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The Healing Power of Antitrust

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ABSTRACT

Millions of rural Americans live in hospital deserts. These are communities where people lack geographic access to hospitals and primary care physicians. People living in these deserts must travel long distances to receive any type of care. For this reason, they often skip doctor appointments, delay necessary care, and stop adhering to their treatment. In this way, hospital deserts exacerbate the rising health disparities that so profoundly harm America.

This article demonstrates that such deserts are neither natural nor inevitable but result from several business strategies implemented by both urban and rural hospitals in America. These strategies, which include the use of non-compete agreements in the labor market, and the tactic of merging with competitors, reduce access to care for rural populations and magnify the shortage of nurses and physicians that plagues underserved areas. By unveiling these strategies, this article illustrates that the wounds hospital deserts inflict on rural communities cannot be treated adequately without the healing power of antitrust law.

Courts have failed to address the harm hospital deserts cause to the health and wealth of millions of Americans. By failing to assess the impact of hospital mergers on the wages and working conditions of employees in the hospital industry, and by examining all non-competes in labor markets under the "rule of reason" legal test, the courts have contributed to the hospital desert problem that disproportionately affects lower-income individuals and communities of color.

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This article is the first to address the need for antitrust enforcers and the courts to confront the harms that hospital deserts pose. It makes three proposals. First, antitrust enforcers and the courts should expand their merger analyses by assessing the impact of hospital mergers on labor markets rather than focusing solely on the impact of those mergers on the price and quality of hospital services. Second, they should treat all non-compete agreements in the healthcare sector as per se illegal. And third, they should accept mergers in rural areas only under the condition that the merged entity will not shut down facilities or cut healthcare services in rural communities already lacking access to essential care. By implementing these proposals, antitrust enforcers and the courts can help mitigate the racial and health inequities that currently undermine the social, moral, and economic fabric of America.

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INTRODUCTION

Healthcare in rural America has hit a crisis point. Even though the health of people living in rural areas is worse than that of people living in metropolitan areas, rural populations are nonetheless deprived of the care they so need and deserve.[1] Rural residents are more likely to be poor, unemployed, and uninsured, and they are also more likely to suffer from a severe chronic condition or substance abuse disorder.[2] People in rural areas are also more likely to live with a disability that impacts their mobility, their self-care, and their ability to live independently.[3] Rural communities also experience higher rates of suicide than do communities in urban areas.[4]

For people of color, life in rural America is even harder.[5] Racial and ethnic minorities in rural areas are less likely to receive primary care due to the prohibitive cost, and they are more likely to die from a severe health condition, such as diabetes or heart disease.[6] Children and young adults in

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[1] *See*, e.g., Janice Probst, Jan Marie Eberth, & Elizabeth Crouch, *Structural Urbanism Contributes to Poorer Health Outcomes for Rural Americans*, 38 HEALTH AFFS. 1976, (2019).

[2] *See About Rural Health*, CENTER FOR DISEASE CONTROL (CDC) (May 9, 2023), https://www.cdc.gov/ruralhealth/about.html [hereinafter *About Rural Health*; *see also* GEORGETOWN UNIVERSITY, *Rural and Urban Health*, HEALTH POL'Y INST., https://hpi.georgetown.edu/rural/, (last visited Sept. 14, 2023); *Substance Use and Misuse in Rural Areas*, RURAL HEALTH INFO. HUB (Jan. 16, 2024), https://www.ruralhealthinfo.org/topics/substance-use.

[3] *See Disability Rates Higher in Rural Areas than Urban Areas*, U.S. CENSUS BUREAU (June 26, 2023), https://www.census.gov/library/stories/2023/06/disability-rates-higher-in-rural-areas-than-urban-areas; *see also* Brian Thiede et al., *Six Charts That Illustrate the Divide between Rural and Urban America*, THE CONVERSATION (Mar. 16, 2017), https://theconversation.com/six-charts-that-illustrate-the-divide-between-rural-and-urban-america-72934.

[4] EILEEN O'GRADY, MARY BUGBEE, & MICHAEL FENNE, PRIVATE EQUITY DESCENDS ON RURAL HEALTHCARE 3 (Jan. 2023), https://pestakeholder.org/wp-content/uploads/2023/02/PE_Rural_Health_Jan2023-compressed.pdf; *see also* Rebecca A. Clay, *Reducing Rural Suicide*, 45 AM. PSYCH. ASSOC. MONITOR ON PSYCH. 36, 36 (2014).

[5] *See* Carrie E. Henning-Smith et al., *Rural Counties with Majority Black or Indigenous Populations Suffer the Highest Rates of Premature Death in the US*, 38 HEALTH AFFS. 2019 (2019).

[6] *See* Rahul Hagarwal et al., *Rural-Urban Disparities: Diabetes, Hypertension, Heart Disease, and Stroke Mortality Among Black and White Adults*, 77 J. AM. COLL.

rural America are likewise disproportionately affected.[7] Empirical evidence indicates that rural communities experience higher child and infant mortality rates as compared to communities in metropolitan areas.[8] Research thus indicates that the most vulnerable among us suffer the most in underserved areas.

Although rural residents experience worse health outcomes than urban residents, rural hospitals throughout the entire nation are closing at a dangerous rate.[9] Recent data show that, since 2010, more than 150 rural hospitals have shut their doors and more than 30% of all hospitals in rural areas are at immediate risk of closure.[10] As hospital closures in rural communities increase, hospital deserts also increase in size and number. Hospital deserts are areas where people lack geographic access to hospitals and primary care physicians. Every state has at least one such health-desert county. The following map (Figure 1) is illustrative:[11]

CARDIOLOGY 1480, 1480 (2021); Arch G. Mainous III et al., *Race, Rural Residence, and Control of Diabetes and Hypertension*, 2 ANNALS OF FAM. MED. 563, 563-64 (2004).

[7] *See generally* Janice Probst, Whitney Zahnd, & Charity Breneman, *Declines in Pediatric Mortality Fall Short For Rural US Children*, 38 HEALTH AFFS. 2069, 2069 (2019).

[8] *See id.*

[9] *Rural Hospital Closures Fuel Rising Demand and Costs at Nearby Hospitals*, NAT'L INST. HEALTH (Mar. 7, 2023), https://ncats.nih.gov/news-events/news/rural-hospital-closures-fuel-rising-demand-and-costs-at-nearby-hospitals; *see also* O'GRADY ET AL., *supra* note 4, at 4; AM. HOSP. ASSOC., RURAL HOSPITAL CLOSURES THREATEN ACCESS: SOLUTIONS TO PRESERVE CARE IN LOCAL COMMUNITIES 3 (2022), https://www.aha.org/2022-09-07-rural-hospital-closures-threaten-access [hereinafter HOSPITAL CLOSURE SOLUTIONS]; *Rural Hospitals at Risk of Closing*, CTR. FOR HEALTHCARE QUALITY AND PAYMENT REFORM (2023), https://ruralhospitals.chqpr.org/downloads/Rural_Hospitals_at_Risk_of_Closing.pdf; Univ. N.C., *191 Hospital Closures and Conversions since 2005*, SHEPS CTR. FOR HEALTH SERVS. RSCH. (2014), https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/.

[10] *See* O'GRADY ET AL., *supra* note 4, at 4; *see also*, Colter Robinson, *More Than Half of Rural Kansas Hospitals at Risk of Closing*, KSNT LOCAL NEWS (Aug. 9, 2023 9:58 AM), https://www.ksnt.com/news/local-news/these-are-the-rural-kansas-hospitals-at-risk-of-closure; *see also* Austin B. Frankt, *The Rural Hospital Problem*, 321 JAMA F. 2271, 2271 (2019).

[11] AMANDA NGUYEN ET AL., MAPPING HEALTHCARE DESERTS 13 (2021), https://www.goodrx.com/healthcare-access/research/healthcare-deserts-80-percent-of-country-lacks-adequate-healthcare-access (scroll to the bottom of the page and click "Read our full white paper here.").

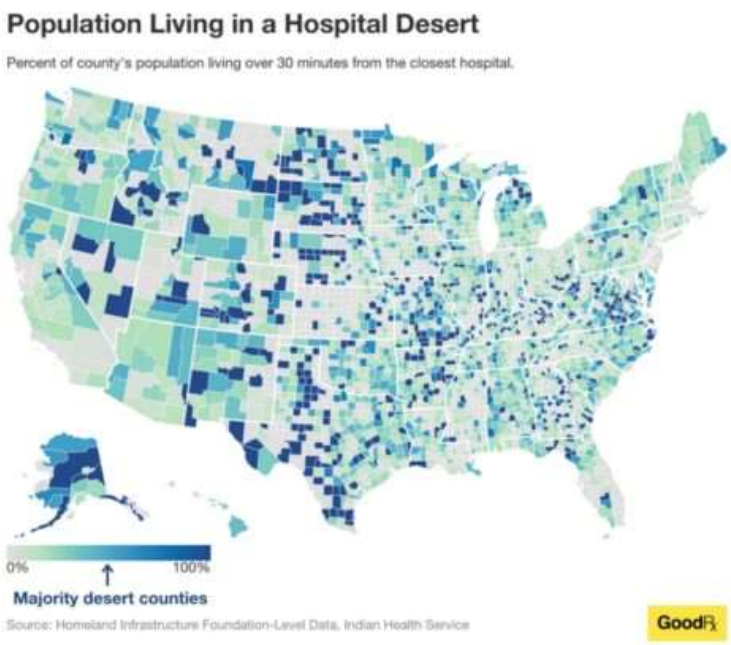

Figure 1: Healthcare Deserts, County by County.

Specifically, Figure 1 illustrates two important points: first, that in more than 20% of American counties, people live in a hospital desert.[12] Second, that hospital deserts are primarily located in rural America.[13] The states with the highest percentages of their respective populations living in hospital deserts include Alabama, Alaska, Vermont, Maine, and Arkansas, where most hospital deserts are concentrated in rural areas.[14]

Research demonstrates that hospital deserts reduce access to care for rural residents and exacerbate the rising health disparities in America. Each time a hospital shuts its doors, rural residents must travel long distances to receive any type of care. Rural populations, however, tend to be more vulnerable, and some residents may not even have access to a vehicle.[15] For this reason, data show that rural residents often skip doctor appointments, delay necessary care, or stop adhering to their treatment.[16] A leading study

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[12] *Id.* at 12.
[13] *Id.* at 13.
[14] *Id.*
[15] CARRIE E. HENNING-SMITH ET AL., UNIV. MINN. RURAL HEALTH RSCH. CTR., RURAL TRANSPORTATION: CHALLENGES & OPPORTUNITIES 2 (2017), https://rhrc.umn.edu/wp-content/uploads/2019/01/1518734252UMRHRCTransportationChallenges.pdf.
[16] Jane Wishner et al., *A Look at Rural Hospital Closures and Implications for Access to Care*, KAISER COMM'N ON MEDICAID & THE UNINSURED 8 (Jul. 7, 2016), https://www.kff.org/report-section/a-look-at-rural-hospital-closures-and-implications-for-access-to-care-three-case-studies-issue-brief/; *see also* Samina T. Syed, Ben S. Gerber, & Lisa K. Sharp, *Traveling Towards Disease: Transportation Barriers to Health Care Access*, 38 J. CMTY. HEALTH 976, 979-83 (2014); Marvellous Akinlotan et al., *Rural Urban Variation in Travel Burdens for Care*, S.W. RURAL HEALTH RSCH. CTR. (Dec. 2021), https://srhrc.tamu.edu/publications/rural-urban-variation-in-travel-burden-for-care-executive-summary1.pdf

examining the relationship between transportation barriers and health outcomes in rural communities sheds light on those concerns: after surveying 600 cancer patients in Texas who lacked access to a vehicle, researchers found that 38% of whites, 55% of African Americans, and 60% of Hispanics delayed cancer treatment due to insurmountable transportation barriers, demonstrating that race is also an indicator of increased vulnerability in hospital desert counties.[17] Another leading study points to similar conclusions, showing that rural children are often deprived of much-needed care because of the high transportation barriers that rural communities face.[18]

Moreover, driving great distances to receive time-sensitive care, such as emergency or obstetric care, increases mortality rates for rural populations.[19] For instance, robust research indicates that between 2011 and 2019, almost 200 rural hospitals stopped offering obstetric services,[20] forcing rural women to travel up to 60 miles for care and delivery.[21] Traveling long distances to receive necessary care increases the risk of health complications and the stress rural women and their families

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[17] *See* Syed et al., *supra* note 16, at 978.

[18] *See generally* Roy Grant et al., *Transportation Barriers to Child Healthcare Access Remain after Health Reform*, 168 JAMA PEDIATRIC 385 (2014).

[19] Caitlin Carroll, Arrianna Planey, & Katy B. Kozhimannil, *Reimagining and Reinvesting in Rural Hospital Markets*, 57 HEALTH SERVS. RSCH. 1001, 1001-02 (2022) ("Hospital closures are concerning, in part, because of the potential effects on patient health. On the one hand, hospital closure decreases access to care and increases travel times, raising concerns about adverse health outcomes for patients with time-sensitive conditions. This may be exacerbated for Black or Latinx residents, who face additional barriers to access, such as longer travel distances."); *see also* Martha Hostetter & Sarah Klein, *Restoring Access to Maternity Care in Rural America*, THE COMMONWEALTH FUND (Sept. 30, 2021), https://www.commonwealthfund.org/publications/2021/sep/restoring-access-maternity-care-rural-america ("As of 2014, more than half of rural counties in the U.S. were considered maternity care deserts, with no hospital-based obstetric services; worsening access has contributed to increases in maternal mortality and morbidities among rural residents particularly Black Women."); Jane O'Donnell & Laura Ungar, *Rural Hospitals in Critical Condition*, USA TODAY (Nov. 12, 2014 5:06 PM), https://www.usatoday.com/story/news/nation/2014/11/12/rural-hospital-closings-federal-reimbursement-medicaid-aca/18532471/ ("There's a 'golden hour' after heart attacks, trauma and stroke in which treatment is needed to prevent loss of heart muscle and brain tissue.").

[20] MICHAEL TOPCHIK ET AL., THE CHARTIS GROUP, PANDEMIC INCREASES PRESSURE ON RURAL HOSPITALS & COMMUNITIES 8 (2022), https://www.chartis.com/sites/default/files/documents/Pandemic-Increases-Pressure-on-Rural-Hospitals-Communities-Chartis.pdf.

[21] Dina F. Maron, *Pregnant Women Often Have to Travel an Hour or More to Deliver in Rural America*, STAT NEWS (Feb. 16, 2017), https://www.statnews.com/2017/02/16/pregnant-women-rural-america/; *see also* Peiyin Hung et al., *Why Are Obstetrics Units in Rural Hospitals Closing Their Doors?*, 51 HEALTH SERVS. RSCH. 1546, 1552 (2016); Elizabeth Reitman, *Many Women in Low Income Areas Have Poor Access to Obstetric and Neonatal Care Study Finds*, YALE SCH. MED. (Mar. 16, 2018), https://medicine.yale.edu/news-article/many-women-in-low-income-areas-have-poor-access-to-obstetric-and-neonatal-care-study-finds/.

experience when the time to give birth arrives.[22] Many obstetric emergencies also require a medical response within minutes, rather than the hours it may take rural residents to drive to a hospital.[23] As a result, for rural women, and especially women of color, giving birth to a child is now more dangerous than it was 20 years ago.[24]

Unfortunately, following the Supreme Court's decision in *Dobbs v. Jackson Women's Health Organization*[25] ("*Dobbs*"), which allows states to either prohibit or limit access to abortion care, this trend will only change for worse.[26] In the wake of *Dobbs*, hospitals in abortion-ban states struggle to retain gynecologists and obstetricians because they fear criminal punishment and even life imprisonment if they offer women the full range of medical services for which they have received training.[27] This has reduced rural women's access to maternal care which, in turn, will further deteriorate their poor health.[28]

Hospital deserts not only harm the health but also the wealth of rural communities. Rural hospitals are often the largest employers in their communities.[29] For this reason, they are "economic anchors" in rural areas.[30] For instance, a 2017 report published by the American Hospital Association (AHA) shows that hospitals create more than 16 million jobs throughout the nation.[31] These include jobs in both the healthcare sector and

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[22] *See* Maron, *supra* note 21.

[23] John Cullen, *A Worsening Crisis: Obstetric Care in Rural America*, HARV. MED. SCH. PRIMARY CARE REV. (Mar. 25, 2021), https://info.primarycare.hms.harvard.edu/perspectives/articles/obstetric-care-rural-america.

[24] *See id.*

[25] Dobbs v. Jackson Women's Health Org., 142 S. Ct. 2228 (2022).

[26] AMALIA LONDOÑON TOBÓN ET AL., THE END OF ROE V. WADE: IMPLICATIONS FOR WOMEN'S MENTAL HEALTH AND CARE, FRONTIERS IN PSYCHIATRY 3 (2023); *see also* Eugene Declercq et al., *The U.S. Maternal Health Divide: the Limited Maternal Health Services and Worse Outcomes of States Proposing New Abortion Restrictions*, THE COMMONWEALTH FUND (Dec. 14, 2022), https://www.commonwealthfund.org/publications/issue-briefs/2022/dec/us-maternal-health-divide-limited-services-worse-outcomes.

[27] Julie Rovner, *Abortion Bans Drive off Doctors and Put Other Health Care at Risk*, SHOTS: HEALTH NEWS FROM NPR (May 23, 2023 5:00AM), https://www.npr.org/sections/health-shots/2023/05/23/1177542605/abortion-bans-drive-off-doctors-and-put-other-health-care-at-risk; *see also* Sophie Novack, *You Know What? I'm Not Doing This Anymore*, SLATE (Mar. 21, 2023), https://slate.com/news-and-politics/2023/03/texas-abortion-law-doctors-nurses-care-supreme-court.html.

[28] Elyssa Spitzer, Tracy Weitz, & Maggie Jo Buchanan, *Abortion Bans Will Result in More Women Dying*, CTR. AM. PROGRESS (Nov. 2, 2022), https://www.americanprogress.org/article/abortion-bans-will-result-in-more-women-dying/.

[29] Carroll et al., *supra* note 19, at 1002 ("Rural hospitals are often major employers in rural areas, so closure can affect the economic vitality of the local community").

[30] Claire E. O'Hanlon et al., *Access, Quality, and Financial Performance of Rural Hospitals Following Health System Affiliation*, 38 HEALTH AFFS. 2095, 2095 (2019).

[31] *See* HOSPITALS ARE ECONOMIC ANCHORS IN THEIR COMMUNITIES, AM. HOSP. ASSOC. (2017), https://www.aha.org/system/files/content/17/17econcontribution.pdf.

in other supporting industries, such as the construction industry.[32] In addition to creating jobs, rural hospitals also support local businesses by purchasing their products and services.[33] By doing so, they contribute to local tax revenues, which, in turn, increases the funding available for infrastructure and public services, including road maintenance and education.[34] The emergence of better infrastructure in rural neighborhoods attracts new residents, which ultimately leads to further growth.[35]

Because hospitals are engines for economic growth and opportunity in rural neighborhoods, the price Americans pay each time a hospital closes is very high.[36] When a rural hospital closes, several community members employed by the hospital may move to urban areas to pursue alternative employment and make a living. This, in turn, reduces local revenues and inhibits growth in rural communities. In addition, community members who lose their jobs have less disposable income to spend, which ultimately threatens the jobs of those who depend on the expenditures of other local residents.[37] Recent data reveal that when a hospital leaves a community, unemployment rate rises by 1.6%, and per capita income declines by 4%.[38]

This article examines what causes hospital deserts in rural areas, and in doing so, demonstrates that the hospital desert problem should also be treated as an antitrust problem. This is because the hospital closure crisis causing hospital deserts in rural communities is also the result of several deliberate business strategies implemented by both rural and urban hospitals in America. These strategies include unreasonable non-compete agreements, which discourage physicians and nurses from offering their services to rural populations already suffering from a shortage of health professionals, and a rash of hospital mergers that have increased consolidation in the hospital industry and have eliminated access to care for the most vulnerable Americans. For these reasons, this article argues that the hospital desert problem in rural areas cannot be adequately treated without the healing power of antitrust law.

This article proceeds in four parts: Part I identifies the roots of the problem, exploring the hospital closure epidemic in rural America. It shows that, due to the sociodemographic characteristics of rural populations, the

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[32] *See* Tyler L. Malone et al., *The Economic Effect of Rural Hospital Closures*, 57 HEALTH SERV. RSCH. 614, 615 (2022).

[33] *See id.*; *see also* RURAL REPORT: CHALLENGES FACING RURAL COMMUNITIES AND THE ROADMAP TO ENSURE LOCAL ACCESS TO HIGH-QUALITY AFFORDABLE CARE, AM. HOSP. ASSOC., 3 (2022), https://www.aha.org/system/files/media/file/2022/09/rural-hospital-closures-threaten-access-report.pdf [hereinafter RURAL REPORT I].

[34] *See* RURAL REPORT: CHALLENGES FACING RURAL COMMUNITIES AND THE ROADMAP TO ENSURE LOCAL ACCESS TO HIGH-QUALITY AFFORDABLE CARE, AM. HOSP. ASSOC., 2 (2019), https://www.aha.org/system/files/2019-02/rural-report-2019.pdf [hereinafter RURAL REPORT II]

[35] *See* Malone et al., *supra* note 32, at 615.

