

California HIT Day 2016

May 25, 2016





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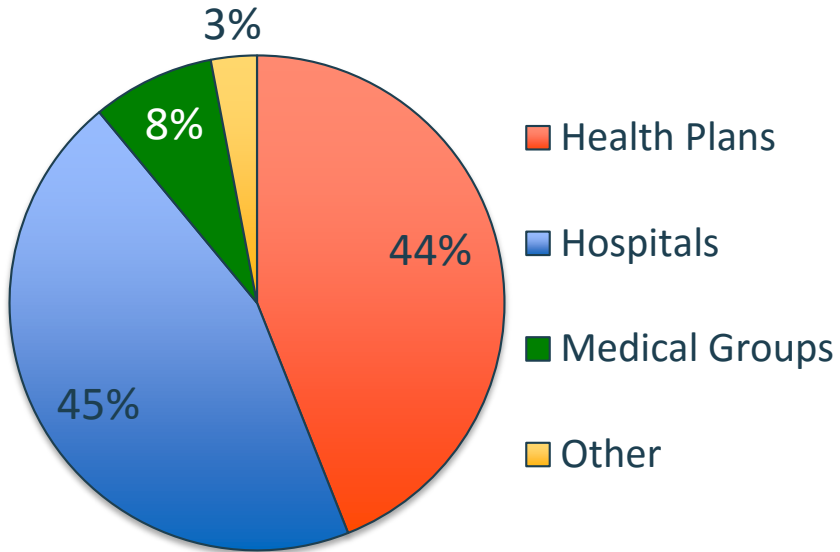
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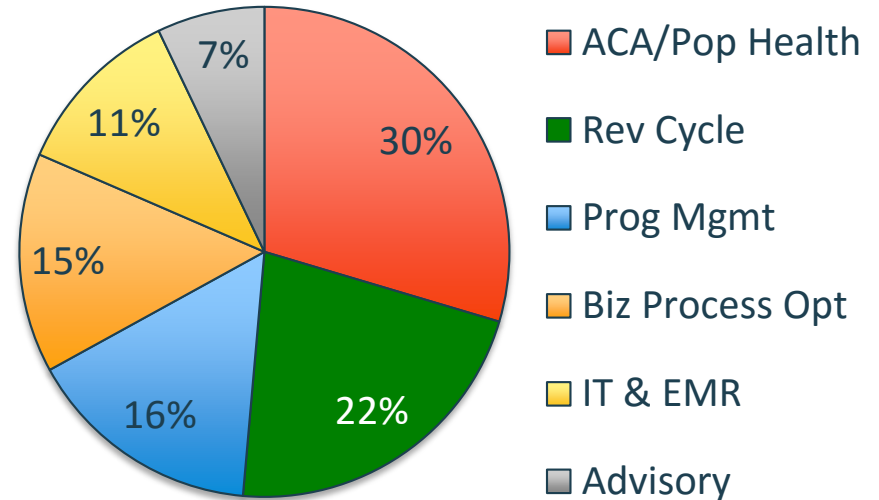


