Lung cancer screening: No more excuses

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It has been 6 years since the National Lung Screening Trial demonstrated a 20% decreased mortality when using low-dose computed tomography (LDCT) to screen for lung cancer in individuals at high risk. Even though lung cancer screening (LCS) is endorsed by the US Preventative Services Task Force and The American Association for Thoracic Surgery (among others) and is reimbursed by the Centers for Medicare and Medicaid Services, uptake has been slow. Between 2010 and 2015, only 3.3% to 3.9% of eligible smokers in the United States actually underwent LDCT screening. Several barriers to screening have been reported, including lack of endorsement by national societies, such as the American Association of Family Practitioners, lack of awareness of guidelines, and lack of knowledge by providers regarding where to refer screening-eligible patients. Moreover, hospital organizations and administrators are discouraged from providing LCS because of perceived cost considerations. The 2017 Hospital Outpatient Payment System proposed rule decreased reimbursement rates for LDCT shared decision making (G0296) and LDCT scans (G0297) by 64% and 44%, respectively.

In this issue of the Journal, Gilbert and colleagues describe the economic impact of a nurse practitioner–led lung cancer screening program. In their analysis, they accounted for direct evaluation and management billing by the nurse practitioner, as well as for direct revenue generated by follow-up studies and procedures that occurred as a result of the evaluation and management services. Relative to the approximate “cost” of $420,000 in the nurse practitioner’s salary and benefits for 3 years, the overall revenue associated with the programs was $733,336. On a per patient basis, this was approximately $1056. Although this revenue is lower than the downstream revenue of $1763/patient reported by others, Gilbert and colleagues did not account for potential indirect sources, such as revenue from short-term follow-up studies recommended for patients with Lung-RADS (Lung Imaging Reporting and Data System) 3- and 4A findings. Additional—but as yet unmeasured—potential revenue also exists for patients requiring adjuvant therapies for lung cancer treatment.

It is also notable that Gilbert and colleagues performed LCS in the way that it is intended and mandated by the Centers for Medicare and Medicaid Services, with documented shared decision making and tobacco cessation counseling. It is currently unclear whether providers ordering LDCT studies outside the context of a screening program are able to achieve this. My own group’s research demonstrated that a minority of providers outside the LCS program performed appropriate shared decision making and tobacco cessation counseling.

The study of Gilbert and colleagues should help to refute the perception that LDCT screening is costly. One could, in fact, argue that it is more costly not to screen patients and continue the status quo, in which more than 50% of patients with lung cancer have their disease diagnosed at stage IIIB and IV. Appropriate counseling and LDCT screening, in a model such as that described by Gilbert and colleagues, can be lifesaving. LDCT screening should not be considered too costly for any facility. We must recognize that LDCT LCS is at the least cost neutral, and it potentially is profitable for the institution. There are no more excuses not to provide LCS services. We owe it to our patients to promote and support these efforts.

Central Message
Lung cancer screening should not be considered too costly for any institution. A structured program provides appropriate care and may serve as a source of additional revenue for the institution. See Article page 416.

References
1. Aberle DR, Adams AM, Berg CD, Black WC, Clapp JD, Fagerstrom RM, et al; National Lung Screening Trial Research Team. Reduced lung-cancer mortality

The Journal of Thoracic and Cardiovascular Surgery • Volume 155, Number 1 369


