Rapid Practice Change During COVID-19 Leads to Enduring Innovations and Expansion of Integrative Oncology Services



The COVID-19 pandemic forced cancer programs and practices to rapidly adapt how they deliver integrative oncology services that help patients manage symptoms and optimize their quality of life. Additional stressors imposed by COVID-19 increased the need for mind-body practices, natural products, and lifestyle modifications. However, literature on best practices for the provision of integrative oncology services during a pandemic is sparse. Our article seeks to describe strategies, challenges, and enduring innovations for successful integrative oncology practice during and beyond the COVID-19 crisis. Effective strategies include expanded telemedicine, online resource libraries, virtual interactive groups and classes, and additional infection prevention protocols. We also describe telemedicine challenges, such as technical difficulties and access to technology, "Zoom fatigue," inability to perform hands-on physical exams, distractions outside the clinical environment, and obstacles to maintaining a virtual therapeutic relationship. Leveraging its skilled facilitators, Levine Cancer Institute in Charlotte, N.C., overcame many of these challenges through proactive responses, flexibility—demonstrated by staff and patients—and the use of virtual platforms. Our experience led to enduring telehealth expansion, livestream groups and classes, on-demand digital repositories of integrative practices, and targeted services delivered at the most clinically appropriate time(s). These insights may be adapted by other institutions to maintain integrative oncology services during and after unprecedented events, like a global pandemic.

nprecedented," "new normal," "challenging times," and "rapidly evolving situation" are all buzzwords and phrases we heard during the coronavirus disease 2019 (COVID-19) pandemic. The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first identified in December 2019 in Wuhan, China,¹ and declared a global pandemic in March 2020.² Healthcare organizations immediately adapted to serve patients while minimizing risk of COVID-19 transmission. This challenge created an opportunity to study oncologic healthcare innovations.³

Oncology Care During COVID-19

Compared to the general public, patients with cancer—whose immune systems are already weakened by treatment—are estimated to be two times as likely to contract COVID-19 and at a higher risk for severe COVID-19 complications.⁴ Patients with

active cancers, particularly hematologic malignancies, are at the highest risk.⁵ However, individuals receiving cancer care, such as chemotherapy, immunotherapy, molecularly targeted therapies, or bone marrow transplants within three months before hospitalization, have no overall increased risk of death, according to a study on COVID-19 outcomes.⁶

During a pandemic, such as the one experienced in 2020 to 2021, infection prevention may include postponing outpatient visits, elective surgery, and chemotherapy for patients with low risk of disease progression. These decisions should be made between the care team, patient, and their care partners, with acknowledgement that delayed treatment can lead to additional stress and apprehension about disease progression and survival. Services that can be provided virtually should pivot to telehealth.⁷ These approaches are reiterated by the American Society of Clinical Oncology in consideration of resource scarcity⁸ and other

clinical guideline reviews.^{9,10} During the current public health emergency, telehealth rapidly expanded to provide supportive care for quality of life concerns, including distress, emotional support, nutrition, social work, and integrative medicine. However, in-person care is necessary for imaging, procedures, and laboratory work that cannot be delayed.^{11,12}

Increased Need for Integrative and Complementary Services

Cancer survivors demonstrated higher levels of stress and symptom burden during COVID-19 compared to pre-pandemic benchmarks.¹³ Drivers of stress and anxiety included delays in diagnosis, continuing cancer treatments, and fear of coronavirus infection.¹³⁻¹⁵ These concerns were exacerbated among those with greater risk of mortality and severe illness from COVID-19.^{4,15} Though supportive oncology care is sometimes not prioritized like cancer treatment because of the financial strains placed on healthcare systems during a national pandemic or public health emergency.¹⁶ the loss of control and additional stressors experienced by patients during these events make integrative oncology services more valuable across all aspects of the cancer care continuum (e.g., newly diagnosed, currently in treatment, long-term survivorship).¹⁷