About Freed Associates

Broad Mix Of Clients



Diverse Consulting Services



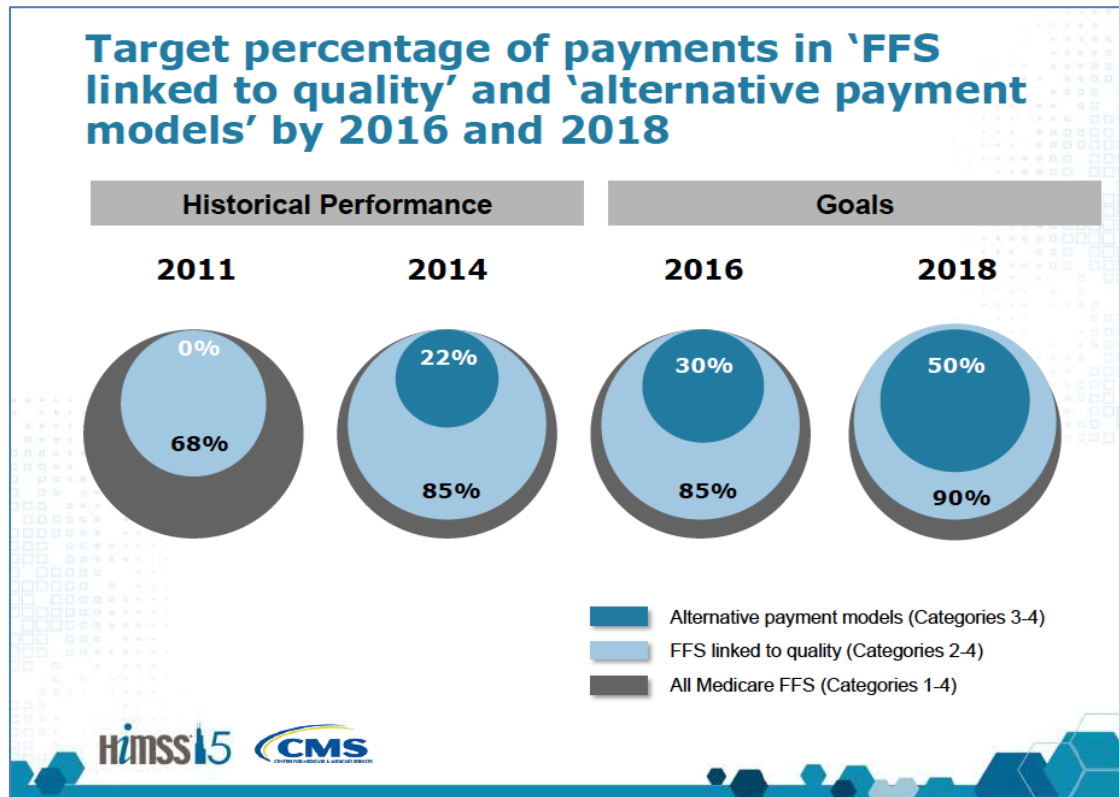


What Are The Next Waves Shaping Health?





Shift From Volume To Value (V2V)

