

# Supportive Care and eHealth

## A narrative review of technologies, interventions, and opportunities for optimizing care in patients with cancer

Kristen R. Haase, RN, PhD, Amanda Drury, PhD, MSc, BSc, PGCert, RGN, and Martine Puts, PhD, RN



**BACKGROUND:** Cancer can be distressing for patients and families. eHealth interventions have the potential to lessen this distress by creating opportunities for providing supportive care resources to patients at home.

**OBJECTIVES:** This article reviews supportive care eHealth interventions in cancer and emerging opportunities to optimize these interventions for diverse populations across the cancer trajectory.

**METHODS:** A narrative literature review was conducted to evaluate eHealth supportive care for patients with cancer, including effective interventions, accessibility and interactivity issues, patient-reported outcomes, and strategies to improve care for older adults.

**FINDINGS:** To ensure that patients with cancer and their family members benefit from supportive care eHealth interventions, nurses need to understand how to leverage such interventions to improve care.

### KEYWORDS

eHealth; telehealth; patient-reported outcomes; supportive care; needs assessment

### DIGITAL OBJECT IDENTIFIER

10.1188/20.CJON.S1.32-41

**RECEIVING A CANCER DIAGNOSIS CAN BE DISTRESSING** for patients and their family members (Bultz & Carlson, 2006; Faller et al., 2013). Meeting supportive care needs—defined as the physical, emotional, psychological, social, spiritual, informational, and practical domains of need—is essential throughout the cancer trajectory (Fitch, 2008; Kaasa et al., 2018). During the acute phase of cancer diagnosis and treatment, supportive care relays information, such as how to manage the physical effects of cancer and treatment and how to cope with uncertainties about the future, psychosocial distress, anxiety, and depression (Faller et al., 2016; Puts et al., 2012; Zebrack et al., 2013). New and often unforeseen issues can arise as patients transition into life after treatment, including chronic treatment effects, fear of recurrence, a need for greater support from community and social networks, and a desire to resume normal life within the context of cancer-related limitations (Drury et al., 2017; Kotronoulas et al., 2017). End-of-life supportive care needs vary but often include spiritual and physical needs related to symptom and pain management, as well as practical support needs for the dying patient and his or her family members (Hui et al., 2009; Teno et al., 2004).

### Background

Some of the needs of patients with cancer and their family members can be mitigated through the timely provision of holistic supportive care delivered in an appropriate setting (Fitch, 2008). In addition, members of the interprofessional healthcare team can address the complex supportive care needs of patients with cancer. Comprehensive supportive care is needed throughout the cancer continuum from diagnosis and treatment (including symptom management) through survivorship and palliative and end-of-life care (Bruera & Hui, 2010; Hui & Bruera, 2016; Zimmermann et al., 2016). Supportive care in cancer aims to ameliorate suffering and distress for all patients regardless of disease stage (Kaasa et al., 2018).

eHealth technologies, including Internet-based technologies, provide an enhanced method to overcome challenges in the delivery of effective supportive cancer care and healthcare services (Eysenbach, 2001; van Gemert-Pijnen et al., 2012). These eHealth technologies include many strategies, such as text messaging, videoconferencing, telephone support, and