Integrative oncology is a "patient-centered, evidence-informed field of cancer care that utilizes mind and body practices, natural products, and/or lifestyle modifications from different traditions alongside conventional cancer treatments. It aims to optimize health, quality of life, and clinical outcomes across the cancer care continuum and to empower people to prevent cancer and become active participants before, during, and beyond cancer treatment."18 Integrative medicine physicians guide patients through their treatment plans, including mind-body practices, such as relaxation techniques, yoga, music therapy, and tai chi, which have demonstrated reductions in anxiety, fear, depression, and pain.¹⁹ When used alongside conventional medicine, integrative approaches can improve stress, sleep, and quality of life.²⁰⁻²² For example, acupuncture can be effective for nausea, vomiting, and analgesia.²³⁻²⁵ Body-based therapies, such as massage and lymphatic drainage, may also soothe anxiety and pain when delivered by an appropriately trained, certified practitioner.¹⁹

Integrative Oncology Practice During COVID-19

Limited literature exists on the impact of COVID-19 on integrative oncology care. In a 2020 study, Ben-Ayre et al. demonstrated feasibility of an online Israeli treatment program made up of weekly practitioner-guided self-treatments, including movement, mind and body interventions, and acupuncture.²⁶ That same year, Mao and Gubili described the role of virtual integrative and supportive care at Memorial Sloan Kettering in New York, N.Y., which includes virtual fitness, meditation, yoga, dance, tai chi, and music classes.²⁷ Participants noted significant reductions in anxiety and stress, and they were very likely to recommend a class to others.²⁷ Also in 2020, Dr. Block recommended increasing indoor exercises, such as tai chi and qigong, reducing high-touch therapies, and focusing on telehealth during the pandemic.²⁸

Pre-COVID-19 Practice

Levine Cancer Institute is an academic hybrid, multi-site, community-based cancer program. Through the dedication of its staff and the flexibility of staff and patients, the Department of Supportive Oncology, which includes integrative oncology, developed new practices to serve patients with cancer and their families during the COVID-19 pandemic. These new practices aligned with the institution's approach to best serve patients and their families.²⁹ We hope that insights from our experience may be adapted by other healthcare facilities.

Before COVID-19, our integrative oncology clinic and services were primarily provided in person. Services consisted of groups and classes for patients, care partners, and staff. These included yoga, tai chi, meditation, therapeutic art, and music therapy. Select modalities were also available privately and during chemotherapy infusions. Tangible modalities, such as healing touch, oncology massage, and acupuncture, were delivered in the clinic setting. Acupuncture was provided in a shared appointment, though patients were assessed and treated individually. The integrative consult clinic with physicians and an advanced practice provider offered mostly on-site visits with limited virtual appointments for designated rural areas. Due to COVID-19, all in-person services were suspended on March 16, 2020, and virtual and phone clinic visits began on March 18. On-site individual modalities (i.e., acupuncture, healing touch, oncology massage) restarted on June 1, 2020, with a modified schedule and screening processes in place. To meet the challenges imposed by the pandemic, our integrative oncology team adopted the strategies listed in Table 1, right.

Our Challenges

Though these strategies are beneficial, we experienced many implementation challenges. Virtual visits require time and patience to learn the platform, and technical difficulties due to connectivity or a device (i.e., computer, smartphone, tablet) occur for both clinicians and patients. Clinicians and practitioners must invest time to learn about new technologies, such as publicly broadcasting live music, digital patch cables, and film equipment. At times, audio delays from the music therapist's equipment can create distractions. During the pandemic, many social interactions moved online and "Zoom fatigue" (e.g., tiredness, anxiety, or worry resulting from overusing virtual videoconferencing platforms)³¹ impacted virtual visits. Though telehealth appointments allow some reading of facial expressions and body language, they are not as effective as in-person visits. Some clinicians prefer in-person appointments and believe that virtual visits hinder rapport building and the therapeutic patient-provider relationship, which has traditionally been built in person and can influence the clinical response to prescribed interventions. Even when no treatment plan is needed, a clinician's careful listening, examination, and reassurance about the normalcy of common symptoms and experiences can decrease patients' stress.32

Certain virtual connections can feel more natural and genuine, based on both parties' familiarity with technology.³³ Yet that same (Continued on page 30)