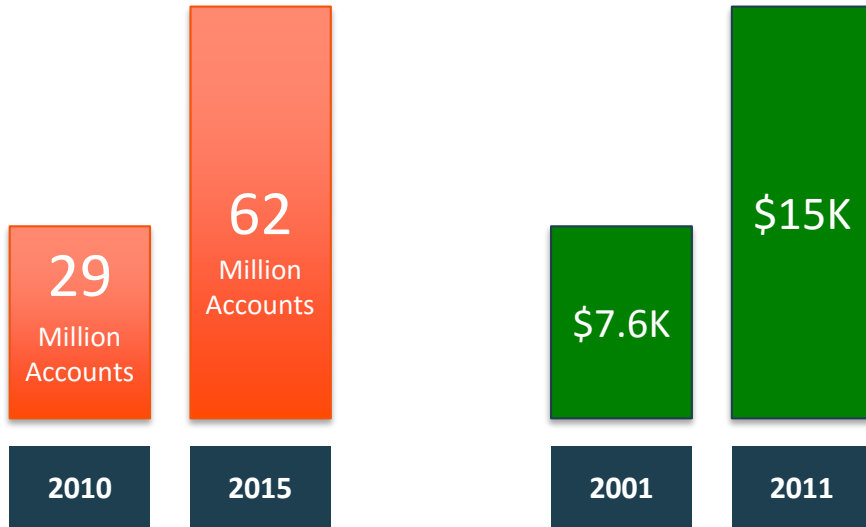


Source: Kate Goodrich, Director of Quality Measurement & Health Assessment, CMS



Shift Towards Health Consumerism

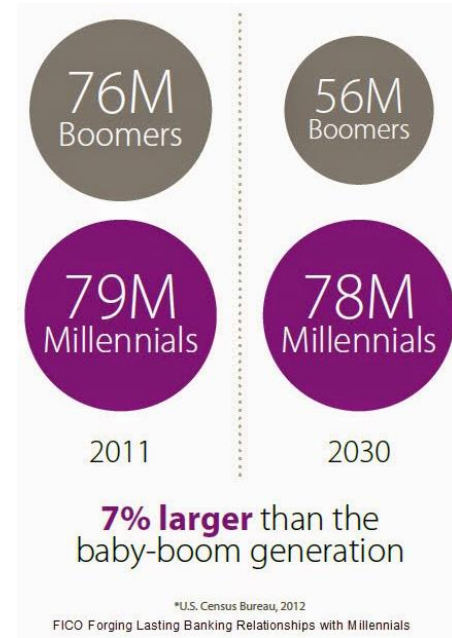
Cost Shifting To Consumers



**2X Growth in CDHP
Enrollments**

**Annual Premiums
Have Doubled**

More Millennials Than Boomers



7% larger than the
baby-boom generation

*U.S. Census Bureau, 2012

FICO Forging Lasting Banking Relationships with Millennials



Shift Towards New Models Of Care

Healthcare Goes Retail



Alternative Channels





Shift Towards Big Data/Analytics

The Power of Healthcare Data
The Body as a Source of Big Data

Today, data storage is essential for healthcare providers to see a patient's complete story of care, make the most informed decisions and enhance treatment and outcomes.

Person's 100,000 pictures
Have filled the internet

30 MB

30 MB

120 MB

665 TB of data

36.6M

20-40%
80%

OR





Powering the Pen with Data

Joshua Tamayo-Sarver

Patient Experience

- Notices redness on lower leg
- Gets a telehealth appt.
- Diagnosed with cellulitis
- Prescribed Keflex

- Fatigue, malaise, light-headed
- Uncertain if redness is better
- Told to go to emergency department

- Redness is better
- Diffuse itchy rash & wheezing
- Stop Bactrim
- Start Benadryl & Steroids

