

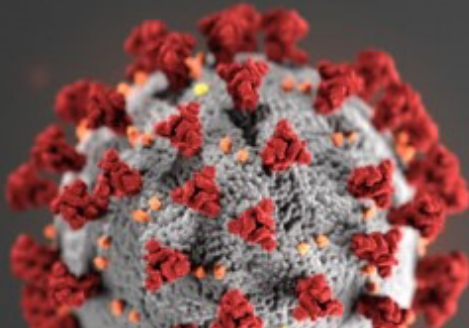
Medication Reconciliation During COVID: Focus on Telemedicine



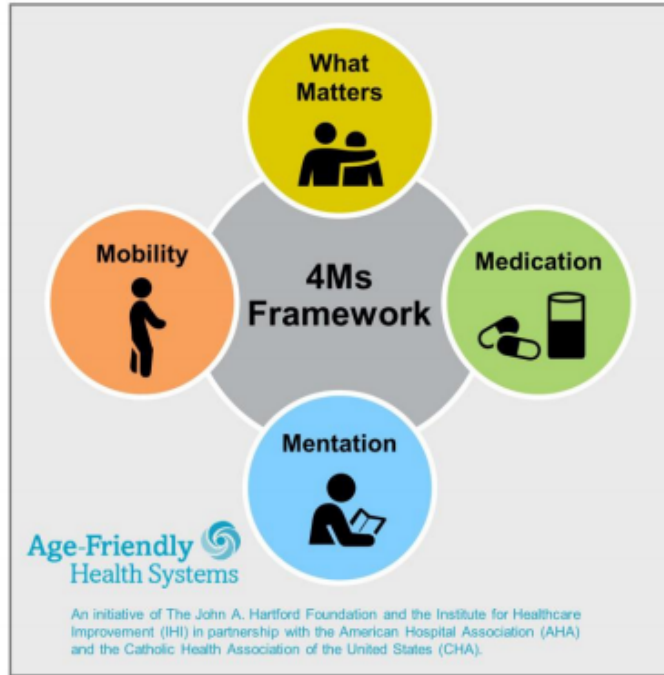
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Background: COVID-19

- COVID-19 is an infectious diseases caused by severe acute respiratory syndrome coronavirus 2 (SARS-COV-2).
- Currently public health strategies are used to mitigate transmission including rapid identification of cases, isolation, contact tracing, and self-quarantine of those exposed.
- No medication has been shown to prevent its transmission and vaccines are currently in trials.
- For prevention of COVID-19, everyone has been advised to frequently sanitize or wash their hands, wear a mask in public or around others, and follow social distancing of at least 6 feet.
- Health care workers, especially those caring for COVID-19 patients, are at elevated risk of exposure.



The 4Ms Framework



1. What Matters? Align care with the patients specific health outcome goals (ie End-of-life care)
2. Medication: Age-friendly medications that does not interfere with the other Ms
3. Mentation: Prevent, identify, and treat depression, dementia, and delirium.
4. Mobility: Ensure that older adults move safely in order to maintain function and do What Matters.

Telehealth and Telemedicine

"During and after COVID-19, telemedicine will play a critical role in the management of disease and improving health outcomes over the long term."

*-Michelle Behm, RN
CEO Sonder Health*

- **Telehealth:** includes a broad range of technologies and services to provide patient care and improve the healthcare delivery system as a whole.
 - Ex: Providing training, conducting administrative meetings, and continuing medical education.
- **Telemedicine:** remote service, the practice of medicine using technology to deliver care at a distance.

Evolution of Telehealth



1924

Foreshadowed telemedicine in depiction of "radio doctor."

1948

Transmission of radiologic images by telephone between West Chester and Philadelphia, Pennsylvania (24 miles).

1959

Clinicians at the University of Nebraska used two-way interactive television to transmit neurological examinations and other information across campus to medical students.

STARPAHC (Space Technology Applied to Rural Papago₂ Advanced Health Care), which tested satellite-based communications to provide medical services to astronauts and to residents of an isolated reservation.

1960 - 1970

Expansion of telemedicine now supported by federal agencies including the U.S. Department of Health, Education and Welfare (now the Department of Health and Human Services).



