Telehealth Is Transforming Health Care: What You Need to Know to Practice Telenutrition

Tony Peregrin

"TELEHEALTH IS THE USE of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, and public health and health administration," according to the Academy of Nutrition and Dietetics (Academy) Definition of Terms List.[1] Telehealth communication tools may include video conferencing, e-mail, and mobile or app-enabled technology, as well as store-and-forward or asynchronous technologies that securely transmit clinical information (data, image, sound, and video) collected from wearable devices or by other sources for the purpose of clinical evaluation.

As virtual health care services gain widespread acceptance by both patients and health care providers, new opportunities are developing for the registered dietitian nutritionist (RDN) to provide telenutrition care. The Academy defines telenutrition as "interactive use, by . . . [an RDN], of electronic information and telecommunications technologies to implement the Nutrition Care Process (nutrition assessment, nutrition diagnosis, nutrition intervention/plan of care, and nutrition monitoring and evaluation) with patients or clients at a remote location, within the provisions of their state licensure as applicable."[1]

Technology-based innovations combined with enhanced regulatory acceptance are leading to an expanded telehealth market that is expected to become a $2.8 billion industry in the United States by 2025, up from $240 million 5 years ago, according to *Forbes* magazine.[2] In fact, in April 2019, Amazon launched a new feature for its virtual assistant, Alexa, which now delivers patient data through the device.[2,3]

Continued growth in the telehealth industry will lead to increased access to health care, particularly for patients in rural areas. Nevertheless, there are ethical considerations that should be addressed no matter the health care setting—whether services are provided in person or delivered remotely. The aim of this article is to address the ethical and professional practice of telehealth, including state regulations and licensure, Health Insurance Portability and Accountability Act (HIPAA) compliance, and the development of enhanced communication skills.

THE ETHICS OF TELEHEALTH

Before examining the ethics related to telehealth practice, it is important to consider how members of the Academy engage with this remote care model. In 2015, the Academy developed a survey to identify "current knowledge and service delivery of nutrition practice related to telehealth, identify challenges, and identify practitioner needs and expectations from the Academy."[4] The survey was distributed to all nonretired credentialed RDNs and nutrition and dietetic technicians, registered (NDTRs) who agreed to receive e-mails from the Academy, with a total of 5,087 respondents. The survey revealed that 30% of respondents used telehealth to practice nutrition with patients and clients located within the state or country of their primary practice location. The majority of these individuals use the title registered dietitian; registered dietitian nutritionist; dietetic technician, registered; nutrition and dietetic technicians, registered; dietitian; or nutritionist when communicating with clients and patients; 16.7% reported using another title, the most common on which was some form of "coach" (health coach, nutrition coach, wellness coach).[4] It is important to note that it is inconsistent with the Code of Ethics for RDNs to deem themselves a "coach" or label the service provided as "coaching" to avoid having to obtain licensure to practice medical nutrition therapy via telehealth in another state. A total of 863 and respondents indicated they were, in fact, licensed or certified to practice in one or more states other than their home state.

Although the number of RDNs providing telenutrition services will likely continue to rise with the advent of new communication technologies and broader regulatory policies, the Academy generally considers this to be an "emerging area of practice for many health care professionals. Regulations, policies, and standards are in flux until a 'gold standard' becomes consensus."[5] Notably, a key component in developing these policies involves a review of ethical practice guidelines as they relate to telehealth.

"With regards to telehealth, at minimum, there remain the same liability and privacy concerns, but there are additional ones as well," said Pepin A. Tuma, senior director of government and regulatory affairs, Academy of

2212-2672/Copyright © 2019 by the Academy of Nutrition and Dietetics.
https://doi.org/10.1016/j.jand.2019.07.020

The Continuing Professional Education (CPE) quiz for this article is available for free to Academy members through the MyCDRGo app (available for iOS and Android devices) and through www.jandonline.org (click on "CPE" in the menu and then "Academy Journal CPE Articles"). Log in with your Academy of Nutrition and Dietetics or Commission on Dietetic Registration username and password, click "Journal Article Quiz" on the next page, then click the "Additional Journal CPE quizzes" button to view a list of available quizzes. Nonmembers may take CPE quizzes by sending a request to journal@eatright.org. There is a fee of $45 per quiz (includes quiz and copy of article) for non-member Journal CPE. CPE quizzes are valid for 1 year after the issue date in which the articles are published.

