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## Addressing Cancer Survivorship Care Under COVID-19: Perspectives From the Cancer Prevention and Control Research Network



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### INTRODUCTION

Funded by the Centers for Disease Control and Prevention (CDC), the mission of the Cancer Prevention and Control Research Network (CPCRN)<sup>1</sup> is to accelerate the adoption and implementation of evidence-based cancer prevention and control strategies in communities and clinical care settings across the U.S., with a special focus on underserved populations. On the basis of a long-term collaboration, Risendal et al.<sup>2</sup> outline how evidence-based cancer prevention and control strategies can inform the public health response to coronavirus disease 2019 (COVID-19) and reduce disparities. Applying the Quality Cancer Survivorship Care Framework<sup>3</sup> while adapting to COVID-19 to promote quality health-care delivery to cancer survivors, the objective of this article is to address the implications for cancer survivorship care on the basis of CPCRN experience. In this paper, the importance of bidirectional knowledge sharing and strategic communications between cancer survivors, as defined by the National Cancer Institute,<sup>4</sup> and the healthcare system are underscored. This document represents a consensus across the CPCRN Cancer Survivorship Working Group, a subgroup of CPCRN members who represent all stakeholder groups within the network, and was supported by the CPCRN Steering Committee.

### CANCER SURVIVORSHIP CARE DISRUPTION

For cancer survivors receiving care during the COVID-19 pandemic, timely access to information and quality care is crucial. Disproportionately high 30-day mortality in individuals with both cancer and COVID-19 versus the mortality in individuals with COVID-19 alone adds urgency to this issue.<sup>5,6</sup> For longer-term cancer survivors, including those receiving treatment for metastatic disease, much less is known; this is an important issue for the >16.9 million U.S. cancer survivors.<sup>7</sup>

The potential for health disparities associated with COVID-19 to amplify health concerns for cancer

survivors heightens the need for action. These disparities are largely driven by socioecologic determinants of health and factors such as obesity, which disproportionately affect those of lower SES, individuals residing in rural areas, and under-represented populations.<sup>8</sup> Disparities are exacerbated by the financial toxicity of cancer care, particularly for under-represented populations,<sup>9</sup> and compounded under the COVID-19 pandemic, in which unemployment and subsequent disruptions in health insurance coverage are common. Furthermore, the shift to telehealth for health care has resulted in disruption and heightened disparities in care, given the requirement for quality Internet connections.

### QUALITY OF CANCER SURVIVORSHIP CARE FRAMEWORK: ADAPTATIONS FOR THE COVID-19 PANDEMIC

The Quality of Cancer Survivorship Care Framework<sup>3</sup> serves as a theoretical guide to direct quality cancer survivorship care; this framework can be adapted to guide care-related decision making and considerations during

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the COVID-19 pandemic. The framework identifies the multiple levels of influence and context that hold the potential to optimize clinical outcomes, which must now consider how COVID-19 influences cancer care.

Focusing on the innermost layers of the Quality of Cancer Survivorship Care Framework (Figure 1), the 5 key constructs that drive care decisions for the individual and healthcare delivery system include (1) surveillance/prevention for recurrent or new cancers, (2) surveillance/management of physical effects, (3) surveillance/management of psychosocial effects, (4) health promotion/disease prevention, and (5) surveillance/management of chronic medical conditions. These constructs occur in the context of the magnified social determinants of health disparities during the current crisis. Importantly, these constructs have relevance throughout the treatment continuum from diagnosis through long-term management, including survivors in treatment for metastatic disease.

### Implications for the Individual Cancer Survivor

New and recurrent disease surveillance is central to cancer survivorship. In the current COVID-19 pandemic, the risks associated with social contact have been highlighted, especially within healthcare settings wherein exposure risk is heightened. This has resulted in enhanced efforts to minimize contact. For a person living with cancer, reduced contact may result in delays in disease surveillance, particularly when screening for recurrent or new disease is anxiety provoking, leading to screening avoidance. Increased reliance on self-examination for recurrent disease and symptoms may be

