



Telemedicine Applications

Ronald S. Weinstein, MD

Director, Arizona Telemedicine Program

Telemedicine

- Modalities
- Services

Telemedicine

- Modalities
- Services

Modalities

Visual

Auditory

“Talk is the treatment”

Modalities

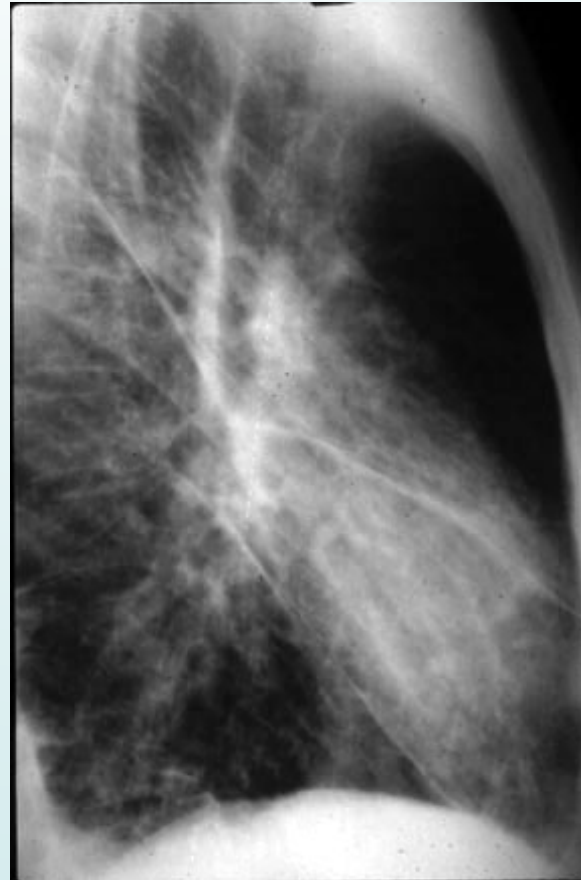
Visual

Auditory

“Talk is the treatment”

MEDICAL IMAGING

Teleradiology



MEDICAL IMAGING

Telemammography



MEDICAL IMAGING

Teledermatology



MEDICAL IMAGING

Otorhinolaryngology (ENT)



MEDICAL IMAGING

Modalities

Visual

Auditory

Electronic Stethoscope



Modalities

Visual

Auditory

“Talk is the treatment”

“The talk is the treatment”

