Provider Adoption of Telemedicine

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DISCLOSURE

- The F Marie Hall Institute for Rural and Community Health at Texas Tech University Health Sciences Center is partnered with Well-Ahead Louisiana with the Louisiana Department of Health to form the TexLa Telehealth Resource Center (TRC).

- The TexLa Telehealth Resource Center is a federally-funded program designed to provide technical assistance and resources to new and existing Telehealth programs throughout Texas and Louisiana.

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HRSA Funded Telehealth Resource

www.telehealthresourcecenter.org
Learning Objectives

1. Describe the state of telehealth adoption among practitioners.

2. Identify barriers to telehealth adoption.

3. Discuss possible strategies to bridge the chasm of telemedicine adoption and promote its adoption.
Bell Curve of Technology Adoption

- Early Market
  - Tech Enthusiasts: 2.5%
  - Early Adopters: 13.5%
  - Visionaries

- The Chasm
  - Pragmatists
  - Early Majority: 34%
  - Late Majority: 34%

- Mainstream Market
  - Conservatives
  - Skeptics: 16%
Bell Curve of Technology Adoption

- **Innovators**
  - willing to take risks
  - younger in age
  - Techies/Innovators
  - Move from one to another new innovations

- **Early Adopters**
  - younger in age
  - have a higher social status/influence
  - more educated
  - Adopts/endorse it if these worth

- **Early Majority**
  - average social status
  - contact with early adopters
  - Adopts only if substantial benefit in having it

- **Late Majority**
  - high degree of skepticism
  - average member in society
  - majority of society has adopted

- **Laggards**
  - aversion to change-agents
  - tend to be advanced in age
  - traditions
# Telemedicine & Telehealth Activities

| PSYCHIATRY | Behavioral Health |
| Radiology | Nutrition |
| Primary Care | Neurology |
| Maternal-Fetal Health | Dermatology |
| Medics | Cardiology |
| Dentistry | Neurosurgery |
| Psychiatry | Orthopedics |
| Pulmonology | Ophthalmology |
| OB-GYN | Trauma |
| Mental Health | Genetics |
| Psychiatry | Endocrine |
| Derm | Endocrinology |
| Vaccine Campaign | Telestroke |
| Internal Medicine | Tele-ICU |
| Cardiology | Chronic Diseases |
| Plastic Surgery | Burn |
| Palliative Medicine | ENT |

## Telemedicine Tools
- Clinicians often communicate through e-mail, video, or both
- Video
- Phone
- E-mail
- Remote wireless monitoring
- Internet

## Telemedicine Services
- Dermatology
- Radiology
- Surgical peer mentoring
- Emergency trauma and ICU care
- Care for chronic conditions
- Medication management
- Wound care
- Counseling
- Postdischarge follow-up
- Mental health

## Patient to Mobile Health Technology
- Wearable monitors
- Smartphones
- Mobile apps
- Video
- E-mail
- Web portals
- Games

## Integration with electronic medical records
- Data analytics

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*N ENGL J MED 2017;377(16):1585-1592*
Provider’s Barriers in Telemedicine

- Equipment
- Adoption/Buy-in
- Connection
- Reimbursement
- Regulations
- Privacy & Security
- Education & Training
- Resources
- Manpower & Technical Support
- COST$
Telehealth Adoption During Pandemic

- First U.S. case of COVID-19 announced Jan 20, 2020
- First community spread of COVID-19 in the United States Feb 26, 2020
- CARES Act enacted Mar 27, 2020
- CMS telehealth waivers go into effect Mar 6, 2020

MMWR 69(43);1595-1599
1. Telehealth use increased from 0.3% in 2019 to 23.6% in 2020

2. In person visit ↓ 37%

3. Behavioral visit were 46.1% while medical visit is 22.%

4. Socially advantaged neighborhood used telemedicine 27.4% vs 19.8% in less advantaged.

5. Medical care cost decreased by 15%

Growth in telehealth usage peaked during April 2020 but has since stabilized.