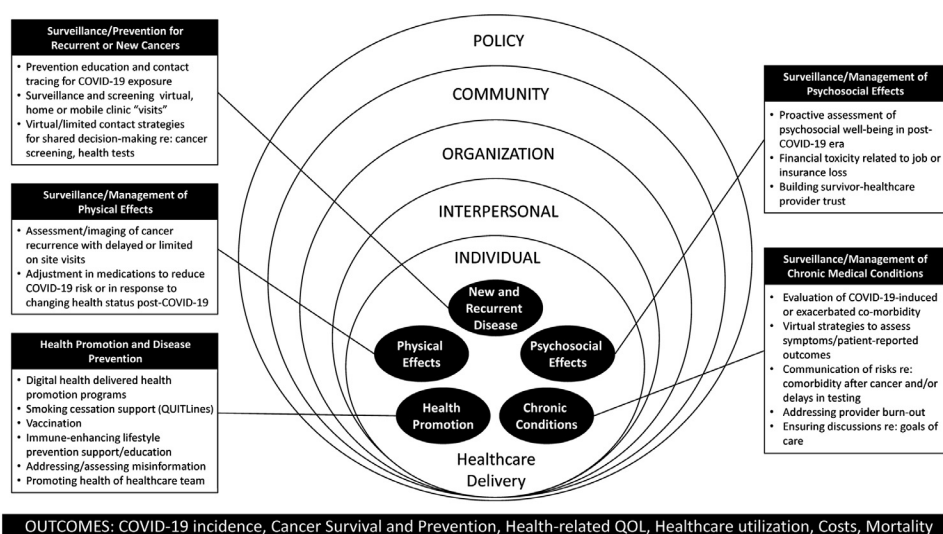
necessary. Strategies to improve surveillance/prevention during COVID-19 should include education on the risks and benefits of regular screening; survivor awareness of contact tracing; and the use of virtual, mobile clinic, or home visits for disease screening.

### Surveillance and management of physical effects.

Quality survivorship care requires that new or worsening physical symptoms of illness are identified early and addressed. In relation to physical effects, the cancer survivor may need to assume a greater role in self-health monitoring for overall health/well-being. For example, information that was previously collected in the clinical setting, including health-related indicators (pain, fatigue, symptoms) and metrics such as a change in body weight, blood pressure, or glucose level, will likely require greater home monitoring and regular reporting to healthcare providers, perhaps through enhanced use of patient portals.

### Surveillance and management of psychosocial effects.

Psychosocial stress may be exacerbated by uncertainties associated with COVID-19. The need for social isolation, which may contribute to loneliness, depression, and fewer clinic visits, may trigger health-related anxiety and depression, further impacting cancer and COVID-19 risk. Cancer survivors with financial concerns may face psychosocial distress related to return-to-work options in the COVID-19 era, struggling to prioritize health over work where exposure may be difficult to avoid. Patients and caregivers will need to monitor changes in mood, affect, and psychosocial well-being; regular communication between healthcare providers and survivors and periodic assessments



**Figure 1.** Quality of cancer survivorship care framework under COVID-19. QOL, quality of life.

Source: Adapted from Nekhlyudov (2019).<sup>3</sup>

similarly must continue with regularity and virtual workarounds to assure that issues are addressed.

**Health promotion and disease prevention.** The role of healthy eating, physical activity, sleep, and stress management in promoting immune health is well established. Recommendations for a healthy lifestyle in relation to cancer survivorship are available to cancer survivors and healthcare providers.<sup>10</sup> Yet, even in the pre-COVID-19 era, cancer survivors were less likely than individuals without cancer to meet recommendations for physical activity<sup>11</sup> or diet quality.<sup>12</sup> Smoking, which may increase with stress, is associated with poorer outcomes in cancer survivors and those with COVID-19. In these challenging times during which tobacco and alcohol use may increase,<sup>13,14</sup> it is imperative that survivors receive counseling to support healthy behaviors, promote well-being, and reduce COVID-19 risk or severity.

**Surveillance and management of chronic medical conditions.** Cancer survivors may be at higher risk for COVID-19 and related complications given the known shared risk factors for cancer, obesity, aging, immunosuppression, and COVID-19. COVID-19 morbidity and mortality are greater for older individuals, immunocompromised individuals, and individuals with obesity and those with certain chronic disease comorbid conditions<sup>15</sup> as well as for minority race/ethnic groups.<sup>16,17</sup> Furthermore, some of the late and long-term physical and psychosocial effects of cancer treatment, including cardiovascular, pulmonary, endocrine, psychological, and immunologic effects, may exacerbate COVID-19 risk or severity. Survivors should engage in screening and monitoring for these effects and adhere to health-promoting behaviors that support chronic disease self-management to reduce risks. Goals of care related to cancer and comorbidities should be openly communicated to healthcare providers.