Telehealth Today



71%

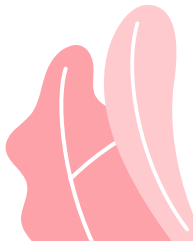
- Patients had considered telemedicine during the early months of COVID

33%

- Increase of telemedicine adoption from the previous year

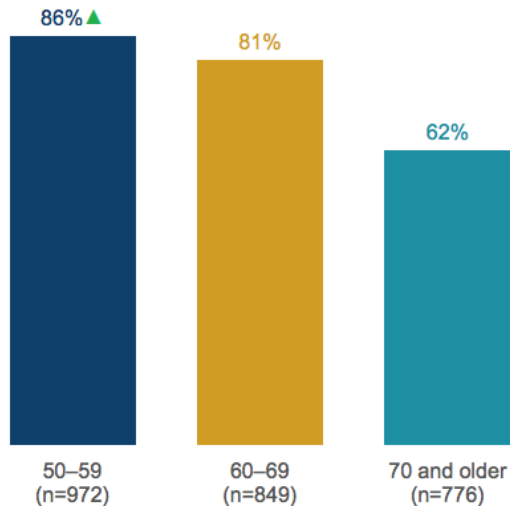
83%

- Of patients expect to use telemedicine after the pandemic resolves



Statistics on Age and Technology

Smartphone adoption rates in 2019
Among adults 50–59, 60–69, and 70 and older



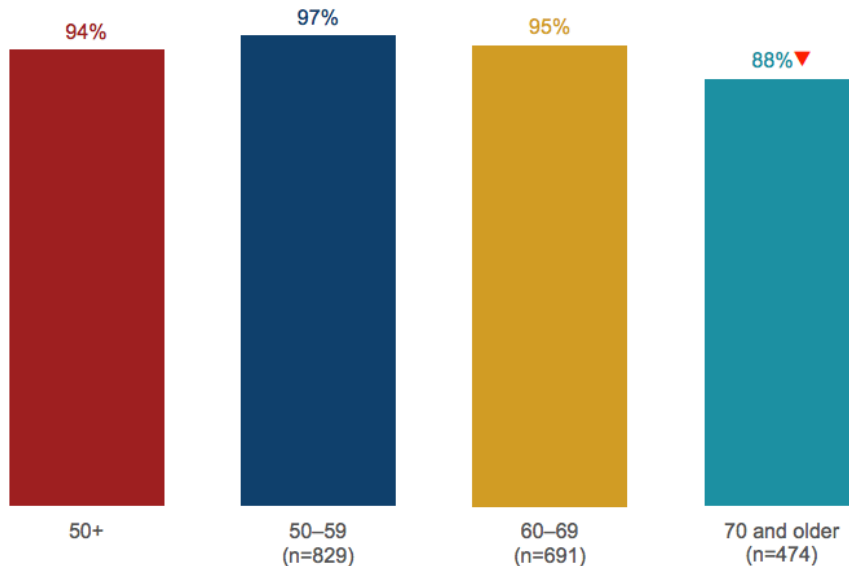
Base: Total Respondents (n=2,597)

Q.TECH1 Which of the following items do you have?

▲ Statistically higher than both groups at the 95% confidence level

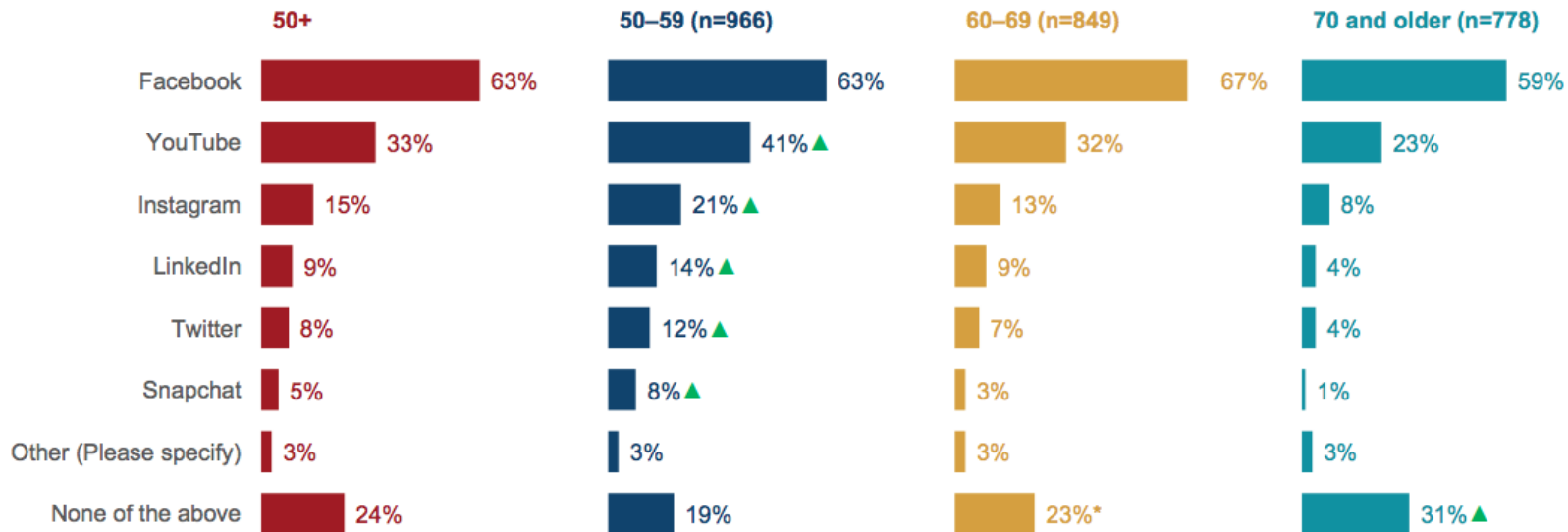
▼ Statistically lower than both groups at the 95% confidence level

