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Considerations When Using Telemedicine As the Advanced Practice Registered Nurse

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A B S T R A C T

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Accessibility to health care is crucial to management of chronic and acute conditions. Although the severe acute respiratory syndrome coronavirus 2 pandemic significantly impacts the issue of access to health care, with the introduction of Waiver 1135, telehealth has become a positive strategy in increasing safe access to health care. This report addresses considerations to take into account when advanced practice registered nurses use telehealth to facilitate access to care.

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Accessibility to health care is crucial to management of chronic and acute conditions. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic significantly impacts the issue of access to health care; however, telehealth is a positive strategy to provide access to health care.¹ Telehealth is not a new practice, but services for its recipients rapidly expanded with the introduction of Waiver 1135 by the Centers for Medicare and Medicaid Services with the onset of coronavirus disease 2019 (COVID-19).¹ The expansion of many health systems' telehealth platforms allows for safe access to quality care without exposure to COVID-19 to the patients or the health care team. This report addresses considerations to take into account when advanced practice registered nurses (APRNs) use telehealth to facilitate safe access to quality health care.

Brief Introduction of Telehealth

Advances in telehealth strongly connect to the developments in technology and communication. In the 1960s through the 1990s, governmental agencies, such as the National Aeronautics and Space Administration, made improvements in telecommunications.^{2,3} One of the most significant enhancements of technology was in the 1990s with the introduction of the internet, making information more accessible.³ Developments in satellites, computers, and network technologies have increased the speed of transmission of medical information and communication.

Telehealth was used to deliver health care in rural and urban areas before the pandemic. However, during the COVID-19 pandemic, telehealth has been expanded in many health systems across the nation, both inpatient and outpatient, to deliver health care. Telehealth allows for same-day and chronic care

appointments to increase safe access for high-quality care while avoiding exposure to infectious agents such as SARS-Cov-2.¹

Telehealth is the use of a specific method for health services from a distance to communicate with a patient. There are 4 methods of telehealth: synchronous or live video, asynchronous or store-and-forward, remote patient monitoring, or mHealth, which incorporates all of the previous 3 (Table).²⁻⁴ Telemedicine is one type of telehealth, and this term is used when providing medical care from a distance by using technology.² Medical care can occur from provider to patient, provider to provider, medical consultations, and advanced home health.² One example of medical care from provider to patient with a technological device is when an APRN might perform an interactive video visit. Using a smartphone or computer with a camera to interact with a patient positive for COVID-19, symptomatic care can be provided without the risk of exposure to the APRN or the health care team. Although differences exist between telehealth and telemedicine, for the purpose of this report, *telehealth* will be used from this point forward.

Telehealth and the APRN

APRNs provide primary and acute care. There are 290,000 APRNs as of August 2020, and 89.7% are certified in primary care.⁵ Telehealth, as an addition to APRNs practices, is improving access to care for remote, urban, and vulnerable populations by naturally eliminating barriers created by in-person visits.^{6,7} For example, while a grandma is caring for her napping grandchildren, she can attend her primary care appointment via video, telephone, or message.

A survey conducted by the American Association of Nurse Practitioners between July 28 and August 9, 2020, showed that 63% of approximately 4,000 APRNs who responded to the survey

Table
Methods of Telehealth^{2,3,4}

Method	Definition	Example
Synchronous	Health care delivery via a secure real-time live video and the health care provider and the patients are both present.	The APRN and the patient set up a telehealth visit. During the meeting, the APRN and the patient can see and talk to each other.
Asynchronous	Also called store-and-forward. The patient's data are sent to a health care provider who can assess the data at a later time. Usually with a specialist.	APRN in primary care consults a dermatologist about a patient's skin condition.
Remote patient monitoring	The use of technological devices to record health information in one location and review at a different time by another provider in a different location	Heart rate or blood pressure monitors. Used by patients to record and monitor their heart rates and blood pressure to transmit to an APRN or other health care provider.
mHealth (mobile health)	Providing management of health care and public health information via mobile devices. Also, may include general information about disease outbreaks and educational information.	mHealth often used in the management of chronic conditions such as diabetes. Another example is the use of a smartphone ultrasound in diagnostic situations.

APRN = advanced practice registered nurse.

indicated that they continue to transit patients from in-person visits to telehealth care.⁸ Waiver 1135 was reported by 76% of the APRNs as the most beneficial action in facilitating patient access to health care provided by APRNs.⁸ Although telehealth is considered impersonal and incomplete care by some providers, it is emerging as a cost-effective, convenient, high-quality alternative of care to the in-person visits.² APRNs' robust increase in the use of telehealth visits is a safe, convenient, cost-effective way to meet a population's necessities.