- Physician looks at unremarkable leg
- Continues with current Insulin regimen



Mon.
AM

Mon.
PM

Tue.
AM

Tue.
PM

Wed.
AM

Fri.
PM

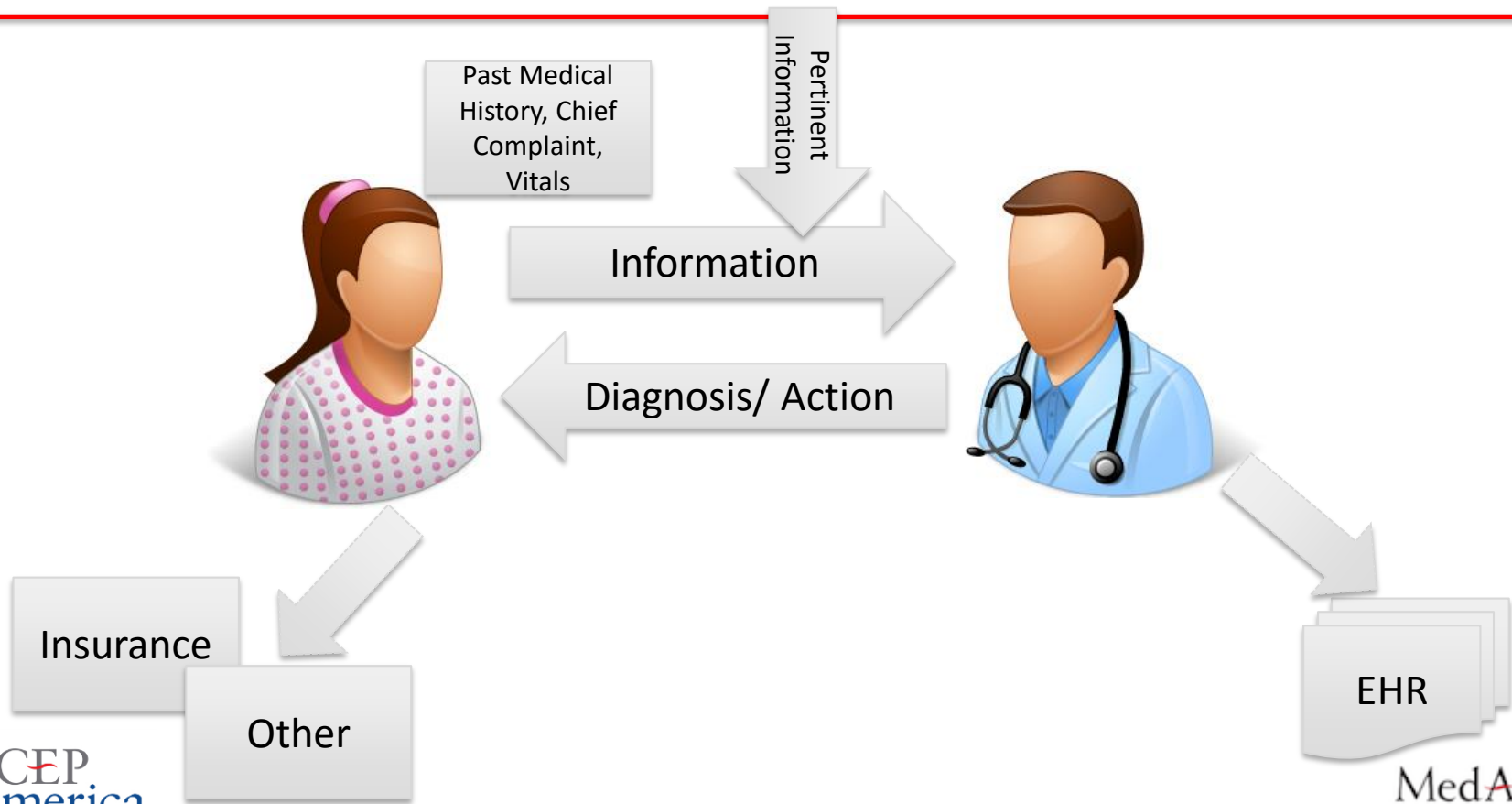
1 Week
Later

- Not getting better
- Calls telehealth, told to go to urgent care
- Diagnosed with contact dermatitis
- Prescribed Solumedrol

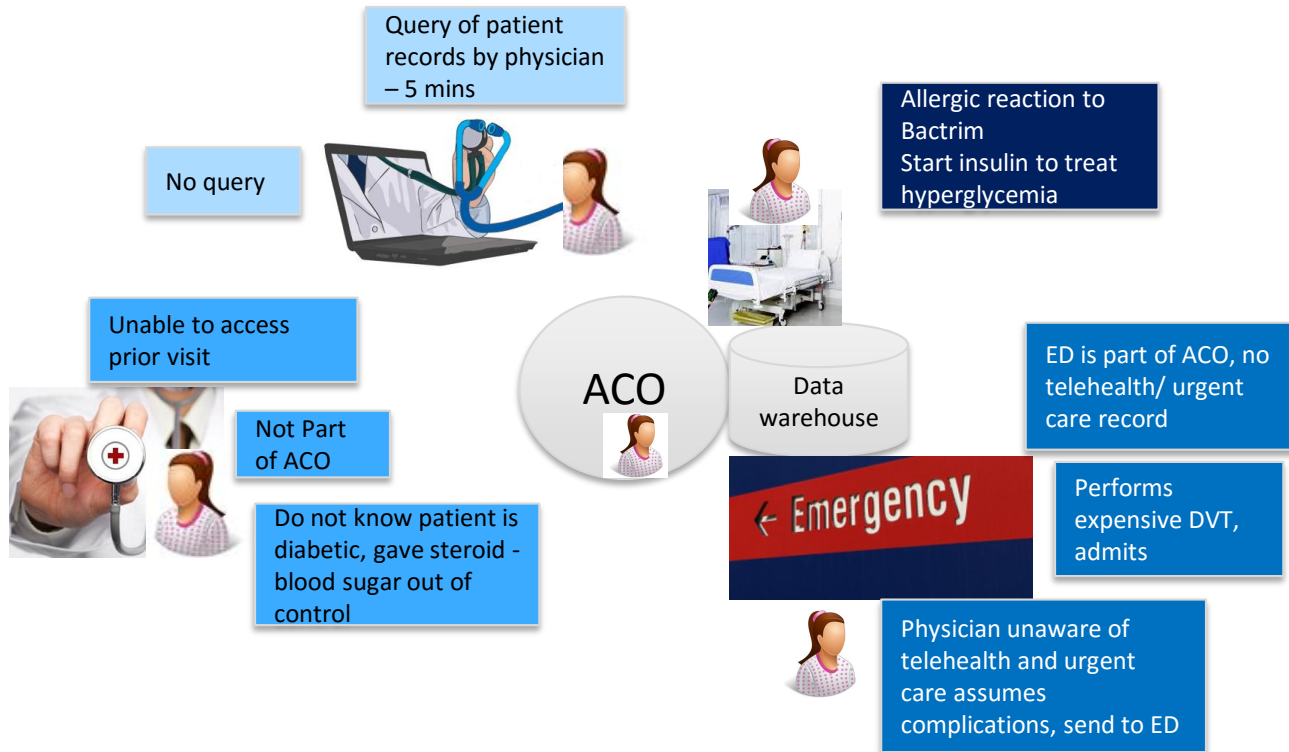
- Feeling worse
- Ultrasound shows on DVT (blood clot)
- Blood work shows leukocytosis, high blood sugar
- Admitted for cellulitis, failing outpatient therapy, hyperglycemia
- Prescribed Bactrim and Insulin