Telehealth claims volumes, compared to pre-Covid-19 levels (February 2020 = 1)

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1 Includes cardiology, dental/oral, dermatology, endocrinology, ENT medicine, gastroenterology, general medicine, general surgery, gynecology, hematology, infectious diseases, neonatal, nephrology, neurological medicine, neurosurgery, oncology, ophthalmology, orthopedic surgery, poisoning/drug tox./comp. of TX, psychiatry, pulmonary medicine, rheumatology, substance use disorder treatment, urology. Also includes only evaluation and management visits; excludes emergency department, hospital inpatient, and physiatry inpatient claims; excludes certain low-volume specialties.

Source: Compile database; McKinsey analysis
WHY TELEMEDICINE?

- Geographic Location
- Physician Shortage & limited resources
- Savings
- Infection control
- Convenience & Increase Access
- Healthcare for special population

Locations: Oklahoma, New Mexico, Louisiana
GOALS OF TELEMEDICINE

Increase Access to primary & specialty care
Warm Up: Telemedicine 101

Pre-Game
1. Identify a need
2. Form a Team
3. Define success
4. Evaluating a vendor
5. Making the Case
6. Contracting
Game Time

7. Designing work flow
8. Prepare the care team
9. Partnering with the patient
10. Implementation
11. Evaluating success
12. Scaling
Best Practices for Telehealth Patient Engagement

- Patients are increasingly interested in telehealth
- The doctor-patient relationship drives clinical outcomes

Access
- Good front lighting
- Quiet environment
- Pre-video checklist

Efficiency
- Professional image
- Look at the camera
- Natural body language

Safety
- Active listening
- Empathetic tone
- Shared decision-making

Communicating
Setting the Stage

1. Test Equipment's
2. Adequate lighting
3. Adjust Camera
4. Review chart in advance
5. Turnoff notification
6. Dress professionally
7. Neutral background
8. Quiet place
9. Alternate communication
Video Presence/Webside Manner

1. Introduce yourself
2. Be natural
3. Eye contact
4. No background noise
5. Undivided attention
6. Empower them to speak up
7. Appropriate gestures
8. Scribe/pen to write plans
Address the Patient & Physician’s Concerns

**Consumer interest in virtual care outpaces physician adoption:**

**CONSUMERS**
- 23% Have had a virtual visit with a doctor or nurse
- 57% Of those who have not used virtual visits are willing to try it

**PHYSICIANS**
- 14% Have implemented the technology for virtual visits
- 18% Of those without a virtual visit capability plan to add it within the next two years

**Top reasons consumers did not opt for a virtual visit:**
- 28% Loss of personal connection with their doctor
- 28% Concerns regarding quality of care
- 24% Issues with access

**Top physician concerns about virtual care technologies:**
- 36% Medical errors
- 35% Access to technology
- 33% Data security

Similarly, consumers are embracing wearables and other technologies to track their health information... ...but doctors’ ability to use patient-generated data is lagging behind consumer interest.
Inclusive Technology & Platform

- 13% or 30 million people ages 12 and older have hearing loss
- 7.5 million in US have voice problem
- 7.3 million in US have significant vision lost
- 1 out of 5 people in US speaks a non English language
- 46 M Americans 65 yrs and older

Auxiliary aids and services
Examples of auxiliary aids and services for people who are deaf or have hearing loss:
- Qualified sign language interpreter
- Qualified cued-speech interpreter
- Qualified tactile interpreter
- Real-time captioning (CART)
- Video remote interpreting (VRI)
- Written materials
Delivery of Medical Care

EVOLUTION
1. Research and education to magnify its importance as possible main or alternative way on providing care

2. Include providers early in the discussion during adoption and make the process easy, simple and worthwhile

3. IT support & Patient navigator support

4. Improvement on patient side: RPM & broadband
QUESTIONS

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