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



Telepsychiatry



Cancer Genetic Counseling



Support Groups

Breast Cancer Survivor Support Group Training



Telemedicine

- Modalities
- Services

TELEMEDICINE SERVICES

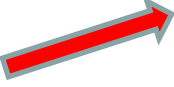
Pre-internet

TELEMEDICINE SERVICES

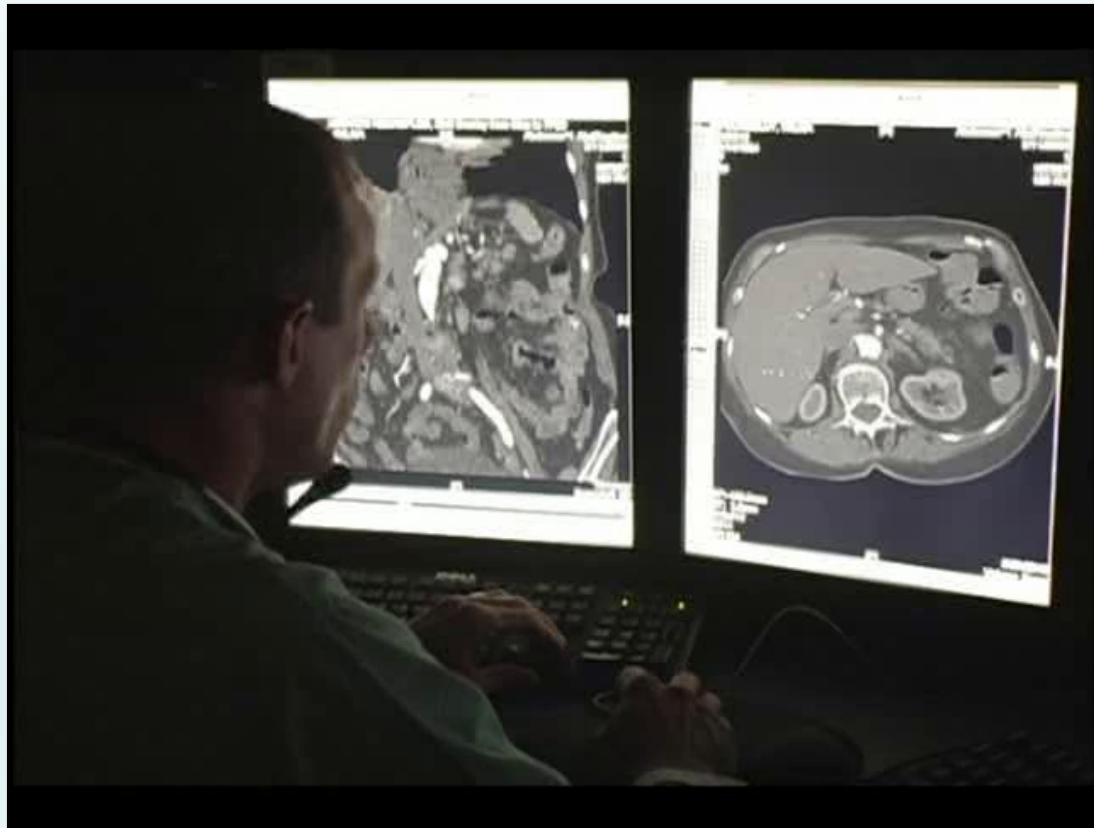
Leading Telemedicine Services

1. Gap Services
2. Urgent Services
3. Mandatory Services

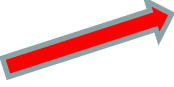

Leading Telemedicine Services

1. Gap Services  Teleradiology
2. Urgent Services
3. Mandatory Services

Teleradiology – 1,400,000+ cases

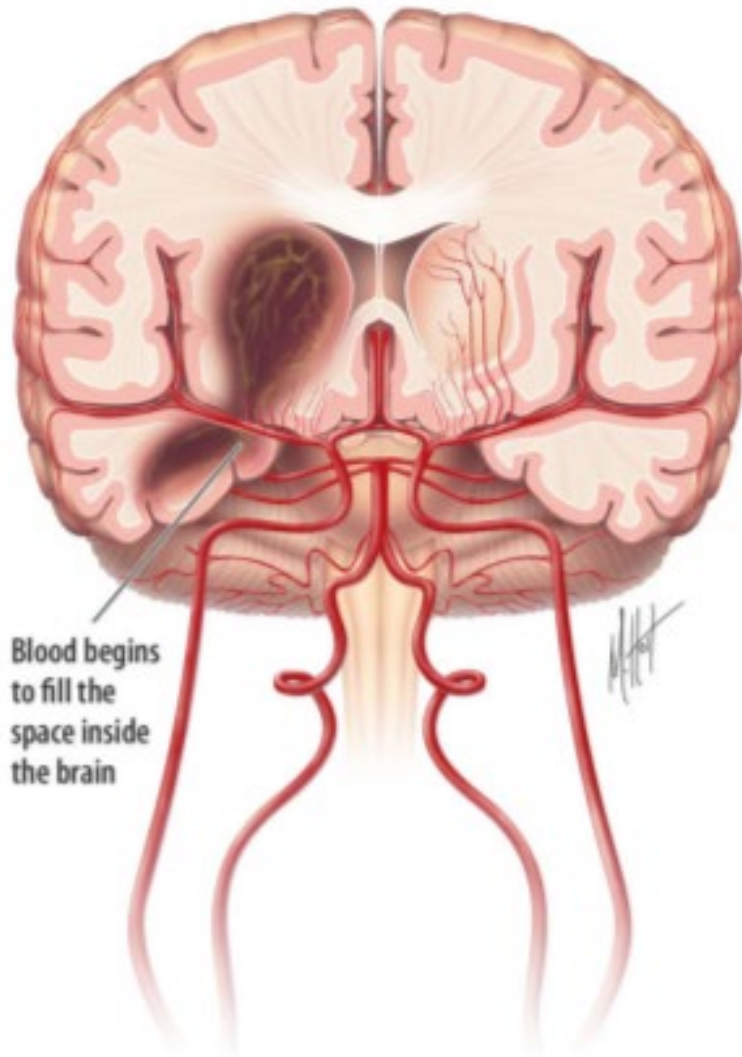


Leading Telemedicine Services

1. Gap Services  Teleradiology
2. Urgent Services  **Telestroke**
3. Mandatory Services

Strokes

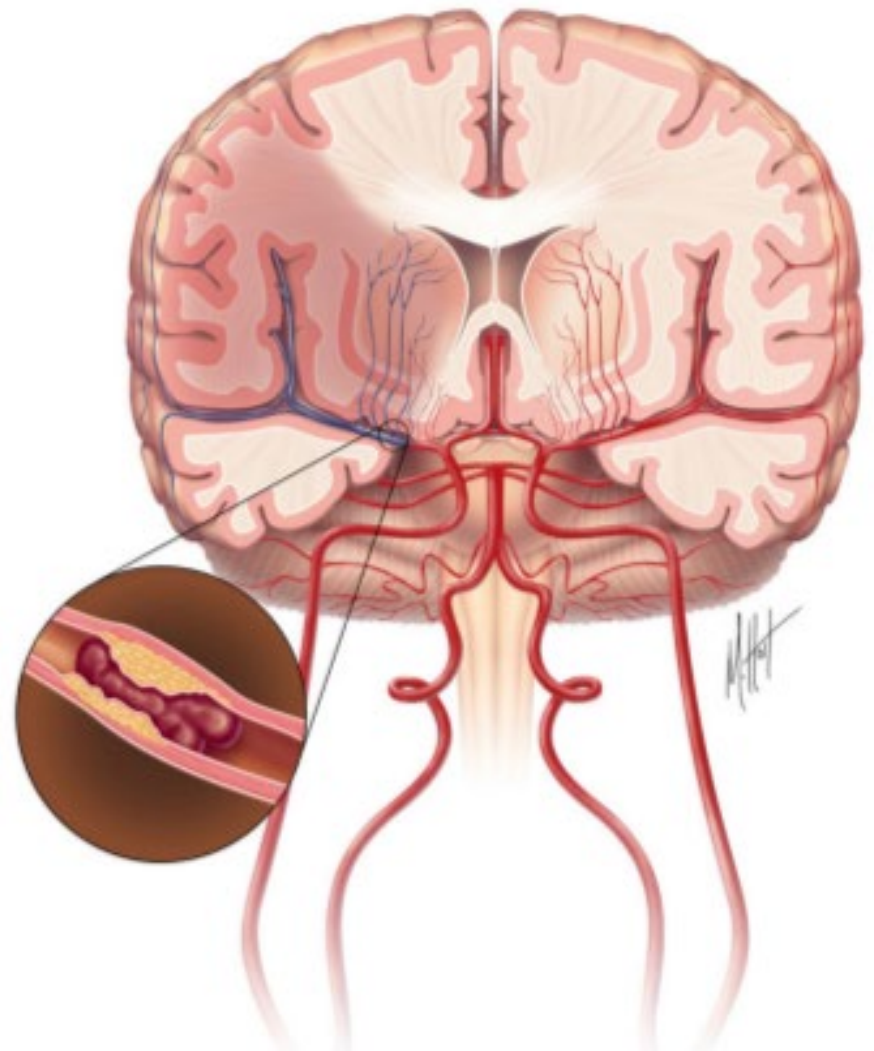
Haemorrhagic (13%)



Blood begins to fill the space inside the brain

Caused by blood vessel rupture.

Ischemic (87%)



Caused by blockage of blood vessel.

Telestroke Evaluation

Patient History

Physical Examination

CT Scan

Phoenix Area

Barrows



TeleStroke
Supporting Community Hospitals

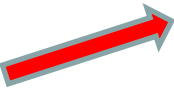




ResolutionMD mobile.



Demaerschalk B M et al. Stroke 2012;43:3098-3101

Leading Telemedicine Services

1. Gap Services  Teleradiology
2. Urgent Services  Telestroke
3. Mandatory Services  Infectious Diseases

TELEMEDICINE SERVICES

Post-internet

Telemedicine & Telehealth Services

1. *Gap Services*
2. *Urgent Services*
3. *Mandatory Services*

4. Mobile Telehealth

5. Direct-to-Consumer Telehealth



<https://ihealthlabs.com/wireless-scales/ihealth-core/>

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

Connected Health/Mobile Health



Telemedicine & Telehealth Services



1. *Gap Services*
2. *Urgent Services*
3. *Mandatory Services*

4. Mobile Telehealth

5. Direct-to-Consumer Telehealth

Tucson Daily Star

February 24, 2019



Talk to a doctor
anytime, anywhere
you happen to be



Prompt treatment,
median call back in
10 minutes

A network of doctors
that can treat every
member of the family


TALK TO A DOCTOR NOW

Access care anywhere, any place, any time.
The TMC Now app gives you 24/7 access to physicians that are licensed to practice in Arizona through the convenience of phone, video or mobile app visits. It's an affordable option for quality medical care.