- Discharged to home with Insulin
- Follow up with Primary Care Physician

Data Flow



Incomplete Data – Unnecessary Treatments



PMD notes good blood sugar control and assumes patient needs insulin now
Unaware that hyperglycemic episode was related to steroid from urgent care

Data Access



Administrative
Data (Monthly)
- Retrospective

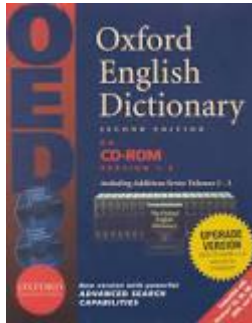


Clinical Data
(Overnight Batch)
- Retrospective



Actionable
Decision Support-
Real Time

Information Delivered



Scrabble Word Finder



Enter up to 12 letters into the scrabble word finder, all valid scrabble words will be generated. Use up to two ? as wildcards. The quickest scrabble words finder on the net!

AOSDJGN

Get Words!

[Advanced Options](#)

41 words Found

5 Letter Scrabble Words

[dhaks](#)

4 Letter Scrabble Words

[daqs](#)

[dahs](#)

[daks](#)

[dash](#)

[dhak](#)

[qads](#)

[qash](#)

[hadi](#)

[haqs](#)

[jags](#)

[shad](#)

[shaq](#)

[skaq](#)

Information to Physician



ID	Physician Name	Specialty	Medical Group	Effective Date	Score
00000000000000000000	BRUNO WIFE	General Med / OP Surgery		25-Jul-2019	80
00000000000000000000	CAF JONATHAN	Obstetrics / Gyn Medical Center		25-Jul-2019	80
00000000000000000000	ALLETAR BRUCE	Hand/FT Services / Hand OP Surgery		25-Jul-2019	80
00000000000000000000	DAVIDE SODANO	Dental One System / Hand OP Surgery		25-Jul-2019	80
00000000000000000000	SACHINBAR SUDHAR	Dental One System / Hand OP Surgery		25-Jul-2019	80
00000000000000000000	NETHA ANJALAN	Fam Health Medical Center		25-Jul-2019	80
00000000000000000000	ROBIN BEYLE	Prostate / Urology / Health Center		25-Jul-2019	80
00000000000000000000	BARBOO ALLAN	Obstetrics / Gyn Medical Center		25-Jul-2019	80
00000000000000000000	ALLETAR BRUCE	Hand/FT Services / Hand OP Surgery		25-Jul-2019	80
00000000000000000000	SHAFIQURE DONALDSON	Dental One System / Hand OP Surgery		25-Jul-2019	80



