



CARDI•OH

Ohio Cardiovascular and Diabetes Health Collaborative



In partnership with:



Cardi-OH ECHO

What's New in Cardiovascular Prevention? A Series of Case-Based Discussions

October 13, 2022

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Disclosure Statements



- The following speakers have a relevant financial interest or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of their presentation:
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Person-Centered Language Recommendations



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The ADA and the APA recommend language that emphasizes inclusivity and respect:

- **Gender**: Gender is a social construct and social identity; use term “gender” when referring to people as a social group. Sex refers to biological sex assignment; use term “assigned sex” when referring to the biological distinction.
- **Race**: Race is a social construct that is used broadly to categorize people based on physical characteristics, behaviors, and geographic location. Race is not a proxy for biology or genetics. Examining health access, quality, and outcome data by allows the healthcare system to assist in addressing the factors contributing to inequity.
- **Sexual Orientation**: Use the term “sexual orientation” rather than “sexual preference” or “sexual identity.” People choose partners regardless of their sexual orientation; however, sexual orientation is not a choice.
- **Disability**: The nature of a disability should be indicated when it is relevant. Disability language should maintain the integrity of the individual. Language should convey the expressed preference of the person with the disability.
- **Socioeconomic Status**: When reporting SES, provide detailed information about a person’s income, education, and occupation/employment. Avoid using pejorative and generalizing terms, such as “the homeless” or “poor.”
- **Violent Language**: Avoid sayings like ‘killing it,’ ‘pull the trigger,’ ‘take a stab at it,’ ‘off the reservation,’ etc.

Advances in Telehealth

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Learning Objectives



1. In general terms, describe the recent growth in telehealth for diabetes care and related conditions.
2. Describe how to prepare patients for a telehealth visit.
3. Summarize the evidence for the benefits of telehealth in cardiovascular prevention.

What is “Telehealth”?

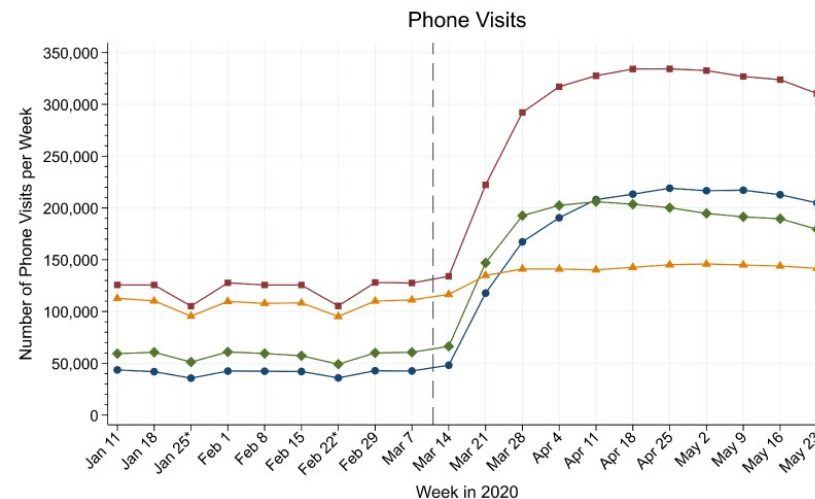
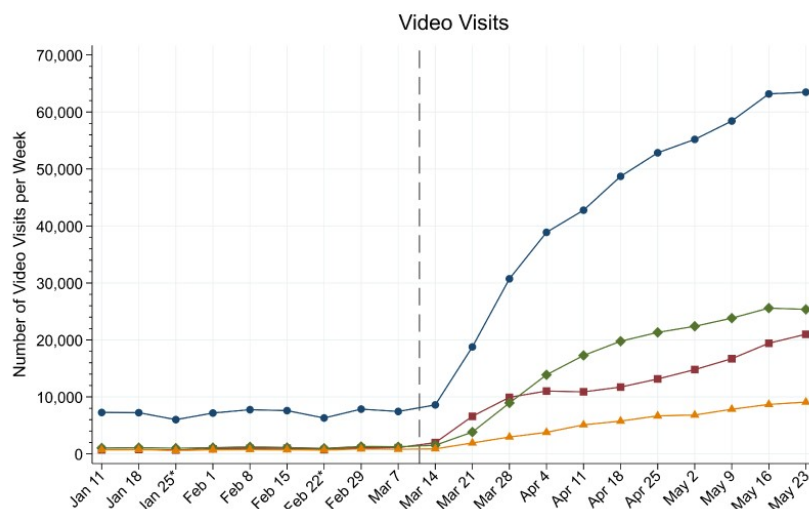