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Strategy	Description
1. Telemedicine and individual therapeutic visits	Virtual integrative clinic visits with physicians and an advanced practice provider are accessible through a secure, Health Insurance Portability and Accountability Act-compliant online portal or by telephone. North Carolina medical licensees are permitted to practice in both North and South Carolina during the COVID-19 public health emergency. ³⁰ Individual, virtual music therapy is available for inpatients undergoing bone marrow transplant and all outpatients.
2. Online resources*	 Newly created online recordings of integrative services previously offered in person are distributed to patients, care partners, and staff to view on demand. Online resources are distributed through email lists of previous participants, posted publicly on an online calendar, and shared with community partners. Offerings include: Archived repository of music discussion and music-assisted relaxation livestreams Chair yoga Guided self-healing touch Learn to knit videos Lymphatic flow exercise class Music therapist-led meditations Online care partner massage training program; free for 90 days SoundCloud-based audio recordings of prayers, reflections, and guided meditations Stress management tips from an integrative physician Tai chi in English and Spanish Therapeutic art with materials found easily at home (e.g., color blending with paint, crayons, or colored pencils and crafting with salt dough) The art and science of journaling Qigong
3. Live, interactive virtual groups and classes	 Many interactive oncology group and class instructors offer live virtual meetings to maintain social connection among participants. Most classes meet once per week. Offerings include: Chair yoga Livestreaming music on YouTube, Facebook, and Twitch Meditation Music therapy for anxiety and pain management Therapeutic art Topical song discussion with live music performance
4. Additional infection prevention	 After reopening in-person services (i.e., clinic visits, healing touch, oncology massage, acupuncture), several precautions were implemented in the following sequential order: Visitor restrictions Screening calls the day before appointments for COVID-19-related symptoms and/or exposure Patients wait for appointments in their car, when possible Physical distancing in waiting room (reduced capacity and 6+ feet social distancing between seats) Temperature checks at entry points Efficient check-in to minimize waiting room time Mask requirements for all Personal protective equipment for staff Symptom checks during appointments Immediate isolation and request for diagnostic testing if patient arrives on-site with COVID-19 symptoms Unidirectional foot traffic flow pattern, so individuals do not cross paths Publicly available hand sanitizer Longer appointment time blocks to allow thorough sanitization between patients

Table 1. Evolving Strategies for Integrative Oncology During COVID-19

* Online resources are presented alphabetically, not by order of importance.

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virtual environment presents limitations, such as lack of hands-on physical examination, which is a fundamental feature of patient-physician encounters.³⁴ The inability to collect lab samples during virtual visits can hinder treatment recommendations (e.g., assessment of vitamin D levels to recommend supplements). Assessing physiologic responses, such as heart and respiratory rates, can also present a challenge to integrative oncology interventions. For clinicians, additional necessary documentation, like notating virtual encounters, patient consent required for virtual visits, and time spent on chart review, can increase clinical burden.

Virtual visits further lack the controlled environment of a clinical setting that has fewer distractions. Some patients do not have the necessary privacy needed for televisits due to environmental distractions (e.g., children, pets, driving, texting, watching television, etc.). A June 2020 online survey of more than 1,000 American adults revealed that 73 percent of men and 39 percent of women multitask during their telehealth visits, with nearly one-quarter checking email, browsing the internet, or texting. A similar proportion (24.5 percent) watch a movie, the news, or television.³⁵

Some patients prefer in-person visits as a means of human interaction, change of environment, or respite from ongoing social isolation imposed by the pandemic. Though those without personal technology (i.e., internet access, computer, smartphone, tablet) can access virtual visit equipment at a regional Levine site facilitated by a clinical team member, this option can be inconvenient and require additional coordination by clinical staff. Other patients who have attended on-campus groups and classes feel that social support is not as strong virtually as it is in person.

Our Facilitators

Although challenges like the ones listed above were numerous, our experienced facilitators ensured that integrative oncology services continued. Philanthropic funds from the 24 Foundation (24foundation.org) and SherryStrong (sherrystrong.org) supported services, including healing touch, oncology massage, acupuncture, therapeutic art, and music therapy. Patients, clinicians, and practitioners all demonstrated an openness to try new practices and a willingness to embrace uncertainty to achieve growth and maintain quality patient care. Without being given specific directions or requirements, our motivated and adaptable group and class leaders created their own virtual content with home equipment.

Some patients feel more comfortable and better able to manage their symptoms, such as fatigue and nausea, while attending virtual visits, groups, and classes from the safety and privacy of their homes. Virtual options also remove travel challenges for those with limited mobility, lack of transportation, or busy schedules.

