

The Big Three of Telehealth

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Agenda

- Overview
- Three Benefits
- Three Obstacles
- Three Delivery Systems
- An Actuary's Role



What is Telehealth?

- The use of digital information and communication technologies to access health care services.
 - Patient-to-Provider
 - Provider-to-Provider





Telehealth Utilization

- According to the 2019 Fair Health Indicators report, telehealth utilization grew 53% from 2016 to 2017.
 - Compared to –
 - Urgent Care Centers: 14%
 - Retail Health Clinics: 7%
 - Ambulatory Surgical Centers: 6%
 - Emergency Rooms: 2%



Figure 19. Percent of claim lines with telehealth usage by rural, urban and national settings, 2012-2017



Three Benefits

- Improved Patient Health



- Increased Patient Satisfaction



- Cost Savings





Patient Health

- Easy Access to Care

- Patient is more likely to seek treatment before condition get progressively worse.

- Informed Providers

- Providers are able to access specialty consultations in a more timely manner.

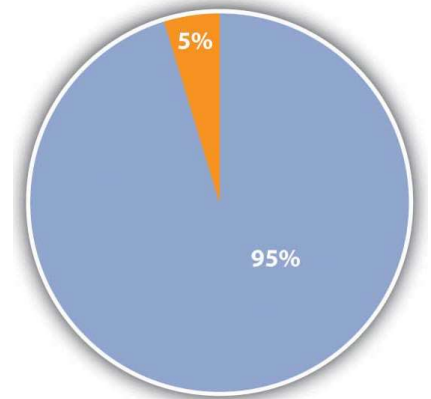
- Care Management

- Providers can remotely monitor post-op vitals and send reminders to encourage medication adherence.



Patient Satisfaction

- A study published by the Journal of General Internal Medicine cited that 95% of survey respondents reported being “very satisfied” with all telehealth attributes.
- Characteristics that increased the odds of liking or preferring telehealth:
 - Convenience of Care
 - Overall Understanding of Telehealth
 - No Medical Insurance
 - Female Patient





Cost Savings

- Idea behind cost savings:
 - A Telehealth visit is less costly than an in-person physician, urgent care, retail health clinic, or most notably, emergency department visit.

Type of Visit	Low Range Cost	High Range Cost
Emergency Department	\$359	\$1,595
Urgent Care	\$98	\$163
Physician Office	\$84	\$131
Retail Health Clinic	\$66	\$89
Virtual Visit	\$41	\$49



Cost Savings

- Concerns regarding this idea:
 - Ease of access increases utilization where care might not have been sought out otherwise.
 - Increase frequency counteracts decrease severity.
 - Diagnosis may not be as accurate when the provider can only assess the patient remotely and, in some cases, follow-up care will be necessary to ultimately properly treat the patient.
 - The decrease in severity is not as impactful as it may seem initially.





Cost Savings

10

- A recent study published in the American Journal of Emergency Medicine accounted for both concerns by surveying:
 - Immediately following the visit – What would the patient have done if telehealth had not been an option?
 - 16% would have ‘done nothing’.
 - 12% would have gone to the emergency room.
 - 1-2 weeks after the visit – Was any follow-up care pursued?
 - 74% did not pursue any type of follow-up care.
 - 5% went to the emergency room.





Cost Savings

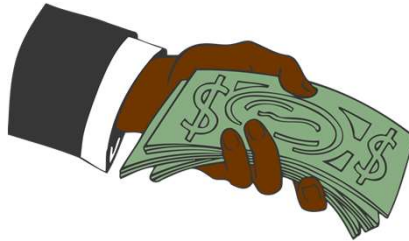
- Even after accounting for increased utilization and follow-up care, the overall net cost savings was calculated as being with the range of \$19 to \$121 per telehealth visit.
 - Most of the savings was generated from emergency department visits avoided.





Three Obstacles

- Cost Investment



- Security and Privacy



- Implementation





Cost Investment

- Telehealth systems, staff, etc. can be costly up front.

Cost Savings \neq Return on Investment

- State or Federal Grant Funding

- The U.S. Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services (HHS), offers grant funding for telehealth programs.