- Telemedicine / telehealth / virtual care / e-health /m-health
- Synchronous, real-time communication
- Both an audio and visual component

- With a patient and a medical professional
- In separate locations, connected by technology

- <https://www.jmir.org/2020/3/e16791/>
- <https://pubmed.ncbi.nlm.nih.gov/34306296/>

Rise in Telehealth VA—weekly visits January-April 2020



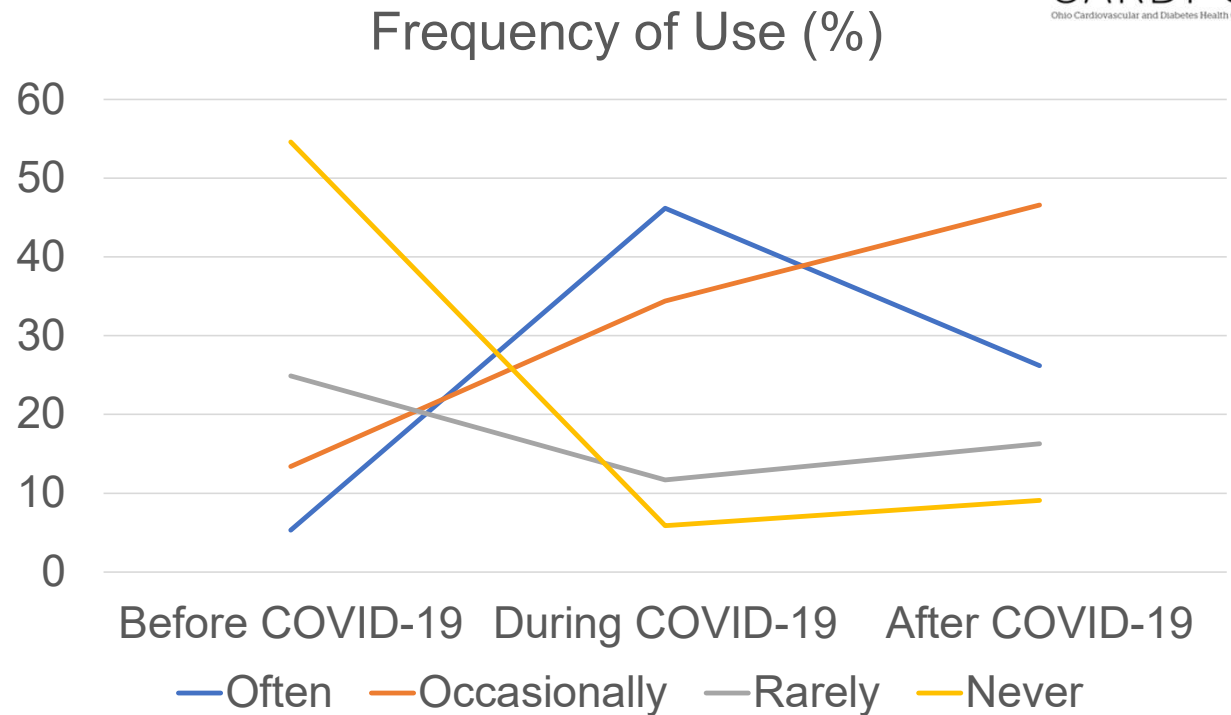
● Mental Health
 ■ Primary Care
 ◆ Speciality
 ▲ Other*

*Other includes social work, and some other non-physician visits
 Source: Veterans Affairs Virtual Access QUERI
 NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Primary Care Physician Survey



- Survey of 625 PCP
- Conducted by Dynata
- Sample approximates population benchmarks
- May 14-25, 2021



Telehealth Expansion was Limited



- [Trilliant Health report](#)
- 56 million telehealth patients from all-payer claims database between 3/1/2020-11/30/2021
 - Only 25% of Americans used telehealth
 - 80% of patients received only in-person care
 - 75% of physicians and 60% of patients said telehealth is more convenient for consumers
 - Only 36% of physicians find it more convenient

