

Improving Quality of Care: Virtual Care During and Post COVID 19

Zelalem Temesgen FIDSA AAHIVS

Learning Objectives

By the conclusion of this talk, learners will be able to:

1. Understand the different terms used to describe remotely delivered care
2. Describe the various types of virtual care
3. Articulate the benefits, disadvantages, and barriers to an effective virtual care program

What is in a name?

- Digital health
- Telehealth
- Virtual Care
- Telemedicine
- Virtual visit
- Virtual consult
- eConsult
- Mobile health (mhealth)

Telehealth Modalities

- **Synchronous**
 - real-time telephone or live audio-video interaction typically with a patient using a smartphone, tablet, or computer.
- **Asynchronous**
 - “store and forward” technology where messages, images, or data are collected at one point in time and interpreted or responded to later.
 - Patient portals facilitate communication between provider and patient through secure messaging.
- **Remote patient monitoring**
 - This allows direct transmission of a patient’s clinical measurements from a distance (may or may not be in real time) to their healthcare provider.

Why?

- Maintenance of patient care
 - Protecting patients
 - Protecting healthcare workers

Telehealth During COVID-19

- Triage patients with symptoms
- Remote surveillance of at-risk patients
- Minimizing transmission to patients and public
- Keeping Healthcare workforce safe: Minimize unnecessary direct contact between physicians and other health care staff and patients
- Permit front-line physicians to consult with specialists
- Enable urgent low-acuity ambulatory care
- Enable continuity of chronic disease care
- Allow physicians who are symptom-free, but who need to remain in quarantine, to continue to provide patient care remotely.
- Relieve strain on the local health care workforce by substituting clinical care from remote healthcare providers.

Benefits to the Patient

- Convenient access to clinical care.
- Improved engagement with their physicians and clinical team.
- Improved satisfaction with their physicians and clinical team.
- Savings in costs related to health care

Benefits to Physicians

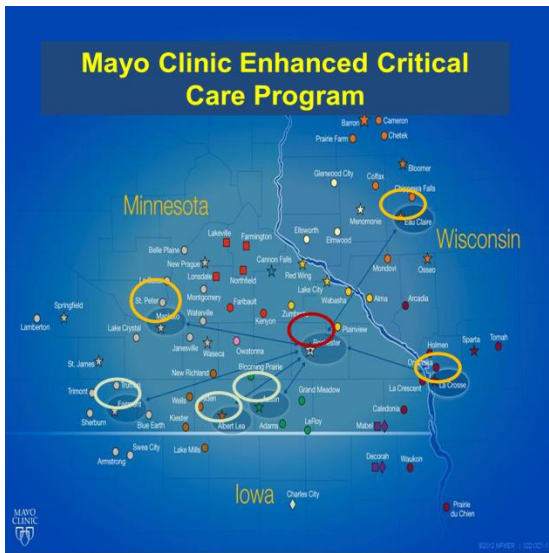
- Overcome geographical barriers
- Transmission of images, clinical data, or video
- Allow multiple members of a team to interact and collaborate in patient care.
- Remote input from consultants
- Extend their reach to patients

Benefits to Healthcare System

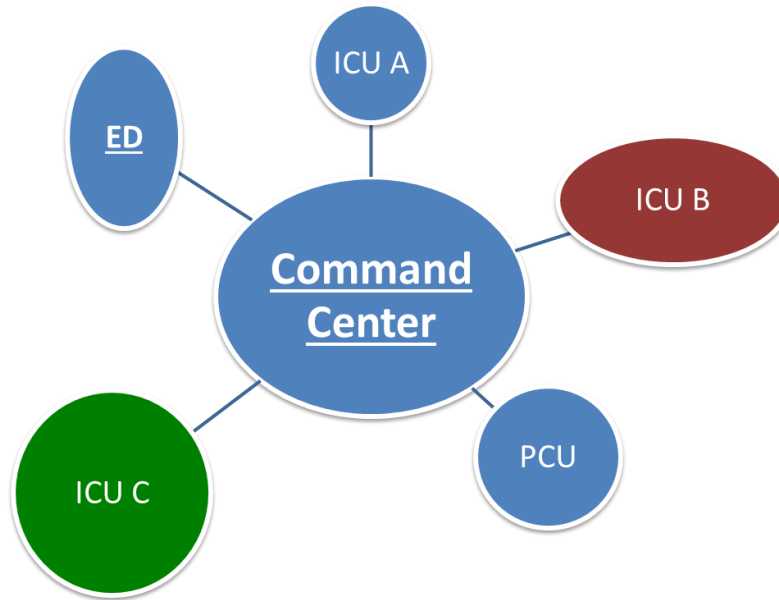
- Deliver low-acuity care in a low-cost and convenient way to payers and employers.
- Provide convenience to employees.
- Flexible practice options: Telemedicine improves the ability for physicians to utilize flexible practice options such as extended or weekend hours.
- Fill vacant slots: Practices are able to use Telemedicine to fill vacant slots created by last-minute cancellations or no-shows.
- Reduce overhead expenses: Practices are able to reduce practice overhead expenses by extending practice hours without the need for office staff.
- Patient retention: Physicians find satisfaction in the ability to retain patients who might otherwise migrate to other office-based or Telemedicine providers, or possibly increasing market share.