[36] Frankt, *supra* note 10, at 2271.

[37] George M. Holmes et al. *The Effect of Rural Hospital Closures on Community Economic Health*, 41 HEALTH SERV. RSCH. 467, 472 (2006).

[38] *See id* at 478.

low volume of patients that rural hospitals treat, and the shortage of nurses and physicians in rural communities, rural hospitals are more financially vulnerable than urban hospitals. Part II examines some of the ameliorative health policy measures proposed so far, including the increased use of telemedicine in underserved areas, Medicaid expansion, and greater reliance on health promotion programs. By exploring the relative strengths and weaknesses of such measures, Part II shows that, despite being fruitful and even crucial, these measures alone are destined to fail in mitigating the problem of hospital deserts. The reason is simple: these measures fail to address the antitrust dimension of hospital deserts in rural America. Part III sheds light on this antitrust dimension by examining the business strategies employed by urban and rural hospitals throughout the nation, demonstrating how these strategies aggravate the hospital closure crisis in underserved areas. As noted, these business strategies include the use of non-compete agreements in the labor market and the tactic of merging with competitors. Part III demonstrates that these business strategies have left rural communities without any meaningful access to care.

Part IV identifies three ways in which the enforcers and the courts can address the severe harms that hospital deserts cause to rural populations. First, the enforcers and the courts should expand their merger analysis by assessing the impact of hospital mergers on labor. Second, they should treat all non-compete agreements in the healthcare sector as per se illegal. Third, they should accept mergers in rural areas only under the condition that the merged entity will not shut down facilities or cut essential services in rural neighborhoods.

This article is the first to address the need for the enforcers and the courts to confront the harms that hospital deserts pose to millions of Americans. Failing to address this problem will contribute to the rising racial and health inequities that undermine the social, moral, and economic fabric of America.

I. UNVEILING THE PROBLEM: WHY DO RURAL HOSPITALS SHUT THEIR DOORS?

A. The Socioeconomic Characteristics of Rural Americans

Hospitals in rural areas treat the most vulnerable among us. Research demonstrates that they treat patients who are older,[39] poorer, and sicker than their urban counterparts.[40] For instance, data show that rural Americans are more likely to have an income below the federal poverty

[39] Stephen A. Cohen & Mary L. Greaney, *Aging in Rural Communities*, 10 CURRENT EPIDEMIOLOGY REP. 1, 1 (2023) ("[A]lthough only 15% of the US population lives in "rural" areas, a disproportionate share of older Americans (22%) lives in rural areas").

[40] *See* O'GRADY ET AL., *supra* note 4, at 2; *see also* Elizabeth Dougherty, *If You Build It,* HARV. MED., Spring 2017, https://magazine.hms.harvard.edu/articles/if-you-build-it; RURAL REPORT II, *supra* note 34, at 5.

level;[41] they are also more likely to suffer from costly diseases, such as diabetes, cancer, and obesity, or to struggle with depression and substance abuse disorders.[42] In addition, Americans in rural areas have higher age-adjusted mortality rates than Americans in metropolitan areas.[43] *Why is this the case?*

Poverty damages health. Where we live, work, and play has a tremendous impact on our health. To highlight the social gradient in health, Michael Marmot[44] has pointed out that "if you catch the Jubilee tube line, for each stop east from Westminster in central London, life expectancy drops a year."[45] If you live in a neighborhood that is somewhere between the humblest and the most exalted, your life expectancy will be somewhere between the low end expected in poorer areas and higher prospects in the richer neighborhoods.[46] In other words, the richer the area in which we live, the better our health.

A healthy environment is also vital for a healthy body.[47] Research demonstrates that rural communities have suffered disproportionate harms due to the climate crisis, water pollution,[48] and environmental hazards left behind at toxic industrial sites.[49] Housing quality may also be poorer for rural communities and ethnic minorities, which also contributes to the worse health outcomes they experience.[50] The lack of a strong social support system, such as high-quality transportation[51] or a robust public school system, might also negatively affect health outcomes.[52] The high barriers that rural Americans face for accessing healthy foods, like fresh

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[41] Thiede et al., *supra* note 3 ("Nearly one in five rural working householders lived in families with incomes less than 150 percent of the poverty line.").

[42] Tanya Lewis, *People in Rural Areas Die at Higher Rates than Those in Urban Areas*, SCI. AM. (Dec. 14, 2022), https://www.scientificamerican.com/article/people-in-rural-areas-die-at-higher-rates-than-those-in-urban-areas/.

[43] *Id.*

[44] MICHAEL MARMOT, THE HEALTH GAP, THE CHALLENGE OF AN UNEQUAL WORLD 27 (2015).

[45] *Id.*

[46] *Id.*

[47] *See generally* Nigel Rice & Peter C. Smith, *Ethics and Geographical Equity in Health Care*, 27 J. MED. ETHICS 256 (2001).

[48] Heather Strosnider et al., *Rural and Urban Differences in Air Quality 2008-2012, and Community Drinking Water Quality 2010-2015, United States*, 66 MORBIDITY & MORTALITY WKLY. REP. 1, 2-3 (2017).

[49] U.S. DEPT. OF INTERIOR, ADVANCING ENVIRONMENTAL JUSTICE (last visited Feb. 6, 2024), https://www.doi.gov/advancing-environmental-justice/; *see also Social Determinants of Health in Rural Communities Toolkit*, RURAL HEALTH INFO. HUB, https://www.ruralhealthinfo.org/toolkits/sdoh/2/built-environment/housing-quality (last visited Feb. 4, 2024) [hereinafter *Social Determinants Toolkit*].

[50] *Social Determinants Toolkit*, *supra* note 49.

[51] *See* HENNING-SMITH ET AL., *supra* note 15.

[52] *Educational Equity for Rural Students Part IV: School Safety and Mental Health of Rural Students*, CTR. FOR PUB. EDUC. 8, 15, 21 (2023), https://www.nsba.org/-/media/CPE-Report-School-Safety-and-Mental-Health-of-Rural-Students.pdf (arguing that rural schools receive much lower funding than urban schools in America and this is one of the reasons rural schools cannot offer students school-based mental health services).

fruits and vegetables, further prevent them from experiencing better health outcomes.[53]

In addition to experiencing poorer health outcomes, rural Americans face higher structural barriers to accessing primary care compared to urban Americans. As noted, rural residents experience higher rates of poverty, and hence, are more likely to be uninsured or underinsured.[54] Because paying out-of-pocket to have regular check-ups, diagnostic tests, and other preventive services may be cost prohibitive for lower income rural Americans, they may not obtain such services at all, even in cases where they urgently need them.[55]

Reality indicates that when low-income citizens delay receiving much-needed care, they tend to rely more heavily on hospital emergency departments to seek treatment.[56] Yet, this creates another problem. The Emergency Medical Treatment and Active Labor Act ("EMTALA") requires hospitals to offer urgent care to all citizens, even to those who lack coverage. Because rural hospitals treat a higher percentage of uninsured patients than urban hospitals, they perform a higher rate of uncompensated care.[57] This increases their costs, undermines their financial viability, and often expedites their closure.[58] Sound research indicates that

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[53] *See Rural Hunger and Access to Healthy Food*, RURAL HEALTH INFO. HUB, (Jan. 18, 2022), https://www.ruralhealthinfo.org/topics/food-and-hunger; *see also* Jessica Caporuscio, *What Are Food Deserts and How Do They Impact Health?*, MED. NEWS TODAY (June 22, 2020), https://www.medicalnewstoday.com/articles/what-are-food-deserts#definition; Denise Payán, *Addressing Food Insecurity and Promoting Nutrition in Low-Income Communities*, UNIV. CAL. IRVINE HEALTH AFFAIRS (Sept. 21, 2022), https://healthaffairs.uci.edu/news-and-media/digital-publications/bridging-the-gap-addressing-food-insecurity-and-promoting-nutrition-in-low-income-communities/.

[54] *See* Jennifer Cheeseman-Day, *Health Insurance In Rural America*, U.S. CENSUS BUREAU (Apr. 9, 2019) https://www.census.gov/library/stories/2019/04/health-insurance-rural-america.html ; *see also The Uninsured in Rural America: Key Facts*, KAISER COMM'N ON MEDICAID & THE UNINSURED (Apr. 2003), https://www.kff.org/wp-content/uploads/2013/01/the-uninsured-in-rural-america-update-pdf.pdf.

[55] *See* Jennifer Tolber, Patrick Drake, & Anthony Damico, *Key Facts about the Uninsured Population*, KAISER COMM'N ON MEDICAID & THE UNINSURED (Dec. 19, 2022), https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/.

[56] *See* Nguyen et al., *supra* note 11, at 10.

[57] According to the AHA "Uncompensated care is an overall measure of hospital care provided for which no payment was received from the patient or insurer. It is the sum of a hospital's bad debt and the financial assistance it provides. Financial assistance includes care for which hospitals never expected to be reimbursed and care provided at a reduced cost for those in need. A hospital incurs bad debt when it cannot obtain reimbursement for care provided; this happens when patients are unable to pay their bills, but do not apply for financial assistance, or are unwilling to pay their bills. Uncompensated care excludes other unfunded costs of care, such as underpayment from Medicaid and Medicare." *See Uncompensated Hospital Care Cost Fact Sheet*, AM. HOSP. ASSOC. 1 (Feb. 2022); *see also* Emmaline Keesee et al., *Uncompensated Care is Highest for Rural Hospitals, Particularly in Non-Expansion States*, 1 MED. CARE RSCH. & REV. 1, (2023).

[58] *See* Tarun Ramesh & Emily Gee, *Rural Hospital Closures Reduce Access to Emergency Care*, CTR. AM. PROGRESS (Sep. 9, 2019) https://www.americanprogress.org/article/rural-hospital-closures-reduce-access-emergency-care/.

uncompensated care is one of the primary reasons why rural hospitals frequently fail to remain in business and treat their residents.[59]

Surely, Medicaid expansion could reduce the burden of uncompensated care for rural hospitals.[60] However, many rural hospitals operate in states that have not expanded Medicaid,[61] such as Texas and Mississippi. Failure to expand Medicaid in these states has naturally increased the rates of uncompensated care that rural hospitals offer, as well as the percentage of populations which live in hospital deserts within these states due to extremely high rates of hospital closures.

B. Lower Volume of Patients

Many rural residents experience deep poverty due to a lack of economic opportunity. Because they often move to affluent urban areas to improve their lives and flourish, many rural areas are characterized by low population density.[62] Because rural hospitals treat a lower volume of patients than urban hospitals, rural hospitals fail to achieve the scale necessary to cover their high fixed costs and boost their profit margins.[63] This poses serious problems for their financial stability and frequently leads to closures.

Indeed, in the early 1990s, the Government Accountability Office found that low occupancy was highly correlated with hospital closures.[64] This led Congress to establish the Low Volume Adjustment program in 2003. Pursuant to this program, the Center for Medicare and Medicaid Services (CMS) offered additional payments to qualifying hospitals to help them cover the higher costs they incur due to lower patient volumes.[65] However, because only a limited number of hospitals qualified for this benefit, several rural hospitals still struggle to cover their high fixed costs and keep afloat.[66]

Low population density is not the only reason why rural hospitals struggle with low patient volumes. Empirical evidence indicates that higher-income rural residents who have private health insurance often bypass their local hospitals to receive care from technologically advanced urban hospitals.[67] Because rural hospitals are more financially vulnerable

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[59] *See id.*

[60] *See* Richard C. Lindrooth et al., *Understanding the Relationship between Medicaid Expansions and Hospital Closures*, 37 HEALTH AFFS. 111, 117-18 (2018).

[61] *See* Ramesh & Gee, *supra* note 58.

[62] *See* RURAL REPORT II, *supra* note 34, at 3.

[63] *See id.* at 4.

[64] *Id.*

[65] *Id.*

[66] *Id.*

[67] *See Patterns of Hospital Bypass and Inpatient Care-seeking by Rural Residents*, UNIV. N.C. SHEPS CTR. https://www.shepscenter.unc.edu/product/patterns-of-hospital-bypass-and-inpatient-care-seeking-by-rural-residents/ (last visited Feb 4. 15, 2024); *Cf.* ALANA KNUDSON ET AL., CTR. MEDICARE & MEDICAID SERVS., UNDERSTANDING RURAL HOSPITAL

than their urban counterparts, they invest less in infrastructure improvements and medical technologies.[68] This motivates higher-income rural residents with better coverage to obtain care at urban hospitals.[69] Without this privately insured patient base, rural hospitals end up primarily treating patients who receive coverage through Medicare or Medicaid.[70] These programs pay significantly lower reimbursement rates than private health insurers.[71] Thus, rural hospitals experience higher negative profit margins than urban hospitals, expediting their closure.[72]

Low patient volumes may hurt not only the financial stability of rural hospitals, but also the quality of services offered.[73] Research demonstrates a positive correlation between procedure volumes and patient volumes:[74] the higher the volume of operations a hospital undertakes, the higher the quality of these procedures. In the field of pediatric care, for instance, empirical evidence shows that hospitals treating a higher number of patients with similar health conditions have better adjusted mortality rates[75], which is one of the most common quality indicators in health services research. The same applies for specific surgical procedures,[76] such as breast cancer operations.[77]

Because rural hospitals treat a lower volume of patients than urban hospitals, they may either fail to obtain statistically reliable results for performance measures, such as mortality or readmission rates, or they may perform relatively poorly in them.[78] This is because, for hospitals with just a few cases per year, a single death may statistically depress their performance indicators.[79] Importantly, these indicators, published by the

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BYPASS AMONG MEDICARE FEE-FOR-SERVICE BENEFICIARIES IN 2018 (2020), https://www.cms.gov/files/document/hospitalbypassamongmedicaredatahighlightsept2020-1-1.pdf (indicating that even rural residents with Medicare and Medicaid frequently bypass their local hospitals in favor of urban hospitals).

[68] *See* Wishner et al., *supra* note 16, at 5 ("The local community hospital may have been older, and due to financial struggles prior to closure, may have invested less in infrastructure improvements.").

[69] *Id.*

[70] *See* Wishner et al., *supra* note 16, at 4.

[71] RURAL REPORT II, *supra* note 34, at 4.

[72] *See* Wishner et al., *supra* note 16, at 4-5.

[73] *See* Dougherty, *supra* note 40.

[74] Johannes Morche, Tim Mathes, & Dawid Pieper, *Relationship Between Surgeon Volumes and Outcomes: a Systematic Review of Systematic Reviews*, 5 SYS. REV. 204, 214 (2016).

[75] John M. Tilford et al., *Volume-Outcome Relationships in Pediatric Intensive Care Units*, 106 PEDIATRICS 289 (2000).

[76] *See generally* Mathieu Levaillant et al., *Assessing the Hospital Volume-Outcome Relationship in Surgery: a Scoping Review*, 21 BMC MED. RSCH. METHODOLOGY 204 (2021); *see also* Morche et al., *supra* note 74, at 214.

[77] *See generally* Mary Ann Gilligan et al., *Relationship between Number of Breast Cancer Operations Performed and 5-year Survival after Treatment for Early-stage Breast Cancer*, 97 AM. J. PUB. HEALTH 539, 541 (2007).

[78] *See* RURAL REPORT I, *supra* note 33, at 5.

[79] *See* Dougherty, *supra* note 40 (arguing that "for a hospital with few cases per year, a single death pushes quality statistics down. And for small rural hospitals that aren't classified as critical access, the financial risk is higher").

CMS and the Agency for Healthcare Research and Quality (AHRQ), are often consulted by physicians making referral decisions, as well as by patients and health insurers. For this reason, poor performance indicators further decrease patient volumes, and hence, undermine rural hospitals' financial stability and their ability to compete with urban hospitals.[80]

But this is not the only reason why low patient volumes threaten hospitals' financial performance. For example, rural hospitals receive a "standard flat fee for each episode of care", just like the larger hospitals in metropolitan areas.[81] This may not seem particularly troubling at first; because some cases are naturally costlier than others, "the thinking goes that it will all balance out in the end."[82] But while this thinking makes sense for large urban hospitals, who treat enough patients to achieve an average patient cost that reliably reflects the proportion of seriously ill patients to moderately ill patients in the community, for hospitals with a lower volume of patients, that equilibrium does not exist. For this reason, experts warn that "even one very sick patient can close a rural hospital's doors."[83]

C. Extreme shortage of physicians and nurses

America is experiencing an extreme shortage of healthcare professionals, especially in the post-pandemic era.[84] Rural America in particular is disproportionately affected by this shortage.[85] Data show that, although rural populations account for 20% of the US population, only 10%

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[80] Brian Wallheimer, *Hospitals Ratings Are Deeply Flawed. Can They Be Fixed?*, CHI. BOOTH REV. (Aug. 26, 2020), https://www.chicagobooth.edu/review/hospital-ratings-are-deeply-flawed-can-they-be-fixed ("the CMS ratings have a particularly strong influence in the industry, in part because they affect a hospital's contract negotiations with insurance companies.").

[81] *See* Dougherty, *supra* note 40.

[82] *See id.*

[83] *Id.*

[84] *See* Andis Robeznieks, *Doctor Shortages Are Here—and They'll Get Worse If We Don't Act Fast,* AMA (Apr. 13, 2022) https://www.ama-assn.org/practice-management/sustainability/doctor-shortages-are-here-and-they-ll-get-worse-if-we-don-t-act; *see also* Press Release, Assoc. of Am. Med. Coll., AAMC Report Reinforces Mounting Physician Shortage (June 11, 2021), https://www.aamc.org/news/press-releases/aamc-report-reinforces-mounting-physician-shortage; Dylan Scott, *The American Doctor Deserts*, VOX (June 23, 2023 6:30 AM), https://www.vox.com/policy/23753724/physician-doctor-shortage-primary-care-medicare-medicaid-rural-health-care-access; Kristine Liao & Katherine Sypher, *Rural Health and Hospitals: A Focus on Texas*, APM RSCH. LAB (Dec. 21, 2021), https://www.apmresearchlab.org/rural-hospital-closures; Tara Oakman & Vina Smith-Ramakrishnan, *Physician Burnout Will Burn Us All*, CENTURY FOUND. (Oct. 25, 2023), https://tcf.org/content/report/physician-burnout-will-burn-all-of-us/.

[85] Elaine K. Howley, *The U.S. Physician Shortage is Only Going to Get Worse*, TIME (July 25, 2022 4:07 PM), https://time.com/6199666/physician-shortage-challenges-solutions/; *see also* Scott, *supra* note 84; Scott A. Shipman et al., *The Decline in Rural Medical Students: A Growing Gap in Geographic Diversity Threatens the Rural Physician Workforce*, 38 HEALTH AFFS. 2011, 2012 (2019).

of physicians in America offer their services in rural areas.[86] State and federal policy makers have made remarkable efforts to address the shortage of healthcare professionals in rural communities.[87] Nonetheless, the uneven distribution of physicians and nurses in the nation is still present, with devastating outcomes for rural residents who desperately need treatment.[88]

Rural hospitals struggle to recruit physicians and nurses, both of which are key inputs for hospital services.[89] Rural hospitals often offer lower wages than hospitals in metropolitan areas.[90] They also require physicians to treat a wider range of illnesses within their communities and to perform various complex procedures, even if they lack the necessary specialized training.[91] Rural hospitals are also characterized by higher workloads and limited resources.[92] For these reasons, recruiting and retaining a workforce is often a challenging task for rural hospitals.

But this is not the only reason why rural hospitals suffer from a severe shortage of physicians. As noted, hospitals in rural areas are closing at a dangerous rate, and sound empirical research demonstrates that, when a rural hospital shuts it doors, physicians often move to urban areas to seek alternative employment and make a living.[93] The same research also indicates that when physicians move to urban areas, they rarely return to rural areas to treat rural residents.[94] Specifically, the study illustrates that when a rural hospital exits the market, there is an average annual reduction of 9.2% in the supply of all physicians, 8.3% in the supply of primary care physicians, and 4.8% in the supply of obstetrician gynecologists.[95] The researchers observed that this reduction in supply was even greater after the sixth year following the closure, especially for surgical specialists and primary care physicians.[96]

In other words, the shortage of nurses and physicians that rural communities experience creates a vicious cycle: the reduced supply of healthcare workers in rural areas contributes to the hospital closure epidemic that hurts rural Americans, which in turn further exacerbates the workforce shortage in the hospital industry and leads to additional closures. This is because, as noted, physicians and nurses are a key input for the

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[86] *See* RURAL REPORT II, *supra* note 34, at 5.
[87] *Id.* at 17.
[88] *Id.*
[89] Allee Mead, *It Takes a Village*, RURAL HEALTH INFO. HUB (Nov. 3, 2021), https://www.ruralhealthinfo.org/rural-monitor/rural-recruitment-and-retention.
[90] *Id.*
[91] Ian T. MacQueen et al., *Recruiting Rural Healthcare Providers Today: A Systematic Review of Training Program Success and Determinants of Geographic Choices*, 33 J. GEN. INTERNAL MED. 191, 191 (2018).
[92] Carly Miller, *Recruitment and Retention of Healthcare Professions in Rural Settings amidst a Labor Shortage*, TRACK FIVE (Jan. 30, 2023); *see also* Mead, *supra* note 89.
[93] Hayley Drew Germack, Ryan Kandrack, & Grant R. Martsolf, *When Rural Hospitals Close, the Physician Workforce Goes*, 38 HEALTH AFFS. 2086, 2087 (2019).
[94] *See* Germack et al., *supra* note 93, at 2089.
[95] *See id.*
[96] *Id.* at 2091.

provision of hospital services. Hence, if rural hospitals struggle to recruit an adequate number of physicians and nurses, they may be unable to increase their admissions and provide profitable healthcare services, especially surgeries.[97] This undermines rural hospitals' financial stability and expedites their closures.[98]

To avoid this risk and bolster staffing, rural hospitals often try to cover their employment needs by recruiting travel nurses.[99] However, the average pay for such nurses has increased substantially over the course of the pandemic[100] and, as noted, rural hospitals already suffer from negative profit margins. This increase in labor costs has also aggravated the hospital closures problem.[101]

II. PROPOSED PUBLIC HEALTH SOLUTIONS

Despite the magnitude of the hospital desert problem and the severe harms hospital deserts cause to millions of Americans, public health experts urge rural communities not to give up hope. For instance, they warn that increased use of telemedicine by underserved communities, Medicaid expansion, and the implementation of local health promotion initiatives can improve the health and well-being of rural residents. For this reason, these measures can also reduce the rate of uncompensated care that rural hospitals are forced to offer, which will ultimately improve their financial health. As noted in the previous section, when people lack access to primary care, either due to lack of coverage or high up-front costs, often the only care they receive ends up being life-saving treatment in hospitals' emergency departments. This increases the rate of uncompensated care rural hospitals offer and, ultimately, contributes to their closures. Thus, any reduction in the ratio of patients passing through the emergency room to those seeking less costly procedures will improve struggling hospitals' financial condition.