Considerations for use of Telemedicine in Care of Patients with Diabetes



- Cultural competency
- Digital literacy
- Physician practice
- Psychosocial
- Systemic: access to cellular or internet, lack of interoperability

<https://www.aafp.org/pubs/afp/issues/2022/0300/p281.html>

Pilot Study on Telemedicine Readiness in Seniors



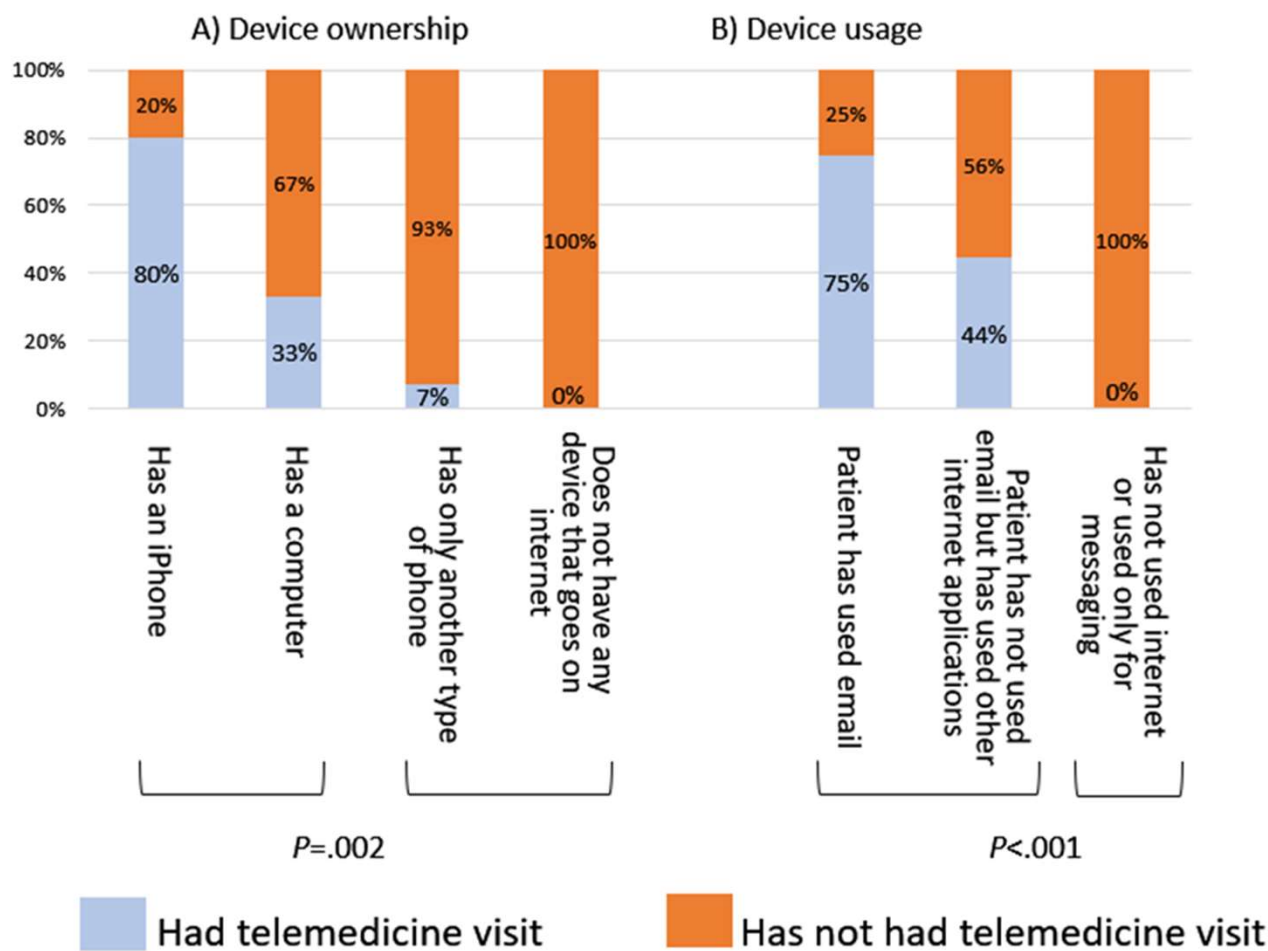
- 30 primary care patients (aged 65-81) with a chronic condition
- February - June 2021
- Survey during an in-person visit at UH
- 10 questions on devices, digital skills, telemedicine experience