Integration of Telehealth

There are several considerations when integrating telehealth into practice. APRNs need to be familiar with the following considerations to provide the best care possible. A discussion of these considerations ensues below.

Telehealth Etiquette

There are techniques for completing a telehealth visit. Before a telehealth visit via telephone or video, establish a Health Insurance Portability and Accountability Act (HIPAA)-compliant environment by providing privacy in an examination room or private office. Privacy also eliminates distractions such as office noises and personnel walking in the background.^{9,10} The provider needs to make others in the office aware of the upcoming telehealth visit by placing a "telehealth visit in progress" sign on the door. If done by video, it is also essential for the provider to be aware of the camera's position, maintain eye contact, and display engagement in the encounter by looking and leaning into the camera.¹⁰ Removing clutter from the camera field and wearing conservative clothing will minimize distractions during the encounter and are considered necessary modifications during a video visit.¹⁰ The provider needs to ensure that any necessary documents are present.

Once the visit is ready to commence, secure the patient's consent for a telehealth visit.¹⁰ Verify patient identifiers, such as name, date of birth and address, to ensure the correct patient is present. If by video, introduce all parties present for the visit, and the provider should ascertain that they are visible on camera throughout the telehealth encounter.¹⁰ When conducting a telephone visit, inquire who is in the room and ask for introductions of all parties present.

The provider reviews the chief concern for the visit with the patient and caregiver and encourages questions throughout the visit, especially from the patient. It is important to remember to speak clearly and directly into the device, muting when not speaking, and remind everyone to speak one at a time.¹⁰ Avoid negative behaviors such as looking down or at notes because it appears as distracted and not engaged in a video visit.¹⁰ In both a telephone and video visit, the provider will wrap up and summarize the visit by answering final questions, ensuring that the patient

is agreeable to the plan of care, and scheduling a follow-up encounter. After the telehealth visit, the provider turns off or secures the equipment and reports any malfunctions.^{10,11}

Equipment

When preparing for the telehealth visit, it is essential to check the equipment, practice a visit, know how the equipment works, and troubleshoot common problems. Preparatory measures will help the encounter proceed smoothly and relieve both the provider's and the patient's anxiety.¹¹ Logging in as a patient is helpful. The provider can check camera placement, the background, practice a visit as a patient, and learn how to troubleshoot the system from a patient's perspective.

The patient's home needs access to the internet and a technological device to conduct a video telehealth visit.¹² Currently, 53.6% of the global population uses the internet.¹³ Of the American population, 96% own variations of cell phones, 81% own smartphones,¹⁴ 75% own laptops or desktops, and 50% own tablets.¹⁴ Although many Americans have internet, the elderly, lower socioeconomic status, and less educated are least likely to have internet in their homes.¹⁵ For patients without internet or electronic devices, telehealth visits by telephone are an excellent option during the COVID-19 pandemic.

Credentialing and Legislation

Implementation into practice can be difficult due to the rules and regulations over patient-provider encounters and state laws over APRNs practice. While APRNs hold national certification, they can only treat patients in the state where they obtain licensures as registered nurses.¹⁶ For example, APRNs practicing in Ohio cannot use telehealth to treat patients who reside in Iowa, Arizona, Montana, North Dakota, or any other states without obtaining individual licensure in each state.¹⁶⁻¹⁹

The APRN Compact, originally developed in 2015 and adopted in August 2020 by the National Council of State Boards of Nursing (NCSBN), can remove the obstacle of needing individual state licensures for APRNs.¹⁹ APRNs could provide care regardless of the provider's and the patient's location with a multistate license. For the APRN Compact to become a multistate license, it requires at least 7 states to vote it into law to practice in those states.¹⁹ The combination of telehealth and multistate licensure would allow APRNs to practice across state lines and provide safe, quality care to rural and underserved populations. For example, an APRN living in Ohio could treat a patient living in a rural area of Michigan, but currently cannot due to the licensure restrictions.

One exception is the health care providers including APRNs who work for the Veterans Affairs (VA) hospitals. In 2018 the Department of Veteran Affairs published its final rule to ensure that VA health

care providers can provide care using telehealth regardless the VA provider's and VA patient's state locations.²⁰ In other words, APRNs and other health care providers who work in the VA system can provide safe, quality health care to veterans in any United States territories via telehealth.²⁰

The concept of a multistate practice can significantly increase health care access for underserved, vulnerable, rural populations. However, the APRN Compact, as of August 2020, has zero states with multistate licensure.²⁰ APRNs are encouraged to work with their professional organizations and write to their legislatures to support and vote for the APRN Compact multistate license.