Smartphone daily use rates among owners age 50+



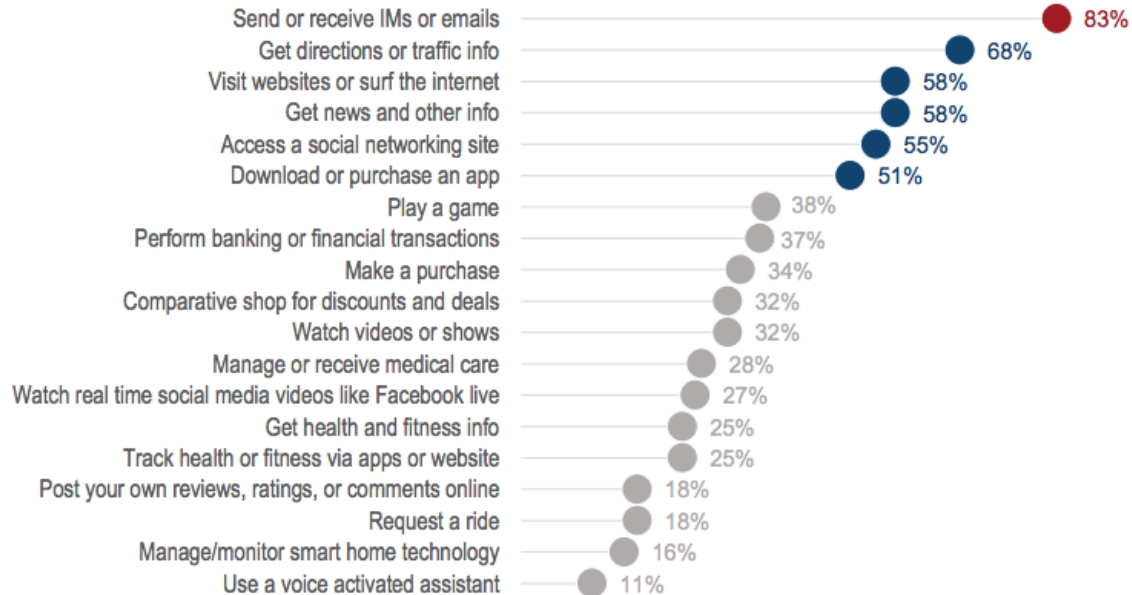
Source: AARP 2020 Tech and the 50+ Survey

Statistics on Age and Technology



Statistics on Age and Technology

Activities performed on a smartphone in the past three months
Among those who own a smartphone



Telehealth and Medicare

- 2014: Expansion of Medicare coverage to include telemedicine to rural and health professional shortage areas.

"Due to COVID-19, doctors and other health care providers can use telehealth services to treat COVID-19 (and for other medically reasonable purposes) from offices, hospitals, and places of residence (like homes, nursing homes, and assisted living facilities) as of March 6, 2020."

- Medicare telehealth services include office visits, psychotherapy, consultations, **medication reconciliations** and certain other medical or health services that are provided by an eligible provider who isn't at your location using an interactive 2-way telecommunications system

Services Provided by Telemedicine

- **Consultations between specialists and PCPs:** Secure video platforms make it easy for a PCP to have access to a wide range of specialists.
 - **Imaging:** X-rays, CT scans, and other types of imaging can be sent from one healthcare professional to another with great ease thanks to the internet.
 - **Patient outreach:** Healthcare providers can communicate with patients by phone, video, text, or the internet.
-

Common Conditions:

- Allergies
- Arthritic Pain
- Asthma
- Colds and Flu
- Diarrhea
- Insect Bites
- Rashes
- Sinusitis
- Sore Throats
- UTI
- And Many More

Telemedicine services can range widely by specialty.

