Commentary: Guideline-concordant care requires recruitment from the full talent pool: Further rationale for efforts to increase diversity in cardiothoracic surgery

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Commentary: Guideline-concordant care requires recruitment from the full talent pool: Further rationale for efforts to increase diversity in cardiothoracic surgery

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Central Message: Inadequate surgeon numbers have been linked to fewer operations for stage I NSCLC, indicating a critical need to recruit from a diverse talent pool.

Central Picture Legend: Rachel M. Lee, MD MSPH and Mara B. Antonoff, MD FACS
In this thought-provoking investigation, Dr. Yang and colleagues report nationwide trends in the number and distribution of thoracic surgeons alongside parallel time trends in the use of surgery versus stereotactic body radiotherapy (SBRT) in stage I lung cancer from 2010 to 2018.\(^1\) We applaud the authors for this work and believe it to be critically important. Lung cancer is the leading cause of cancer mortality and carries a dismal prognosis if not diagnosed at an early stage. With the current United States Preventive Services Task Force recommendations of annual screening for high-risk patients, more patients are being diagnosed with early-stage disease.\(^2\) And while adoption of screening remains low, the authors found that diagnoses of stage I lung cancer increased by 44%. As resources are invested into improving adherence to lung screening, an important ethical dilemma emerges if we are unable to care for screening-diagnosed patients in a guideline-concordant manner.

The authors found that the number of cardiothoracic surgeons per 100,000 people decreased by 12% over the study period, which resulted entirely from decline in non-metropolitan regions. The percentage of patients who underwent surgical resection also decreased, while more patients underwent SBRT. These trends were greatest in non-metropolitan regions, suggesting that diminished access to surgeons in these areas impacts frequency of receipt of surgery—potentially leading to guideline-disconcordant care. Retrospective databases, of course, cannot determine causation, but the correlation of these data is striking.

Notably, the numbers of cardiothoracic fellowship positions, trainees matching into fellowship, and surgeons taking the thoracic licensing exam did not change, confirming a stability in the pipeline of surgeons.\(^1\) Yet it has not grown adequately to support the needs of an aging population. Moreover, the preponderance of this phenomenon in non-metropolitan areas indicates
that either the population outside of cities is increasing rapidly or that surgeons are increasingly choosing to practice in metropolitan areas.

As we contemplate strategies to increase our reach, especially to the full spectrum of patients whom we serve, it’s impossible to ignore the demographics of our workforce. Our specialty is one of the least diverse, with < 10% of practicing cardiothoracic surgeons identifying as women, and almost 3 times as many white as non-white surgeons.\(^3\,^4\) Not only has it been shown that a more diverse workforce translates to better patient care and outcomes, it would also allow us to grow at a faster rate – taking advantage of the rest of the untapped talent pool – while also potentially leading to increased diversity in practice settings. Trainees from rural areas are significantly more likely to return to rural areas to practice than those from urban areas, and underrepresented minority medical students more frequently aim to provide service to underserved populations in their career goals compared to white students.\(^5\,^6\) While the solutions to the questions posed by the authors are complex, in order to address the shortage of surgeons and to attract the best talent to our specialty, it is critical that we focus on recruiting and nurturing a diverse and vibrant community in which all feel welcomed and wanted.

We would like to again thank the authors for the important work presented in this manuscript, which we believe should serve as a call to action to the cardiothoracic community.
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