Security and Privacy

- While most adults acknowledge the concern around security of medical information, the convenience of rapid access to care outweighs concerns.
- Mitigating security breaches:
 - Device/data encryption
 - File authentication





Implementation

- Includes building infrastructure, establishing protocols, training staff, setting up billing procedures, etc.
- Recommended to start small and expand over time.





Three Delivery Systems

- Live Video



- Remote Patient Monitoring



- Store and Forward





Live Video

17

- Uses:
 - Virtual Visits
 - Case Collaboration
 - Distance learning

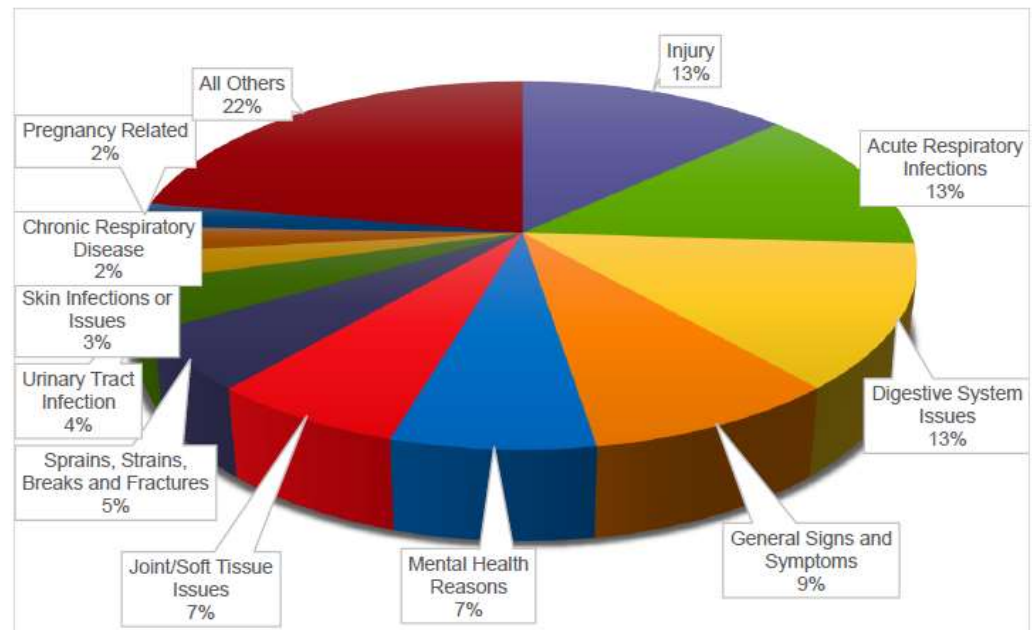


Figure 24. Distribution of claim lines with telehealth usage by diagnostic category, 2017



Live Video

- Virtual Visits



- Case Collaboration

- ICU, emergency care, neurology, cardiology, psychiatry, orthopedics, pediatrics

- Distance Learning

- Direct access to continuing education opportunities around the world.



Remote Patient Monitoring

- Uses:



- Managing
 - Chronic Care
 - Acute Care
 - High-Risk Patients

- Examples:

- Blood Sugar Readings
- Blood Pressure Readings
- Medication Reminders
- Food/Exercise Logs
- Heart Rate Monitors



Remote Patient Monitoring

- Connected Home Living 
 - Provides kits after discharge personalized to each patient, which the doctor can use to monitor vitals remotely.
 - Reports 3-year average re-admission rate of 5.8%, compared to the U.S. average of 14%.
- InfoBionic 
 - Wearable cardiac monitor that continuously streams ECG and motion data in real-time for patients with heart conditions.



Store and Forward

- Store and Forward is a means of gathering, storing, and sharing patient information.
- Uses:
 - Storing and Sending
 - Digital Images
 - Health Records
 - Training Videos



An Actuary's Role

- Value-Based Care and Provider Risk
 - Telehealth presents the opportunity to both save on costs and increase quality of care.
- Potential Outcomes
 - Model resulting effects on pricing and financial projections
- Telehealth Benefits in Medicare Advantage (MA)
 - MA plans will be allowed to include additional telehealth benefits starting in plan year 2020 where the allowance of this type of benefit was previously limited.



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Questions