- Surgeon: post-operation check-ins with patients.
- Gynecologist: provide birth control counseling.
- Endocrinologist: live video chats with patients to discuss recent lab results.

Examples of Telemedicine

Telenursing: The utilization of communicative technology to provide remote nursing services. Consultations can be made over the phone to reach a diagnosis and monitor health conditions and symptoms. This is growing in favor due to the low cost and high accessibility of the services to patients, particularly for those in rural regions. It also has the potential to lessen the burden of patients in hospitals because it is possible to address minor ailments earlier and patients can receive advice about whether hospital admission is required.

Telepharmacy: Allows pharmaceutical advice to patients when direct contact with a pharmacist is not possible. This allows medications to be monitored and patients can be offered advice over the phone. Depending on regulations, refill authorization may be given to allow patients to receive regularly medications when required.

Teleneuropsychology: Includes neuropsychological consultation and assessment over the phone with patients that have, or are suspected to have, a cognitive disorder. Standard evaluation techniques are implemented to assess the patient via video technology.

Telerehabilitation: Utilizes technology to communicate and perform clinical assessment and therapy for rehabilitation patients. This usually has a strong visual element with video conferences and webcams commonly used to assist in communicating symptoms and clinical progress.

Examples of Telehealth:

Live Video-Conferencing:

- Most common
- Live video-based conference between a patient and their healthcare provider.
- This type of telehealth is widely used by everyone from physicians in local hospitals to providers who own their own private practice.

Asynchronous Video (Store-and-Forward):

- Electronic delivery of a patient's documented health history outside of real-time, used by a healthcare provider. Commonly used in rural areas when providers are consulting with a specialist in another location. Secure servers and routers are used to store the information and then route it to the proper recipients.
- Secure email platforms may also be used.



Examples of Telehealth:

Remote Patient Monitoring (RPM):

- The collection of a patient's health data from a patient or resident in one location that is then electronically sent to a healthcare professional (provider, nurse, etc.) for monitoring and review. RPM is especially helpful in senior living areas in order to prevent falls and keep a watchful eye on residents' vitals.



Mobile Health:

- The use of smart devices (smartphones, tablets, etc.), and the health-based software apps developed for these devices, that supports continued healthcare. Many health-based apps exist now and can monitor everything from a diabetic patient's blood sugar level to one's daily water intake. These apps help to encourage healthier lifestyle behaviors and also (if designed to) can integrate with a patient's personal health records.

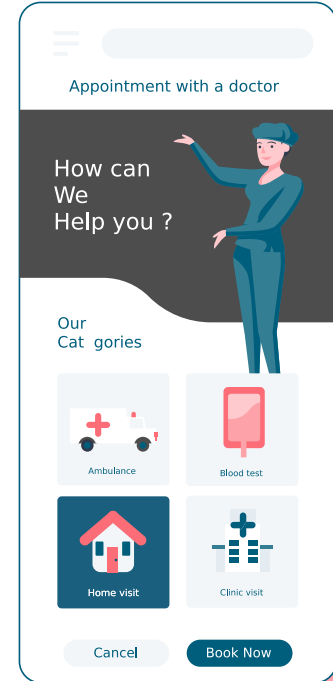


Advantages of Telemedicine

- Eliminates commute time
- Helps to bring healthcare to rural areas with limited health care options
- Increasing patient engagement by allowing to connect with their doctors more frequently
- Healthcare providers can communicate and share information with each other more easily
- **Better quality of patient care**- easier for providers to follow-up with patients

In the Geriatric Population:

- Reduce the burden and cost of certain travel expenses- patients with mobility issues or no transportation
- Reduce the number of unnecessary hospital visits
- Reduce the stress put on at-home caregivers
- Improve overall patient satisfaction



Barriers and Limitations of Telemedicine

- Relies on internet connection or phone reception to communicate
 - Some patients may not be able to communicate by electronic means
- Cannot see patient's body language for phone communication
- No in-person interaction with the patient
- Chance of data inaccuracy for patient-reported data
- "Easier" for the patient or the healthcare provider to avoid conversation over the phone



Tools and Platforms for Communications

Tools:

- Telemedicine Carts
- Telemedicine Kiosks
- Smart phone / Telephone
- Computer with webcam
- Integrated healthcare software

Apps: (HIPAA Compliant)

- Zoom for Healthcare
- Skype for Business
- Microsoft Teams



Medication Reconciliation Process

The process of identifying the most **accurate** list of all medications that a patient is taking.

