

HOW TO CHOOSE TELEHEALTH TECHNOLOGIES

WHEN CHOOSING TELEHEALTH TECHNOLOGIES FOR YOUR PUBLIC HEALTH PROGRAM, FIRST CONSIDER:



What are you hoping to achieve with this program?
Are you trying to scale up or maintain an existing program?
What needs will the device(s) have to meet?



Where will the telehealth technology be located and who will it connect to?



What patient population are you planning to serve and what technology will work best for them?



What information is required for healthcare providers to meet the targeted needs of patients and in what time frame?



Note what capabilities your facilities and participants have before determining which telehealth technologies to purchase.

Include specifics such as whether the facility has wired or wireless connection.

Telehealth technologies can transmit data in various ways:

- Encrypted internet connections
- Major broadband networks
- High-speed telecommunications lines
- Private point-to-point broadband connections
- Patient monitoring centers
- Single-line telephone and video lines

RESEARCH: EFFICIENT APPROACHES

Research and compare features of devices and become familiar with their functionality. Reach out to your colleagues and/or your regional [telehealth resource center \(TRC\)](#). Expensive does not always mean better! Some issues can be addressed with a laptop and a consumer-grade webcam.

Test before you buy!



Research and select a vendor(s) with knowledge of the telehealth industry, then obtain devices for an in-person comparison.

- Assure vendors provide necessary support, any needed updates, maintenance, or installation, and meet privacy requirements for telehealth equipment. Talk to other healthcare information technology (IT) leaders and legal counsel before making purchasing decisions.



Test the devices and compare results, evaluating and narrowing your choices until you have decided on purchasing the remaining device.



Engage key stakeholders in hands-on testing of the device.



Once your team has determined which device is the most appropriate for your needs, purchase the equipment and install the telehealth technologies, implementing a support and training plan with them.

TO GET STARTED,

THERE ARE FOUR MAIN TELEHEALTH MODALITIES TO CHOOSE FROM:

LIVE VIDEOCONFERENCING (SYNCHRONOUS):



Live, two-way interaction between a person and a provider using audiovisual telecommunications technology.

COMMON TECHNOLOGIES

- Video devices: videoconferencing units, peripheral cameras, and web cameras.
- Display devices: tablets, laptops, desktop computers, large monitors or TVs, and specialized telemedicine carts.

COMMON USES

- Cost-effective care for patients in prisons, correctional facilities, or nursing homes.
- Connects emergency providers with specialists who would be otherwise inaccessible.
- Clinical encounters, administrative meetings, education.

STORE-AND-FORWARD (ASYNCHRONOUS):



Transmission of recorded health history through an electronic communications system to a provider, usually a specialist, who uses the information to evaluate the case or render a service outside of real-time.

COMMON TECHNOLOGIES

- Peripheral devices: stethoscopes, otoscopes, dermoscopes, and other equipment that transmits images and data for diagnosis.
- Medical information to be shared: patient data, photos, x-rays, MRIs, and even video-exam clips.

COMMON USES

- Physicians at rural hospitals or in remote locations can forward x-rays, MRIs, and photos to specialists at major medical centers for review.

REMOTE PATIENT MONITORING (RPM):



Personal health and medical data collection from an individual in one location via electronic communication technologies is transmitted to a provider in a different location for use in care and related support.

COMMON TECHNOLOGIES

- Devices: Internet connected scales, blood pressure monitors, glucometers, and others that transmit vital signs to clinicians.
- Data collected: weight, blood pressure, blood sugar, blood oxygen levels, and heart rate.

COMMON USES

- Facilitating healthy aging from the home setting.
- Management of infectious disease as a method to prevent the spread of disease (E.g., utilized with Ebola patients).
- Monitoring and care for high-risk patients and patients with chronic disease (E.g., self-measured blood pressure (SMBP) monitoring).

MOBILE HEALTH (MHEALTH):



Healthcare, public health practice and education supported by mobile communication devices such as cell phones and tablet computers.

COMMON TECHNOLOGIES

- Devices: smartphones, portable monitoring sensors that transmit information to providers, and mobile applications that are downloaded onto devices.

COMMON USES

- Reminders for medication, individual data collection, or booking appointments.
- Large-scale alerts about disease outbreaks or natural disasters.
- Primary care delivery virtually during and in the aftermath of disasters.
- Additional uses: monitor diabetes, manage diet, detect stress, track sleep patterns, or track fitness.

MODALITY

EXAMPLE

LIVE VIDEOCONFERENCING (SYNCHRONOUS):



GEORGIA

Counties in Georgia have telecommunication networks that allow them to provide programs such as nutrition counseling, breastfeeding education, and HIV consults to rural clients through synchronous videoconferencing. The Georgia Department of Public Health is working with these networks to provide telemedicine services including dental care, asthma clinics, monitoring of high-risk pregnancies and more. This public health network aims to increase access to care for its clients, particularly in rural areas.

STORE-AND-FORWARD (ASYNCHRONOUS):



EDOT

Electronic Directly Observed Therapy (eDOT) for Tuberculosis (TB) is a cost-effective alternative method of administering Directly Observed Therapy (DOT), which promotes full-length treatment adherence for individuals with TB. Asynchronous eDOT allows individual to remotely record themselves ingesting medication and send documentation to their healthcare provider, saving both the providers' and patients' time and finances.

REMOTE PATIENT MONITORING (RPM):



NEW CANAAN TELE-HEALTH WELLNESS PROGRAM FOR SENIORS

The New Canaan Tele-Health Program for seniors facilitates healthy aging in place through remote patient monitoring and health promotion education. Telenurses provided by the town of New Canaan remotely monitor the vital signs of home-based elderly clients and analyze weekly recordings of the client's physical activity via Fitbit, along with conducting bi-weekly video visits. The program focuses on reducing costs and improving the quality of care, allowing seniors to receive effective services in the comfort of their home.

MOBILE HEALTH (MHEALTH):



TEXT4BABY

Text4baby is a free mobile phone texting service that provides support for pregnant women and new moms. Text messages scheduled for the due date or baby's birthday are sent out three times a week with relevant health information such as nutrition tips, signs of labor, health insurance information, and appointment reminders. In addition to the texting service, there is a Text4baby app with further information about pregnancy, development, childcare tips, and other topics.

ADDITIONAL RESOURCES:

[ASTHO Telehealth Resources](#) • [Center for Connected Health Policy](#)

[National Telehealth Technology Assessment Resource Center](#) • [Regional Telehealth Resource Centers](#)

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