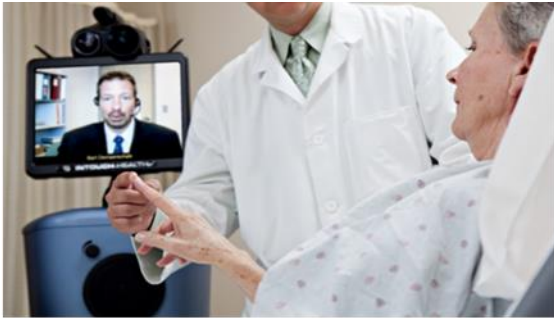
Removing barriers of time, distance, and inadequate expertise



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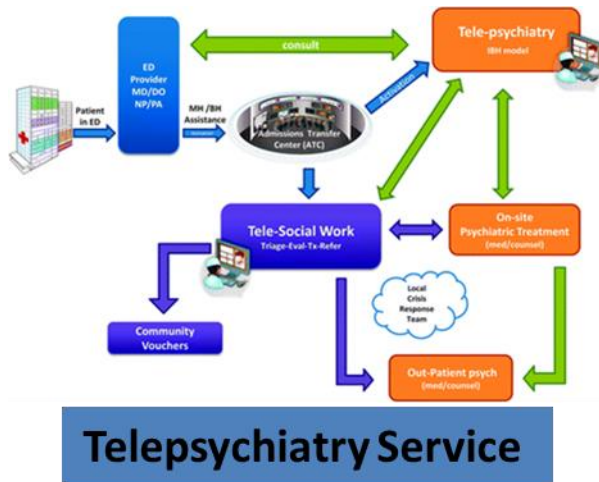
- High definition audio-visuals
- Real-time, bi-directional interaction



Acute Care telemedicine provides specialty consultation and remote care guidance for medical and surgical emergencies through live video communication.



100% of newborns in the Mayo Clinic Midwest Region have immediate access to a neonatologist
Before Tele Neonatology:
43% of newborns at Mayo Midwest hospitals had immediate access to a neonatologist





eBoards provide an opportunity for providers to discuss complicated, complex cases in a multidisciplinary forum that is mediated through video technology.



Mayo Clinic's PhotoExam app allows clinicians to capture photographs and videos of patients using their iOS mobile devices. Images are securely transferred to Mayo imaging systems, stored and made available for viewing.



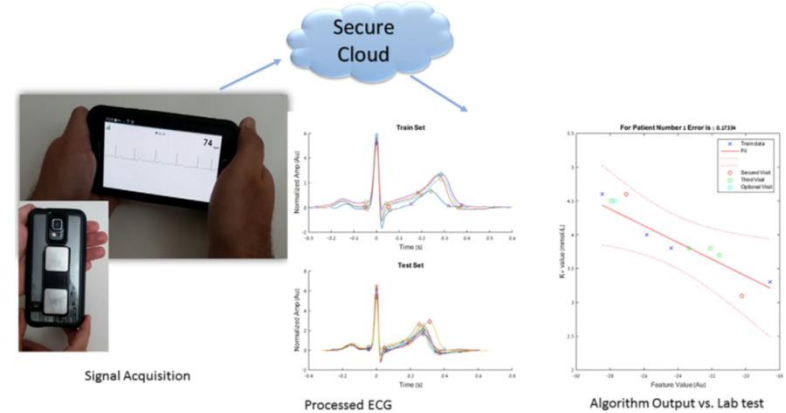
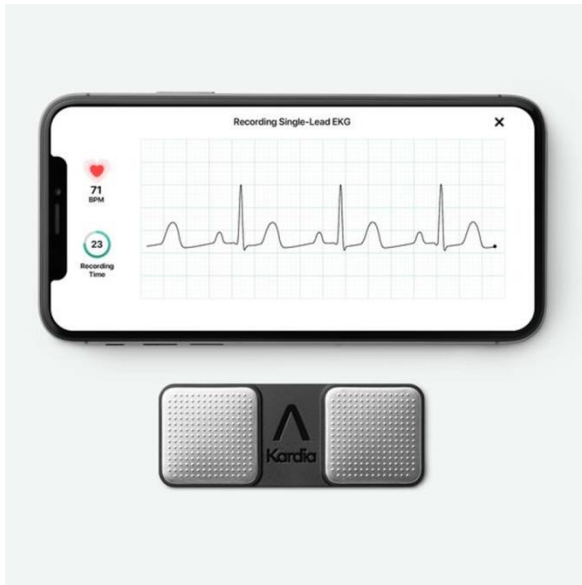
A digital tablet is sent to the patient along with a Bluetooth-enabled blood pressure cuff, pulse oximeter, weight scale, and thermometer. The technology also has the ability to ask patients symptomatic or lifestyle questions and provide educational content.