The section that follows weighs the strengths and weaknesses of each proposal mentioned above. It argues that such proposals, albeit crucial, may fail to cure the problem. This is because the problem of hospital deserts is not only the result of the social and demographic characteristics of rural residents, or the fact that rural hospitals offer higher rates of uncompensated care than urban hospitals. Rather, this problem is also the result of several deliberate business strategies employed by both rural and urban hospitals throughout America. These strategies, which include mergers with competitors and non-compete agreements in the labor market, reduce access to care for rural populations and magnify the shortage of nurses and

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[97] *Id.* at 2090.
[98] *Id.* at 2090-91.
[99] RURAL REPORT I, *supra* note 33, at 7.
[100] *Id.*
[101] *Id.*

physicians that rural communities experience. In other words, these strategies lead to hospital deserts in rural America.

A. Telemedicine

Increased use of telemedicine can improve access to care for underserved communities in rural areas.[102] Telemedicine eliminates the need for residents to travel long distances to visit hospitals or physicians.[103] It also eliminates the need for people to secure childcare or take time off from work to receive medical advice and treatment.[104] For such reasons, telemedicine can improve the health and life expectancy of rural residents, especially for those suffering from chronic diseases whose treatment requires continuous supervision. By improving rural residents' access to primary care, telemedicine also has the potential to reduce the financial burdens associated with disproportionately high rates of uncompensated care.

Nonetheless, the assumption that telemedicine always and necessarily improves access to care for rural populations who need treatment should not remain unchallenged. In fact, studies indicate that access to telemedicine has not spread equally to all populations across America. For instance, one recent study has shown that the most vulnerable populations— specifically, racial and ethnic minorities[105], as well as the poorer, older, and those less proficient in English—did not rely on telemedicine to obtain care during the coronavirus pandemic.[106]

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[102] Fed. Commc'ns Comm'n (FCC), *Telehealth, Telemedicine, and Telecare: What's What?*, FCC (last visited Feb. 6, 2024), https://www.fcc.gov/general/telehealth-telemedicine-and-telecare-whats-what/ ("Telemedicine can be defined as using telecommunications technologies to support the delivery of all kinds of medical, diagnostic and treatment-related services usually by doctors". This includes "conducting diagnostic tests, closely monitoring a patient's progress after treatment or therapy and facilitating access to specialists that are not located in the same place as the patient.").

[103] Jenna Becker, *How Telehealth Can Reduce Disparities*, HARV. L. BLOG: BILL OF HEALTH (Sept. 11, 2020), https://blog.petrieflom.law.harvard.edu/2020/09/11/telehealth-disparities-health-equity-covid19/.

[104] Sarah C. Hull, Joyce M. Oen-Hsiao, & Erica S. Spatz, *Practical and Ethical Considerations in Telehealth: Pitfalls and Opportunities*, 95 YALE J. BIOLOGY & MED. 367, 368 (2022).

[105] Kanza Aziz et al., *Association of Patient Characteristics With Delivery of Ophthalmic Telemedicine During the COVID-19 Pandemic*, 139 JAMA OPHTHALMOLOGY 1174, 1180 (2021); *see also* Victoria Foster, *Telemedicine Fails to Counter Health Disparities During the Pandemic*, FORBES (Apr. 19, 2022 9:00 AM), https://www.forbes.com/sites/victoriaforster/2022/04/19/telemedicine-fails-to-counter-healthcare-disparities-during-the-pandemic.

[106] Jorge A. Rodriguez et al., *Disparities In Telehealth Use Among California Patients With Limited English Proficiency*, 40 HEALTH AFFS. 487, 490 (2021); *see also* Lauren A. Eberly et al., *Patient Characteristics Associated with Telemedicine Access for Primary and Specialty Ambulatory Care During the Covid-19 Pandemic*, 3 JAMA NETWORK OPEN 1, 7 (2020) ("Non-English language as the patient's preferred language is independently associated with 16% lower telemedicine visit completion despite adjustment for other

Previous research also supports these findings, demonstrating that most telemedicine users live in metropolitan areas, have higher socio-economic status, and are often well-educated.[107] Indeed, empirical evidence indicates that while 11% of internet users with family incomes of $100,000 or more receive care through telemedicine, only 4% of those in families who earn under $25,000 annually utilize this form of care.[108] *But why has telemedicine failed to improve access for the most vulnerable Americans?*

The answer may be rather obvious. Telemedicine requires patients to use unfamiliar technology and have access to reliable broadband internet.[109] These limitations restrict the use of telemedicine by lower income communities, racial and ethnic minorities, and older populations who often lack adequate internet access or digital literacy.[110] For instance, data show that among adults aged 65 or older, only 53% have a smartphone, about 60% have access to broadband internet, and 73% have the basic skills they need to use the internet.[111] Among the 73% who use the internet, only 60% know how to find a website and send an email.[112] Additionally, studies reveal that 1 in 8 Americans live in deep poverty, and that lower income individuals are less likely to own a smartphone or have a reliable cellphone data plan.[113] Privacy concerns may also discourage patients from implementing virtual forms of care.[114] This may be especially true for

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factors, which suggests that language barriers to care via telemedicine platforms may be prohibitive").

[107] NAT'L TELECOMMS. & INFO. ADMIN., EXPLORING THE DIGITAL NATION: AMERICA'S EMERGING ONLINE EXPERIENCE, 11 (2013) https://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_-_americas_emerging_online_experience.pdf [hereinafter DIGITAL NATION]; *see also* Jeongyoung Park et al., *Are State Telehealth Policies Associated with the Use of Telehealth Services among Underserved Populations?* 37 HEALTH AFFS. 2060, 2066 (2018).

[108] DIGITAL NATION, *supra* note 107, at 11.

[109] *Id.*

[110] One study claims that "one in four Americans does not have the BIA or devices needed to engage in video visits. Without Broadband Internet Access "BIA", patients cannot fully use telehealth in all its forms: asynchronous messaging via patient portals, remote monitoring devices such as blood pressure monitors, or synchronous video connections to consult with a physician …Some patients, even those with BIA, have declined to use these technologies because of difficulties with digital literacy or privacy concerns." Natalie C. Benda et al., *Broadband Internet Access Is a Social Determinant of Health!*, 110 AM. J. PUB. HEALTH. 1123, 1123 (2020).

[111] Jennifer C. Price & Dinee C. Simpson, *Telemedicine and Health Disparities*, 19 CLINICAL LIVER DISEASE 144, 145 (2022).

[112] Sarah Nouri et al., *Addressing Equity in Telemedicine for Chronic Disease Management during the Covid-19 Pandemic*, 1 NEW ENG. J. MED. CATALYST 1, 2 (2020).

[113] *See id*.

[114] *See generally* Timothy M. Hale & Joseph C. Kvedar, *Privacy and Security Concerns in Telehealth*, 16 VIRTUAL MENTOR 981 (2014).

communities of color[115] due to the deep-rooted racism they have historically experienced, and continue to experience, when they seek to obtain care.[116]

Furthermore, when telemedicine is used as the primary form of care, quality of care may also suffer. Quality of care is a multidimensional concept consisting of the notions of equity, access, continuity, and "acceptability," measured as the amount of trust one has in the doctor-patient relationship.[117] Telemedicine may undermine continuity of care, especially for individuals suffering from chronic diseases that require continuous treatment, which in turn undermines trust. When patients receive care through telemedicine, they are randomly assigned to different physicians who work in rotation rather than have a consistent physician with whom patients have developed a trusting relationship. Research demonstrates that because telemedicine fails to ensure continuity of care, black populations are less likely than white ones to access healthcare through telemedicine.[118] The study illustrates that "the lack of preestablished relationships with physicians, in addition to black populations' general skepticism toward digital platforms, discourages them from utilizing telemedicine."[119] Recent research further supports these findings: it confirms that African Americans suffering from diabetes during the pandemic did not rely on telemedicine to receive care because they distrusted this medical technology.[120]

Thus, although telemedicine is a valuable weapon in a larger arsenal of policy options available to address the problem of reduced access to care in rural areas, presuming that telemedicine alone can cure the problem, and relying on it to do so, may in fact widen rather than mitigate the rising health and racial inequities disproportionately affecting communities in rural

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[115] Vivian Yee, Simar S. Bajaj, & Fatima C. Stanford, *Paradox of Telemedicine: Building or Neglecting Trust and Equity*, 4 LANCET DIG. HEALTH 480, 480 (2022) ("Black Americans have historically adopted novel medical technologies at lower rates than their White counterparts, due in large part to inaccessibility and well-founded suspicion towards medical innovation.").

[116] *Id.* at 480; *see also* J. Corey Williams, *Black Americans Don't Trust Our Healthcare System—Here's Why*, THE HILL: HEALTHCARE BLOG (Aug. 24, 2017, 11:20 AM), https://thehill.com/blogs/pundits-blog/healthcare/347780-black-americans-dont-have-trust-in-our-healthcare-system ("The U.S. medical establishment has a long legacy of discriminating and exploiting black Americans, the indelible memory of which remains deeply embedded in the collective consciousness of the community. Historically, medicine has used black bodies, without consent, for its own advancement; while, medical theories, technologies, and institutions were used to reinforce systems of oppression.").

[117] AVEDIS DONABEDIAN, AN INTRODUCTION TO QUALITY ASSURANCE IN HEALTH CARE 4 (2003); *see also* THEODOSIA STAVROULAKI, HEALTHCARE QUALITY CONCERNS AND COMPETITION LAW 22 (2023), [hereinafter HEALTHCARE QUALITY CONCERNS AND COMPETITION LAW].

[118] *See* Yee et al., *supra* note 115, at 480 (2022).

[119] *See id.*

[120] Barry W. Rovner et al., *Mistrust Neighborhood Deprivation, and Telehealth Use in African Americans with Diabetes*, 24 POPULATION HEALTH MGMT. 699, 700 (2021).

America.[121] In addition, because telemedicine may fail to ensure access to primary care for the people who need it most, namely communities of color and lower income individuals, it may also fail to relieve the financial burdens of struggling rural hospitals and deter their closures.

B. Medicaid Expansion

Telemedicine is not the only measure that can improve access to care for vulnerable populations in rural areas. Medicaid expansion also has the potential to enhance health outcomes for rural residents and assuage the rampant hospital closure crisis that is plaguing underserved areas. *How?*

Medicaid is the main form of health insurance coverage for poor Americans. The Affordable Care Act (ACA), passed by Congress in 2010, required states to expand Medicaid. The vision of the ACA was to increase health insurance coverage for almost all Americans with household incomes up to 138% of the federal poverty level.[122] However, in *NFIB v. Sebelius* (2012),[123] the Supreme Court decided to strike down the obligatory expansion of Medicaid.[124] The Supreme Court ruled that Medicaid expansion was completely optional.[125] As a result, ten states have chosen not to expand Medicaid to date.[126] Unfortunately, rural hospitals in these states have been the ones to pay the price for this choice. Of all the rural hospitals that have shut their doors in America, 75% are in non-expansion states.[127]

Empirical evidence demonstrates that a state's decision regarding Medicaid expansion has significant effects on the financial performance of area hospitals and on the health of state residents.[128] Data show that

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[121] *Id. See* Aziz et al., *supra* note 105, at 1180 ("Although telemedicine is increasingly considered to be 1 approach to improve access to care and decrease health care disparities, reports of even greater disparities in the use of telemedicine have surfaced across multiple fields of medicine").

[122] *See Status of Medicaid Expansion Decisions: Interactive Map*, KAISER FAMILY FOUNDATION (July 27, 2023), https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/ [hereinafter *Interactive Map*].

[123] Nat'l Fed'n Indep. Bus. v. Sebelius, 567 U.S. 519 (2012).

[124] *See* MARYBETH MUSUMECI, KAISER COMM'N ON MEDICAID & UNINSURED, A GUIDE TO THE SUPREME COURT'S DECISION ON THE ACA'S MEDICAID EXPANSION 1 (Aug. 2012), https://www.kff.org/wp-content/uploads/2013/01/8347.pdf.

[125] *Id.*

[126] *See Interactive Map*, *supra* note 122.

[127] Dylan Scott, *One in 4 Rural Hospitals is Vulnerable to Closures* , VOX (Feb 18, 2020 4:00 PM) https://www.vox.com/policy-and-politics/2020/2/18/21142650/rural-hospitals-closing-medicaid-expansion-states.

[128] Fredric Blavin & Christal Ramos, *Medicaid Expansion: Effects on Hospital Finances and Implications for Hospitals Facing Covid-19 Challenges*, 40 HEALTH AFFS. 82, 83 (2021); *see also* Lindrooth et al., *supra* note 60, at 117-18; David Dranove, Craig Garthwaite, & Christopher Ody, *Uncompensated Care Decreased at Hospitals in Medicaid Expansion States, but Not at Hospitals in Non-expansion States*, 35 HEALTH AFFS. 1471, 1471 (2016) ("in states that expanded Medicaid under the ACA, uncompensated care costs decreased from 4.1 percentage points to 3.1 percentage points of operating costs"); Fredric

hospitals located in expansion states have lower uncompensated care costs attributable to uninsured patients compared with hospitals in non-expansion states.[129] They also generate higher Medicaid revenue from the newly covered and, hence, have higher operating margins.[130] For this reason, Medicaid expansion can help rural hospitals reduce the rate of the uncompensated care they offer to the uninsured, and even defer hospital closures.

A recent study confirms that states which have not expanded Medicaid suffer from a higher rate of hospital closures than states that opted for Medicaid expansion.[131] Specifically, this study reveals that states which chose not to expand Medicaid witnessed a significant increase in their rate of hospital closures from 2008–12 and 2015–16.[132] On the other hand, states that chose to expand Medicaid experienced a decrease in the number of hospital closures during this same period.[133] The same study also identified the primary mechanism that explains the relationship between Medicaid expansion and hospital closures: namely, "the substitution of utilization [of a hospital's services] by patients with Medicaid coverage for utilization [of these services] by uninsured patients."[134] The study thus shows a clear link between Medicaid expansion and improved financial health for struggling hospitals.

However, although research indicates that expanding Medicaid can improve the profit margins of rural hospitals, reality demonstrates that this measure alone cannot prevent the hospital closure epidemic in underserved areas. Consider, for example, Kentucky, a state which only recently chose to expand Medicaid. Although Medicaid expansion helped some hospitals in Kentucky, such as Parkway Regional, operate for longer than they might have otherwise, ultimately it did not prevent their closure.[135] Three other hospitals in the state met the same fate.[136] This indicates that, although Medicaid expansion can improve the financial performance of rural hospitals, it cannot, by itself, deter the hospital closure crisis that so profoundly harms rural America.

This is true for at least two reasons. First, Medicaid expansion does not necessarily address all the causes of the hospital closure crisis, including the shortage of healthcare professionals in rural communities. Second, the

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Blavin, *Association Between the 2014 Medicaid Expansion and US Hospital Finances*, 316 JAMA 1475 (2016) ("Medicaid expansion was associated with significant declines in uncompensated care costs and increases in Medicaid revenue in 2014 among hospitals in 19 states that expanded Medicaid compared with hospitals in 25 states that did not expand Medicaid").

[129] *See* Blavin & Ramos, *supra* note 128, at 87.

[130] *See id* at 83.

[131] *See* Lindrooth et al., *supra* note 60, at 114.

[132] *See id.*

[133] *Id.*. at 114-15.

[134] *Id.* at 117.

[135] *See* Wishner et al., *supra* note 16, at 9.

[136] *See id.*

compensation hospitals receive for Medicaid patients, while greater than the nothing they receive from patients who are not covered, is still too little to cover the overhead costs incurred while treating those patients.[137] In fact, a 2022 report published by the AHA explains that Medicaid reimburses less than half of the costs that rural hospitals incur when treating Medicaid patients.[138] This may at least partially explain why Medicaid expansion alone cannot eliminate the risk of hospital closures in underserved areas.

C. Health Promotion Programs

As noted above, rural residents in America face worse health outcomes than urban residents. Indeed, rural communities are more likely to suffer from cancer, diabetes, obesity, and substance abuse disorders.[139] They also face a higher risk of developing hypertension or respiratory diseases.[140] Moreover, rural residents are less likely to engage in physical exercise or adhere to a healthy lifestyle.[141] Given that many of these problems are (to some extent) preventable, health policy experts often allege that further expansion of health promotion programs in rural areas may improve rural residents' health literacy. This could help them make choices that will improve their well-being and health.[142] *But what types of initiatives could help rural residents improve their health?*

For starters, nutrition promotion programs have the potential to increase rural communities' awareness about the relationship between food and health.[143] For instance, empirical research demonstrates that a healthy diet can optimize health outcomes both on a long-term and short-term basis.[144] On the other hand, this same research also indicates that poor nutrition can lead to increased mortality rates.[145] In other words, robust research findings warn that while some foods can help people live healthier lives, other foods can also be the cause of premature deaths. Given the strong correlation between food and health, educating the public about the life-saving benefits of good nutrition may help rural populations improve their health.

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[137] *See* HOSPITAL CLOSURE SOLUTIONS, *supra* note 9, at 6.
[138] *See id.*
[139] *See About Rural Health*, *supra* note 2; *see also Substance Use and Misuse in Rural Areas*, *supra* note 2.
[140] FDA, RURAL HEALTH (June 22, 2021), https://www.fda.gov/consumers/minority-health-and-health-equity-resources/rural-health.
[141] *See About Rural Health*, *supra* note 2.
[142] *See Module 1: Health Promotion and Disease Prevention in Rural Communities*, RURAL HEALTH INFO. HUB, (Apr. 30, 2018) https://www.ruralhealthinfo.org/toolkits/health-promotion/1/introduction; *see also Community Health Promotion in Rural Areas*, TUL. SCH. PUB. HEALTH & TROPICAL MED. BLOG (Feb. 14, 2023), https://publichealth.tulane.edu/blog/community-health-promotion-rural-areas/.
[143] *See Community Health Promotion in Rural Areas, supra* note 142.
[144] *See* Sara N. Bleich et al., *The Complex Relationship between Diet and Health*, 34 HEALTH AFFS. 1813, 1813 (2015).
[145] *See id.*

Introducing smoking cessation programs may also lead to improved health outcomes in rural areas.[146] Research indicates that, between urban and rural communities, there are wide disparities in both tobacco use and "tobacco-related diseases," including cancer.[147] For instance, the American Phycological Association reports that "not only are rural residents more likely to use tobacco, including cigarettes and smokeless tobacco, but they're also more likely to be exposed to secondhand smoke."[148] Rural Americans are also more likely to begin smoking at a younger age and to consume higher quantities of tobacco products than urban residents.[149] Thus, introducing smoking cessation programs in rural neighborhoods may reduce the risk of cancer or various respiratory diseases which disproportionately hurt rural residents.

Injury and fatality prevention programs may also ameliorate the striking health inequities experienced by communities in rural areas.[150] For instance, data show that children living in rural America are less likely to use seat belts, and are therefore at higher risk of experiencing fatal vehicle accidents than their urban counterparts.[151] Additionally, 2021 data from the Children's Safety Network indicate that "injury rates are approximately 55% higher for children and adolescents in rural areas compared to those in urban areas."[152] Thus, promoting educational programs about motor vehicle safety may also improve health outcomes for rural populations.

Nonetheless, expanding health promotion programs that may help *individuals* in rural areas may not necessarily help rural *communities* improve their health. As noted, clinical evidence indicates a strong link between health disparities and the social determinants of health. Indeed, decades of research illustrates that "the relationship between social advantage and health is incremental, with less advantaged groups experiencing a disproportionate burden of poor health and even relatively advantaged groups showing a deficit."[153] This is because poorer individuals face higher structural barriers to adopting a healthier lifestyle, and hence, attaining health improvements.