Financial Considerations

COVID-19 plays a significant role in influencing telehealth use in health care. As of March 6, 2020, and throughout the SARS-Cov-2 pandemic, telehealth video visits are reimbursed equally to in-person visits.¹ The telehealth visits can occur in the patient's home and any health care facility.¹ Before COVID-19, the patient had to be in an office, hospital, or skilled nursing facility for a telehealth visit. Also, with free apps like Doximity, Zoom, and Skype replacing the original expensive technology, telehealth is becoming cost-effective.²¹

Originally, telephone visits were reimbursed at a lower rate than video visits at \$14 to \$43 and then increased to \$46 to \$110 during the pandemic.¹ However Centers for Medicare and Medicaid Services reversed that decision in response to the overwhelming number of telephone visits occurring during the pandemic.¹ Telephone visits Current Procedural Terminology (American Medical Association) codes (99441-99443)²² reimburse at the same rate as established patient office visits or video visits (99212-99214)²² in primary care at approximately \$46 to \$211.¹ These reimbursement changes are part of the Centers for Medicare and Medicaid Services COVID-19 telehealth waiver and are not guaranteed to last beyond the public health emergency.¹

Video and telephone visits are examples of live and interactive telehealth. Video visits require a camera on a technological device and the internet, where a telephone visit requires having access to a telephone. Telephone visits are an excellent option for patients without smartphones, computers, or the internet to access health care safely.

HIPAA Guidelines

HIPAA of 1996 has strict guidelines for health care providers to safeguard telehealth date of the patient's encounter with an encrypted system, to disseminate HIPAA guidelines and agreements with all personnel, and to be responsible for protecting the provider and patient locations and the communication between the 2 sites.²¹ Due to the current increased need for telehealth with the COVID-19 pandemic, the Office for Civil Rights (OCR) at the US Department of Health and Human Services published a notice to delineate the adjustment of specific rules under the HIPAA of 1996 to treat patients using telehealth. In this notice, OCR states that during the pandemic, when health care providers who use non-HIPAA-compliant nonpublic-facing remote communication products to assess, diagnose, and treat patients, OCR will not penalize for noncompliance with the HIPAA rules.²¹ Penalties will not occur as long as the health care providers have documented proof of reasonable encryption attempts, to follow the HIPAA guidelines and notify patients of the privacy risks using telehealth.²¹ Nonpublic-facing remote communication products are the technologies that "allow only the intended parties to participate in the communication."²¹ These products include Doximity, Skype, and Zoom.²¹

Benefits

The VA's 2020 award-winning Connected Care program can reach the veterans where and when they require care.²³ With the use of VA Video Connect, they have a 1000% increase in video visits (10,000 to 127,000 per week) to veterans during the COVID-19 pandemic.²³ The veterans' high use of video visits supports the idea that telehealth improves safe access to providers and care.

APRNs can provide care by telehealth to patients who have difficulty traveling or who might be geographically isolated. Research supports that telehealth increases access to quality care and has high patient satisfaction ratings.⁹ Telehealth reduces the barriers in accessing care by decreasing travel, time away from work, and costs.^{7,9} Overall, patients view telehealth as safe and timely and would have telehealth visits again.^{7,9,24}

Barriers

Health care providers recognize no physical examination as a significant barrier to telehealth.² However, some of the physical assessments are completed with visual and auditory observations via telehealth. Also, the use of otoscopes, stethoscopes, and other devices to gather physical information on the patient via digital technology is an option,² although the devices might be at the patient's cost.

Barriers of telehealth also include not using a HIPAA-compliant examination room and collection of payments. Other obstacles documented are the complexity of scheduling and triage of appropriate visits.²⁵ By establishing protocols and guidelines before the implementation, the team can avoid these barriers.²⁵ Didactics and practicing with new equipment help avoid the barriers of lack of emergency support, upgrades in software, and disrespect of personal time.²⁵ The shortage of funding likewise creates a hindrance to implementing or improving telehealth.² These barriers often need ongoing evaluation and adjustments to improve processes for the use of telehealth. They can have an array of effects on the delivery of health care.

Summary and Conclusion

Access to health care is an ongoing issue that is further complicated by the COVID-19 pandemic. Telehealth with Waiver 1135 enhances safe access to quality health care by allowing health care providers, including APRNs, to care for their patients without the risk of exposing patients or the health care team to COVID-19. Integrating the considerations mentioned in this report will assist APRNs in providing smooth transition from the traditional method of patient encounter to telehealth visits and in the meantime maintaining safe and quality health care.

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