Nutrition and Dietetics, Washington, DC. "Providers should be very clear about what HIPAA privacy rules apply when it comes to patient information, particularly when it comes to the use of technology and the fact that much existing and commonly used technology is not HIPAA compliant, and being aware of the additional restrictions that are imposed upon people providing that sort of care, and understanding when their states recognize that they are, in fact, providing telehealth."

Similar to the Academy's assertion that the same liability and privacy concerns exist for both in-person and telehealth provision of care, the American Medical Association Code of Medical Ethics Opinion 1.2.12 states, "Although physicians' fundamental ethical responsibilities do not change, the continuum of possible patient-physician interactions in telehealth/telemedicine give rise to differing levels of accountability for physicians."[6]

The American Medical Association also underscores the importance of protecting patients' privacy, noting: "All physicians who participate in telehealth/telemedicine must assure themselves that telemedicine services have appropriate protocols to prevent unauthorized access and to protect the security and integrity of patient information at the patient end of the electronic encounter, during transmission, and among all health care professionals and other personnel who participate in the telehealth/telemedicine service consistent with their individual roles."[6]

The Code of Ethics for the Nutrition and Dietetics Profession—updated in June 2018 and developed by the Academy and its credentialing agency, the Commission on Dietetic Registration—also emphasizes the importance of "safeguard[ing] patient/client confidentiality according to current regulations and laws" and "implement[ing] appropriate measures to protect personal health information using appropriate techniques (e.g., encryption)."[7,8] It is important to note that safeguarding patient privacy in virtual nutrition care extends beyond adhering to HIPAA and other related policies and includes establishing a confidential setting to conduct the remote counseling session. In the digital era, health care providers have a range of communication platforms that foster multitasking and on-demand connectivity. However, conducting a counseling session while walking down the street, in the elevator on the way to your home office, or in a public coffeehouse is not an acceptable environ for ensuring patient confidentially.

The Center for Connected Health Policy, available via the Academy's telehealth web page, provides a comprehensive list of all the state regulations related to the provision of virtual health care, including policies that protect patient privacy. Earlier this year, the Academy updated its Web-based Licensure Map with additional information to facilitate practice across state lines either in person or through the provision of telehealth services.

As virtual health care services gain widespread acceptance by both patients and health care providers, new opportunities are developing for the registered dietitian nutritionist (RDN) to provide telenutrition care.

According to the March 26, 2019, issue of the Academy's *Public Policy Weekly News*, "The map now specifies state-by-state provisions by which RDNs might be made more easily eligible to practice in another state, even if that state requires a license to practice, including licensure by endorsement through the Commission on Dietetic Registration, licensure by reciprocity based on licensure in another state, and other exceptions, such as allowances for temporary practice under limited circumstances."[9,10]

In addition to recognizing state-specific licensing requirements for providing ethically sound, remote care to clients and patients, there are additional best practices that address potential liability concerns and safeguarding of patient privacy.

"As with any client, proper and prompt documentation will be a necessary component of the practice, along with following required HIPAA laws for the storage and transmission of protected health information" (PHI), says Libby MacQuillan, PhD, RDN, CHSE, assistant professor of clinical dietetics, College of Health Professions, at Grand Valley State University, Grand Rapids, MI. For the last 3 years, MacQuillan has taught a graduate-level dietetics course at Grand Valley State University that uses telehealth with standard patients in a simulation laboratory. "Written documentation would include the client's informed consent for the disclosure of PHI for electronic and telephone treatment, and for payment purposes, the client's agreement to engage in electronic communication, and disclosure of how PHI will be protected and stored."

Generating a referral form that outlines treatment modality and expectations is not only helpful for the client or patient, it is also a best practice that can address potential liability concerns.