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[146] *See Community Health Promotion in Rural Areas*, *supra* note 142.
[147] *See id.*; *see also* Maria A. Parker et al., *Trends in Rural and Urban Smoking Quit Ratios in the US from 2010 to 2020*, 5 JAMA NETWORK OPEN 1, 1 (2022).
[148] *Id. See also* AM. PSYCH. ASSOC., SMOKING AND TOBACCO USE IN RURAL POPULATIONS (2016), https://www.apa.org/pi/health-equity/resources/smoking-rural-populations.
[149] Kelly Buettner-Schmidt, Donald R. Miller, & Brody Maack, *Disparities in Rural Tobacco Use, Smoke-free Policies and Tobacco Taxes*, 41 W. J. NURSING RSCH. 1184, 1188 (2019).
[150] *Community Health Promotion in Rural Areas, supra* note 142.
[151] *Id.*
[152] Erin Ficker, *Health Disparities in Rural Childhood Injury*, CHILDREN'S SAFETY NETWORK (Feb. 16, 2021), https://www.childrenssafetynetwork.org/blog/health-disparities-rural-childhood-injury.
[153] Ana Penman-Aguilar et al., *Measurement of Health Disparities, Health Inequities, and Social Determinants of Health to Support the Advancement of Health Equities*, 22 J. PUB. HEALTH MGMT. PRAC. S33, S34 (2016).

For instance, if one lives in a food desert, it is often hard to buy fresh fruits or vegetables and, thus, more difficult to adopt healthy eating habits.[154] Likewise, lower income communities may be unable to afford such healthy foods.[155] Many people may also be unable to afford the luxury of arranging for childcare to free up the time needed to exercise regularly. In other words, even if disadvantaged social groups wish to adopt a healthier lifestyle, they may simply be unable to do so for reasons related to their socioeconomic conditions.[156] Hence, expanding health promotion programs in rural areas may not necessarily effectuate the types of changes that would lead to rural residents' better health. For the same reason, greater reliance on health promotion programs may not reduce the rate of hospital closures in rural areas.

And yet, there are additional reasons why the above measures alone may not mitigate the mounting hospital closures and the resulting hospital deserts in underserved areas. As the following section shows, these measures are myopic because they fail to address the antitrust dimension of the hospital deserts problem. Specifically, they fail to recognize that the hospital deserts which hurt rural Americans are also caused by several business strategies implemented by hospitals throughout the nation. These strategies, which include mergers with competitors and non-competes in the labor market, exacerbate the shortage of nurses and physicians that rural communities experience, and leave vulnerable residents without essential care. By examining these strategies through an antitrust lens, the following section illustrates that the wounds that hospital deserts inflict on rural populations cannot be treated adequately without the healing power of antitrust law.

III. A STORY NEVER TOLD: MERGERS LEAD TO THE RISING HOSPITAL CRISIS IN RURAL AMERICA

Hospital markets in America are extremely concentrated.[157] This is largely due to the wave of hospital mergers that America experienced in the 1990s.[158] This merger wave was devastating for patients, workers, and public health because the resulting consolidation led to lower wages, inferior working conditions, and less favorable employment terms for

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[154] Christopher R. Leslie, *Food Deserts, Racism, and Antitrust Law*, 110 CAL. L. REV. 1717, 1725 (2022); *see also* Bennett Capers & Gregory Day, *Race-ing Antitrust*, 121 MICH. L. REV. 523, 525 (2023); Janet Shamlian & Alicia Hastey, *Rural Residents Rely on Dwindling Number of Grocery Stores*, CBS NEWS (Mar. 17, 2022), https://www.cbsnews.com/news/rural-kansas-grocery-stores-food-deserts/.

[155] Theodosia Stavroulaki, *Mergers that Harm our Health*, 19 BERKELY BUS. L. J. 89, 97 (2022).

[156] *Id.*

[157] Brent D. Fulton, *Health Care Market Concentration Trends in the United States: Evidence and Policy Responses,* 36 HEALTH AFFS. 1530, 1534 (2017).

[158] *See* SETH SILBER & LEIGH OLIVER, ABA, HEALTHCARE MERGERS AND ACQUISITIONS HANDBOOK 93 (1st ed. 2003).

workers in the hospital industry, including non-compete agreements. This section demonstrates that all of the above-mentioned factors exacerbated the problem of hospital deserts in America, and that each factor can be readily traced back to the merger wave of the '90s. This begs the question: *what caused this merger wave?*

To begin, the late '80s and '90s saw the emergence of new treatment and fee structures. During the first half of the 20th century, most patients received care from independent physicians whose pricing was mainly fee for service (FFS).[159] This form of payment was kept with the popular sentiment that more care meant better care, and that the physician was the person best positioned to identify and recommend the most appropriate form of treatment.[160] Health insurers did not restrict consumers' choice of providers, nor did they so strictly circumscribe the types of care they would cover so long as that care was recommended by a physician.[161]

But beginning in the late 1960s,[162] health experts started raising concerns that physicians had no incentive to compete on price terms since patients often had little or no knowledge about the value of the services they were being offered, and because health insurers would cover the costs of treatment and fully reimburse the performing physician in virtually any case.[163] Unsurprisingly, these mechanisms motivated physicians to over-provide, and consumers to over-consume, healthcare.[164]

Influenced by these concerns, state and federal health policy begun to encourage alternative forms of healthcare delivery, and, over the past three decades, have induced varying degrees of price and quality competition among healthcare providers.[165] The rapid growth of managed care in the 1990s' is the result of this new policy orientation aimed at inducing competition in the healthcare industry.[166] The growing demand for lower healthcare costs, along with the increasing presence of managed care, placed enormous pressure on hospitals to reduce their costs while simultaneously improving the quality of their services. To attain these goals, hospitals started merging. This spurred a period of rapid and substantial consolidation in the hospital industry: that is to say, a merger wave.

This trend toward consolidation has never abated. Quite to the contrary, it has ramped up following the implementation of the ACA, which sought to enhance quality and reduce healthcare costs by improving

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[159] FFS means that the payment is based on the number and type of services performed. *See* U.S. CENTER FOR MEDICARE AND MEDICAID SERVICES, GLOSSARY: FEE FOR SERVICE, HEALTHCARE.GOV (last visited Feb. 6, 2024), https://www.healthcare.gov/glossary/fee-for-service/.

[160] *See* FTC, IMPROVING HEALTH CARE: A DOSE OF COMPETITION 1-2 (2004).

[161] *Id.* at 1.

[162] *Id.* at 2.

[163] *Id.*

[164] *Id*.

[165] *Id.*

[166] *See* HEALTHCARE QUALITY CONCERNS AND COMPETITION LAW, *supra* note 117, at 99.

coordination of care among providers through the establishment of Accountable Care Organizations.[167]

But can hospital consolidation really reduce the cost of care while improving quality? This question is not an easy one to address. For instance, a merger may lead to lower costs because the more care a hospital provides, the more efficient and less costly each instance of care becomes.[168] Additionally, a merger may allow hospitals to eliminate duplicate services, push down administrative costs, expand their delivery network, and achieve economies of scale.[169] For these reasons, hospitals often allege that a merger can boost the efficiency of healthcare services.[170]

In theory, mergers may also allow hospitals to enhance the quality of services rendered.[171] For example, acquiring hospitals can bring both their financial resources and their management expertise to the acquired hospitals, allowing an expansion of the services delivered.[172] Such an expansion can contribute to quality inasmuch as patients can gain access to a wider array of services.[173] Again, in theory, a merger can also enhance the average quality of the services offered to patients "by redirecting patient flows."[174] Hence, a hospital system can concentrate services in its higher-quality facilities, which will improve the quality of care that patients of the newly merged entity receive.

Inevitably, a merger also increases patient volumes for providers. In light of medical research identifying a relationship between patient volumes and procedure volumes, the increased patient volumes which a merger brings to a facility may improve the overall quality of the services

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[167] *See id*; *see also* Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (as amended by Health Care and Education Reconciliation Act of 2010, Pub. L. No. 11-152. 124 Stat. 1029, § 3011 (2010)). Accountable Care Organizations (ACOs) are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high - quality care to their Medicare patients. The goal of coordinated care is to ensure that patients, especially the chronically ill, get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors. *See* CTR. FOR MEDICARE & MEDICAID SERVS., ACCOUNTABLE CARE ORGANIZATIONS (ACOS): GENERAL INFORMATION (last visited Feb. 7, 2024), https://www.cms.gov/priorities/innovation/innovation-models/aco.

[168] Gregory Curfman, *Everywhere, Hospitals are Merging - but Why Should we Care?*, HARV. MED. SCH.: HARV. HEALTH BLOG (Apr. 1, 2015), https://www.health.harvard.edu/blog/everywhere-hospitals-are-merging-but-why-should-you-care-201504017844. (arguing that hospital administrators often claim that hospital consolidation may reduce costs "because in theory, the more care a hospital provides, the more efficient and less expensive it should become.").

[169] *See* HEALTHCARE QUALITY CONCERNS AND COMPETITION LAW, *supra* note 117, at

[170] *The Benefits of Hospital Mergers*, AM. HOSP. ASSOC. (Nov. 8, 2017 9:49 AM), https://www.aha.org/news/blog/2017-11-08-benefits-hospital-mergers.

[171] *See* Kristin Madison, *Hospital Mergers in an Era of Quality Improvement*, 7 HOUS. J. HEALTH L. & POL'Y 265, 274 (2007).

[172] *Id*. at 275.

[173] *Id*.

[174] *Id*.

provided.[175] Furthermore, peer to peer influence between hospital personnel can speed the adoption of novel forms of medical treatment.[176] In other words, a merger which encourages the sharing of experience and medical expertise among physicians and hospital managers could lead to better care.

But the story does not end there. Reality demonstrates that the acquiring hospitals often acquire target hospitals in rural areas just to remove their closest competitor and increase their market power in the output market (i.e the hospital services market).[177] This, however, worsens health outcomes for rural residents who desperately need treatment. This is because, as the next section shows, this business strategy often leads to the closure of the newly acquired rural hospital, which reduces access to care for residents in underserved areas.

At the same time, by acquiring their closest competitor in rural areas, hospitals also increase their market power in input (labor) markets, which ultimately allows them to suppress the wages of healthcare workers, vitiate their working conditions, and employ them under unfavourable terms, such as non-competes. And while hospitals may allege that they employ these strategies to reduce their costs, improve their profit margins, retain their workers, and stay afloat, the upshot is that these strategies contribute to the hospital closure epidemic in rural America.

This section examines the vital but woefully understudied question of how this happens. In so doing, it reveals that the problem of hospital deserts is also an antitrust problem. For this reason, this question cannot be addressed adequately if it is also not examined through the lens of antitrust law.

A. Effects of Consolidation on the Output Market: Shutdowns and Reduced Access to Care

Mergers among hospitals in rural areas often lead to hospital deserts and, as a result, leave rural communities without meaningful access to care. As noted, this is because hospitals in rural areas often acquire their closest competitors just to remove them from the market and increase their market power in the hospital services market.[178] Consequently, after such a merger

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[175] *See* HEALTHCARE QUALITY CONCERNS AND COMPETITION LAW, *supra* note 117, at 99-100.

[176] *See* Madison, *supra* note 171, at 276.

[177] Dunc Williams Jr. et al., *Rural Hospital Mergers Increased between 2005-2016—What Did Those Hospitals Look Like?*, 57 INQUIRY 1, 2 (2020) [hereinafter *What Do Hospital Mergers Look Like?*] ("A 2017 industry survey of hospital executives conducted by Deloitte and Healthcare Financial Management Association (HFMA) showed that executives from acquiring hospitals most commonly reported merging to increase market share (40%).

[178] *See What Do Hospital Mergers Look Like?*, *supra* note 177, at 3; *see also* Wishner et al., *supra* note 16, at 5 ("[L]arge health systems that owned and managed the hospitals made the decision to close them based not on community needs, but on corporate business considerations that favored other hospitals in their system over the ones they closed." This study also says that "a shift from mission to margin" is the decisive factor in the hospital

is complete, the acquiring hospital completely shuts down the newly acquired one, leaving a hospital desert.[179] A report published by the AHA sheds some light on the scope of the issue, revealing that, from 1998 to 2021, approximately 1,887 hospital mergers were announced. After these mergers moved forward, the number of hospitals in the nation was reduced from about 8,000 to about 6,000.[180] In other words, over the past two decades, about a quarter of American hospitals have closed their doors.

Not surprisingly, this business strategy has had a devastating impact on the health of rural communities, which are already deprived of access to care. Indeed, data show that each time a rural hospital shuts its doors, the mortality rate for rural residents increases. For example, one study indicates that a hospital closure can lead to a 7.3% increase in the in-patient mortality of Medicare patients and an 11.3% increase in the mortality of Medicaid patients.[181] The same study also reveals that hospital closures contribute to the rising racial disparities in health outcomes. Specifically, researchers showed that rural hospital closures increased mortality rates for white patients by 7.4% and for non-white patients by 12.6%, even though the rural closure treatment group included a higher percentage of white residents compared with black residents.[182]

But even in cases where hospital mergers do not lead to closures, they still reduce access to care for rural Americans. A recent study indicates that, following a merger, acquired rural hospitals experience a reduction in the availability of primary and obstetric care.[183] Another leading study

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closures and in the lack of consideration or planning for the impact on the community."); Dunc Williams Jr. et al., *Rural Hospital Mergers from 2005-2016*, N.C. Rural Health Rsch. Program 1 (Aug. 2018), https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2018/08/Rural-Hospital-Mergers.pdf [hereinafter *Rural Hospital Mergers from 2005-2016*] (arguing that the acquiring hospitals often acquire the rural target hospitals to increase their market share).

[179] *See* O'Hanlon et al., *supra* note 30, at 2096 ("Affiliation may also negatively affect access, as health systems sometimes close rural facilities after acquiring them)"; *see also* Wishner et al., *supra* note 16, at 5; *Rural Hospital Mergers from 2005-2016*, *supra* note 178, at 3 (indicating that "among the 326 unique rural hospitals that merged, 10 hospitals closed after merging, nine of which closed from 2010 to through 2016," many of which were part of multi-hospital acquisitions by healthcare systems); Sara Sirota, *The Harms of Hospital Mergers and How to Stop Them*, AM. ECON. LIBERTIES PROJECT (Apr. 26, 2023), https://www.economicliberties.us/our-work/the-harms-of-hospital-mergers-and-how-to-stop-them/; Oakman & Smith-Ramakrishnan, *supra* note 84 (arguing that hospital consolidation in rural areas often leads to closures).

[180] Hoag Levins, *Hospital Consolidation Continues to Boost costs, Narrow Access, and Impact Care Quality*, UNIV. PENN. LEAONARD DAVIS INST. HEALTH & ECON. (Jan. 19, 2023), https://ldi.upenn.edu/our-work/research-updates/hospital-consolidation-continues-to-boost-costs-narrow-access-and-impact-care-quality/.

[181] *See* KRITEE GUJRAL & ANIRBAN BASU, NAT'L BUREAU ECON. RSCH., IMPACT OF RURAL AND URBAN HOSPITAL CLOSURES ON INPATIENT MORTALITY 11 (Aug. 2019).

[182] *Id.*

[183] *See* O'Hanlon et al., *supra* note 30, at 2100 (noting that post-merger, acquired rural hospitals witnessed a 7-14% annual reduction in the availability of obstetric services compared to non-affiliated entities as well as a 7-19% annual reduction in the availability of primary care departments within 5-6 years following the deal*)*; *see also* Hung et al.,

reveals that, in the wake of a merger, only 15.3% of acquired rural hospitals continue to offer acute care services.[184] Data also demonstrate that acquiring hospitals often discontinue vital healthcare services, including psychiatric care, cardiac surgery, and even emergency, maternal,[185] and primary care.[186] What's more, when rural hospitals are acquired by a religiously sponsored health system, they may be forced to cut key reproductive services, prevent gender affirming care, or deny certain end-of-life care options.[187]

Empirical evidence also indicates that, when acquiring hospitals cut essential services, rural residents forego much-needed care.[188] Absent available choices, rural residents are forced to travel many miles away from their homes to receive medical advice and treatment. This may be especially the case for rural residents who are elderly, disabled, non-English speaking, and without access to a vehicle.[189] Following hospital closures, data reveal that rural residents often prefer to forego lab work and diagnostic imaging rather than travel long distances to obtain care.[190]

In addition, when emergency departments shut down, the mental health of rural Americans deteriorates at dangerous rates.[191] This is because, especially for lower-income rural Americans who lack coverage, entering a hospital's emergency department is the only way they can access acute mental health services or receive substance abuse treatment.[192] Not surprisingly, over the past two decades, the suicide rate for rural Americans has been consistently higher than that for urban Americans.[193] For example, between 2000-2020, the rate of suicides increased 46% in rural areas

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supra note 21, at 1555-57; Rachel M. Henke et al., *Access to Obstetric, Behavioral Health, and Surgical Inpatient Services after Hospital Mergers in Rural Areas*, 40 HEALTH AFFS. 1627, 1634 (2021).

[184] RJ Bogue et al., *Hospital Reorganization after Merger*, 33 MED. CARE 676, 681 (1995).

[185] *See* Sirota, *supra* note 179; *see also* Levins, *supra* note 180 ("Acquiring systems often move to close services like intensive care, labor and delivery, psychiatric care, and cardiac surgery"); O'Hanlon et al., *supra* note 30, at 2100-01; Henke et al., *supra* note 183, at 1634 (noting that mergers led to a reduction of maternal, surgical, mental healthcare services in rural areas).

[186] *See* O'Hanlon et al., *supra* note 30, at 2101; *see also Nurses Call on Federal Trade Commission and Department of Justice to Strengthen Guidelines to Limit Negative Effects of Mergers, Acquisitions on Patients and Healthcare Workers*, NAT'L NURSES UNITED (Apr. 21, 2022), https://www.nationalnursesunited.org/press/nurses-call-on-ftc-and-doj-to-strengthen-merger-guidelines/ [hereinafter NAT'L NURSES UNITED] (arguing that services such as "rural cancer care and wheelchair and seating clinics have been cut completely" following acquisitions).

[187] *See* Levins, *supra* note 180.

[188] *See* Wishner et al., *supra* note 16, at 8.

[189] *See* Sirota, *supra* note 179.

[190] *See* Wishner et al., *supra* note 16, at 8.

[191] *Id.*

[192] *Id.* at 7.

[193] CDC, SUICIDE IN RURAL AMERICA (Apr. 21, 2023), https://www.cdc.gov/ruralhealth/Suicide.html; *see also Rural Mental Health*, RURAL HEALTH INFO. HUB (Jan. 30, 2024), https://www.ruralhealthinfo.org/topics/mental-health.

compared to 27.3% in urban areas.[194] Also, the suicide rates for rural youth are much higher than for urban youth, a geographic disparity that continues to increase.[195] The complete lack of availability of mental healthcare services and the shortage of psychologists and psychiatrists that rural America experiences are correlated with this heartbreaking outcome.[196]

In brief, mergers in rural areas aggravate the hospital closure crisis that hurts rural communities. This is because after the merger is complete, the acquiring hospital often shuts down the newly acquired rural hospital or cuts the essential healthcare services it offers. These services often include emergency care, cardiac surgery, psychiatric services, or even primary and maternal care. Hence, hospital mergers in rural areas often leave underserved communities without access to care. This hurts the well-being of rural residents who already experience worse health outcomes than urban residents. Naturally then, such business strategies also contribute to the rising health inequities between rural and metropolitan areas.

B. Effects of Consolidation on the Input Market: Reduced Wages, Burnout, and Unfavorable Employment Terms

Mergers also allow hospitals to increase their market power in input markets, most notably labor markets, and even to attain monopsony power,[197] especially if they operate in rural areas where competition in the hospital industry is limited. This allows hospitals to suppress their employees' wages and offer employment under unfavorable conditions and employments terms, including imposing non-compete agreements on nurses and physicians. This in turn threatens the mental health and well-

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[194] *See* SUICIDE IN RURAL AMERICA, *supra* note 193.

[195] Janessa M. Graves et al., *Association of Rurality with Availability of Youth Mental Health Facilities with Suicide Prevention Services in the US*, 3 JAMA NETWORK OPEN 1, 3 (2020) (arguing also that highly rural areas have "fewer facilities in general—and fewer suicide prevention services in particular—compared with more urban areas.").

[196] *Id.*; *see also* Jennifer A. Hoffman et al., *Association of Youth Suicides and County-Level Mental Health Professional Shortage Areas in the U.S.*, 177 JAMA Pediatric 71, 77 (2022) ("Unadjusted youth suicide rates were higher in counties with higher rates of uninsured children and in rural areas compared with metropolitan areas... US county mental health professional workforce shortages were associated with increased youth suicide rates."); Benson S. Ku et al., *Associations between Mental Health Shortage Areas and County-Level Suicide Rates among Adults Age 25 and Older in the USA, 2010 to 2018*, 70 GEN. HOSP. PSYCHIATRY 44, 50 (2021) ("[T]he significant interaction of mental health shortage areas and rurality suggests that suicide rates are higher in more rural areas especially in areas with more limited health resources such as mental health provider shortages.").