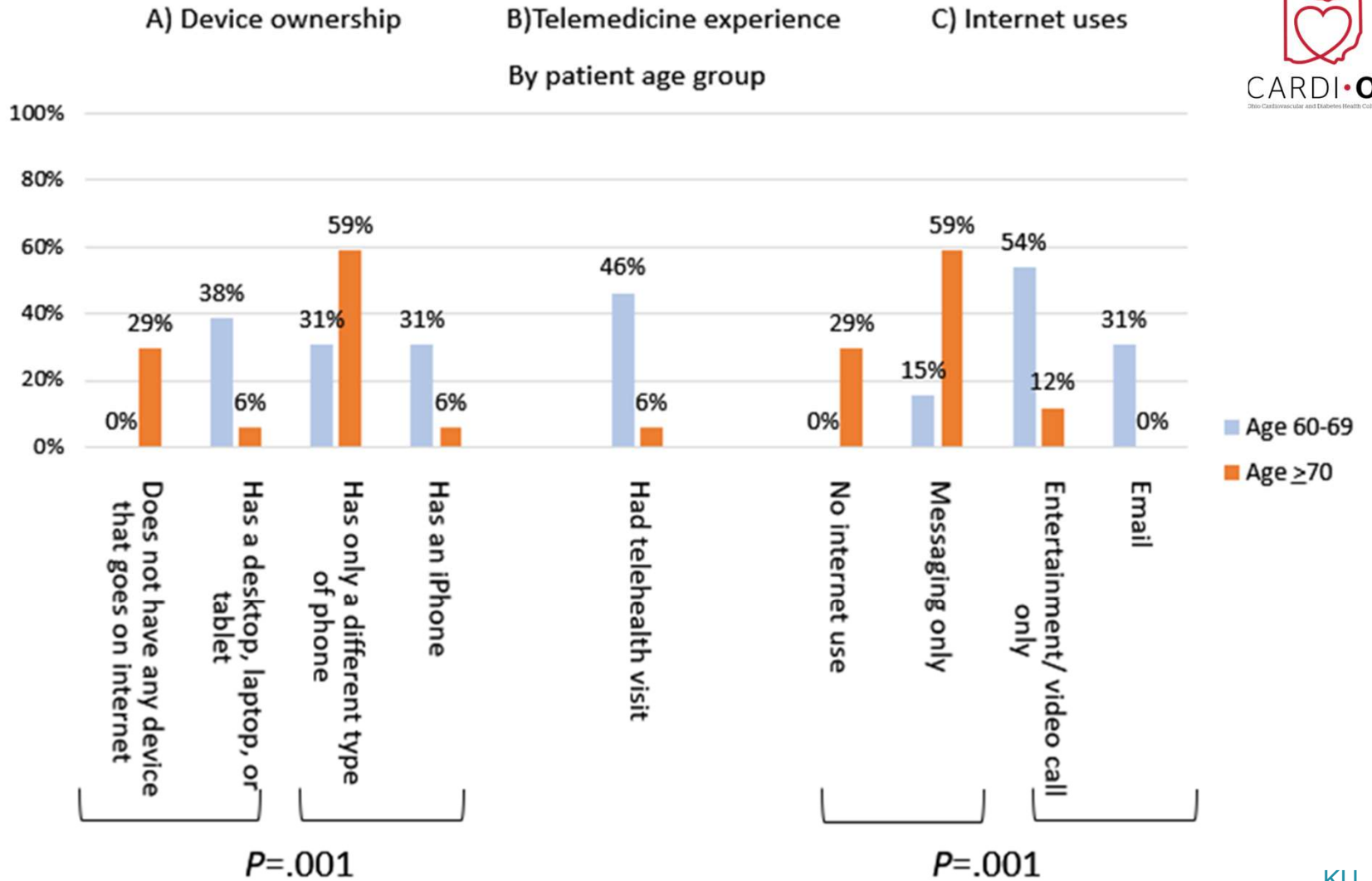
How they use the internet

- Telemedicine visit 23%
- Video calls 30%
- Entertainment 17%
- Email 13%
- Messaging only 40%
- Never use the internet 17%
- Work, shopping, banking 0%