"For my practice, we have a referral form for our telenutrition clinic that bills with the understanding that you are asking for a telenutrition visit and this is the information we need for your telenutrition visit," said Erin Lavin, RD, CNSC, clinical dietitian II and neuroscience dietitian, UC Davis Health, Food and Nutrition Services, Sacramento, CA. "Our referral form speaks pretty specifically to what kind of visit this will be, for example, a video consultation and then what specific disease states we can talk about in regard to nutrition."

HIPAA-COMPLIANT TELEHEALTH

The HIPAA guidelines pertaining to telehealth are contained within the HIPAA Security Rule, which sets national standards for the security of electronic protected health information in video, chat messages, documents, photos, and other modes of communication. HIPAA telehealth guidelines suggest health care providers use "reasonable and appropriate safeguards" to prevent breaches of PHI to unauthorized entities.[11] These safeguards include an awareness of unsecure modes of communication including SMS (which stands for "short message service" and is a text messaging feature available on smartphones and other mobile devices) Skype, and e-mail when communicating PHI at a distance. According to the HIPAA guidelines, when an electronic PHI is created by a health care provider or an organization and is stored by a third party, a Business Associate Agreement (BAA) must be

generated with the party storing the patient data to ensure protection of the information and to provide pathways for auditing the data's security. Currently, many companies, such as Verizon, Skype, and Google, do not enter into BAAs with providers for these services, leaving medical professionals, including RDNs, liable for any fines or civil action should a data breach occur.[11]

"You have to work via a HIPAA-compliant platform," said Lavin. "FaceTime, for example, is not a HIPAA-compliant platform, so you would not be able to do a video consultation using this tool because you are not protecting client or patient information. It costs money for companies to ensure this compliance and so it is a pretty safe bet that a lot of the free options cannot guarantee that the information you are putting in there is protected."

There are options available for individual RDNs in private practice who want to provide HIPAA-compliant telenutrition services. Examples include Microsoft, which offers providers a BAA if they want to use the HIPAA-compliant version of Skype for Business video service. Employing this option means the client or patient must have Office365 linked to the cloud-based Skype for Business service.[11]

"You'll likely find that whatever video-based platform you're trying to utilize will generally advertise if they're HIPAA compliant or not because certain programs are trying to cater to medical teams and medical professionals," said Lavin. "If you're unsure, contact them directly and ask them, 'Are you HIPAA compliant? Have you met these regulations; do you have these certifications that you're going to protect this information?'" As for Lavin's own telenutrition practice, she uses the UC Davis Health System, which has an in-house regulatory team that ensures HIPAA compliance. "If you're doing it through a health system and going from one clinic to the other clinic like an intra-clinic communication that will help ensure HIPAA protection."

CHALLENGES OF VIRTUAL NUTRITION CARE

After researching state telenutrition policy and licensing requirements, and once you've established an HIPAA-compliant mode of communication, there are other ethics-related topics that should be considered before engaging in telehealth, namely the feasibility of this technology to help specific patients, particularly those with varying degrees of health literacy and individuals with limited access to, or understanding of, advanced communications technology.

The US Department of Veterans Affairs (VA) Telehealth Services office sums up these additional considerations by describing the overarching goals of its telehealth program. "The value the VA derives from telehealth is not in implementing telehealth technologies alone… For technology to work, it must work for the people it is meant to help—patients and the professionals providing care. Telehealth in the VA helps ensure veteran patients get the right care in the right place at the right time and aims to make the home into the preferred place of care, whenever possible."[12]

"There are important factors to consider related to the appropriateness of a patient for telehealth services," said MacQuillan. "Those factors include the patient's access to required technology (for example, computer with webcam, telephone line, Internet access, and so on); the patient's comfort level with technology as a way to give and receive health information, including privacy concerns; and the level of acuity of the patient—a very high-acuity patient may not be an appropriate candidate for telehealth because if the connection were to be lost or broken, and the dietitian had not completed their assessment and instruction to the patient, this could be a safety concern." These "what if" situations are covered in class with MacQuillan's students and are a good segue into an ethical discussion of next steps when a technology breach occurs.