### Implications for Healthcare Delivery

**Care for patients with cancer during the COVID pandemic.** Access to care for cancer survivors under COVID-19 has shifted markedly. Cancer centers have reported significant declines in routine follow-up visits, and most centers are delaying or canceling nonurgent appointments.<sup>18</sup> Follow-up and screening for new or progressing disease has waned because people postpone surveillance testing and cancer screenings, resulting in concerns over the future cancer mortality burden.<sup>19,20</sup> Telemedicine has been widely implemented to deliver care during COVID-19.<sup>21–23</sup> Inherent limitations to virtual health care and monitoring remain.<sup>23,24</sup> With the expanded use of telemedicine, new challenges may

present related to the social desirability of telling care providers what they want to hear. In the case of older individuals, additional challenges exist related to potentially lower proficiency with video technology. Technology support and probing interviews will be important in ascertaining reliable health-status reporting. Self-management and proactive patient engagement are strategies that could be facilitated by telemedicine capabilities<sup>2</sup> and adapted for the virtual climate. Beyond telehealth, public health programs have leveraged evidence from digital health to reach cancer survivors. Guidance for cancer survivor care and health promotion during COVID-19 is published by CDC, providing support for self-management efforts.<sup>25</sup>

**Care delivery modalities and care coordination.** Despite the widespread implementation of telemedicine, inherent limitations exist, including the inability to perform a physical examination or to familiarize patients and healthcare team members with one another. Protocols to establish quality telemedicine as a sustainable way to provide coordinated care for cancer survivors over time will need to be tested. Telemedicine and telehealth capabilities have implications for provider engagement in shared care with cancer survivors. For example, virtual tumor boards, whereby clinical specialists from a variety of disciplines engage in a collaborative discussion to help guide diagnostic and treatment planning for patients with cancer, are being developed. It is conceivable that such processes could expand to include primary care as a strategy to enhance care coordination. The use of electronic consultations, by which primary care providers can submit questions asynchronously through an electronic health portal to a specialist, may reduce the need for face-to-face specialty consultations for patients. If the question or clinical situation is deemed too complex to be answered in an electronic consultation format, a more traditional referral can be considered. The ability to reduce in-person consultations has the potential to reduce exposure and both direct and indirect costs of care. Central to this conversation of telehealth is the essential need for enhanced access to quality, high-speed Internet at a reasonable cost.

**Shared care for cancer survivors.** The importance of shared care for cancer survivors and the need to involve primary care has been well described; yet, persistent gaps in care coordination continue. By virtue of the fact that COVID-19 has disrupted primary care delivery, it has impacted and will continue to impact the care for cancer survivors. Primary care physicians have cited a need for more education and guidance from oncologists to confidently and consistently care for cancer survivors despite a willingness to be engaged in this care. A survey

of oncology providers has suggested that some oncology providers have had to address issues that may be considered the domain of primary care, such as managing comorbidities,<sup>18</sup> possibly because primary care physicians have competing demands that limit the availability to meet needs. Some but not all primary care systems are equipped to adapt to the new healthcare climate, particularly if the system has already adopted and become facile at leveraging telemedicine capabilities.

## CALL TO ACTION

The COVID-19 pandemic presents an opportunity to reflect on the current disruptions in care and consider the future of cancer survivorship care. It is time to strategize toward enhanced integration of clinical and public health expertise and programming. The CPRN partnership of academic researchers, clinicians, public health experts, and community partners proposes an adaptation of a contemporary framework of cancer survivorship care for COVID-19 (Figure 1). This paper provides specific, actionable efforts to influence care for cancer survivors under COVID-19 to address physical health, psychosocial health, disease recurrence/surveillance, health promotion, and comorbid conditions. Strategies for each of these areas of care provision, at the individual and healthcare delivery system levels, are central to assuring quality outcomes for survivors during and after COVID-19. In addition, institutional and public health policies that support care provisions and ultimately the well-being of cancer survivors should be strengthened or implemented. These could include but are not limited to support for tobacco control and alcohol cessation; practices that enhance access to care, especially for those with pre-existing conditions; institutional policies that support screening for cancer in a low-risk clinical environment; evaluation of cancer risk–related health behaviors and cancer symptoms; and the management of these behaviors and symptoms. Through its social network and professional relationships, CPRN provides a national network for disseminating these actionable items to those who directly influence cancer care and survivorship.

Furthermore, disparities that are exacerbated during COVID-19 must be addressed to create more equity in cancer survivorship. The limited access to care experienced by a significant proportion of cancer survivors and the under-representation of select populations in survivorship practice and research increase the vulnerability to adverse health outcomes. The ability to implement quality survivorship care at the inner patient level and in the healthcare setting will be influenced by the contextual outer-layer socioecologic factors, including

what is happening in the public health and policy arena. If these remain unchallenged, disparities in survivorship will remain and likely will be amplified during the COVID-19 crisis.

## SUMMARY

The COVID-19 pandemic presents new challenges for quality care and health promotion among cancer survivors. The CPRN, and its clinical, community, public health, and academic partners in applying the Quality of Cancer Survivorship Care framework, adapted for the COVID-19 pandemic, has identified current, ongoing, and new initiatives that support the health and well-being of cancer survivors and ultimately hold potential to lessen the prospective adverse impact of COVID-19 on survivor health.

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