Talk to a doctor for only \$49.
Use promo code **FESTIVAL10** for **10% OFF** your first visit.
Expires 3/31/19. One code per person.



tmcaz.com/tmcnow



DOWNLOAD THE APP
FREE TODAY!



Tucson Medical Center

GET THE CARE YOU NEED

Our doctors can treat many medical conditions, including:

- Cold and flu symptoms
- Allergies
- Pink eye
- Ear infection
- Respiratory infection
- Sinus problems
- Skin problems
- ...and more.

© 2018 Tucson Medical Center. All Rights Reserved.
Apple and the Apple logo are trademarks of Apple Inc. registered in the U.S. and other countries.

Tucson Daily Star

January 6, 2019

Arizona Daily Star / Monday, January 6, 2019



TMC NOW
Tucson Medical Center

TALK TO A DOCTOR NOW

 Talk to a doctor anytime, anywhere, your request to be

 Prompt treatment, medication back in 30 minutes



A network of doctors that can treat every member of the family

Access care anywhere, any place, any time. The TMC Now app gives you 24/7 access to physicians that are licensed to practice in Arizona through the convenience of phone, video or mobile app visits. It's an affordable option for quality medical care.

Talk to a doctor for only \$49.
Use promo code **STAR10** for **10% OFF** your first visit.
Expires 2/28/19. One code per person.

Download on the **App Store** | Download on **Google Play**

tmcaz.com/tmcnow

GET THE CARE YOU NEED

Our doctors can treat many medical conditions, including:

- Cold and flu symptoms
- Allergies
- Pink eye
- Ear infections
- Sinus problems
- Skin problems and more

DOWNLOAD THE APP FREE TODAY!

 Tucson Medical Center

© 2018 Tucson Medical Center. All Rights Reserved. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries.

Access care anywhere, any place, any time.

The TMC Now app gives you 24/7 access to physicians that are licensed to practice in Arizona through the convenience of phone, video or mobile app visits. It's an affordable option for quality medical care.

Talk to a doctor for only \$49.
Use promo code **STAR10** for **10% OFF** your first visit.
Expires 2/28/19. One code per person.

Download on the **App Store** | Download on **Google Play**


tmcaz.com/tmcnow

GET THE CARE YOU NEED

Our doctors can treat many medical conditions, including:

- Cold and flu symptoms
- Allergies
- Pink eye
- Ear infections
- Sinus problems
- Skin problems and more

DOWNLOAD THE APP FREE TODAY!

 Tucson Medical Center

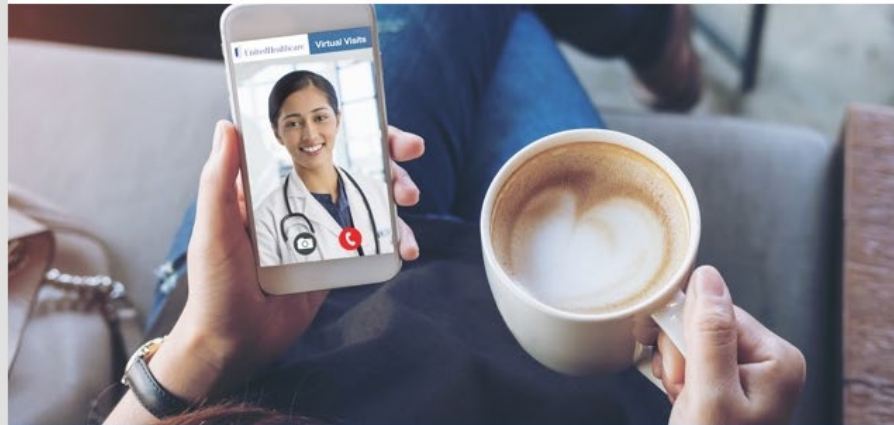
© 2018 Tucson Medical Center. All Rights Reserved. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries.