In fact, in an effort to enhance telehealth communication skills for future generations of food and nutrition and dietetics practitioners, MacQuillan's didactic course on telehealth emphasizes counseling and coaching instruction in this virtual care setting. "We have used Fruit Street with standardized patients for a real-time and video-recorded brief nutrition counseling session to give students the experience of handling the unique challenges of video-based consultations," said MacQuillan. "As part of the telenutrition content, I've also asked students to write up a list of required written policies and documents to cover a private practice dietitian using telenutrition (to meet HIPAA and other requirements), and likely billing and coding options and procedures." (MacQuillan's course meets key Accreditation Council for Education in Nutrition and Dietetics competencies, including CRDN 3.3—demonstrates effective communications skills for clinical and customer service in a variety of formats and settings.)

Part of the unique challenges associated with video-based consultations that are addressed in this course include the lack of nonverbal physical cues that are often necessary to gauge how a client or patient is receiving information.

"During that hour time span when you're conducting video counseling, you are going to get less information to that person vs a face-to-face consultation because you may have a harder time reading body language or whether or not they understand something," said Lavin. "In this setting, it could be possible that you're not as receptive to their nonverbal cues, or you're trying to base so much information off of the little pieces that you have received ahead of time, or you give them a handout that they don't understand and you're not there with them to go over it together as effectively. So, I think there are ethical considerations and drawbacks to using telenutrition vs inpatient counseling. That said, I think telehealth has a limitless potential. There's research that has shown that participants who used telehealth vs face-to-face counseling had improvements in their A1C, had improvements in their lipid profile, just like they would if they were in face-to-face counseling."

LOOKING AHEAD

According to the American Telemedicine Association, more states are adopting telemedicine parity laws, which require private insurers to cover services provided via telemedicine comparable to that of services provided in person. As many as 36 states have such policies in place, as of the American Telemedicine Association's 2018 report.[13] (Each insurer sets its own policies related to coverage, coding, and payment for these services.)

"Parity laws are very important and valuable because they demonstrate the fact that these services are functionally the same," explained Tuma. "You don't

discount telehealth services because it is done electronically or remotely—the quality of the services is the same. Ensuring that those laws are available is one barrier that needs to be broken down. The next step with that process is having states being able to work together in some sort of compact, some sort of agreement, among these states to better facilitate the practice across state lines for registered dietitian nutritionists. It takes a lot of time, a lot paperwork, and a lot of money to be able to become licensed in multiple states. What we want to do is reduce all of those burdens for our members."

In 2019, the US Centers for Medicare and Medicaid Services, which also happens to be the nation's single largest health care payer, has expanded its reimbursement for remote care services, just as it did in 2018.[14] The new rule announced by Centers for Medicare and Medicaid Services allows for physician reimbursement for virtual check-ins, remote image evaluation, and other remote technology services.[14] Although this is a notable move toward wider adoption of virtual care services, RDNs have an opportunity to engage in grassroots advocacy to propel the nutrition and dietetics profession forward within the realm of telehealth.

"Any research that is produced showing that increased access to care and improved patient outcomes can be linked with telehealth interventions can be part of advocacy efforts for the profession of dietetics," said MacQuillan. "As dietitians in some states continue to seek licensure bills, this type of information can be used as further evidence for the need to streamline and simplify the state-to-state licensure setup currently in use so that dietitians can more easily be involved in providing telenutrition care for the patient's benefit."

CONCLUSION

Although not all in-person visits may be replaced by video consultations and other forms of telehealth, modifications to state laws, enhancements to reimbursement policies, and new HIPAA-compliant communication technologies are providing expanded opportunities for RDNs with an interest in providing virtual nutrition care. Ethical considerations for providing this care are the same no matter the setting or modality, although telehealth demands a heightened awareness of patient privacy and HIPAA regulations, as well as a keenly developed communication skill set that goes beyond the assessment of body language and other nonverbal cues.

