disparities affect smaller subsets of patients (resulting in an overall difference in the population that could seem minor). In the case of adjuvant chemotherapy for NSCLC, the traditional benefit is not large (5% increase in 5-year survivorship,¹ a fair bit less than was seen in the current study). The uninsured and other government insured represented 3.6% of the study population, and the oldest patients represented 6.9%. As a result, the impact of these disparities on the population would seem modest (ie, if all of these patients had received guideline concordant care, approximately 40 additional lives could have been saved during this study period). On the other hand, this is the fallacy of a “majority medicine” philosophy, *exclusively* focusing on the approach that benefits the most patients. Eventually, every patient can fit into a minority category, depending on the stratification strategy. It is important to recognize that the majority is, in actuality, a sum of many minorities. The “great” issue here is not the absolute number of lives saved, it is the potential for these differences to reflect restricted *access* to appropriate treatment, because restricted access is a big issue, even in a small subset. In this regard, the study findings appear to tell a bit of a split message. Clearly, some sociodemographic strata appeared to have been undertreated. However, several strata that are

historically colinear (ie, race, income, with insurance status) did not demonstrate a consistent pattern. As a result, it is difficult to pinpoint the “at-risk” population. This in no way dismisses their findings, only to say that more study is needed to better understand where to focus efforts to provide optimal care more uniformly. The authors should be commended for thoughtfully exploring this critically important topic that is worthy of additional study.

References

1. Pignon J-P, Tribodet H, Scagliotti GV, Douillard JY, Shepherd FA, Stephens RJ, et al. Lung adjuvant cisplatin evaluation: a pooled analysis by the LACE Collaborative Group. *J Clin Oncol*. 2008;26:3552-9.
2. Farrow NE, An SA, Speicher PJ, Harpole DH Jr, D’Amico TA, Klapper JA, et al. Disparities in guideline-concordant treatment for node-positive, non-small cell lung cancer following surgery. *J Thorac Cardiovasc Surg*. 2020;160:261-71.e1.
3. Johnson AM, Johnson A, Hines RB, Bayakly R. The effects of residential segregation and neighborhood characteristics on surgery and survival in patients with early-stage non-small cell lung cancer. *Cancer Epidemiol Biomarkers Prev*. 2016;25:750-8.
4. Shugarman LR, Mack K, Sorbero ME, Tian H, Jain AK, Ashwood JS, et al. Race and sex differences in the receipt of timely and appropriate lung cancer treatment. *Med Care*. 2009;47:774-81.
5. Balduyck B, Hendriks J, Lauwers P, Van Schil P. Quality of life evolution after lung cancer surgery: a prospective study in 100 patients. *Lung Cancer*. 2007;56:423-31.
6. Nezu K, Kushibe K, Tojo T, Takahama M, Kitamura S. Recovery and limitation of exercise capacity after lung resection for lung cancer. *Chest*. 1998;113:1511-6.

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Commentary: Chemo if you can—disparities in receipt of guideline-concordant adjuvant therapy in patients with locoregional non-small cell lung cancer

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CENTRAL MESSAGE

Within the limitations of the National Cancer Database, the study identifies inequities in care of patients with locoregional NSCLC and presents opportunities for further study and practice change.

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Indications and recommendations for the provision of adjuvant therapy in resected non-small cell lung cancer (NSCLC) are clearly delineated and readily accessible. The provision and delivery of adjuvant therapy to an individual patient, however, can be much more complicated. In this issue of the *Journal*, Farrow and colleagues¹ evaluated disparities in adherence to National Comprehensive Cancer Network guidelines for adjuvant therapy among patients with NSCLC and nodal disease who underwent margin-negative pulmonary lobectomy or pneumonectomy. In this cohort, 70% of patients received guideline-concordant adjuvant therapy. Older age, no or “other” insurance, pneumonectomy, extent of nodal disease, postoperative length of stay, and readmission were associated with less frequent receipt of guideline-concordant therapy. Receipt of guideline-concordant therapy was associated with significantly longer overall survival (adjusted hazard ratio, 0.66; 95% confidence interval, 0.62-0.70). This study highlights 3 interesting issues impacting use of adjuvant therapy in this patient population.

First, many factors associated with poorer adherence to National Comprehensive Cancer Network guidelines are also markers of frailty. It is unclear the extent to which any population of older patients who underwent lobectomy or pneumonectomy should tolerate adjuvant chemotherapy. It is important to determine whether the findings represent appropriate lack of adjuvant therapy due to shared decision-making incorporating clinician judgment and patient preferences versus lack of treatment because patients are not being presented with appropriate options. It should be noted that increased use of minimally invasive techniques since the beginning of the study period may reduce postoperative complications, potentially allowing more vulnerable patients to progress safely to adjuvant therapies.

Second, there was marked geographic variation in receipt of guideline-concordant therapy. Variables commonly implicated in geographic disparities, including travel distance or differences in access to more specialized centers, were not significant factors in this analysis. It would be interesting, however, to determine whether these findings are driven by differences in urban/rural location, hospital/provider volume, or surgical specialty. In addition, there may be regional differences in insurance, hospital, and provider network that could complicate the transition from surgical care at larger hospital centers to adjuvant therapy in the community.

Third, this analysis highlights insurance-based disparities in guideline-concordant care. Interestingly, this study only includes patients who had the financial means to undergo surgery, but the findings raise the possibility that the cost-sharing burden of subsequent chemotherapeutic regimens became exorbitant. The health care landscape has changed dramatically in recent years following the passage of the Affordable Care Act in 2010. While insurance policies are more widely available in many areas, they also include greater cost-sharing burdens for many patients. It is important to determine how these policy changes impact patients in a contemporary cohort, particularly because this study suggests a decrement in survival when adjuvant therapy is withheld.

Farrow and colleagues present a well-designed retrospective cohort study identifying disparities in receipt of guideline-concordant adjuvant therapy in patients with NSCLC. Within the limitations of the National Cancer Database, the study identifies inequities in the care of patients with locoregional disease and presents opportunities for further study and practice change.

Reference

1. Farrow NE, An SJ, Speicher PJ, Harpole DH Jr, D'Amico TA, Klapper JA, et al. Disparities in guideline-concordant treatment for node-positive non-small cell lung cancer following surgery. *J Thorac Cardiovasc Surg*. 2020;160:261-71.e1.