Risk Score - XX

Actionable and Manageable

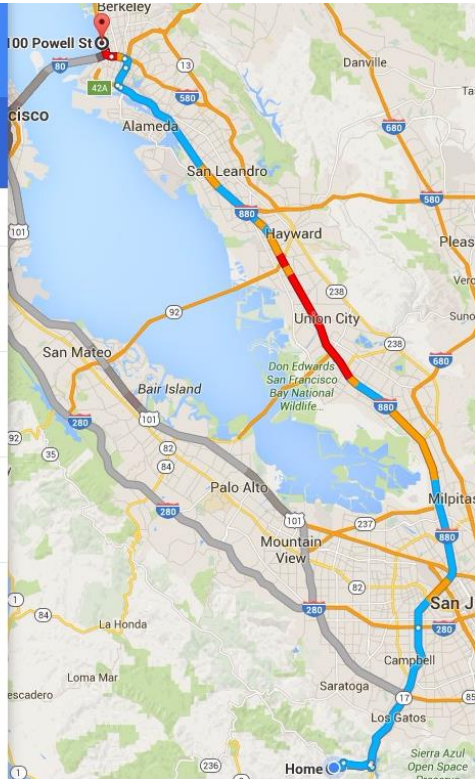
Decision Support Done Right

Home (19115 Green Forest Rd)
2100 Powell St, Emeryville, CA 94608

Depart at 3:00 PM Wed, Apr 6

OPTIONS

- Send directions to your phone
- via I-880 N typically 1 h 20 min - 2 h 20 min
Arrive around 5:20 PM
59.7 miles
[DETAILS](#)
 - via I-280 N typically 1 h 40 min - 2 h 40 min
Arrive around 5:40 PM
68.8 miles
 - via US-101 N typically 1 h 40 min - 2 h 50 min
Arrive around 5:50 PM
66.4 miles



Home (19115 Green Forest Rd)
2100 Powell St, Emeryville, CA 94608

Leave now

OPTIONS

- Send directions to your phone
- via I-880 N 1 h 40 min
1 h 6 min without traffic
59.7 miles
[DETAILS](#)
 - via US-101 N 2 h 1 min
1 h 14 min without traffic
66.4 miles
 - via I-280 N 2 h 13 min
1 h 14 min without traffic
68.8 miles

Right Data at the Right Time

- Data sharing between all healthcare contacts
- Expert rules to push right information at the right time—before decision is made



Personalized,
Trusted



Flexible
and Easy



High Value,
High Quality



Anytime,
Anywhere

- Improved patient outcome and satisfaction
- ROI?

Integrated Care Patient Experience

- Notices redness on lower leg
- Gets a telehealth appt.
- Diagnosed with cellulitis
- Prescribed Keflex

- Calls telehealth
- Comparison photo from last two calls shown
- No improvement
- Sent to urgent care

- Physician given brief summary from prior visits
- Physician looks at unremarkable leg
- Continues with current diabetes medicine



Mon.
AM

Mon.
PM

Tue.
AM

Tue.
PM

1 Week
Later

- Not getting better
- Calls telehealth
- Provider shown comparison picture from last visit
- Reassured and asked to call on Tuesday morning

- Physician at urgent care sees photos from Monday morning
- Sees improvement
- Makes no changes
- Recommends follow up with Primary care Physician

Cost and Outcome difference



No ED Visit
No Ultrasound



4 days of
Hospitalization



Life Long Insulin
Therapy
Lost work
Pain & suffering

Contact Information



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Board certified in clinical informatics
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UCSF Medical Center

Telehealth at UCSF

HIMSS – State HIT Day

Patty Nason, MBA
Telehealth Resource Center

5/25/2016

Overview

- Introduction to telehealth at UCSF
- Ethical considerations
- Cultural considerations
- Pediatric considerations
- Best practices



Telehealth at UCSF

- Telehealth Resource Center is designed to provide tools, operational infrastructure and information so that any provider interested in delivering care via telehealth can do so effectively and compliantly
- Flagship programs get direct efforts and assistance
- Telehealth and Video Technology team reports through IT Operations
- Other institutions use other models

Introduction - Telehealth Resource Center

- External Telehealth

- Partnerships with rural hospitals in specialty areas (Critical Care, Emergency Medicine, Neonatology, Hospital Medicine, Cardiology)

- Internal Telehealth

- Providers in one UCSF location use telehealth carts to see patients in another

- Home Telehealth

- Providers see patients in their homes via video conferencing (WebEx)

External/Internal Telehealth

- External Telehealth
 - Partnerships with rural hospitals in specialty areas (Critical Care, Emergency Medicine, Neonatology, Hospital Medicine, Cardiology)
- Internal Telehealth
 - Providers in one UCSF location use telehealth carts to see patients in another UCSF location