- **GET GREAT CARE YOU NEED**
- Cold & flu symptoms
- Allergies
- Pink eye
- Ear infections
- Respiratory infection
- Sinus problems
- Skin problems
- ... and more

Trouble viewing this email? [Click to view in browser.](#)



Register for Virtual Visits now to save time later.



See a doctor whenever, wherever.

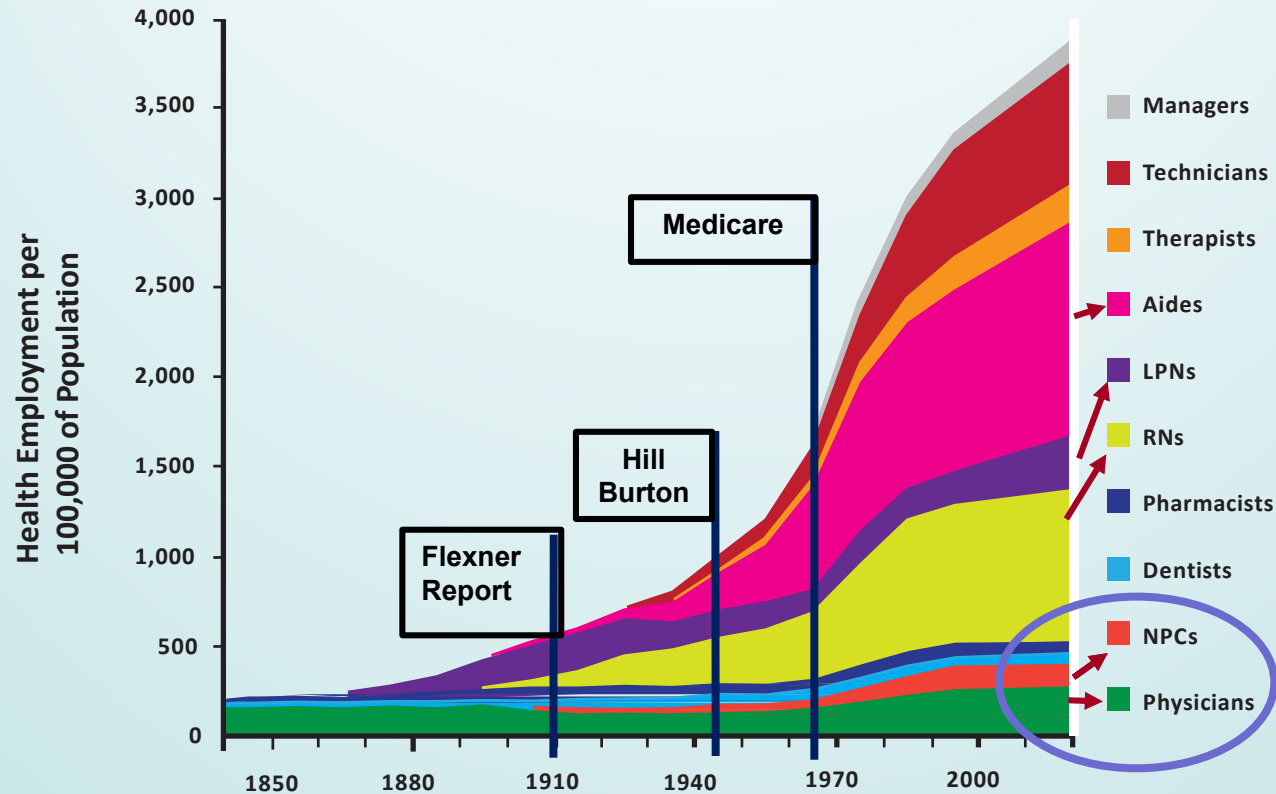
Get registered for Virtual Visits now, so you're ready for cold and flu season — and can see the doctor without having to leave home.

[Register Now](#)

Start feeling better faster.

A Virtual Visit lets you see and talk to a doctor on your mobile device,* tablet or computer. The doctor can give you a diagnosis and even write a prescription** if needed. No appointment necessary — it's available 24/7. And, with your UnitedHealthcare plan, your cost is \$50*** or less.

Physicians, Non-physician Clinicians, and other Health Workers 1850-2010



Adapted from Kendix and Getzen,
and the Bureau of Labor Statistics

TELEMEDICINE SERVICES



98point6

Questions!

Ronald S. Weinstein, M.D.

rweinstein@telemedicine.arizona.edu