Improving Surveillance following Treatment for Lung Cancer

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It is generally accepted that follow-up of patients treated for lung cancer is required to detect recurrences promptly and offer effective treatment. In this issue of the *Journal of Thoracic Oncology*, the cost-effectiveness of two different approaches to this end is presented.[1] The experimental approach is a web-based, patient-reported outcome–based surveillance approach that was being been evaluated in a randomized trial that was halted early because of a significant benefit of the approach in terms of lung cancer survival.[2]

The patients included in the trial had Internet access and prior e-mail experience, which increasingly can be expected of patients with lung cancer. Although the patients in the experimental arm had more consultations, the average annual cost of surveillance follow-up was lower per patient in the experimental arm than in the control arm and the consultations were presumably more effective, as the numbers of deaths was significantly reduced in that arm compared with in the control arm, thus reducing costs associated with dying. This more than compensated for the greater costs of follow-up and treatment in the experimental than in the control arm, thus resulting in an acceptable incremental cost-effectiveness ratio per life-year gained.

Increasingly, these sorts of cost-effectiveness analyses are being used to determine whether a new approach should become health policy. With the recognition that we cannot afford to introduce everything that is possible, microsimulation mathematical modeling is a viable approach. In the United States, the National Cancer Institute–supported Cancer Intervention and Surveillance Modeling Network has evaluated various approaches to screening, generating analyses that have then been utilized by the U.S. Preventive Services Task Force to make recommendations (e.g., by de Koning et al.[3]). Similarly, in Canada, the Canadian Partnership Against Cancer in collaboration with Statistics Canada has developed the OncoSim modeling initiative, which has been used to evaluate the cost-effectiveness of different approaches to low-dose computed tomography screening for lung cancer in Canada.[4]

A parallel may be drawn between the present study and the approach recently recommended by the WHO for early detection of cancer in populations that might otherwise be exposed to major screening programs.[5] In effect, what is being recommended in both approaches is a return to making people aware of the early signs and symptoms of cancer, an approach that requires endeavors on a population basis to provide education on such signs and symptoms and ready access to trained physicians and facilities for prompt and accurate diagnosis of cancer, or in the present instance, recurrences of cancer. It would seem that self-reliance in this instance is not only effective but also cost-effective and that it should be increasingly encouraged.

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