Home Telehealth

- Home telehealth utilizes WebEx, and a patient's computer or smart phone
- 35 UCSF clinics are actively using home telehealth with some of their patients
- Ideal for patients that have to travel far for appointments, or who are too ill to leave home
- WebEx video is encrypted and not recorded, privacy breach risk is very small
- Provider must be licensed in the state the patient is located in at the time of the appointment

Available Resources

■ For patients:

- Brochures, via email and hard copy, covering installation and use of WebEx on PCs, Androids, iPhone/iPad
- Video on how to set up WebEx

■ For providers:

- Training guides on how to set up WebEx appointments
- Troubleshooting guide
- In-person training for support staff and clinicians
- Videos on telehealth cart usage
- Wallet sized tip cards

Telehealth Patient Quick Start Guide

For Android Smartphone Users

UCSF Medical Center

Welcome to Telehealth!
1. Let's Get Started...
Using your Android phone, open the email from your provider's office titled "Invitation to WebEx Meeting." Inside you will find the date and time of the appointment, and a link to join the online meeting.
Click on the blue link in the email that says "Join the Meeting"; 10 minutes prior to the appointment start time.

If this is your first time using WebEx on your Android, download the "Cisco WebEx Meetings" app in the Google Play store.

If you see a message that says "Security Warning", click continue.

UCSF Medical Center Telehealth Resource Center

What is Telehealth?
Telehealth enables patients to meet with providers using simple web-based video conferencing

Benefits
Meet with your provider in the comfort of your home
Save money on gas and parking
Use your iPhone, iPad, Mac, PC or Android to connect with your provider

How does Telehealth work?
If your provider determines you are a candidate for telehealth visits, the clinical staff will set up your appointment and send you an email with your appointment information. The email will include a link to join the appointment online.
What equipment do I need?
You can use an iPad/iPhone, Android, Mac, or PC laptop or desktop with a web camera to conduct your telehealth appointment.
What if I'm traveling out of California, can I use Telehealth to see my doctor?
Due to state licensing regulations, you must be in California to utilize telehealth with your provider.

ENCOUNTER REMINDERS

1. **LOCATION.** Provider must be licensed where the patient is.
2. **IDENTITY.** If patient isn't known to you, check two pieces of info from APeX or a photo ID.
3. **BADGE.** Position your badge so it is visible on camera.
4. **CONSENT.** Confirm that patient agrees to telehealth interaction:
 - *In-person visit may be required*
 - *Data is encrypted in transit and not stored, low risk to privacy*
 - *If you share your screen, ensure no other patient data is visible*
 - *Do not record encounters*
5. **DOCUMENTATION.** Use appropriate smart phrase and note type (see reverse).

V2.2

UCSF Telehealth

APeX NOTES

Note types are determined based on **patient location**:

Home: Usual office visit note type
UCSF inpatient : *Internal Telehealth Consult*
Other hospital: *External Telehealth Consult*

APeX SMART PHRASE

.TELEMED – for video-based consultations

V2.2

UCSF Telehealth

Ethical Considerations

- Telehealth should not be used to avoid seeing patients in person due to any protected status. Epidemics/pandemics are an exception.
- Conflict of interest – telehealth must not be used solely for the purpose of enhancing income.
- Providers should have a policy in place to accommodate equipment/technical failures, and should document any technical issues in the patient's health record.
- If your level of licensure does not permit you to do something in person, you can't do it via telehealth either.

Cultural Considerations

- Provider and patient or patient-representative should be able to converse in a language comfortable and familiar to both parties



Pediatric Considerations

- Encounters must include parent/guardian, except for in certain cases involving adolescents with behavioral or mental health issues.
- Pediatric patient does not need to be present, as long as you're discussing a treatment plan



Best Practices – External/Internal Telehealth

- Conduct training for all staff
- Offer re-training as staff changes at both your institution and external ones.
- Conduct routine equipment and connectivity checks.

Best Practices – Home Telehealth

- Conduct a test appointment 24 – 48 hours before the actual appointment
- Home telehealth providers should use laptops/desktops, or use a stand with a smartphone/tablet
- If you use dual monitors, make sure you're still looking into your webcam
- Convene telehealth user group to share knowledge

UCSF Medical Center



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