Though virtual visits were available to rural residents prior to the COVID-19 pandemic, their use was infrequent. Telehealth appointments now allow patients living in areas inaccessible to regional clinics to experience greater accessibility to services,³⁶ and immuno-compromised patients previously unable to take part in face-to-face events gain social support. During the 2020 public health emergency, our extended integrative oncology offerings and the reduced time commitment for groups and classes improved patient engagement by allowing patients to attend more events and build diverse self-care strategies. Care partners also benefited from on-demand recordings and virtual groups and classes where scheduling and accessibility would have otherwise interfered. Many patients expressed gratitude that our integrative oncology services continued and provided support during this difficult time.

For clinicians, virtual visits improve efficiency by allowing appointments to occur consecutively without travel time and disinfection between patients. Following an initial increase in no-show rates in March 2020 when the pandemic first began, integrative oncology clinic no-show rates improved in 2020 (3 percent average; range of 1.2 percent to 7.4 percent) compared to 2019 (6.9 percent average; range of 2.5 percent to 11.2 percent), likely due to fewer challenges with attending virtual visits. Video connections allow clinicians to see patients in their own environments, which can provide information about others in the home and potential beneficial or missing resources. Though a full assessment of physiological responses to complementary therapies, such as music therapy, is not possible, the therapist or practitioner can monitor visual cues to assess calming responses, like rise and fall of the chest and stomach with inhalations and exhalations. Patient satisfaction and likelihood of recommending the integrative oncology clinic to peers remain high and comparable to prepandemic levels.

Benefits and Enduring Changes

Lessons learned during a global crises are opportunities to transform and improve healthcare.¹⁰ The COVID-19 pandemic led to practice adaptations that will continue long after the virus is controlled due to demonstrated benefits. Expanded virtual visits, livestreamed groups and classes, and on-demand recorded integrative practices are examples of this enduring change. Patients with cancer continue to strengthen their self-efficacy by independently engaging in evidence-based practices to reduce symptoms and improve well-being. Virtual offerings also support health equity by mitigating challenges presented by transportation, mobility issues, and distance. Most follow-up visits are now conducted virtually because of increased convenience for patients and the option for care partners to participate, which has the added benefit of social support and better understanding of their care plans.

At Levine Cancer Institute, we will continue to target integrative oncology services at the most clinically appropriate times. For example, a music therapist now connects virtually with patients at home the day after chemotherapy, when symptoms are typically more severe. Before the pandemic, music therapy was offered in person during chemotherapy infusions. This insight about optimal timing of integrative oncology services would not have been discovered without the forced switch to virtual care necessitated by the pandemic. The flexibility demonstrated by clinicians, practitioners, and administrators ensures that our team is ready to pivot back into restrictions if warranted. These strategies demonstrate our team's determination to provide world-class care to all patients—no matter where they live.

Closing Thoughts

Future research should examine utilization of each integrative oncology service offering, patient and care partner preferences for virtual versus in-person services, and health outcomes, including symptoms (e.g., anxiety, pain, fatigue), after virtual versus in-person services. Though COVID-19 is perhaps the largest public health crisis of our lifetimes, it has resulted in healthcare delivery improvements for patients and providers that likely would not have occurred otherwise. We are hopeful that the integrative oncology strategies implemented at our institution will be adapted by other healthcare settings to improve symptoms and quality of life of patients with cancer.

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The ACCC Adoption and Expansion of Telehealth Solutions Initiative

Sustaining care delivery during the COVID-19 pandemic required the oncology community to quickly adopt and expand telehealth services, demonstrating how telemedicine can help expand access to care to traditionally underserved groups and under-resourced suburban and rural areas. This educational initiative addresses the immediate and ongoing needs of cancer programs and practices that want to implement, integrate, and expand their telehealth services to optimize patient care during and beyond public health emergencies. It aims to educate members of the multidisciplinary cancer care team about how to optimize their use of telehealth by providing the resources, tools, and information they need to keep telehealth an essential component of quality cancer care. The Adoption and Expansion of Telehealth Solutions initiative is comprised of five integrated programs:

- 1. *Rapid Response*. Tells the story of how cancer programs and practices successfully integrated and expanded telehealth solutions during the public health emergency.
- 2. State of Affairs (Policy). Provides information on advocacy efforts and key policy issues regarding coverage and reimbursement for telehealth services, as well as changing federal and state regulations.
- 3. Telehealth Team. Discusses the telehealth roles of multidisciplinary cancer care team members.
- 4. *PluggedIN*. Addresses the importance of a strong information technology (IT) foundation for telemedicine and integration of the IT professional on the multidisciplinary cancer care team.
- 5. *Blueprint*. Offers a repository of resources on optimizing telehealth from workflow, operational, economic, and policy perspectives.

