

# Examining Adherence With Recommendations for Follow-Up in the Prevention Among Colorectal Cancer Survivors Study

Nikki A. Hawkins, PhD, Zahava Berkowitz, MS, Juan L. Rodriguez, MPH, Jacqueline W. Miller, MD, Susan A. Sabatino, MD, MPH, and Lori A. Pollack, MD, MPH

**P**eople diagnosed with colorectal cancer (CRC) are now living longer after diagnosis than they did 30 years ago (Howlander et al., 2013), but heightened risks for cancer recurrence, second primary cancers, and other health problems are a concern during this lengthened phase of survivorship. To manage these risks and facilitate early detection of subsequent disease, cancer survivors are advised to follow a schedule of routine medical checkups, screenings, and surveillance (Desch et al., 2005; National Comprehensive Cancer Network [NCCN], 2012).

Compared with non-cancer controls, cancer survivors generally report higher rates of recommended cancer screenings (Bellizzi, Rowland, Jeffery, & McNeel, 2005; Fairley, Hawk, & Pierre, 2006; Hudson et al., 2009; Trask et al., 2005). However, a systematic review on post-treatment surveillance of CRC survivors concluded that 20%–49% of survivors are nonadherent with recommendations for surveillance colonoscopy at five years postdiagnosis, and as many as 23% of survivors attend fewer than the number of recommended office visits (Carpentier, Vernon, Bartholomew, Murphy, & Bluethmann, 2013). Given the potential health benefits (e.g., increased survival) associated with undergoing recommended surveillance after CRC treatments (Figueredo et al., 2003; Jeffery, Hickey, & Hider, 2007; Renehan, Egger, Saunders, & O'Dwyer, 2002; Tjandra & Chan, 2007), underuse of appropriate follow-up is an issue of growing public health concern.

Research has revealed that CRC survivors who are African American, under- or uninsured, and who have more comorbidities are among the least likely to undergo post-treatment surveillance (Carpentier et al., 2013; Hudson et al., 2009; Rolnick et al., 2005; Rulyak, Mandelson, Brentnall, Rutter, & Wagner, 2004). Other characteristics have been inconsistently reported across studies, and a need remains to identify modifiable factors associated with follow-up care for CRC survivors.

**Purpose/Objectives:** To explore the impact of health professionals' recommendations for medical follow-up among colorectal cancer (CRC) survivors.

**Design:** Cross-sectional survey.

**Setting:** Mailed surveys and telephone interviews with CRC survivors in California.

**Sample:** 593 adults diagnosed with a primary CRC six to seven years before the time of the study.

**Methods:** Participants were identified through California Cancer Registry records and invited to take part in a survey delivered via mail or through telephone interview.

**Main Research Variables:** The survey assessed cancer history, current preventive health practices, health status, demographics, and other cancer-related experiences.

**Findings:** More than 70% of CRC survivors received recommendations for routine checkups, surveillance colonoscopy, or other cancer screenings after completing CRC treatment, and 18%–22% received no such recommendations. Recommendations were sometimes given in writing. Receiving a recommendation for a specific type of follow-up was associated with greater adherence to corresponding guidelines for routine checkups, colonoscopy, mammography, and Papanicolaou testing. Receiving written (versus unwritten) recommendations led to greater adherence only for colonoscopy.

**Conclusions:** Most CRC survivors reported receiving recommendations for long-term medical follow-up and largely adhered to guidelines for follow-up. Receiving a health professional's recommendation for follow-up was consistently associated with patient adherence, and limited evidence showed that recommendations in written form led to greater adherence than unwritten recommendations.

**Implications for Nursing:** Given the increasingly important role of the oncology nurse in survivorship care, nurses can be instrumental in ensuring appropriate surveillance and follow-up care among CRC survivors. Conveying recommendations in written form, as is done in survivorship care plans, may be particularly effective.

**Key Words:** cancer survivorship; adherence; cancer surveillance; colorectal cancer; long-term care; public health

*ONF*, 42(3), 233–240. doi: 10.1188/15.ONF.233-240