TELEHEALTH AND E-HEALTH AFTER COVID

RECENT ADVANCES AND PERSISTENT BARRIERS

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TO DEFINE TELEHEALTH AND E-HEALTH

• What is eHealth?
  • Telemedicine: all methods providing healthcare at a distance
  • Telehealth: regardless of format, patient interacts with a therapist in real time
    • Live, contingent responding to patient’s concerns
  • eHealth refers to digital health technologies that are distinct from, but can be integrated with telehealth
    • Provider/patient dashboards, EHR, informatics
    • Mobile and online apps, sensors, chat bots, integrated platforms

• Here, we will address Covid’s impact on eHealth in two contexts:
  • Integrated with telehealth
  • Independent tools and interventions that influence how telehealth will be delivered
Impact of COVID-19 on How E-Health Integrates with Telehealth

- Independent and/or community-based providers moved to telehealth
  - Primarily entailed transition to (ultimately) secure platforms
  - Wide-scale grappling with the digital divide
IMPACT OF COVID-19 ON HOW E-HEALTH INTEGRATES WITH TELEHEALTH

• Large telehealth companies and managed care organizations integrated more eHealth 2-6
  • Integrated systems (i.e., collaborative care, SBIRT in primary care settings)
    • Enhanced functions in multi-system provider dashboards and patient portals
    • Third-party apps that manage and secure data and integrate into EHR
    • Patient data gathering, monitoring and management
    • Messaging
  • Increase in integrating treatment-oriented content and functions
    • CBT protocols, patient-facing tools
    • Focus on comprehensive protocols
IMPACT OF COVID-19 ON SELF-GUIDED E-HEALTH TOOLS AND INTERVENTIONS

- The rapid expansion of eHealth, particularly with regards to mental health
  - Catalyzed interest in the effectiveness of eHealth interventions and their adoption
    - Increasing focus on evidence-based and user-centered design
  - eHealth tools for alcohol use
    - Self-guided: \( g = 0.20; 95\% \ CI = 0.22, 0.38, k = 5 \)
    - Adjunct to treatment: \( g = 0.30; 95\% \ CI = 0.10, 0.50, k = 7 \)
- These interventions will appear in telehealth dashboards
FACILITATORS TO WIDER DIGITAL HEALTH ADOPTION

- NIH SBIR/STTR and Private Investment 18,19
- Digital Therapeutics with big market impacts
  - FDA Case Study: Pear Therapeutics, Dynamicare, and Contingency Management
CURRENT BARRIERS TO WIDER E-HEALTH ADOPTION

• The current fragmented state of health technology $^{21}$
  • The liminal state between translation of extant interventions and the creation of new ones
• Implementation challenges $^{22,23}$
  • In MCOs: integration into existing environments of care
• Provider adoption $^{24-27}$
  • Current generation not trained to use them
  • Unclear advantage with regards to outcomes
  • Bad design
  • Questions about privacy
  • Innovation fatigue
FUTURE DIRECTIONS

• eHealth integrated with telehealth: are therapists ready for the tools technology will provide? 28-31
  • Sensors, ecological assessment, cloud-computing, AI, automated interventions and 5G
    • Need for theory driven models
  • For alcohol: can we identify, track and effectively use key variables?

• Research and training needs
  • Focus on “digital divide” and related populations 32-34
  • Moderators and mediators of uptake and engagement among patients and providers 24,35-40
  • Program development for optimal integration of eHealth 6,41,42
  • Train the next generation of providers to formulate their cases using available tech
THANK YOU!
REFERENCES


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