Meeting the Challenge of the 2019 Novel Coronavirus Disease in Patients With Cancer

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Deaths from the 2019 novel coronavirus disease (COVID-19) are heavily skewed to the elderly, with almost all of the deaths occurring in patients older than 60 years and with preexisting conditions.

As of this writing, more than 70,000 patients are known to have been infected in the United States. Many more will be identified as testing and screening ramp up.¹ The World Health Organization, the Centers for Disease Control and Prevention, and the National Institute of Allergy and Infectious Diseases of the National Institutes of Health all warn that COVID-19 may expand to pandemic proportions (defined as worldwide spread of the disease),² and it could rival the 2009 H1N1 pandemic, which killed hundreds of thousands of people worldwide.³

This alarming situation contrasts with limited efforts to curb the spread and impact of the disease among patients with cancer—patients who are uniquely vulnerable. Patients with cancer are especially susceptible to infections because of systemic immunosuppression, chemotherapy, or recovery from recent surgery.⁴ In China, patients who had cancer were more likely than patients without cancer to die of COVID-19 or to have severe events requiring ventilation or admission to the intensive care unit.⁵

We propose a simple 5-part strategy plus rapidly expanded use of telemedicine to anticipate and deal with COVID-19 in patients with cancer. First, screening and testing should be quickly expanded to all patients with advanced-stage cancer. Currently, screening relies on patients presenting with symptoms, typically a fever and/or a cough, and doing a travel history before testing. In the cancer community, we feel that these pretesting criteria should no longer include a travel history, and screening should be performed for all those at risk: the elderly, patients receiving chemotherapy or adjuvant therapy, patients who have undergone surgery, and all immunocompromised patients, regardless of the cause. Second, in symptomatic patients, unless they have tested negative for COVID-19, other coronaviruses, or influenza, chemotherapy and surgery should be temporarily postponed until the disease declares itself or the patients are no longer symptomatic. Third, health care personnel and patients should be provided with appropriate personal protective equipment and, when exposed to an infected patient or a patient who might be infected, should be tested and followed closely. Family members of such patients with cancer should follow appropriate Centers for Disease Control and Prevention guidance for quarantine and testing. Fourth, a COVID-19 team should be created in the hospital setting and should include an infectious disease lead with hospital epidemiology, infection prevention, nursing, and, in the cancer setting, medical oncology aware of the vulnerabilities of different levels of immunosuppression in patients with cancer and the latest strategies for preventing the transmission of COVID-19. Community oncology practices would consult the COVID-19-cancer team for training on best practices and implementing similar strategies adapted to the outpatient setting. Fifth, hospitals, local health authorities, and state and national leaders will need to work much more closely together to coordinate the identification, triage, and treatment of patients. If we are to overcome the inherent fragmentation of health care in our communities, a dedicated point person or office will be required at each cancer facility through which outside institutions will have more seamless access to patient services, data, and service coordination and receive inbound information in a timely fashion.

Telemedicine will leverage all 5 of these strategies. Telemedicine increases access to 24/7 care, increases screening, and reduces dangerous overcrowding of infected and noninfected patients.⁶ At-risk patients with cancer can be properly tested at a nearby facility, their surgery or chemotherapy can be delayed, and they can be isolated.

The effectiveness of telemedicine at reducing the spread of infections and improving outcomes is unproven.⁷ Nevertheless, it does increase access and lower costs.⁸ Accordingly, we urge that concurrently with the loosening of the

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restrictions on telemedicine use, clinical trials be put into place for evaluating telemedicine's clinical effectiveness, overall costs of care, diagnostic accuracy, and real and perceived effects on patient confidentiality.

Expanding telemedicine faces 3 significant challenges. First, not all patients will have access to high-speed internet connections, and this must be addressed.⁹ Some of these clinical encounters will still be accomplished through phone conversations, with in-person clinical visits reserved for those with unresolved problems or without telemedicine connectivity. Second, providers and patients who typically have not used telemedicine will have to be introduced and supported until they develop some facility.^{10,11} Third, the US Department of Health and Human Services has exercised its authority granted under imminent bipartisan legislation emerging from Congress,¹² and it will pay providers caring for Medicare patients, waive or reduce copays, and allow for patients' care across state lines. With these regulatory changes, however, providers need to be reassured that these changes and future regulatory changes, such as eliminating the need to first conduct an in-person visit before telemedicine is used, will encourage expanded use of telemedicine among oncologists to reduce COVID-19 infections today and improve access to care tomorrow.

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CONFLICT OF INTEREST DISCLOSURES

Philippe E. Spiess reports that he is medical director of virtual health at Moffitt Cancer Center. Douglas G. Letson reports consultancy work for Stryker Ortho outside the submitted work. John W. Peabody is a professor at the University of California, provides strategic support to Moffitt Cancer Center, and is the founder and president of QURE Healthcare, which is a health care measurement company that uses its trademarked tool, Clinical Performance and Value, to reduce clinical practice variation, raise the quality of care, and lower the costs of health care for patients, providers, and payors. The other authors made no disclosures.

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