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Using artificial intelligence to analyze cardiac ultrasound imaging and map the impact of COVID-19 (SARS-CoV-2) on the heart



Noninvasive blood potassium measurement using signal-processed, single-lead ecg acquired from a handheld smartphone. J Electrocardiol, 50 (2017), pp. 620-625



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Point of Care CME for HIV, Tuberculosis, and Associated Conditions

OVERVIEW

PROGRAM

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<https://globalprofessionaleducation.mayo.edu/point-of-care-cme/>

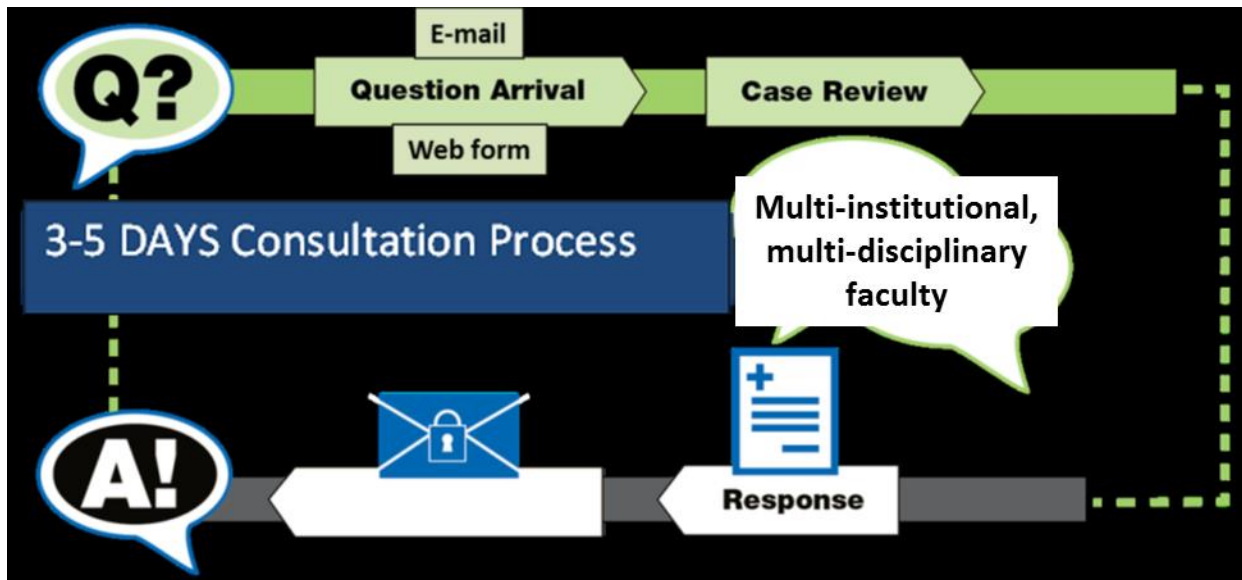


IDeducation@mayo.edu











Common Perceptions/Barriers



Patients prefer in-person interactions with their physicians



Lack of technical knowledge to integrate Telemedicine services



The inability to conduct a physical examination in Telemedicine



Patients' lack of access to reliable internet or cellular access



Lack of confidence in safety and security of virtual care



Patients perceive poor quality of care in Telemedicine visits



Certain subgroups of patients (eg, older patients) are unwilling to embrace Telemedicine

Issues to Ponder

- Patient physician relationship
- Depersonalization
- Inadequate allocation of time
- Reliable infrastructure
 - Widening health disparities
- Privacy
- Confidentiality
- Disclosures





*Thank
You*