Low-Dose Computed Tomography

Effects of oncology nurse navigation on lung cancer screening

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BACKGROUND: Low-dose computed tomography (LDCT) lung cancer screening is an evidence-based and reimbursable strategy to decrease lung cancer and all-cause mortality in qualifying patients, but there remains low use and variation in providers' LDCT screening, ordering, and referring knowledge.

OBJECTIVES: The purpose of this quality improvement project was to examine the effects of oncology nurse navigation on assisting patients and ensuring optimal LDCT lung cancer screening.

METHODS: Oncology nurse navigators conducted LDCT provider education and navigated 133 eligible patients to LDCT during a five-month intervention time period.

FINDINGS: Provider education resulted in improved documented tobacco cessation discussions and increased LDCT screening ordering fidelity. Mean days from LDCT to provider notification and mean days from LDCT to patient notification improved significantly.

KEYWORDS
nurse navigation; lung cancer screening; low-dose computed tomography

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IN ONCOLOGY CLINICAL PRACTICE, ACCESS TO CARE and proper sequencing of screening and diagnostic testing are vital to holistic care. The complex healthcare environment is difficult for clinicians to navigate and even more so for patients and family members, who are anxious for answers and frequently experience significant fear of a chronic or life-threatening cancer. Inadequate knowledge and/or support can result in care delays and increased patient distress. In addition, under- or overuse of healthcare resources (e.g., tests, people, programs) via uncoordinated or lower-quality care lacking evidence-based guideline alignment can also occur. These non–value-added wastes can ultimately affect patient outcomes (Gorin et al., 2017; Seek & Hogle, 2007).

Lung cancer remains the second most commonly diagnosed cancer and the leading cause of cancer deaths in the United States, with about 142,670 deaths annually (Siegel et al., 2019). Low-dose computed tomography (LDCT) lung cancer screening is an evidence-based and reimbursable strategy to decrease lung cancer and all-cause mortality in qualifying patients, but there remains low use and variation in providers' LDCT screening, ordering, and referring knowledge (Balogh et al., 2017). Oncology nurse navigation is an evidence-based strategy that can facilitate guideline-based LDCT lung cancer screening use to detect lung cancers at earlier, more treatable stages (Gorin et al., 2017; Hunnibell et al., 2012; Seek & Hogle, 2007).

Evidence-Based Literature Review and Synthesis

The Oncology Nursing Society (2017) defines an oncology nurse navigator (ONN) as "a professional RN with oncology-specific clinical knowledge who offers individualized assistance to patients, families, and caregivers to help overcome healthcare system barriers. Using the nursing process, an ONN provides education and resources to facilitate informed decision making and timely access to quality health and psychosocial care throughout all phases of the cancer continuum" (p. 4). Oncology nurse navigation is a care coordination method linked to increased and appropriate healthcare use and improved