## CNE Article

## Using Nurse Navigation to Improve Timeliness of Lung Cancer Care at a Veterans Hospital

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The Connecticut Veterans Affairs Healthcare System (CT-VAHCS) sought to improve the timeliness of lung cancer care by filling the new position of cancer care coordinator with an advanced practice nurse (APN) functioning as a nurse navigator. The multifaceted nature of diagnosing lung cancer and the barriers encountered by patients and families as they access the complex healthcare system contributed to substantial delays in diagnosing and treating this disease. Beginning in January 2007 when the cancer care coordinator was hired, she recorded data regarding timeliness and stage at diagnosis for all patients diagnosed with non-small cell lung cancer. CT-VAHCS created and modified several processes to improve timeliness and quality of cancer care as soon as a patient's imaging suggested a new diagnosis of malignancy. The cancer care coordinator effected a measurable

improvement in timeliness. In 2003, the average was 136 days from suspicion of cancer to treatment compared to 55 days in 2010, with a trend toward diagnosis of non-small cell lung cancer at an earlier stage. Oncology-certified APNs in the position of cancer care coordinator can engage multiple disciplines to generate process changes and improve timeliness of lung cancer care.

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ung cancer remains the deadliest malignancy in the United States. In 2011, the estimated number of new cases of lung cancer was 221,130 (14% of all cancers) and an estimated 156,940 deaths (27% of all cancer-related deaths) were caused by this disease (American Cancer Society, 2011). Advanced stage at diagnosis accounts for the high mortality rate in lung cancer. About 75% of lung cancers are locally advanced or already metastasized at the time of diagnosis, and the five-year survival rate with metastatic disease is lower than 5% (National Lung Screening Trial Research Team, 2011a).

Although tobacco use has declined in the United States, some studies have reported an increase in certain military groups, particularly those in combat zones. In 2005, tobacco use was higher in active duty military personnel (32%) and veterans (22%) than in the general U.S. population (20%) (Bondurant & Wedge, 2009). In addition, 27% of veterans who used the Veterans Affairs (VA) Healthcare System identified themselves as current smokers in 2008 (Department of Veterans Affairs, Office of the Assistant Deputy Under Secretary for Health for Policy and Planning, 2009). The incidence of smoking increases in veterans with mental illnesses including major depression, post-traumatic stress disorder, and schizophrenia (Bondurant & Wedge, 2009; PRIME Education, 2010). Veterans who receive health care in the VA Healthcare System tend to be of lower socioeconomic status and have poorer general health when compared with the general population. Veterans without private insurance were found to be younger, more likely to smoke, and have less education and income; in addition, veterans who receive their entire health care within the VA system are more likely to be from disadvantaged groups, less educated, poor, and of minority status (Nelson, Starkebaum, & Reiber, 2007).

The diagnosis and staging of lung cancer is a complex process that typically involves use of many different medical services and procedures that may include percutaneous or bronchoscopic biopsies, sampling of mediastinal lymph nodes, multiple radiographic assessments, and specialty services such as pulmonary and cardiology to conduct risk assessment prior to surgery. Factors contributing to delays in the diagnosis and treatment of lung