[197] Carmen S. Cumming, *A Primer on Monopsony Power: It's Causes, Consequences, and Implications for U.S. Workers and Economic Growth*, WASH. CTR. FOR EQUITABLE GROWTH (July 27, 2022), https://equitablegrowth.org/a-primer-on-monopsony-power-its-causes-consequences-and-implications-for-u-s-workers-and-economic-growth/ (stating that "[a]t its most basic, monopsony refers to a market where there is a single buyer of a good or service." In labor markets, the buyer of services is the employer who purchases the labor of its workers).

being of such healthcare workers, who, despite their costly and specialized training, are deciding to leave the market at ever-increasing rates.[198] This exacerbates the severe shortage of healthcare workers that hospitals, especially in rural areas, experience, and worsens the hospital closure crisis and the resulting hospital deserts. *How did we get here?*

Nurses and physicians are a key input for hospital services. Nonetheless, this does not prevent hospitals from exploiting their labor. This is because nurses and physicians have specialized skills and knowledge that are not easily transferrable to employers in other economic sectors. Consider the following example: a rural town with two hospitals, a shoe factory, a public school, and a shopping mall. If the two hospitals merge, nurses and physicians will have only one potential employer that they can turn to sell their specialized labor.

But when competition among employers is substantially reduced, employees end up paying the cost. In the healthcare industry, this cost has proven to be extremely high. This is because when just one hospital operates in a geographic area, that hospital can reduce wages and allow working conditions to deteriorate without bearing the risk of losing employees. Empirical research confirms that these risks are real. For instance, a recent study assessed the impact of 84 hospital mergers on the wages of nurses between 2000 and 2010.[199] The study showed that those mergers, which considerably increased concentration in the hospital market, also hindered wage growth for nurses.[200] The researchers conclude that, following such mergers, the annual increase in nurses' wages in these highly concentrated markets was 1.7% slower than in markets characterized by lower levels of concentration.[201]

Hospitals also exercise their monopsony power over healthcare workers by offering employment under unfavorable working conditions and terms such as unmanageably long hours or heavy workloads. A 2005 empirical study that examined the impact of hospital mergers on the working conditions of nurses in America provides strong support for those concerns, highlighting that after a hospital merger takes place, "nurses are consistently asked to work harder" and the effort demanded by them is much greater.[202] Another study raises similar concerns, illustrating that,

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[198] *See* Oakman & Smith-Ramakrishnan, *supra* note 84 (noting that increased consolidation in the hospital industry also contributes to physicians' burnout); Richard Menger et al., *Commentary: Impact of Hospital and Health System Mergers and Acquisitions on the Practicing Neurosurgeon: Survey and Analysis from the Council of State Neurosurgical Societies Medical Director's Ad Hoc Representative Section*, 82 NEUROSURGERY S157, 159-160 (2018) (arguing that post-merger neurosurgeons experience a higher level of job dissatisfaction which ultimately encourages some physicians to leave either their current practice or the field of medicine).

[199] Elena Prager & Matt Schmitt, *Employer Consolidation and Wages: Evidence from Hospitals*, 111 AM. ECON. REV. 397, 398 (2021).

[200] *Id.*

[201] *Id.*

[202] Janet Currie, Mehdi Farsi, & William B. MacLeod, *Cut to the Bone? Hospital Takeovers and Nurse Employment Contracts*, 58 INDUS. & LAB. REL. REV. 471, 490-491 (2005).

post-merger, nurses often experience increased responsibilities, higher levels of emotional exhaustion, and job dissatisfaction.[203]

The same applies to physicians. For example, a recent survey notes that, following a hospital merger, physicians are more likely to experience burnout and are less willing to remain at their organization.[204] Physicians cited rapid organizational changes and a lack of support from their working environment as the main reasons why they felt this way.[205] Another report also raises similar concerns, showing that hospital consolidation contributes to physicians' burnout, "making it harder for them to prioritize patient care, earn patient trust and build relationships."[206] The same report also illustrates that, although the high levels of burnout undermine the mental health of all physicians, physicians of color and female physicians are disproportionately affected.[207]

These toxic working conditions, however, become effectively inescapable when hospitals further impose non-compete clauses on their workforce. *But what is a non-compete and, more importantly, how does it harm workers in the healthcare industry?*

A non-compete is a restrictive clause in an employment contract that reduces a worker's mobility based on distance, time, and scope.[208] A typical non-compete in the healthcare industry might read as follows: "Upon termination of employment, physician will not practice medicine for three years within a 90-mile radius of all current practice sites."[209] One 2020 study examining the range of non-competes in hospitals across five states

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[203] Bonnie M. Jennings, *Restructuring and Mergers, in* PATIENT SAFETY AND QUALITY: AN EVIDENCE-BASED HANDBOOK FOR NURSES S2-93, S2-98, (Rhonda G. Hughes ed., 2008) ("[R]estructuring efforts and mergers can be related to lower job satisfaction among nurses and increased burnout."); *see also* NAT'L NURSES UNITED, *supra* note 186 ("Mergers and acquisitions 'dilute[] the bargaining power of workers over terms and conditions of employment' with negative effects on wages and working conditions like safe staffing levels. In addition to harming patient safety, "intentional understaffing, lack of health and safety precautions, and other poor working conditions have driven nurses away from bedside nursing.").

[204] Carley Thornell, *Physicians Report that Organizational and Technology Changes are Amond the Biggest Burnout Factors*, ATHENA HEALTH (July 2, 2021), https://www.athenahealth.com/knowledge-hub/clinical-trends/physicians-report-organizational-technology-changes-among-biggest-burnout-factors; *see also* Jill McKeon, *Healthcare Mergers and Acquisitions Linked to Physician Burnout*, PRAC. MGMT. NEWS (July 8, 2021), https://revcycleintelligence.com/news/healthcare-mergers-and-acquisitions-linked-to-physician-burnout; *see also* Gwen Byrne, *The Physician's Dilemma: Navigating Healthcare Consolidation and the Unionization Renaissance*, ONLABOR (Nov. 3, 2023), https://onlabor.org/the-physicians-dilemma-navigating-healthcare-consolidation-and-the-unionization-renaissance; *see also* Menger et al., *supra* note 198, at 159-160 (arguing that post-merger neurosurgeons experience a higher level of job satisfaction and burn-out which leads some physicians to leave medicine).

[205] *See* Thornell, *supra* note 204; *see also* McKeon, *supra* note 204.

[206] Oakman & Smith-Ramakrishnan, *supra* note 84.

[207] *Id.*

[208] *See* Erik B. Smith, *Ending Physician Noncompete Agreements—Time for a National Solution*, 2 JAMA HEALTH F. 1, 1 (2021).

[209] *Id.* (for a similar example).

found that 45% of primary care physicians were bound by non-compete agreements in 2007.[210] Such non-competes can be enforced irrespective of whether the worker resigns or is removed from the job, and because non-competes block workers from freely moving to new jobs, they deter them from pursuing higher-paying and more fulfilling jobs.[211] By reducing job mobility, non-competes also undermine employers' incentives to increase wages and improve their employees' working conditions.

Empirical evidence validates these concerns. One leading study measuring the relationship between non-competes and wages concluded that decreasing the enforceability of non-competes would increase average earnings for workers in America by 3.3% to 13.9%.[212] Another study reached similar conclusions, finding that, after Oregon stopped enforcing non-competes for workers, their wages were increased by at least 2% to 3%.[213]

But non-competes may do more harm than just leading to lower wages for workers in the healthcare industry. Non-competes in the healthcare sector also increase nurses' and physicians' burnout, encouraging them to leave the market at increasing rates.[214] The heartbreaking story of Dr. Jacqui O' Kane, a primary care physician who signed a labor contract with a primary care clinic in a small town in Southern Georgia in 2020, illustrates this point.[215] After Dr. O' Kane started her new job, her employer put continuous pressure on her to treat more patients.[216] To meet her employer's demands, Dr. O' Kane, a mother of two, had to work day and night. Unable to strike a balance between her immense workload and

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[210] Kurt Lavetti, Carol Simon, & William D. White, *The Impact of Restricting Mobility of Skilled Service Workers: Evidence from Physicians*, 55 J. HUM. RES. 1025, 1042 (2020); *see also* Smith, *supra* note 208, at 1; Harris Meyer, *Banning Noncompete Contracts for Medical Staff Riles Hospitals*, KAISER FAM. FOUND. HEALTH NEWS (March 27, 2023), https://kffhealthnews.org/news/article/banning-noncompete-contracts-for-medical-staff-riles-hospitals/ ("The FTC estimates that 30 million workers are bound by noncompete clauses").

[211] Luke Goldstein, *How Noncompete Agreements Hamstrung America's Pandemic Response*, THE AM. PROSPECT (Feb. 16, 2023), https://prospect.org/health/02-15-2023-doctors-pandemic-noncompete-hospitals/.

[212] Non-Compete Clause Rule, 88 Fed. Reg. 3482, 3486 (proposed Jan. 19, 2023) (to be codified at 16 C.F.R. pt. 910), https://www.govinfo.gov/content/pkg/FR-2023-01-19/pdf/2023-00414.pdf.

[213] *Id.*

[214] *See* Goldstein, *supra* note 211; *see also* Oakman & Smith-Ramakrishnan, *supra* note 84 (arguing that the elimination of non-compete clauses from physicians' employment contracts would reduce the rates of burnout they experience); Amaryllis Sánchez Wohlever, *"Burnout" in the Workplace: Strategies, Omissions, and Lessons from Wounded Healers*, 34 AM. J. HEALTH PROMOTION 568, 568 (2020) (arguing that physicians increasingly leave medicine because of the high rates of burnout they experience); *see also* Herbert L. Fred & Mark S. Scheid, *Physician Burnout: Causes, Consequences, and [?] Cures*, 45 TEX. HEART INST. J. 198, 198-99 (2018).

[215] *See* Meyer, *supra* note 210.

[216] *See id*.

making time for her family, Dr. O' Kane decided to establish her own practice.

However, her contract with the hospital included a non-compete clause which prevented her from practicing within 50 miles of the hospital for two years after her contract ended.[217] Thus, only if she sold the family house, moved many miles, and enrolled her children in a new school would she be able to start her own practice.[218] Dr. O'Kane faced a tragic dilemma: either she had to stay in an unhealthy working environment to avoid the move, or she had to leave her patients, town, and community to establish her own practice. Many physicians and nurses face similar dilemmas, and many decide either to move to another industry or to seek early retirement.[219]

But Dr. O'Kane is not alone. After the Federal Trade Commission (FTC) requested public comments on the effects of non-compete clauses in the healthcare industry, several physicians seized the chance to highlight the severe harms that non-competes cause. Some participants pointed to the fact that the majority of non-competes are unreasonable in terms of geographic scope, as they often prohibit physicians from practicing medicine within a hundred miles radius of the employing hospital.[220] Others explained that non-competes eliminate their ability to practice medicine in a five-county area.[221] This leaves physicians with very limited options: either they have to accept any unfair employment terms imposed by their current employer or move themselves and their families to a different city, or even state.[222] Many physicians have noted that such dilemmas increase their levels of burnout and stress, which ultimately undermines their productivity and encourages them to leave medicine at increasing rates [223].

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[217] *Id.*

[218] *Id.*

[219] *See* Goldstein, *supra* note 211.

[220] *See* Ward Becker, *Comment FTC-2019-0093-0166*, Workshop on Non-compete Clauses Used in Employment Contracts (Jan. 30, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0166;

[221] *See Comment FTC-2019-0093-0218* Workshop on Non-compete Clauses Used in Employment Contracts, (Feb. 4, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0218 [hereinafter *Comment 0218*]; *see also See Comment FTC-2019-0093-0160*, Workshop on Non-compete Clauses Used in Employment Contracts (Jan. 30, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0160.

[222] *See* Scott Mintzer, *Comment FTC-2019-0093-0232*, Workshop on Non-compete Clauses Used in Employment Contracts (Feb. 6, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0232 [hereinafter *Comment 0232*]; *see also Comment FTC-2019-0093-0180*, Workshop on Non-compete Clauses Used in Employment Contracts (Jan. 30, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0180 [hereinafter *Comment 0180*]; Shannon Pettypiece, *Biden's Push to Ban Noncompetes Could Have Big Implications for Healthcare*, NBC NEWS (Feb. 13, 2023 10:49 AM), https://www.nbcnews.com/politics/economics/biden-ban-non-compete-agreements-health-care-industry-rcna70099.

[223] *See* Martha Bardsley, *Comment FTC-2019-0093-0162*, Workshop on Non-compete Clauses Used in Employment Contracts (Jan. 30, 2020),

The prospect of eventually having to choose between unhealthy working conditions and uprooting one's life may also deter many Americans from entering the healthcare job market in the first place. Non-competes thus limit the pool of nurses and physicians who might be available for recruitment by rural hospitals even before these agreements are ever signed. This may contribute to the shortage of healthcare workers currently plaguing rural America and aggravate the hospital closure epidemic.[224]

But there are additional reasons why non-competes contribute to the hospital closure crisis in rural America. By eliminating job mobility, non-competes imposed by rural hospitals discourage nurses and physicians from offering their services in competing hospitals in underserved areas that often struggle to attract workers in the healthcare industry and meet the needs of their patients.[225] This is because the nurses and physicians who work in rural hospitals and are subject to non-competes, but who wish to switch employers, must move away from the rural area in order to free themselves from the non-compete clauses and find new work. Forcing such healthcare workers to leave underserved areas naturally exacerbates the shortage of nurses and physicians that rural hospitals are experiencing.[226]

Consider the following example: a non-compete that prevents a cardiologist from practicing medicine for two years within a 60-mile radius of an employing hospital upon termination of the physician's contract. If most cardiologists in a given geographic area are subject to a similar non-compete, competing rural hospitals may be unable to recruit cardiologists even if they offer them higher wages and more favorable employment terms. Unable to offer their communities cardiac care services due to their inability to recruit a sufficient number of cardiologists, some rural hospitals

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https://www.regulations.gov/comment/FTC-2019-0093-0162 [hereinafter *Comment 0162*]; *see also* Raymond Dragann, *Comment FTC-2019-0093-0176*, Workshop on Non-compete Clauses Used in Employment Contracts (Jan. 30, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0176 [hereinafter ; *See* Melissa Pell, *Comment FTC-2019-0093-0141*, Workshop on Non-compete Clauses Used in Employment Contracts (Jan. 30, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0141.

[224] Pettypiece, *supra* note 222 (arguing that opponents of non-competes contend "that the agreements are suppressing wages, contributing to doctor shortages in rural areas and stifling competition"); Letter from Debbie Hatmaker, Chief Nursing Officer & Exec. Vice President, Am. Nurses Assoc., to Lina M. Khan, Chair FTC, 2 (Mar. 2, 2023) (on file with the FTC), https://www.nursingworld.org/~4942e4/globalassets/docs/ana/comment-letters/anacomments_ftcproposedrule_noncompeteclauses_2023.pdf.

[225] Letter from Christopher S. Kang, President, Am. Coll. Emergency Physicians, to Lina M. Khan, Chair FTC, 1, 4 (Mar. 7, 2023) (on file with the FTC), https://www.acep.org/siteassets/new-pdfs/advocacy/acep-letter-on--ftc-noncompete-clause-03.07.23.pdf (urging the FTC to examine how non-competes exacerbate the shortage of physicians in underserved areas).

[226] *See id.* at 4 ("In rural America where doctor shortages are a daily event this further restricts supply if doctor must relocate outside region" as well as that non-competes "penalize underserved areas for which a doctor might stay if able to make a lateral move to a hospital in the same area").

may be forced to cut this essential service, while still others may decide to close their doors entirely.

The COVID-19 pandemic made both the nature and scope of this problem very clear. The overwhelming need for hospital staff during the peak of the pandemic exposed how non-competes can undermine a hospital's ability to treat patients, save lives, and serve its community.[227] When, in the midst of the pandemic, hospitals across America saw surges of COVID patients, many hospitals, especially in underserved areas, lacked the necessary staff to manage the influx of patients and meet their immediate needs.[228] Absent the necessary ICU beds or on-call medical staff to treat the increasing volume of COVID patients, several hospitals simply had to send people with severe symptoms back home, leaving them without any access to care. This likely contributed to the high mortality rates rural communities experienced during the COVID 19 pandemic.[229]

Absent the high percentage of non-competes that dominate the healthcare industry, some rural hospitals may have been able to cover their increased needs during the pandemic by recruiting additional nurses and physicians—either those who were unemployed at the time or those who could be spared by hospitals with more robust staffing. But, as noted, most healthcare workers in America are subject to non-competes. For this reason, even physicians who had recently left their jobs and desired to offer their services to struggling hospitals were prevented from doing so by the non-competes imposed upon them by their former employers. Indeed, when the pandemic hit, several hospitals requested courts to enforce non-competes against healthcare workers who wanted to accept calls for extra help by hospitals which lacked the resources to treat their patients.[230] This undermined the ability of understaffed hospitals to meet the increased healthcare needs of their communities.

Advocacy groups and other higher-ups at rural hospitals, however, tell a different story. For instance, the AHA recently alleged that, unless rural hospitals impose non-competes on nurses and physicians, they will be unable to retain them.[231] In other words, the argument is that non-competes allow rural hospitals to remain in business and treat rural residents. Reality, however, indicates that this is not necessarily true. As noted, rural hospitals

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[227] *See* Goldstein, *supra* note 211.

[228] *See Rural Health and Covid*, Tracie Healthcare Emergency Preparedness Info. Gateway 1,2 (May 28, 2020), https://files.asprtracie.hhs.gov/documents/aspr-tracie-rural-health-and-covid-19.pdf.

[229] *Covid Incidence, Mortality Rates Remain Much Higher in Rural Areas*, IOWA COLL. PUB. HEALTH (Dec. 8, 2021), https://www.public-health.uiowa.edu/news-items/covid-incidence-mortality-rates-remain-much-higher-in-rural-areas/ ("Hospital closures and shortages of health care providers may contribute to the high mortality rates from COVID-19 in rural areas.")

[230] *See* Goldstein, *supra* note 211.

[231] Letter from Melinda Reid Hatton, Gen. Couns. & Sec'y, Am. Hosp. Assoc., to Lina M. Khan, Chair FTC 10 (Feb. 22, 2023) (on file with the FTC), https://www.aha.org/system/files/media/file/2023/02/aha-comments-on-ftc-proposed-non-compete-clause-rule-letter-2-22-23.pdf.

struggle to recruit and retain nurses and physicians primarily because they are unable to compete with urban hospitals in terms of payment and benefits.[232] But imposing a non-compete on employees will not address the problem: first, because non-competes further suppress wages for employees; and second, because a non-compete is an unfavorable employment term for employees. For these reasons, a non-compete may deter potential healthcare workers from choosing an employer-hospital who forces them to sign such a term, especially if the hospital is located in an underserved area that offers them a poorer wage.

This may be especially problematic for healthcare industry specialists with rural backgrounds. Robust research demonstrates that medical students with rural backgrounds may be more willing to offer their services in rural areas.[233] The same research also indicates that "racial/ethnic minority groups that are traditionally underrepresented in medicine are more likely to practice in underserved communities and provide care to minority populations."[234] If, however, rural hospitals offer employment to these groups of healthcare workers only if they abide by a non-compete, they may be discouraged from practicing medicine in rural areas. Thus, the chance to attract even the most likely candidates to underserved communities may be thwarted by the imposition of non-compete clauses.

In brief, because non-competes may lead to lower wages and inferior working conditions, they often motivate nurses and physicians to leave the market or discourage potential healthcare workers from ever entering the field at all. This contributes to the shortage of physicians and nurses that disproportionately affects rural hospitals and leads to additional closures. By impeding healthcare workers' mobility, non-competes imposed by rural hospitals also prevent physicians and nurses from offering their services in rural areas which urgently need workers in the healthcare industry.[235] Hence, non-competes may undermine rural hospitals' ability to attract the volume of healthcare workers they need to offer profitable healthcare services, such as surgeries.[236] Again, for some of these hospitals, departing their communities may be inevitable.[237]

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[232] *See* Mead, *supra* note 89.

[233] *See* Shipman et al., *supra* note 85, at 2012; *see also* John A. Owen et al., *Predicting Rural Practice Using Different Definitions to Classify Medical School Applicants as Having a Rural Upbringing*, 23 J. RURAL HEALTH 133, 133 (2007) ("Recruiting more applicants who match this definition of rural background should increase the number of rural physicians.").

[234] *See* Shipman et al., *supra* note 85, at 2012.

[235] See Letter from Christopher Kang, *supra* note 225, at 4; *see also Comment 0218*, *supra* note 221 (arguing that "Non-compete clauses are included in virtually every physician contract, and they have become the standard for employment contracts with the corporate take-over of medicine," and that "These antiquated restrictions on physician practice are only hurting patients by further limiting access to care in areas of physician shortages").

[236] *See* Germack et al., *supra* note 93, at 2090.

[237] *Id.*

Given the concerns expressed above, two crucial, albeit underexplored, questions emerge, begging further examination. First, can antitrust law cure the hospital desert problem? And second, can antitrust law heal the wounds and losses that hospital deserts pose on the most vulnerable Americans? The section that follows takes a deep dive into answering these questions.

IV. Enforcers as Healers: Can Antitrust Enforcers Remedy the Hospital Closure Crisis Affecting Rural America?

The previous section identified the business strategies American hospitals employ that have exacerbated the hospital closure crisis affecting rural communities. This section delves into the role antitrust law can play in alleviating this problem.

