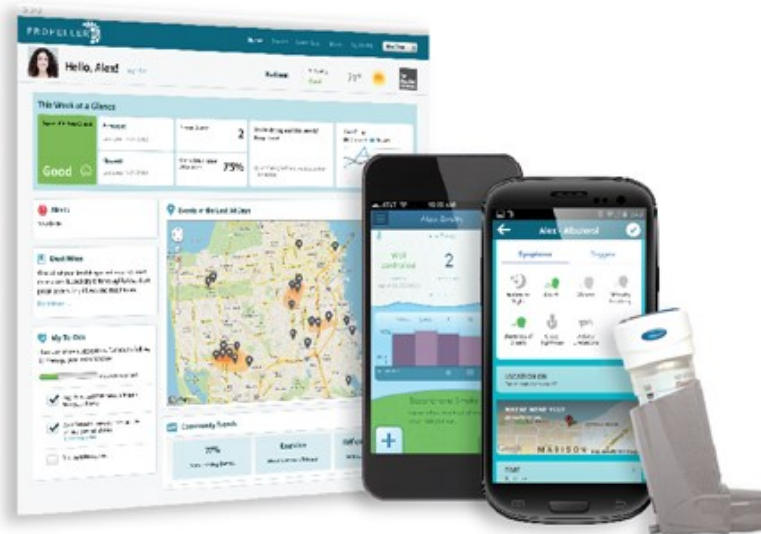
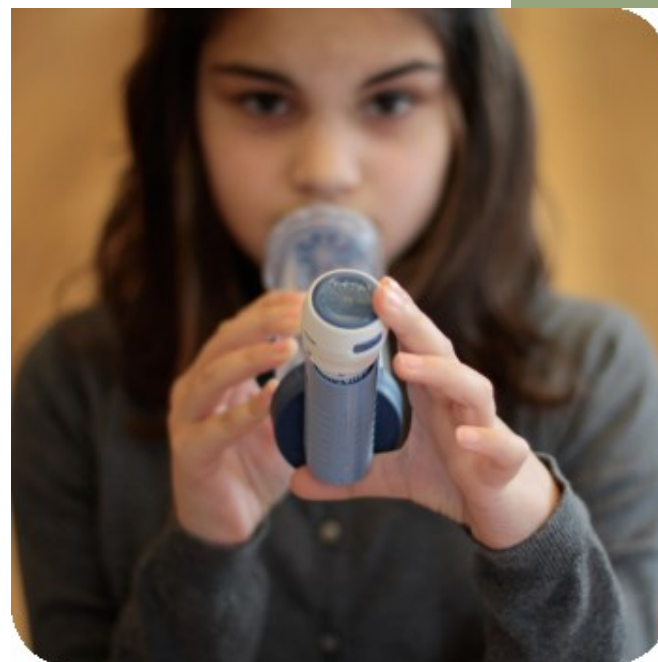
See reviews...

See all...

### Links

# RPM – Propeller Health

- Asthma and COPD are the 5th and 6th most costly conditions in the US – est. cost of \$50 billion annually each
- Improved self management reduces the cost of treating asthma and COPD by eliminating unnecessary hospitalizations, ED and office visits
- Providers who *remotely* monitor asthma and COPD symptoms and the use of medications by their patients can better identify those in need of additional attention



# Looking Ahead

Medical tricorders

## The dream of the medical tricorder

Medical technology: The hand-held diagnostic devices seen on “Star Trek” are inspiring a host of medical add-ons for smartphones

Dec 1st 2012 | From the print edition

 Like  1.1k  251



WHEN aliens seize and torture Dr McCoy in “The Empath”, an episode of the science-fiction series “Star Trek”, Captain Kirk and Mr Spock rush to his aid. They are able to

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# Issues and Challenges

- EHR integration (or lack thereof) – how does the evolving EHR landscape impact telehealth?
- Evolving reimbursement models :
  - How do we reimburse for a specialist to PCP “cognitive consult”
  - When do we expect the shift from FFS to capitated models to be widespread enough to encourage prevention-focused efforts?
- Taking advantage of mobile – how do telehealth programs evolve to incorporate mobile platforms and technologies?

## Contact information and resources:

- Margaret Laws, Director, Innovations for the Underserved, California HealthCare Foundation, [mlaws@chcf.org](mailto:mlaws@chcf.org)
- Center for Connected Health Policy: <http://cchpca.org/>
- ROI of RPM Calculator for Heart Failure Monitoring: <http://www.telemedroi.com/#home>