The Academy's Evidence Analysis Library's Project on Telenutrition, published in 2012, examined the provision of remote care via telephone, videoconferencing, and other modalities, and although researchers called for additional research in this area, they found "strong and consistent evidence that telenutrition interventions and counseling, when provided by a registered dietitian as part of a health care team, resulted in significant improvements in weight, BMI [body mass index], A1C, blood pressure and serum lipids."[5]

Telehealth, and specifically telenutrition, is a complex and evolving area of practice. The benefits of this approach—including the potential reduction of costs (such as the transportation of patient to another location), enriched patient engagement, enhanced job satisfaction for the provider, and improved outcomes—signal increased adoption of virtual health care in the near future, particularly in the fast-paced digital age marked by immediate interconnectivity and on-demand product delivery.

References

1. Academy of Nutrition and Dietetics. Practicing telehealth. Definition of terms list. Reviewed April 2018. https://www.eatrightpro.org/practice/practice-resources/telehealth/practicing-telehealth. Accessed July 7, 2019.
2. Harpaz J. Why your next doctor visit could be over the phone. Forbes.com. https://www.forbes.com/sites/joeharpaz/2019/01/23/why-your-next-doctor-visit-could-be-over-the-phone/#7aea8e5b3669. Published January 23, 2019. Accessed July 7, 2019.
3. Rosenthal E. Alexa is gaining medical skills. Why that could be bad for health care. *Fortune*. https://fortune.com/2019/05/28/alexa-skills-virtual-health-care/. Published May 29, 2019. Accessed July 7, 2019.
4. Academy of Nutrition and Dietetics. Telehealth Practice Survey 2015 Summary. https://www.eatrightpro.org/practice/practice-resources/telehealth/telehealth-practice-survey-2015-summary. Accessed July 6, 2019.
5. Academy of Nutrition and Dietetics. Telehealth. https://www.eatrightpro.org/practice/practice-resources/telehealth. Accessed July 7, 2019.
6. American Medical Association. American Medical Association's Code of Medical Ethics Opinion 1.2.12. https://www.ama-assn.org/delivering-care/ethics/ethical-practice-telemedicine. Accessed July 7, 2019.
7. Academy of Nutrition and Dietetics. Code of Ethics for the Nutrition and Dietetics Profession. https://www.eatrightpro.org/-/media/eatrightpro-files/career/code-of-ethics/coeforthenutritionanddieteticsprofession.pdf?la=en&hash=0C9D1622C51782F12A0D6004A28CDAC0CE99A032. Accessed July 7, 2019.
8. Ashley RC. Telemedicine: legal, ethical, and liability considerations. *J Acad Nutr Diet*. 2002;102(2):267-269.
9. Academy of Nutrition and Dietetics. Academy enhances information to online licensure map resource. *Public Policy Weekly News*. March 26.
10. Academy of Nutrition and Dietetics. Licensure statutes and information by state. https://www.eatrightpro.org/advocacy/licensure/licensure-map. Accessed July 7, 2019.
11. HIPAA guidelines on telemedicine. *HIPAA Journal*. https://www.hipaajournal.com/hipaa-guidelines-on-telemedicine/. Accessed July 7, 2019.
12. US Department of Veterans Affairs. VA Telehealth Services. What is telehealth?. https://www.telehealth.va.gov/. Accessed July 7, 2019.
13. American Telemedicine Association. State Policy Resource Center. States with parity laws for private insurance coverage of telemedicine 2018. http://legacy.americantelemed.org/main/policy-page/state-policy-resource-center. Accessed July 7, 2019.
14. Care Innovations. What are the factors driving telehealth growth in 2019?. https://news.careinnovations.com/blog/factors-driving-telehealth-growth-in-2019. Accessed July 7, 2019.

AUTHOR INFORMATION

T. Peregrin is an editor and writer for a Chicago-based medical association and a freelance writer in Chicago, IL.

STATEMENT OF POTENTIAL OF CONFLICT INTEREST

No potential conflict of interest was reported by the author.

FUNDING/SUPPORT

There was no funding to disclose.