First, this section examines the anticompetitive effects of non-compete clauses and contends that the nation's courts should find such agreements in the healthcare sector constitute per se violations of Section 1 of the Sherman Act. In order to flesh out this argument, this section goes on to address the inadequacies of the current legal framework for addressing employee non-competes, which is to analyze them under the "rule of reason" test. In doing so, this section argues that, if the courts continue to apply a rule of reason analysis to employee non-compete agreements, hospitals will be allowed to further increase their market power in the labor market via the mechanisms discussed above. As the previous section showed, allowing hospitals to increase their market power and force non-compete agreements on their employees has amplified the shortage of physicians and nurses in America, which, in turn, has led and will continue to lead to an ever-increasing number of hospital closures.

Second, this section alleges that antitrust enforcers should start assessing the impact of hospital mergers on wages and the working conditions of employees in the healthcare industry. Failing to do so will aggravate the hospital closure crisis that is hitting rural America and creating hospital deserts. This section also explains the methodology that antitrust enforcers and the courts could apply to identify the impact of hospitals mergers on labor. To do so, it analyzes and explores both the novel 2023 Merger Guidelines recently published by the FTC and the Department of Justice ("the Agencies"), as well as relevant scholarship and case law.

Third, this section contends that enforcers should only accept hospital mergers in rural areas on the condition that the acquiring hospital will neither (1) shut down the acquired hospital, nor (2) cut the healthcare services it offers to rural residents. This will ensure, at least to some extent, that hospital mergers in underserved areas do not end up depriving rural residents of much needed healthcare services, including primary, maternal, emergency, and psychiatric care.

A. Section 1 of the Sherman Act and Non-Competes

1. The Anticompetitive Effects of Non-Competes

The non-compete agreements that hospitals widely impose on workers in the healthcare industry are both the product and instrument of the monopsony power hospitals enjoy in America. As noted, hospitals initially gained monopsony power due to the wave of hospital mergers the nation experienced in the 1990s. Presently, hospitals can impose non-compete agreements on employees because of this monopsony power. Those non-competes then function to keep workers from having or exercising fallback options in negotiations for wages and working conditions because they prevent workers from either starting their own practices or migrating to other potential employers in a specific geographic area. Because non-competes eliminate job mobility, they lead to reduced wages and harmful working conditions for employees.[238]

What's more, by drastically reducing the available talent pool in the healthcare industry, non-compete agreements between a given hospital and its employees may prevent competing hospitals from meeting their own employment needs. This is especially the case for rural hospitals that struggle to attract nurses, physicians, and clinicians, and thus frequently fail to meet the healthcare needs of their communities.[239] Because non-competes significantly harm competition in labor markets and reduce consumer choice, they are subject to Section 1 of the Sherman Act, which prohibits every contract that unreasonably restrains trade.

Although the courts could apply antitrust law in a way that addresses the harms that non-competes cause to rural communities, thus far, they have failed to do so. But that is not to say they could not. Antitrust law can and should do better. The section that follows explains *how*. Specifically, it examines how the courts can apply Section 1 of the Sherman Act to better protect workers in the healthcare industry, which will in turn promote public health.

2. Non-Competes and the Rule of Reason

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[238] Eric A. Posner, *The Antitrust Challenge to Covenants Not to Compete in Employment Contracts*, 83 ANTITRUST L. J. 165, 187-190 (2020); *see also* Press Release, FTC, FTC Proposes Rule to Ban Noncompete Clauses, which Hurt Workers and Harm Competition (Jan. 5, 2023) (on file with FTC), https://www.ftc.gov/news-events/news/press-releases/2023/01/ftc-proposes-rule-ban-noncompete-clauses-which-hurt-workers-harm-competition [hereinafter FTC Press Release].

[239] *See* Aallyah Right, *Rural Hospitals Can't Find the Nurses They Need to Fight Covid*, STATELINE (Sept. 1, 2021 12:00AM), https://stateline.org/2021/09/01/rural-hospitals-cant-find-the-nurses-they-need-to-fight-covid/; *see also* Cory Meador, *In Rural Areas with Health Care Shortages, These Doctors Are Answering the Call*, PBS NEWS HOUR (Apr. 9, 2021 11:03 AM), https://www.pbs.org/newshour/health/rural-areas-health-care-shortages-these-doctors-are-answering-the-call.

Two types of antitrust analysis are applied by the Supreme Court to examine whether an agreement violates the Sherman Act. These are the "per se" analysis and the "rule of reason" analysis.[240] Per se unlawful agreements are those agreements which are so harmful to competition and consumers that they are unlikely to produce any essential procompetitive benefits. Courts treat such agreements as categorically illegal.[241] For example, any agreement between competitors to fix prices or restrict output is considered illegal per se.[242]

Agreements not condemned as illegal per se are examined under the rule of reason legal test. Essentially, the rule of reason test asks whether an agreement among market players promotes or hurts competition.[243] This test was first formulated by the Supreme Court's opinion in *Chicago Board of Trade*.[244] In that 1918 case, the Chicago Board of Trade had adopted a "call rule" prohibiting members of the grain exchange from purchasing or offering to purchase "to arrive" wheat, corn, oats or rye "at any price other than the closing price of that commodity on the previous day."[245] Although this agreement was literally a form of price fixing, Justice Brandeis found that the agreement was justified because it created a level playing field for the purchase and sale of agricultural commodities on the open market. "The true test of legality," Justice Brandeis explained, "is whether the restraint is such as merely regulates, and perhaps thereby promotes, competition, or whether it is such as may suppress or even destroy competition."[246]

To delve into this question, Justice Brandeis explained, "the court must ordinarily consider *the facts peculiar to the business*, *its condition before and after the restraint was imposed*, *the nature of the restraint, and its effect, actual or probable. The history of the restraint, the evil believed to exist, the reason for adopting the particular remedy, the purpose or end sought to be attained, are all relevant facts*, not because a good intention will save an otherwise objectionable regulation or the reverse, but because knowledge of intent may help the court to interpret facts and predict consequences."[247]

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[240] U.S. Dep't of Just. & Federal Trade Commission (F.T.C.), ANTITRUST GUIDELINES FOR COLLABORATIONS AMONG COMPETITORS 3 (2000), https://www.ftc.gov/sites/default/files/documents/public_events/joint-venture-hearings-antitrust-guidelines-collaboration-among-competitors/ftcdojguidelines-2.pdf.

[241] *Id*.

[242] The Supreme Court described the distinctive features of these naked anticompetitive agreements in United States v. Socony – Vacuum Oil Co, 310 U.S. 150 (1940). It held that "[a]ny combination which tampers with price structures is engaged in unlawful activity. Under the Sherman Act a combination formed for the purpose and with the effect of raising, depressing, fixing, pegging, or stabilizing the price of a commodity in interstate or foreign commerce is illegal per se." 310 U.S. at 221.

[243] Theodosia Stavroulaki, *Equality of Opportunity and Antitrust: The Curious Case of College Rankings*, 17 J. COMPETITION L. & ECON. 903, 922 (2021).

[244] Chi. Bd. Trade v. United States, 246 U.S. 231 (1918).

[245] *Id*. at 237.

[246] *Id*. at 244.

[247] *Id*.

Although the Supreme Court's ruling in *Chicago Board* laid the foundation for the rule of reason test, at the same time, it left some important questions unanswered.[248] Indeed, in *Chicago Board*, the Court did not identify the analytical framework under which future courts should assess whether an agreement among competitors would undermine competition.[249] Nonetheless, over time, lower courts limited the number of agreements among competitors that were treated as per se illegal, and the rule of reason test became more widely used.[250]

One positive consequence of this frequent usage is that the rule of reason test has become much more structured.[251] A leading study that reviewed all rule of reason cases from 1977 to 1999 revealed that, when applying the rule of reason test, courts generally follow a "burden-shifting approach."[252] First, the plaintiffs must show the agreement's main anticompetitive effects;[253] next, if the plaintiffs have met their initial burden, the defendants must show that the anticompetitive agreement produces some procompetitive benefits;[254] and finally, if the defendants meet their own burden, the plaintiffs must show either "that the restraint is not reasonably necessary or that the defendant's objectives could be achieved by less restrictive alternatives."[255] Only after all three stages are completed will the courts then balance the agreement's procompetitive effects against the harm caused to competition.[256]

To date, courts have examined non-competes under the rule of reason. There are two main reasons for this. First, non-competes are purely vertical agreements: they exist between two different levels of a given market (i.e., employee and employer) as opposed to between direct competitors in a market (i.e., two employers). Because these agreements are vertical restraints of trade, they are not considered as harmful to competition and consumers as horizontal restraints, such as cartels.[257]

Second, non-compete agreements have the potential to yield some procompetitive benefits. Reduced mobility, the argument goes, benefits employers by allowing them to recover the costs of training their workers.[258] Absent the non-competes, employees could free ride on their employers' investments by obtaining skills at a job and then migrating to another

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[248] Andrew I. Gavil, *Moving Beyond Caricature and Characterization: The Modern Rule of Reason in Practice*, 85 S. CAL. L. REV. 733, 742-743 (2012).
[249] *See* Stavroulaki, *supra* note 243, at 923.
[250] *Id.*
[251] *Id.*
[252] Michael A. Carrier, *The Rule of Reason: An Empirical Update for the 21st Century,* 16 GEO. MASON L. REV. 827, 827 (2009).
[253] *Id.*
[254] *Id.*
[255] *Id*.
[256] *See* Stavroulaki, *supra* note 243, at 923.
[257] Herbert Hovenkamp, *Noncompetes and the Rule of Reason*, THE REGUL. REV. (Jan. 16, 2023), https://www.theregreview.org/2023/01/16/hovenkamp-noncompetes-and-rule-of-reason/.
[258] *See* Posner, *supra* note 238, at 176.

employer who could afford to pay better because the new employer did not have to incur costs to train the employee in the first place. This risk of free riding would disincentivize employers from investing in their workers' education, talents, and skills. Thus, from an employers' perspective, a non-compete agreement may be the only effective way they can protect their investment from the free riding that might occur if a new employer "commandeers" the investment of the former employer.[259]

In theory, non-competes also have the potential to benefit employees. By signing non-competes, employees reduce their job mobility and their opportunity to seek alternative employment; for this reason, employers may offer them higher wages.[260] Hence, if enforcers banned non-competes without a lengthy legal and economic analysis of their alleged procompetitive benefits, they would risk causing harm both to employers and employees.

But, as in life, so also in the case of non-competes, theory does not always comport neatly with reality. For instance, according to a 2014 empirical study, most workers in the US labor market who are bound by non-compete agreements do not receive a "compensating wage differential" from their employers.[261] What's more, the notion that, absent non-competes, employers may have little incentive to invest in their employees' skills and training, relies on the assumption that typical American labor markets function according to models of well-regulated, competitive markets. In such markets, the barriers that employees face in moving from one job to another are quite low, and hence, employees have options for migrating between jobs in order to maximize some benefits, either higher wages or better working conditions. But this assumption does not reflect reality. Labor markets in America are concentrated, and thus, they do not behave according to competitive models.[262] Because only a few employers exist in labor markets, especially in rural areas,[263] employees cannot easily switch employers, even if their current job does not meet their qualifications, expectations, or even needs.

Labor market concentration, however, is not the only reason why workers in America may be deterred from leaving a low-paying or otherwise unfulfilling job to seek alternative employment. High switching costs may also discourage workers from finding a new job. Because many employees may be unable to invest the resources necessary to pursue a new job, they may not leave their current jobs even if a higher-paid and more

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[259] Hovenkamp, *supra* note 257.

[260] *See* Posner, *supra* note 238, at 176.

[261] Saresh Naidu, Eric Posner, & Glen Weyl, *Antitrust Remedies for Labor Market Power,* 132 HARV. L. REV. 536, 545 (2018); *see also* Evan Starr, J.J. Prescott, & Norman D. Bishara, *Noncompete Agreements in the US Labor Force*, 64 J. L. & ECON. 53, 68 (2021) (arguing that non-competes do not necessarily lead to a higher compensation).

[262] *See* José Azar, Ioana Marinescu, & Marshall Steinbaum, *Labor Market Concentration*, 57 J. HUM. RES. S167, S179 (2020).

[263] Hiba Hafiz, *The Law of Geographic Labor Market Inequality*, 172 U. PENN. L. REV. 1, 3-4 (2023).

fulfilling job is available in the market.[264] Because labor markets in America are neither competitive nor frictionless, the argument that non-competes yield procompetitive benefits because they reduce the risk of free riding is simply unconvincing.

Additionally, the argument that employers impose non-competes on their employees simply because they want to protect their legitimate business interests and trade secrets is ill-founded. Empirical evidence demonstrates that employers impose non-competes even in markets where they invest little to no money in the training of their employees, and where those employees have no trade secrets to protect. Consider the example of Jimmy John's franchises, which for years included non-competes in all of its labor contracts.[265] Essentially, these non-competes banned Jimmy John's workers from working for any sandwich shop (including another Jimmy John's franchise) within three miles of *any* Jimmy John's franchise for a two-year period. Because numerous Jimmy John's shops may operate in any given city, the employer's non-competes severely limited its workers' ability to switch employers if they wished to pursue a new sandwich job.[266] Surely, Jimmy John's did not seriously invest in its employees' education and skills, nor did these employees possess anything that could be fairly characterized as "trade secret" knowledge. Nonetheless, the franchise chain imposed non-competes on its employees to restrict competition for sandwich workers.

But Jimmy John's is not the only employer to impose non-competes in cases where its investment in employees' training, knowledge, and skills is negligible. Hospitals too do not invest appreciably in their workers' training, especially when compared to the worker's own investment: the vast majority of the education and knowledge that nurses and physicians need in order to practice is acquired before they are even recruited to work in a given hospital.[267] Nonetheless, most physicians and nurses in America are subject to non-competes.[268] Indeed, as noted, one recent study found that almost three quarters of all physicians who have signed employment contracts with hospital systems in the nation are subject to such unfavorable terms.[269] Another 2018 study[270] found that almost 50% of primary care physicians in Georgia and Texas have signed non-competes.[271]

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[264] Posner, *supra* note 238, at 181 (arguing that search costs often prevent employees from seeking a better job even if this job is available in the market).

[265] *Id.* at 165; *see also* Dave Jamieson, *Jimmy John's Makes Low-Wage Workers Sign 'Oppressive' Noncompete Agreements*, HUFFINGTON POST (Oct. 13, 2014, 4:03 PM), https://www.huffpost.com/entry/jimmy-johns-non-compete_n_5978180.

[266] See Posner *supra* note 238, at 165.

[267] William F. Sherman et al., *The Impact of a Non-compete Clause on Patient Care and Orthopedic Surgeons in the State of Louisiana*, 14 ORTHOPEDIC REV. 1, 4 (2022).

[268] *See* Meyer, *supra* note 210.

[269] *Id.*

[270] *See* Lavetti et al., *supra* note 210, at 1043.

[271] *See* Meyer, *supra* note 210.

Applying the rule of reason test in such cases, however—that is, cases where the restraint's procompetitive benefits are insignificant, and its anticompetitive effects are obvious—is a mistake. Essentially, this is because, in such cases, the costs of applying the rule of reason test clearly outweigh its benefits. By way of illustration, consider the following example: a non-compete in the nursing industry. When analyzing the non-compete under the rule of reason test, the plaintiff-nurse must show that (1) the employer-hospital possesses market power, and (2) the non-compete would significantly harm competition in the labor market for nurses. Antitrust scholarship warns that meeting this burden of proof is nearly impossible for individual plaintiffs trying to challenge non-competes.[272] This is because, in non-compete cases, the lawyer will typically represent a single employee seeking to prove that the non-compete is unreasonable. The application of the rule of reason, though, requires the plaintiff to prove anticompetitive harm on the entire labor market.[273] Specifically, this showing would require the plaintiff to demonstrate that the non-compete caused wages to decrease in the entire labor market.

Professor Eric Posner observes that, while economic theory suggests that a reduction in competition among employers would lead to suppressed wages, "the effect would be impossible to show statistically in the case of a single non-compete that prevents a single employer from hiring a single worker where the market presumably contains thousands of employees and dozens or hundreds of employers." [274] For this reason, applying the rule of reason test in the case of non-competes greatly raises the litigation costs plaintiffs must incur to challenge their legality, which ultimately prevents many employees, including nurses and physicians, from doing so.[275] As a result, employers, notably hospitals, are encouraged to expand the use of non-competes, even in cases where they lack any legitimate business interest to impose them.[276]

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[272] *See* Posner*, supra* note 238, at 173.

[273] *See id.*

[274] *See id.* at 174.

[275] *See* Meyer, *supra* note 210 (arguing that it can cost tens of thousands of dollars in legal fees to challenge a noncompete clause).

[276] *See Comment 0232*, *supra* note 222 ("[A]n overly-restrictive clause might be litigated in court but that requires an enormous, expensive legal fight that most of us can't manage (even in medicine!) Who can afford to fight against the hospital or health plan worth billions of dollars with an army of attorneys at its disposal?") ("In medicine, employers routinely insist upon clauses that they know would not hold up in court simply because they know the employee would be in no financial position for the legal fight," and "there is simply no justification for the existence of these clauses. They reduce the free movement of labor (with major economic impact), cause personal distress, give employers far too much power, and, in our industry, disrupt health care. They should be banned, altogether, at the federal level."); *see also Comment FTC-2019-0093-0156* Workshop on Non-compete Clauses Used in Employment Contracts, (Jan. 31, 2020), https://www.regulations.gov/comment/FTC-2019-0093-0156 [hereinafter *Comment 0156*] ("Non-compete clauses are more financial than legal constraints. Everybody understands that the non-compete clause at my institution is absurd. We all know that any individual who left my institution would eventually win their case. We also know that we would be

Arguably, some of the above challenges could be overcome through class action suits; however, thus far, a limited number of courts have been willing to certify a class to bring such a challenge.[277] Because employment contracts are confidential, it is hard for lawyers to prove that a non-compete that is binding for their client's contract is also binding for their client's coworkers.[278] These obstacles, however, undermine the deterrence effect of antitrust law, which could effectively protect workers from employers' monopsony power and unreasonable non-competes.[279]

And yet, there are more reasons why applying the rule of reason test in the case of non-competes may be a mistake. Consider *Alston v. NCAA*.[280] This case involved the compensation limits the NCAA and its members imposed on student athletes. A District Court in California examined this case under the rule of reason. While the District Court refused to condemn the NCAA's rules restraining undergraduate athletic scholarships and other forms of compensation related to students' athletic performance, it condemned those NCAA rules that limited what education-related benefits schools could make available to student athletes.[281]

In applying the first step of the rule of reason test, where the plaintiff is required to prove the restraint's anticompetitive effects, the court observed that the NCAA exercised its monopsony power in the market for athletic services in men's and women's Division I basketball and FBS football.[282] The NCAA and its members, the Court observed, have the power to restrain student-athlete compensation "in any way and any time they wish" without reducing their market power.[283] The Court found that the NCAA's compensation limits created significant anti-competitive effects in this market because they capped the compensation offered to recruits.[284] Absent these restraints, the Court said, students would attain a higher compensation.

Then, the Court went on to examine the business justifications offered by the NCAA.[285] Although the Court rejected most of them, it did take the time to closely examine one, which it ultimately accepted: that the NCAA's compensation rules were necessary for the preservation of amateurism.[286] Without the imposed restraints, the Court said, a unique product – amateur college sports – would not be available to consumers.

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overwhelmed by legal costs. The message by my institution is if you practice in Philadelphia, or leave with another person you currently practice with, we will destroy you financially so no one will ever dare to do anything like that again.").

[277] *See* Posner*, supra* note 238, at 174.

[278] *Id.*

[279] *Id.* at 175 ("[E]mployers face virtually no legal consequences under the antitrust laws if they use non-competes for anticompetitive purposes.").

[280] Alston v. NCAA, 594 U.S., 141 S. Ct. 2141 (2021).

[281] *Id.* at 2147.

[282] *Id.* at 2151-52.

[283] *Id.* at 2152.

[284] *Id.*

[285] *Id.* at 2152, 2159.

[286] *Id.* at 2152-53.

Hence, the NCAA's compensation rules expanded consumer choice. On appeal filed by both sides, the Ninth Circuit affirmed the lower court's ruling. The Supreme Court also affirmed.[287]

But this procompetitive benefit – preservation of amateurism, as the Supreme Court observed – was created in the NCAA's seller-side consumer market rather than the market for athletic services in which the anticompetitive effects of the NCAA's compensation rules were felt.[288] Thus, the Supreme Court did not exclude the possibility that, when Section 1 of the Sherman Act applies, the procompetitive benefit in one market can outweigh its anti-competitive effect in another one.[289] Future courts that hear cases challenging non-compete clauses in the healthcare industry may adopt the Supreme Court's line of thinking in *NCAA v. Alston*. This, however, could have devastating effects on physicians, nurses, patients, and ultimately, public health. *Why?*

Recall the example of a hospital that imposes a non-compete on nurses. Under the rule of reason legal test, the plaintiff-nurse would need to prove that the hospital for which the nurse works has substantial market power and that the non-compete suppresses competition in the entire labor market. In the unlikely case that the plaintiff-nurse met this high burden of proof under the first step of the rule of reason test, the burden of proof would shift to the defendant-hospital, which would be required to show the restraint's procompetitive benefits. For instance, the hospital may contend that the non-compete produces cost savings that benefit consumers in the hospital services market. By suppressing the wages of nurses, the argument would go, non-competes reduce hospitals' labor costs. This allows them to reduce the rates they charge health insurers, which ultimately benefits the purchasers of health insurance services, notably, employers and consumers. Alternatively, the defendants-hospitals may allege that the non-competes ensure the continuity of healthcare services, and hence, contribute to health outcomes. Because in *NCAA v. Alston*, the Supreme Court did not exclude the possibility that the procompetitive benefits produced in one market can outweigh the anticompetitive harms in another, it is possible that the hospitals may successfully defend the non-competes they impose on workers on the basis that the likely efficiencies they produce in the hospital services market surpass any harm they cause to competition in the labor market.