Among the resources developed for this education initiative is the video podcast "The IT Professional as a Multidisciplinary Team Member" as featured on Cancer Buzz TV, Ep 03, where Brian Dunn, a unified communications engineer for tele-oncology at University of Virginia Health, the Karen S. Rheuban Center for Telehealth, telehealth operations, discusses the role of the IT professional in quality, patient-centered cancer care delivery and what lies ahead.

The Adoption & Expansion of Telehealth Solutions initiative is supported by Lilly and Amgen. Learn more at accc-cancer. org/telehealth-solutions.

References

1. Zhou F, Yu T, Du R, et al. Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study. *Lancet.* 2020;395(10229):1054-1062.

2. Cucinotta D, Vanelli M. WHO declares COVID-19 a pandemic. *Acta Biomed.* 2020;91(1):157-160.

3. Cinar P, Cox J, Kamal A, et al. Oncology care delivery in the COVID-19 pandemic: an opportunity to study innovations and outcomes. *JCO Oncol Pract*. 2020;16(8):431-434.

4. Yang G, Zhang H, Yang Y. Challenges and countermeasures of integrative cancer therapy in the epidemic of COVID-19. *Integr Cancer Ther.* 2020;19:1-2.

5. Sahu KK, Jindal V, Siddiqui AD. Managing COVID-19 in patients with cancer: a double blow for oncologists. *JCO Oncol Pract.* 2020;16(5):223-225.

6. Fu C, Stoeckle JH, Masri L, et al. COVID 19 outcomes in hospitalized patients with active cancer: experiences from a major New York City health care system. *Cancer.* 2021;127(18):3466-3475.

7. Segelov E, Underhill C, Prenen H, et al. Practical considerations for treating patients with cancer in the COVID-19 pandemic. *JCO Oncol Pract.* 2020;16(8):467-482.

8. Marron JM, Joffe S, Jagsi R, et al. Ethics and resource scarcity: ASCO recommendations for the oncology community during the COVID-19 pandemic. *J Clin Oncol.* 2020;38(19):2201-2205.

9. Zaniboni A, Ghidini M, Grossi F, et al. A review of clinical practice guidelines and treatment recommendations for cancer care in the COVID-19 pandemic. *Cancers (Basel)*. 2020;12(9):2452.

10. Patt D, Gordan L, Diaz M, Okon T, Grady L, Harmison M, Markward N, Sullivan M, Peng J, Zhou A. Impact of COVID-19 on cancer care: how the pandemic Is delaying cancer diagnosis and treatment for American seniors. *JCO Clin Cancer Inform*. 2020 Nov;4:1059-1071.

11. Liu R, Sundaresan T, Reed ME, et al. Telehealth in oncology during the COVID-19 outbreak: bringing the house call back virtually. *JCO Oncol Pract*. 2020;16(6):289-293.

12. Schrag D, Hershman DL, Basch E. Oncology practice during the COVID-19 pandemic. *JAMA*. 2020;323(20):2005-2006.

13. Miaskowski C, Paul SM, Snowberg K, et al. Stress and symptom burden in oncology patients during the COVID-19 pandemic. *J Pain Symptom Manage*. 2020;60(5):e25-e34.

14. Gregucci F, Caliandro M, Surgo A, et al. Cancer patients in COVID-19 era: swimming against the tide. *Radiother Oncol.* 2020;149:109-110.

15. Kuderer NM, Choueiri TK, Shah DP, et al. Clinical impact of COVID-19 on patients with cancer (CCC19): a cohort study. *Lancet*. 2020;395(10241):1907-1918.