PREP-WORK

Go into patient's EMR. Read admission notes, patient's status, PMH, allergies, existing medication list (starting point).

INTERVIEW

Sources of Information: patient, family member, caretaker, pharmacy, etc
Introduce yourself, why you are calling, ask open-ended questions
Ensure that patient has med list and/or medications with them currently
Questions should answer: indication, dosing, adherence, side effect
Ask about discontinued medications- when, why, was it MD directed?
Don't forget to thank the interviewee for their time

RECONCILE

Reconcile Med List: highlight changes- dosing errors, discontinued meds, or meds that patient is non-adherent to.

UPDATE

Update the medical record.

Telemedicine and Med Recs in Action

- In August 2018, New York-Presbyterian/Weill Cornell Medical Center incorporated telehealth to conduct medication reconciliations in the emergency department.
- Pharmacy technicians or pharmacy interns conduct virtual consultations with patients about their medications before they see a doctor
- Nurses or patient navigators wheel a cart to patients at the bedside with a monitor that displays a live feed of the pharmacy tech or intern. Consultations usually last 3-5 minutes.

Outcomes:

- Reduced travel time to perform med rec. More time for the pharmacist to review the list for ADR/DDIs.
- Increases patient safety as the doctor will have the medication list prior to consult.
- The program expanded to New York-Presbyterian's Columbia, Queens and Allen hospitals. It's also available to surgery and endoscopy patients at outpatient David H. Koch Center.
- The program has increased med recs by as much as **126%** at some campuses.



Supporting Literature for Telemedicine

Virtually Perfect? Telemedicine for COVID-19

- A perspective article from NEJM
- Goes over many telemedicine methods that hospitals already have in place and explains how they are being used in the pandemic

The Role of Telehealth During COVID-19 Outbreak: A Systematic Review Based on Current Evidence

- A systematic review that searched for studies clearly defining any use of telehealth services in all aspects of healthcare during the COVID-19 outbreak.
- Concluded that telehealth has the potential to solve many of the key challenges in providing healthcare during the pandemic. Telehealth can help healthcare providers minimize physical contact, minimize the risk of COVID-19 transmission, and give continuous care for patients.

Supporting Literature for Telemedicine

The Application of Telemedicine to Geriatric Medicine

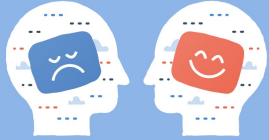
- A comprehensive review of literature pertaining to the application of telemedicine in geriatric medicine and relevant related sub-specialties was undertaken.
- The source explored the application of telemedicine in inpatient management, community care, and ambulatory care geriatrics.

Conclusion:

- In chronic disease management, there are many reports of improved efficacy and patient satisfaction when compared with usual care.
- It seems likely to improve clinical relationships, treatment efficacy and productivity, but further evaluation in the elderly is needed.
- In areas where geriatrician expertise is currently unavailable, telemedicine has the capacity to allow remote consultation



Tips for Medication Reconciliation



Have an open mindset:

- Every situation is different
- Be creative



Create a plan:

- Review patient information (age, pmh, etc.)
- Identify sources of medication (prescriber / pharmacies)
- Identify home medications
- Check on patient status (stability/mental status/language barriers)
- Identify possible contacts if you are unable to reach patient (family, friends, caregiver)



Choose the most effective way to contact patient:

- Phone call
- Video conference (Zoom, Skype)- HIPAA compliant source

*Some situations may allow you to contact patient initially and schedule an appointment once a preferred preference has been agreed upon.

Telehealth Resources

American Academy of Family Physicians – COVID-19: Telehealth Tools

- Provides a toolkit to help your facility build a telehealth program
- Shows a list of commonly used telehealth platforms
- Has a list of practice guidelines for telemedicine
- <https://www.aafp.org/family-physician/patient-care/current-hot-topics/recent-outbreaks/covid-19/covid-19-telehealth.html>

Telehealth Resource Centers

- <https://www.telehealthresourcecenter.org/>



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Med Rec Skit



May

83 year old female,
independent and lives alone.
PMH: HTN, HLD, DM, Acid
Reflux



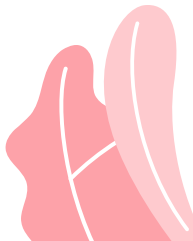
Tyler

May's son and
caretaker.



Joe

Pharmacist completing
the medication
reconciliation.



The background features several large, light blue, organic, wavy shapes that resemble water droplets or soft clouds, scattered across a white background. These shapes are positioned around the central text, with some overlapping the edges of the frame.

THANK YOU

Do you have any questions?