Clearly, this type of analysis can lead to unfair outcomes. First, this analysis risks ignoring that non-competes contribute to the shortage of nurses and physicians and, thus, to the hospital closure crisis plaguing underserved areas. For this reason, this analysis would favor only limited, short-term theories of potential procompetitive benefits while ignoring the

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[287] *Id.* at 2166.

[288] *Id.* at 2152.

[289] Ted Tatos & Hal Singer, *The Abuse of Offsets as Procompetitive Justification: Restoring the Proper Role of Efficiencies after* Ohio v. American Express *and* NCAA v. Alston, 38 GA. ST. U. L. REV. 1179, 1205 (2022).

long-term harm that non-competes ultimately inflict: a reduced workforce and fewer hospitals with fewer healthcare services in rural communities. Second, such an analysis would contribute to the monopsony power that hospitals already enjoy, especially in rural areas. More importantly, if the enforcers and the courts allow the procompetitive effects in one market to outweigh the anticompetitive effects in another, they will apply antitrust law in a way that reflects the notion that one group of consumers (i.e., the employers) deserves more protection than another (i.e., the workers).

But antitrust law does not support this notion. Indeed, antitrust law is based on the idea that all individuals deserve the fruits of well-functioning markets: lower prices, increased quality, and wider choice. For this reason, if courts apply antitrust law in a way that privileges employers' interests over the interests of workers, they risk ignoring a basic tenet of antitrust policy: that all consumers *equally* deserve the protection of antitrust principles.[290] They also risk contributing to the social and economic inequality that antitrust law was initially designed to combat,[291] and which is already so rampant in America.[292]

There are several reasons why this would be case. To start, the *Alston*-style analysis would result in a redistribution of wealth from employees to employers. If any branch of government has the authority to make policies that affect the distribution of wealth in the nation, it would be Congress rather than antitrust enforcers and the courts. By supporting the view that an employer's legitimate interests can outweigh the harm that non-competes cause to workers and patients, the courts may end up permitting the majority of non-competes in the healthcare industry, despite research demonstrating how these agreements aggravate the shortage of healthcare workers in America and, ultimately, the hospital closure epidemic.

One could argue that it is unlikely that all courts will apply the Supreme Court's analysis in *Alston v. NCAA* to non-compete cases. Some courts may instead be inspired by the Supreme Court's analysis in *Philadelphia National Bank*, which maintained that the procompetitive justifications in one market cannot outweigh the anti-competitive benefits in another.[293] *Philadelphia National Bank* centered around the merger of the second and third largest commercial banks in the Philadelphia metropolitan area.[294] The proposed transaction would have resulted in Philadelphia's largest commercial bank. To rebut the government's findings of anticompetitive effects, the merging parties raised an efficiency defense. Specifically, they alleged that, following the merger, the resulting bank "with its greater prestige and increase[ed] lending limit would be better able

[290] *See* Leslie, *supra* note 154, at 1753.
[291] *See* Sandeep Vaheesan, *Accommodating Capital and Policing Labor: Antitrust in Two Gilded Ages*, 78 MD. L. REV. 766, 771 (2019).
[292] *See generally* Johnathan B. Baker & Steven C. Salop, *Antitrust, Competition Policy, and Inequality*, 104 GEO. L. REV. 1 (2015).
[293] United States v. Phila. Nat'l Bank, 374 U.S. 321 (1963).
[294] *Id.* at 330.

to compete with large out-of-state (particularly NY) banks, would attract new business in Philadelphia, and in general would promote the economic development of the metropolitan area."[295]

The Supreme Court was not convinced. Rather, the Court supported the view that, if anticompetitive effects in one market could be offset by procompetitive benefits in another, every firm in the industry could, without breaching the Clayton Act, "embark on a series of mergers" that ultimately would make it the leading industry player.[296] For this reason, the Supreme Court did not allow the proposed merger to move forward.

Given the Supreme Court's ruling in *Philadelphia National Bank*, some courts may still be willing to hold that the welfare gains enjoyed by employers cannot outweigh the welfare losses suffered by employees.[297] However, because *Philadelphia National Bank* is a merger case, some courts may contend that the Supreme Court's ruling in *Philadelphia National Bank* does not apply to cases analyzing claims under Section 1 of the Sherman Act, and hence, the line of thinking in *NCAA v. Alston* is more appropriate for analyzing non-compete agreements.

Importantly, the FTC has not shut its ears to these concerns. Specifically, the FTC has recently proposed a new federal regulation that aims to ban all non-compete agreements across America, including those for physicians and nurses.[298] In November 2022, the FTC also published a policy statement to elaborate on its power under Section 5 of the Federal Trade Act ("FTC Act"), which prohibits unfair methods of competition.[299] In this statement, the FTC underlines that it is authorized to protect employees around the nation from any unfair methods of competition.[300] Since then, the FTC announced several actions against companies whose employers imposed non-compete agreements on their employees in breach of Section 5 of the FTC Act.

For instance, the FTC initiated proceedings against Prudential, a Michigan-based security firm, on the basis that the company's non-competes were exploitative and had a negative effect on competitive conditions.[301] Given these concerns, the FTC ordered Prudential to terminate all non-competes for all security guards in Prudential's employ,

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[295] *Id*. at 334.
[296] *Id.* at 370.
[297] *See* Laura Alexander & Steven C. Salop, *Antitrust Worker Protections: the Rule of Reason Does Not Allow Counting of Out-of-Market Benefits*, 90 U. CHI. L. REV. 273, 278 (2023) (arguing that the Philadelphia National Bank approach to mergers should apply to all buyer-side restraints analyzed under the Sherman Act).
[298] *See* Non-Compete Clause Rule, *supra* note 212.
[299] *See* FED. TRADE COMM'N, POLICY STATEMENT REGARDING THE SCOPE OF UNFAIR METHODS OF COMPETITION UNDER SECTION 5 OF THE FEDERAL TRADE COMMISSION ACT (Nov. 10, 2022), https://www.ftc.gov/system/files/ftc_gov/pdf/P221202Section5PolicyStatement.pdf.
[300] *See generally* FTC, Fact Sheet: FTC Proposes to Ban Noncompete Clauses, Which Hurt Workers and Harm Competition (Jan. 5, 2023), https://www.ftc.gov/system/files/ftc_gov/pdf/noncompete_nprm_fact_sheet.pdf.
[301] *Id.* at 3.

and to notify these employees that the non-competes were now unenforceable.[302]

Similarly, the FTC has initiated actions against Owens-Illinois and Ardagh, targeting the use of non-competes in the glass manufacturing sector. In its complaint, the FTC emphasized that the company's use of non-competes "locked up highly specialized workers" and thus, deprived rival firms of access to qualified labor.[303] In its order, the FTC again required the employer to inform its employees that the non-competes were void.

But the FTC is not alone in this battle. Many states have also taken steps to reduce the harmful effects of non-competes on laborers and consumers. For instance, California, Minnesota, North Dakota, and Oklahoma have each banned all non-compete agreements.[304] Other states, including Illinois, Oregon, and Maryland, have chosen to ban the use of non-competes only for lower-paid workers.[305] Still other states, such as New Mexico and Rhode Island, have either limited or completely banned the use of non-compete agreements in the healthcare industry.[306]

But despite these developments, a national solution to the problems posed by non-competes remains crucial, especially in the healthcare sector. As things now stand, nurses and physicians may be more willing to move to states that have completely banned the use of non-competes, which gives these states a competitive advantage in the market for skilled healthcare workers. Accordingly, states that have not limited the use of non-competes, such as Mississippi, are at a competitive disadvantage. This market imbalance may ultimately worsen the shortage of healthcare workers that states like Mississippi face, which may, in turn, lead to more hospital closures and worse health outcomes for vulnerable residents.

In sum, non-compete agreements, especially in the healthcare sector, cause severe harm to workers, patients, and ultimately, public health. Despite this, courts have examined all non-competes in labor markets in America under the rule of reason test, on the basis that they have the potential to create some important procompetitive benefits. This section illustrated that this is a mistake mainly for two reasons: first, because non-competes especially in the healthcare sector hardly create any substantial procompetitive benefits. Second, because the rule of reason test is an

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[302] *Id.*

[303] *Id.*

[304] Will Kishman, *The Non-compete Landscape in 2023: What Employers Should Know about Changes in Non-compete Law from the FTC, NLRB, Antitrust Laws, and New State Laws (US)*, SQUIRE PATTON BOGGS: EMPLOYMENT LAW WORLDVIEW (Sept. 28, 2023), https://www.employmentlawworldview.com/the-non-compete-landscape-in-2023-what-employers-should-know-about-changes-in-non-compete-law-from-the-ftc-nlrb-antitrust-claims-and-new-state-laws-us/.

[305] Ivy E. Waisbord, *Prohibitions on Non-compete Agreements for Low-Wage Workers*, ABA (Feb. 4, 2022), https://www.americanbar.org/groups/litigation/resources/newsletters/business-torts-unfair-competition/prohibitions-non-compete-agreements-low-wage-workers/.

[306] Adam Wright, *US Non-Compete Agreement Laws by State*, SIXFIFTY (last visited Feb. 6, 2024), https://www.sixfifty.com/resource-library/non-compete-agreement-by-state/.

extremely complex legal and economic test that research demonstrates favors the defendants. This discourages workers, including nurses and physicians, from challenging unreasonable non-competes, which ultimately encourages employers to expand their use even in cases where they have no business interest or trade secret to protect. For these reasons, courts should examine all non-competes, especially in the healthcare sector, under the per se rule, which was designed to quickly eliminate any business practices that had clear anticompetitive effects and no actual procompetitive benefits. As this section demonstrated, this is clearly the case with non-compete agreements in the healthcare sector.

B. Section 7 of the Clayton Act and Monopsony Power

The previous section illustrated that mergers among hospitals have detrimental effects not only on output but also on input (labor) markets. When hospitals merge in concentrated markets, the number of employers that are available for physicians, nurses, and healthcare workers further decreases. This allows hospitals to exercise monopsony power in the labor market by suppressing their employees' wages and reducing the quality of their working conditions.

Empirical evidence illustrates those concerns. Robust studies prove that increased consolidation in the hospital industry has resulted in suppressed wages for nurses in America. For instance, as noted, one recent study showed that wage growth for nurses slowed due to the higher levels of market concentration following a wave of hospital mergers.[307] In that study, researchers observed that, in cases where the mergers significantly increased concentration in the hospital industry, wages for nurses were 6.8% lower than they would have been had the mergers been blocked.[308]

When wages fall, employees have higher incentive to leave the market. This explains, at least partially, the severe shortage of nurses that America is currently experiencing, especially in rural areas. A 2021 study that surveyed rural hospitals in America is illustrative.[309] This study revealed that all respondent hospitals struggled to fill their nursing positions.[310] Due to these shortages, almost 50% of survey respondents said that they were forced to turn away patients. Others reported that they had no other option than to suspend offering specific hospital services altogether.[311] This, of course, undermines the ability of rural hospitals to make profits and stay afloat.

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[307] *See* Prager & Schmitt, *supra* note 199, at 398.
[308] *Id.*
[309] *See* THE CHARTIS GROUP, THE COVID 19 PANDEMIC'S IMPACT ON RURAL HOSPITAL STAFFING 1,2 (2021) https://www.chartis.com/sites/default/files/documents/The-Pandemics-Impact-on-Rural-Hospital-Staffing.pdf.
[310] *Id.*
[311] *Id.*

In 2021, the American Nursing Association (ANA) sent a letter to the Department of Health and Human Services urging the administration to declare a national nurse-staffing crisis.[312] The concerns highlighted by the ANA are heartbreaking. For example, the ANA reported that, just *before* the Delta variant of COVID-19 caused hospitalization of COVID patients to surge, Louisiana had over 6,000 unfilled nursing positions open across the state.[313] The surge in hospitalizations made matters markedly worse, but even as COVID cases abate, the shortage is unlikely to ameliorate anytime soon, given that Louisiana is now dealing with the aftermath of hurricane Ida.[314] Similarly, Texas and Nebraska are also suffering from severe nursing shortages. Meeting patients' increased needs during the COVID-19 pandemic required Texas to recruit 2,500 nurses from outside the state, while Nebraska had no choice but to recruit unvaccinated nurses.[315] The ANA warns that, unless nurses' wages increase, this unprecedented shortage of nurses will not cure itself.[316]

But increasing wages alone may not necessarily fix the problem. Nurses do not leave the market solely because they are underpaid. Nurses themselves have emphasized that chronic understaffing, immense patient loads, and brutal working hours have left them feeling crushed.[317] Facing these burdens for less-than-adequate pay and being unable to easily switch to a different nursing job with better working conditions, many nurses are simply deciding to leave the nursing industry.[318] A leading study, which explored the reasons why nurses in America increasingly leave their profession, illustrates these concerns.[319] The study reveals that, among the nurses who reported leaving their jobs in 2017, 31.5% cited burnout as the primary reason. Other contributing factors included working in a stressful environment, inadequate staffing, increased workloads, poor pay, and a lack of support from leadership.[320] Considering the time, energy, and financial resources it takes to train a nurse, any systemic problem that causes nurses to leave the market *en masse* represents an immense waste of resources.

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[312] Letter from Ernst Grant, Am. Nurses Assoc. President, to Xavier Becerra, Dep't Health & Hum. Servs. Sec'y, (Sept. 1, 2021) (on file with the American Nurses Association), https://www.nursingworld.org/~4a49e2/globalassets/rss-assets/analettertohhs_staffingconcerns_final-2021-09-01.pdf.

[313] *Id.* at 1-2.

[314] *Id.*

[315] *Id*.

[316] *Id.* at 4.

[317] *See* Goldstein, *supra* note 211; *see also* Megha K. Shah et al., *Prevalence of and Factors Associated with Nurse Burnout in the US*, 4 JAMA NETWORK OPEN, S1, S1 (2021); Heather Landi, *Third of Nurses Plan to Leave Their Jobs in 2022*, FIERCE HEALTHCARE (Mar. 22, 2022, 11:11 AM), https://www.fiercehealthcare.com/providers/third-nurses-plan-leave-their-jobs-2022-survey-finds.

[318] *See* Goldstein, *supra* note 211.

[319] *See* Shah et al., *supra* note 317, at 1.

[320] *Id.*

Surely burnout is, and has always been, a risk inherent in a nurse's job—and many nurses admit as much[321]—but the problem has reached a crisis point. The data speak volumes: a 2022 study published by the American Nurses Foundation confirms that, after surveying 12,581 nurses, 57% felt "exhausted" over the past two weeks, 44% reported that they were overworked, 43% felt "burned out" and 23% revealed that they experienced symptoms of depression,[322] while only 20% of the surveyed nurses felt valued.[323] The COVID-19 pandemic exacerbated the problem by adding yet another factor: a rise in violence and hostility toward healthcare workers.[324]

But studies increasingly convey that these harmful effects relate not only to the COVID-19 pandemic. They are also strongly correlated with the increased consolidation in the hospital industry and the monopsony power exercised by the hospital-employers. As noted, research demonstrates that, when a hospital merger takes place, nurses face higher rates of burnout and job dissatisfaction, as well as heavier workloads.[325] In light of these concerns, National Nurses United (NNU) recently urged the Agencies to strengthen antitrust scrutiny in the hospital sector so as to prevent hospitals from exploiting their market power in the labor market.[326] In her request, NNU's Lead Regulatory Policy Specialist, Carmen Comsti, emphasized the ways in which exercises of market power in the labor market have threatened the health and safety of nurses while also worsening health outcomes for patients.[327] Hospitals' monopsony power, Comsti explained, has reduced access to healthcare services for patients and has "depressed wages and dilute[d] the power of workers to advocate for better working conditions and patient safety."[328]

But nurses are not alone in this struggle. Physicians are also leaving medicine or seeking early retirement to avoid burnout and cope with feelings of chronic stress and exhaustion. One recent study conducted by the Agency for Healthcare Research and Quality explores why physicians

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[321] Bradford Pearson, *Nurses Are Burned Out. Can Hospitals Change in Time to Keep Them?*, N.Y. TIMES (Feb. 20, 2023) (updated Apr. 5, 2023), https://www.nytimes.com/2023/02/20/well/nurses-burnout-pandemic-stress.html.

[322] AM. NURSES ASSOC. ENT., ANNUAL ASSESSMENT SURVEY (2022), https://www.nursingworld.org/practice-policy/work-environment/health-safety/disaster-preparedness/coronavirus/what-you-need-to-know/annual-survey--third-year/.

[323] *Id.*

[324] NAT'L NURSES UNITED, WORKPLACE VIOLENCE AND COVID-19 IN HEALTH CARE: HOW THE HOSPITAL INDUSTRY CREATED AN OCCUPATIONAL SYNDEMIC 4 (2020), https://www.nationalnursesunited.org/sites/default/files/nnu/documents/1121_WPV_HS_Survey_Report_FINAL.pdf.

[325] Currie et al, *supra* note 202; *see also* Jennings, *supra* note 203.

[325] Press Release, Nat'l Nurses United, Nurses Call on Federal Trade Commission and Department of Justice to Strengthen Guidelines to Limit Negative Effects of Mergers, Acquisitions on Healthcare Workers (Apr. 21, 2022), https://www.nationalnursesunited.org/press/nurses-call-on-ftc-and-doj-to-strengthen-merger-guidelines.

[326] *Id.*

[327] *Id.*

[328] *Id.*

in America constantly feel overwhelmed.[329] This study found that more than 50% of the surveyed physicians "reported experiencing extreme time pressures when conducting physical examinations,"[330] while a third said that "they needed at least 50 percent more time than was allotted for this patient-care function."[331] Approximately a quarter also conveyed that "they needed at least 50 percent more time for follow-up appointments".[332] Chaotic working conditions, a lack of control over work pace, and unfavorable organizational cultures were also factors that contributed to their emotional exhaustion.[333]

As was the case with nurses, market consolidation has been one of the most critical factors in creating the working conditions that have caused physicians to experience burnout and job dissatisfaction. This was amply demonstrated in a public workshop organized by the FTC aiming to examine the effects of hospital consolidation in input and output markets. At this workshop, several participants stressed that hospitals' monopsony power has led to lower wages and inferior working conditions for physicians.[334] For example, one participant, Sue Sedory, who represented the American College of Emergency Physicians, shared the results of a survey conducted by her organization that attested to the effects of mergers on the wages of physicians.[335] The results indicated that almost 60% of the respondents had experienced a pay cut of more than 20% following a merger involving their employing hospital.[336] Other physicians indicated that the mergers negatively affected their autonomy, which caused them a moral injury.[337] This impingement on their decision-making freedom made some physicians feel alienated from their healing mission, encouraging them to leave medicine altogether, even though some of them always viewed medicine as their calling.[338]

But again, the negative effects are not limited to the individual sphere. As explained above, when physicians, nurses, and clinicians leave the market, hospitals are unable to offer their communities the care they want and need. Because healthcare workers are essential inputs for the provision of healthcare services, inadequately staffed hospitals are destined

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[329] PHYSICIAN BURNOUT, AGENCY FOR HEALTHCARE RSCH. & QUALITY (July, 2017), https://www.ahrq.gov/prevention/clinician/ahrq-works/burnout/index.html.
[330] *Id.*
[331] *Id*.
[332] *Id.*
[333] *Id.*
[334] *See generally* TRANSCRIPT: FTC & DOJ HOST LISTENING FORUM ON EFFECTS OF MERGERS IN HEALTHCARE INDUSTRY (Apr. 14, 2022), https://www.ftc.gov/system/files/ftc_gov/pdf/FTC-DOJ-Listening-Forum-%20Health-Care-Transcript.pdf [hereinafter LISTENING FORUM TRANSCRIPT].
[335] *Id.* at 14-15.
[336] *Id.* at 14.
[337] *Id* at 14, 15, 24, 27; *see also* Eyal Press, *The Moral Crisis of America's Doctors*, N.Y. TIMES (June 14, 2023), https://www.nytimes.com/2023/06/15/magazine/doctors-moral-crises.html.
[338] LISTENING FORUM TRANSCRIPT, *supra* note 334, at 19, 23, 27.

for closure. This severely affects the health and well-being of rural communities who are left without treatment options.

Meanwhile, if hospital markets in America were less concentrated, nurses and physicians might not so readily look for the exit. Indeed, if hospitals rigorously competed to attract labor, they would have greater incentive to improve the salaries and working conditions of their employees, which would naturally prevent some early exits. Nonetheless, due to rampant hospital consolidation across America, hospitals simply lack any incentive to do so. Put simply, the lack of competition among hospitals in the labor market contributes to the severe shortage of physicians and nurses across America, thus, disproportionately harming rural hospitals.