Device Ownership

- iPhone 17%
- Other smartphone 47%
- Computer/tablet 20%
- No device 17%
- >2 devices 13%





Overall Findings



- Patients liked that they could avoid Covid and skip the drive
- They were most concerned about losing their connection with their doctor and care quality
- Adults over age 70 are least comfortable with technology
- Cannot assume patients have or can use an internet-capable device

Traits of Successful Telemedicine



- Heterogeneity makes it difficult to draw broad conclusions
- Self-monitoring increases intervention success
- Different modalities
- Videoconferencing is preferred but relatively understudied
- For weight loss: portion control, increased PA, relapse prevention

1. <https://www.jmir.org/2020/3/e16791/>
2. <https://pubmed.ncbi.nlm.nih.gov/34306296/>

Virtual Care Preparation



Choose well-lit quiet, private location

Have camera held steady

Wear comfortable clothes. Be ready if there is a body part you need to show the provider

Focus on the appointment. Don't take an appointment with TV on or in the car

Have questions, medication, and self-monitoring devices ready

Close other apps on phone/computer

Charge device before appointment

Check internet connection

<https://telehealth.hhs.gov/patients/preparing-for-a-video-visit/>



Telehealth Team



- **Schedulers:**
 - ✓ Review expectations
 - ✓ Provide logs or device-specific instructions
 - ✓ Contacts the patient to schedule follow-up
- **Nurses/Medical Assistants:**
 - Pre-call: reduces failed video visits by half¹
 - ✓ Tech check
 - ✓ Medication reconciliation
 - ✓ Updates the chart with standard elements
 - ✓ Obtains glucose monitoring data
 - Rooming:
 - ✓ Tech check
 - ✓ Keeps informed of the status in the queue

Status	Patient	Info
○	Suzie Q	Send link to 614-123-4567, 1 st attempt 1/2/23, 2 nd attempt 1/3/23
●	Cardi O	Send link to 890-123-4567; patient to send log via portal
●	Echo T	Send link to cardio@yahoo.com . Download in Media tab
●	Tele H	Send link to 987-654-3210; sent invitation to link to clinic

- Not contacted
- Roomed, need data
- Rooming complete
- Visit complete

Obtaining Glucose Data

- A formal process for implementing remote glucose monitoring within a clinic is recommended^{1,2}
- Consider focusing on 1 or 2 devices or platforms

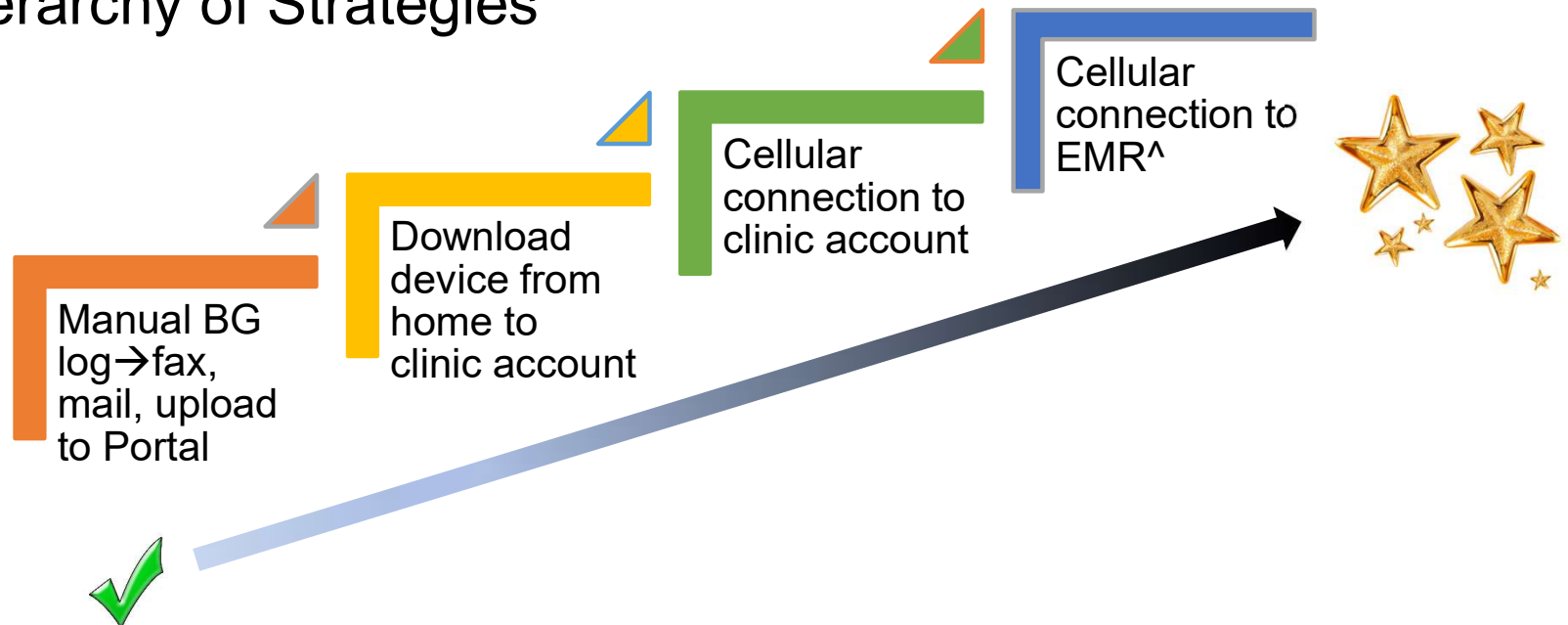
Step	Role	Responsibilities
Set-up/training	CDCES*, PharmD, other trained staff	<ul style="list-style-type: none"> • Assess readiness/barriers • Set up apps/connect to clinic • Document how patient is connected • Maintain clinic's device portals
Device download	CDCES*, PharmD, nurse/MA	<ul style="list-style-type: none"> • Retrieve glucose monitoring reports • Upload to EMR • Communicate to provider