16. Ferrell B, Paice J, Koczywas M. New standards and implications for improving the quality of supportive oncology practice. *J Clin Oncol.* 2008;26(23):3824-3831.

17. Hopkins J, Mumber MP. Patient navigation through the cancer care continuum: an overview. *J Oncol Pract*. 2009;5(4):150-152.

18. Witt CM, Balneaves LG, Cardoso MJ, et al. A comprehensive definition for integrative oncology. *J Natl Cancer Inst Monogr.* 2017;2017(52):3-8.

19. Deng G, Cassileth B. Integrative oncology: an overview. *Am Soc Clin Oncol Educ Book*. 2014;233-242.

20. Piet J, Würtzen H, Zachariae R. The effect of mindfulness-based therapy on symptoms of anxiety and depression in adult cancer patients and survivors: a systematic review and meta-analysis. *J Consult Clin Psychol.* 2012;80(6):1007-1020.

21. Shennan C, Payne S, Fenlon D. What is the evidence for the use of mindfulness-based interventions in cancer care? A review. *Psychooncology*. 2011;20(7):681-697.

22. Zainal NZ, Booth S, Huppert FA. The efficacy of mindfulness-based stress reduction on mental health of breast cancer patients: a meta-analysis. *Psychooncology*. 2013;22(7):1457-1465.

23. Ma TT, Zhang T, Zhang GL, et al. Prevention of chemotherapy-induced nausea and vomiting with acupuncture: a protocol for systematic review and meta-analysis. *Medicine (Baltimore)*. 2020;99(3):e18828.

24. Lu W, Rosenthal DS. Oncology acupuncture for chronic pain in cancer survivors: a reflection on the American Society of Clinical Oncology chronic pain guideline. *Hematol Oncol Clin North Am.* 2018;32(3):519-533.

25. Paice JA, Portenoy R, Lacchetti C, et al. Management of chronic pain in survivors of adult cancers: American Society of Clinical Oncology clinical practice guideline. *J Clin Oncol.* 2016;34(27):3325-3345.

26. Ben-Arye E, Gressel O, Ben-Arye E, Samuels N. Feasibility of an online integrative oncology treatment program during COVID-19. *J Pain Symptom Manage*. 2021;61(2):e1-e3.

27. Mao JJ, Gubili J. Virtual mind-body services for patients with cancer during the COVID-19 pandemic. Available online at: https://ascopost. com/issues/november-25-2020/virtual-mind-body-services-for-patients-with-cancer-during-the-covid-19-pandemic/. Published November 25, 2020. Last accessed June 23, 2021.

28. Block KI. Integrative cancer therapies: learning from COVID-19. *Integr Cancer Ther.* 2020;19:1-6.

29. Raghavan D, Kim ES, Chai SJ, et al. Levine Cancer Institute approach to pandemic care of patients with cancer. *JCO Oncol Pract.* 2020;16(6):299-304.

30. Federation of State Medical Boards. U.S. states and territories modifying licensure requirements for physicians in response to COVID-19. Available online at: https://www.fsmb.org/siteassets/advocacy/pdf/ state-emergency-declarations-licensures-requirementscovid-19.pdf. Published June 23, 2021. Last accessed June 23, 2021.

31. Wiederhold BK. Connecting through technology during the coronavirus disease 2019 pandemic: avoiding "Zoom fatigue." *Cyberpsychol Behav Soc Netw.* 2020;23(7):437-438.

32. Pellegrini CA. Trust: the keystone of the patient-physician relationship. J Am Coll Surg. 2017;224(2):95-102.

33. Chwistek M. "Are you wearing your white coat?": telemedicine in the time of the pandemic. *JAMA*. 2020;324(2):149-150.

34. Costanzo C, Verghese A. The physical examination as ritual: social sciences and embodiment in the context of the physical examination. *Med Clin North Am.* 2018;102(3):425-431.

35. Advisory Board. What do patients do during telehealth visits? (Sometimes, smoke a cigarette or drink a "quarantini"). Available online at: https://www.advisory.com/en/daily-briefing/2020/11/04/telehealth-be-haviors. Published November 4, 2020. Last accessed June 23, 2021.

36. Nelson R. Telemedicine and telehealth: the potential to improve rural access to care. *Am J Nurs*. 2017;117(6):17-18.