Patient Use of Electronic Methods to Self-Report Symptoms: An Integrative Literature Review

Sharyn Carrasco, RN, MSN, and Lene Symes, PhD, RN

Patients with cancer experience acute and chronic symptoms caused by their disease and its treatment (Portenoy et al., 1994). However, clinicians are often unaware of patients’ symptoms (Bruera, Sweeney, Calder, Palmer, & Benisch-Tolley, 2001; Butow, Brown, Cogar, Tattersall, & Dunn, 2002; Chang, Hwang, Feuerman, & Kasimis, 2000; Newell, Sanson-Fisher, Girgis, & Bonaventura, 1998) and fail to recognize 50%–80% of these symptoms (Epstein & Street, 2007; Farrell, Beaver, Heaven, & Maguire, 2001; Ryan et al., 2005). Even when symptoms are recognized, they may be underdocumented and undertreated, with their impact underestimated (McIntyre, 2015). Discordance exists between clinicians’ findings during assessment and patients’ reported symptoms (Basch et al., 2006; Petersen, Larsen, Pedersen, Sonne, & Groenvold, 2006), which leads to unmanaged symptoms. Inadequate management of treatment-related toxicities may increase symptom distress and negatively affect quality of life (Cella, 1997; Lee, 2008). Worsening symptoms may lead to emergency department visits and have a negative impact on patient outcomes, including survival (Bersa et al., 2007; Berry et al., 2014; Blum et al., 2014; Cella et al., 2014; Fromme, Eilers, Mori, Hsieh, & Beer, 2004).

Reporting the prevalence, severity, and impact of symptoms is essential in oncology symptom management (White, McMullan, & Doyle, 2009). Reilly et al. (2013) concluded that any clinical study evaluating the impact of treatment on patients should consider including patient self-reporting of symptoms, which is also referred to as patient-reported outcomes.

The U.S. Food and Drug Administration and the National Cancer Institute have stated that a patient’s own description of symptoms should be considered