*CDCES: Certified Diabetes Care & Education Specialist

1. Isaacs D, Cox C, Schwab K, et al. Diabetes Educ. 2020;46(4):323-34
 2. Gusdorf et al. J Telemed Telecare. 2021;1357633X211008786

Obtaining Glucose Monitoring Data

Hierarchy of Strategies



[^]Not widely available

Telehealth: Benefits in Diabetes Management



- Telehealth interventions improve A1C, body mass index, quality of life^{1,2}
- Systematic review (17 studies): best A1C when used in conjunction with **automatic mobile transmission of data** or real-time feedback to patients³

Table 2. Subgroup Analysis of Mean Difference of Pre-Post reduction in Hemoglobin A1c (%) Between the Telehealth and the Comparison Groups

SUBGROUPS	NO. OF SUBJECTS (STUDIES)	MEAN DIFFERENCE	I ² , %	P-VALUE FOR HETEROGENEITY IN SUBGROUPS	P-VALUE FOR HETEROGENEITY B/W SUBGROUPS
Transmission methods					<0.001
Automatic transmission	558 (5)	-0.57 (-0.60, -0.54)	94	<0.001	
Automatic mobile transmission	473 (3)	-0.61 (-0.65, -0.56)	94	<0.001	
Internet/web	1,181 (7)	-0.24 (-0.25, -0.23)	99	<0.001	
Feedback methods					<0.001
Real time	479 (3)	-0.77 (-0.82, -0.72)	93	<0.001	
Asynchronous	1,077 (8)	-0.23 (-0.24, -0.22)	98	<0.001	
Combination	656 (4)	-0.55 (-0.57, -0.52)	98	<0.001	
Lifestyle modification					<0.001
PA + nutrition	891 (9)	-0.48 (-0.52, -0.45)	96	<0.001	
PA + nutrition + medication management	1,173 (5)	-0.28 (-0.29, -0.27)	100	<0.001	
Nutrition + medication management	148 (1)	-0.70 (-0.77, -0.63)	-	-	

1. De Groot et al. World J Diabetes. 2021;12(2):170–97
 2. Eberle C, Stichling S. J Med Internet Res. 2021;23(2):e23244
 3. Michaud et al. Telemed J E Health. 2021;27(2):124–36

Cardiovascular Risk Factors



- Systematic review¹
 - Few studies comparing synchronous telemedicine versus in-person visits.
 - However, in the primary care setting, telemedicine was not inferior to in-person visits for diabetes, hypertension, and hyperlipidemia



Thank you!

Questions/Discussion