This begs the question: has antitrust law failed nurses, physicians, and healthcare workers? Given the concerns laid out above, the answer is clearly affirmative. This is because, thus far, whenever antitrust enforcers or courts have examined a hospital merger's impact on competition and consumers, they have primarily focused on the impact that the merger would have on the price and quality of hospital services. In other words, the focus has been on the short-term effects felt in the output market, rather than on input markets.[339] One study, which examined the most seminal hospital merger cases in the American healthcare sector over the past few decades, reveals that antitrust enforcers did not specifically address the impact these mergers would have on workers at all.[340] This shortcoming is not trivial, considering that any detrimental effect on the welfare of healthcare workers will also eventually negatively impact consumers, inasmuch as lower wages and inferior working conditions force nurses, physicians, and clinicians to leave the market, thereby limiting rural residents' access to care.

In order to address these and other concerns, in 2021, the Biden Administration published an Executive Order urging the FTC to increase antitrust enforcement in the healthcare industry and to combat the harmful effects of monopsony power in multiple industries, including the hospital sector.[341] In its complaint to prevent the merger between *Lifespan Corporation and Care New England Health System*, the largest healthcare providers in Rhode Island, the FTC signaled a commitment to expanding its merger analysis and to assessing the harmful effects of hospital mergers on

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[339] Theodosia Stavroulaki, *Integrating Healthcare Quality Concerns into the US Hospital Merger Cases, A Mission Impossible?* 39 WORLD COMPETITION 593 (2016), [hereinafter *A Mission Impossible*]. This study examined how the enforcers assess the non-price effects of hospital mergers; It found that the enforcers focus primarily on assessing the impact of hospital mergers on output markets; *see also* Naidu et al., *supra* note 261, at 539-540 (claiming that the enforcers do not generally assess the impact of mergers on labor markets, but rather focus more on the anticompetitive effects of mergers on output or product markets).

[340] *A Mission Impossible, supra* note 339.

[341] Exec. Order No. 14,036, 3 C.F.R. 36,987 (2021), https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/.

the labor market.[342] Indeed, in addition to alleging that the merged entity at issue would control at least 70% of the market for inpatient acute care and inpatient behavioral health services, Chair Lina Khan and Commissioner Rebecca Slaughter also emphasized that the proposed deal had the potential to significantly decrease competition in the relevant labor markets.[343]

Specifically, they emphasized that, "just as consumers are worse off when mergers diminish competition for goods and services based on price, quality, and innovation, workers [also] suffer when mergers diminish competition for their labor and employers are insulated from competition driving improved wages, benefits, working conditions, and other terms of employment."[344] Following the FTC's complaint, the merging entities abandoned the proposed merger.[345]

The fact that the FTC is now looking more closely at the effects on labor markets is an obvious improvement over previous merger assessments in the hospital sector. This, however, leaves open the question of how the enforcers aim to assess the effects of mergers on workers in the hospital industry. *Do the Agencies have the methodological tools and analytical framework to examine a hospital merger's impact on labor?*

The answer is not straightforward. For instance, the 2010 Horizontal Merger Guidelines (2010 HMG) explicitly addressed the importance of considering monopsony power in the context of a merger analysis,[346] explaining that "[m]ergers of competing buyers can enhance market power on the buying side of the market, just as mergers of competing sellers can enhance market power on the selling side of the market."[347] The 2010 HMG also explained that, when evaluating whether a merger is likely to enhance market power on the buying side of the market, "*the Agencies employ essentially the framework. . . for evaluating whether a merger is likely to enhance market power on the selling side of the market.*"[348] The recently-published 2023 Merger Guidelines ("the 2023 Guidelines") also take the

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[342] Lina M. Khan & Rebecca K. Slaughter, *Concurring Statement of Commissioner Slaughter and Chair Kahn Regarding FTC and State of Rhode Island v. Lifespan Corporation and Care New England Health System*, FTC File No. 2110031 at 2 (Feb. 17, 2022), https://www.ftc.gov/legal-library/browse/cases-proceedings/public-statements/concurring-statement-commissioner-slaughter-chair-khan-regarding-ftc-state-rhode-island-v-lifespan.

[343] *Id.*

[344] *Id.*

[345] Nick Thomas, *Lifespan, Care New England Won't Say No to a Possible Merger as New Leadership Beds in*, BECKER'S HEALTHCARE: HOSPITAL CFO REPORT (Mar. 17, 2023), https://www.beckershospitalreview.com/finance/lifespan-care-new-england-wont-say-no-to-a-possible-merger-as-new-leadership-beds-in.

[346] U.S. Dep't of Just., Horizontal Merger Guidelines §12 (2010), https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 [hereinafter *Horizontal Merger Guidelines*].

[347] *Id.*

[348] *Id. see also* U.S. Dep't of Just., Merger Guidelines §§ 2.10, 4.3.D.8 (2023), https://www.justice.gov/atr/2023-merger-guidelines [hereinafter *Revised Merger Guidelines*].

same approach. Specifically, the 2023 Guidelines say that "*A merger between competing buyers may harm sellers just as a merger between competing sellers may harm buyers. The same—or analogous—tools used to assess the effects of a merger of sellers can be used to analyze the effects of a merger of buyers, including employers as buyers of labor*."[349] But this still begs the question: *What are these tools?*

To begin with, the existing framework for assessing market power in output (i.e., product) markets is the Herfindahl-Hirschman Index (HHI) framework.[350] The HHI for an output market equals the sum of the squares of the market share of the firms competing within that product market, multiplied by 100.[351] An HHI of zero represents a perfectly competitive market, while "an HHI of 10,000 indicates a product market dominated by a single monopolist."[352] The value of the index increases when there are just a few firms selling a product or when one firm monopolizes the market (for example, for two firms, the HHI is higher when one firm sells 85 percent of products and the other 15 percent than when each of the two firms sells just 50 percent of the products)—as under these conditions the harm caused to competition due to market concentration is substantial.[353]

The Agencies use the HHI to assess whether a specific merger among competitors may raise serious anticompetitive concerns, and hence, is illegal.[354] For instance, an HHI above 1,800 indicates that a market is "highly concentrated."[355] When two firms seek to merge in a market characterized by high concentration levels and the envisaged merger would significantly increase the HHI, enforcers will block the merger based on the presumption that it creates anticompetitive concerns.[356]

The Agencies can conduct a similar analysis when they assess the impact of a merger on labor. First, the Agencies would have to define the relevant market in which the anticompetitive effects—namely, suppressed wages and inferior working conditions—are likely to be felt. Second, they would assess how the envisaged merger may impact the level of concentration in the labor market. If the proposed merger substantially increased concentration in the labor market, the Agencies would have good reasons to stop the merger. Then, they would assess any potential efficiencies raised by the merging parties which may outweigh any potential anticompetitive effects.

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[349] *Revised Merger Guidelines*, *supra* note 348, at § 2.10.
[350] *Id.* at §2.1.
[351] *See* IOANA MARINESCU & ERIC POSNER, ROOSEVELT INST., A PROPOSAL TO ENHANCE ANTITRUST PROTECTION AGAINST LABOR MARKET MONOPSONY (2018), https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI_ProposalToEnhanceAntitrustProtection_workingpaper_201812.pdf.
[352] *Id.* at 4.
[353] *Id.*
[354] *See Revised Merger Guidelines*, *supra* note 348, at § 2.1.
[355] *Id.*
[356] *Id.*

But how would the Agencies define relevant markets when they assess the impact of a hospital merger on labor? Although the 2010 HMG were silent on the issue, the 2023 Guidelines offer some guidance.[357] The 2023 Guidelines explain that, when the Agencies define a market for labor, they will take into consideration "the job opportunities available to the workers who supply a relevant type of labor service, where worker choice among jobs or between geographic areas is the analog of consumer choices among products and regions when defining a product market. The Agencies may consider workers' willingness to switch in response to changes to wages or other aspects of working conditions, such as changes to benefits or other non-wage compensation."[358] The 2023 Guidelines also note that "geographic market definition may involve considering workers' willingness or ability to commute, including the availability of public transportation."[359]

Although the 2023 Guidelines shed some light on the factors that the Agencies are likely to consider when defining the relevant labor markets, they do not delve into the specific methodology that the Agencies would apply. This seems to be an important omission, especially considering the scarcity of merger cases discussing the anticompetitive effects of monopsony on labor.[360] Nonetheless, leading scholars such as Ioana Marinescu and Eric Posner have extensively discussed the question of how the Agencies should define the relevant market when they assess the effects of mergers on labor, which can serve as a guidepost for enforces in future cases.[361] This labor market definition analysis consists of three elements: "type of job, geographic scope, and time."[362]

First, Marinescu and Posner suggest that the Agencies should define a labor market "by the type of job."[363] To do so, they should rely on a list created by the Bureau of Labor Statistics called "Standard Occupational Classifications" (SOC),[364] and, more specifically, "an occupation at the six-

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[357] *Id.* at § 2.10.
[358] *Id.* at § 4.3.D.8.
[359] *See generally id.*
[360] *See* Ioana Marinescu & Eric Posner, *Why Has Antitrust Law Failed Workers?*, 105 CORNELL L. REV. 1343, 1375 (2020) (noting the scarcity of such cases). *But see* Press Release, Just. Dept., Justice Department Obtains Permanent Injunction Blocking Penguin Random House's Proposed Acquisition of Simon & Schuster (Oct. 31, 2022) (on file with Justice Department), https://www.justice.gov/opa/pr/justice-department-obtains-permanent-injunction-blocking-penguin-random-house-s-proposed, (noting that "[the] U.S. District Court for the District of Columbia ruled in favor of the Justice Department in its civil antitrust lawsuit to block book publisher Penguin Random House's proposed $2.2 billion acquisition of Simon & Schuster," because "[t]he court found that the effect of the proposed merger would be to substantially lessen competition in the market for the U.S. publishing rights to anticipated top-selling books," having specifically considered the merger's impact on authors' compensation).
[361] *Id.*; *see also* Ioana Marinescu & Herbert J. Hovenkamp, *Anticompetitive Mergers in Labor Markets*, 94 IND. L. J. 1031, 1048-51 (2019).
[362] Marinescu & Posner, *supra* note 351, at 5.
[363] *Id.*
[364] *Id.*

digit SOC level, which represents a fairly specific definition of a job or occupation."[365] For instance, according to this classification system "registered nurses" constitute a specific job.

Second, the Agencies should define the geographic scope of the market.[366] This should be the geographic region "where most workers work and live, and more specifically a commuting zone (CZ)."[367] Commuting zones are geographic regions "comprising clusters of counties" that the United States Department of Agriculture established after detecting patterns of commuting.[368]

Third, the labor market should be limited in terms of time because people seeking employment can only stay unemployed for a certain period of time.[369] For instance, Posner and Marinescu note that "the median duration of unemployment was about a quarter of a year in 2016."[370] For this reason, they conclude that the Agencies should define the market as "the combination of a six-digit SOC occupation, a commuting zone, and a [fiscal] quarter."[371] Considering this analysis, registered nurses in Philadelphia in the first quarter of 2016 could constitute a separate labor market.

After defining a labor market using this three-step analysis, the Agencies can then assess the HHI in a specific labor market as they would do in product markets. The only difference would be that the market share in this case is "the firm's share of a labor market, rather than its share of a product market."[372] To assess labor market concentration, the Agencies should examine "the number of vacancies in a particular labor market and calculate the HHI based on each firm's share of those vacancies."[373] For instance, a labor market "where four firms post 25% of jobs is highly concentrated with an HHI of 2,500."[374]

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[365] *Id.*
[366] *Id.*
[367] *Id.*
[368] *Id.* at 6.
[369] *Id.*
[370] *Id.*
[371] *Id.*
[372] *Id.* at 4.
[373] *Id.*
[374] *Id.* at The FTC also followed a similar approach in a recent hospital merger case. In its public comments on the proposed merger between SUNY Upstate and Crouse Health System, the FTC assessed the anticompetitive effects of the proposed merger not only on the product but also on the labor market and specifically on the respiratory therapists and registered nurses. To do so, the FTC followed a two-step approach. First, it assessed the pre-merger level of concentration in the labor market; second it evaluated how the proposed merger would change the level of concentration for hospitals as employers "in commuting zone for nursing labor." The FTC concluded that "the labor markets for both registered nurses and respiratory therapists will be highly concentrated after the proposed merger and that the merger would increase concentration significantly." *See* FTC Comment, *Federal Trade Commission Staff Submission to New York State Health Department Regarding the Certificate of Public Advantage Application of State University of New York Upstate Medical University and Crouse Health System, Inc.* 28-29 (Oct. 7, 2022),

But even if the Agencies applied a similar analysis and, hence, showed that the merger may significantly increase the levels of concentration in the labor industry, the analysis may not necessarily stop there. More likely, the defendant-employers would try to rebut the Agencies' findings by showing that the merger may also yield some substantial efficiencies that may benefit competition and consumers in the product market.

Consider, as an example, a merger between two hospitals in a rural area where competition for labor among employers is almost zero. Assume that the Agencies demonstrate that the merger may significantly increase concentration in the market for registered nurses, and hence, that it should be prohibited because of the high levels of HHI in this specific labor market. The hospital-defendants would most likely try to rebut the showing of anticompetitive effects in the market for registered nurses by alleging that the merger may lead to significant cost savings due to lower labor costs. These cost savings would be passed on to consumers in the form of lower hospital rates and, ultimately, lower health insurance premiums. Thus, the argument would go that although the merger may harm one group of consumers (the workers), it may benefit another (the purchasers of hospital and health insurance services). *But would the Agencies be convinced by such a claim?*

Recall *Philadelphia National Bank*. In this case, the Supreme Court alleged that, if anticompetitive effects in one market could be offset by procompetitive benefits in another one, every firm in the industry could, without violating the Clayton Act, "embark on a series of mergers" that ultimately would make it the only real player in the market. For this reason, the Supreme Court stopped the proposed merger. In light of this, the Agencies may argue that, even if the proposed merger produces cost efficiencies, those efficiencies might occur in the market for hospital and health insurance services, not in the labor market. In line with the Court's reasoning in *Philadelphia National Bank,* the Agencies may therefore put forward the claim that the merger between the two hospitals violates Section 7 of the Clayton Act due to the significant anticompetitive concerns it creates in the labor market. As a result, such a merger should be prohibited.

The 2023 Guidelines also support this line of thinking.[375] Specifically, the 2023 Guidelines say that "[i]f a merger may substantially lessen competition or tend to create a monopoly in upstream markets, that loss of competition is not offset by purported benefits in a separate downstream product market. Because the Clayton Act prohibits mergers

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https://www.ftc.gov/system/files/ftc_gov/pdf/2210126NYCOPACommentPublic.pdf. Eventually, the parties abandoned the merger altogether. *See* Press Release, Elizabeth Wilkins, Dir. Fed. Trade Comm'n Off. Pol'y Plan., Statement on the Decision of SUNY Upstate Medical University and Crouse Health System, Inc. to Drop Their Proposed Merger (Feb. 16, 2023), https://www.ftc.gov/news-events/news/press-releases/2023/02/statement-elizabeth-wilkins-director-ftcs-office-policy-planning-decision-suny-upstate-medical.

[375] *See generally Revised Merger Guidelines*, *supra* note 348, at 27.

that may substantially lessen competition or tend to create a monopoly in *any* line of commerce and in *any* section of the country, a merger's harm to competition among buyers is not saved by benefits to competition among sellers."[376]

The Agencies may also try to rebut the hospitals' efficiencies claim by raising an additional concern: they may say that, even if the merger produces the envisaged cost efficiencies, such efficiencies may create welfare gains for one group of consumers—the purchasers of hospital and health insurance services—only in the short run. This is because, if the proposed merger could lead to monopsony power in the market for registered nurses, the wages of such nurses could be substantially reduced. Because reduced wages may motivate the affected nurses to depart their community, this community would suffer from a severe shortage of nurses in the long term. This would lead to reduced access to care for the affected rural residents and, ultimately, additional closures. Thus, because in the long run *all consumers* would be harmed, the merger should be blocked.

C. Section 7 of the Clayton Act and Monopoly Power

When two firms decide to merge, the Agencies as well as the Offices of the States' Attorneys General "possess leverage" during the process of reviewing the merger.[377] Under the Hart-Scott-Rodino (HSR) Act, "parties to certain large mergers and acquisitions" must file a thorough merger notification with the Agencies and wait for their assessment.[378] After this process is complete the Agencies have three main options: (1) they can allow the merger to move forward on the basis that it does not raise any significant anticompetitive concerns; (2) they can challenge the merger because their review indicates that it may cause harm to competition and consumers; or (3), they can negotiate a consent decree with the merging parties. In this latter case, the Agencies will allow the merger to proceed only if the merging parties agree to conform with specific merger conditions.[379]

There are two main types of merger conditions: behavioral and structural. The structural merger conditions usually require the merging entities to divest themselves of specific assets.[380] By requiring divestitures, the enforcers try to ensure that competition is not totally eliminated in the market in which the merger is likely to create anticompetitive effects. Behavioral conditions, on the other hand, usually require the merging

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[376] *Id.* at § 2.10.

[377] See Leslie, *supra* note 154, at 1771.

[378] *Id.*; *see also* Federal Trade Commission (F.T.C.), *Premerger Notification and the Merger Review Process*, FTC (last visited Feb. 3, 2024), https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/mergers/premerger-notification-merger-review-process.

[379] See Leslie, *supra* note 154, at 1771.

[380] *See* U.S. Dep't of Just., Antitrust Div. Pol. Guide to Merger Remedies 23–25 (2011) https://www.justice.gov/sites/default/files/atr/legacy/2011/06/17/272350.pdf.

parties either to engage in specific conduct or refrain from it. For instance, the Agencies may require the merging entity not to increase prices after the merger is consummated. They could also require the merging parties to license their intellectual property or not to engage in any discriminatory practices when they deal with their trading partners.[381]

The previous section demonstrated that the hospital closure crisis is at least partially the result of several mergers among hospitals in rural areas that eliminate access to care for rural populations, further exacerbating the problem of hospital deserts in underserved areas in America. As noted, many hospitals in rural areas choose to acquire their closest competitors in underserved areas only to eliminate them from the market and increase their market power in both the hospital services market and the labor market. Thus, post-merger, the acquiring hospital either shuts down the facilities of the target rural hospital or cuts some of its essential healthcare services, including emergency, primary, and maternal care.

Given these concerns, the Agencies could consider accepting hospital mergers in rural areas only under specific conditions. Specifically, the Agencies could require either (1) that the merging parties not shut down any facilities operating pre-merger, or (2) that the merging parties not cut any type of healthcare services in underserved areas. In this way, the Agencies could mitigate—at least to a certain extent—the hospital desert problem that so profoundly harms rural Americans.

Using the antitrust weapon of merger conditions to prevent acquiring hospitals from shutting down the facilities of acquired entities has considerable advantages. For starters, it would disincentivize the acquiring hospitals from acquiring their closest competitors in rural areas only to remove them from the market and further exploit their market power in both the input and output markets. In addition, while monitoring whether the merging entities have continued to conform with the agreed merger conditions may be costly for the Agencies in theory, this would not be the case in practice in this instance. This is because any attempt by the acquiring hospital to shut down the healthcare facilities of the acquired hospital, or to cut its vital services, could be easily detected by the Agencies.

One could, justifiably, question the deterrence effect of such merger conditions. Nonetheless, merger conditions are legally binding, meaning that, when the Agencies successfully negotiate an agreement with the merging entities, the latter will either have to honor that agreement or pay a substantial price. Indeed, as the Merger Remedies Manual published by the Department of Justice explains, if the Department of Justice finds that the merging entities have ignored their commitments under the negotiated merger conditions, it has the authority to file a civil or criminal contempt action (or even both) requesting imprisonment, monetary penalties, or

[381] Mark A. Lemley & Christopher R. Leslie, *Antitrust Arbitration and Merger Approval*, 110 NW. U. L. REV. 1, 51 (2015).

injunctive relief.[382] Similarly, the Federal Trade Commission Act (FTCA) also gives the FTC the power to file enforcement actions seeking severe civil penalties.[383] Given the severity of the above sanctions, the merging parties have strong incentive to conform with the merger conditions negotiated with the Agencies.

Another counterargument may be that, if the Agencies accept hospital mergers in rural areas only under those merger conditions, they may discourage hospitals from pursuing mergers that can produce cost or qualitative efficiencies, and which would thus help the acquiring entities improve their financial condition and the quality of their services. But this argument underestimates research studies demonstrating that mergers among hospitals rarely, if ever, yield any cost or qualitative efficiencies. Although hospitals in America often claim that they need to merge with their competitors to reduce their costs and enhance the quality of their services, recent studies show that mergers do not necessarily help hospitals attain these goals. Indeed, leading scholars such as Professor Leemore Dafny have shown that hospital consolidation often leads to higher prices for privately insured consumers and worse experiences for patients.[384] In the same vein, Professor Martin Gaynor has also emphasized that consolidation in the hospital industry leads to higher prices for hospitals and health insurers "without offsetting gains in improved quality or efficiency."[385]

Other studies have shown that hospital mergers often fail to lead to cost efficiencies or even help the failing rural hospitals to improve their profit margins.[386] For instance, a leading study examining the performance of struggling rural hospitals after they have been acquired warns that, although rural hospitals may choose to merge with their competitor because they hope to experience rapid capital infusion, lower debts, and higher profit

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[382] *See generally* U.S. Dep't of Just., MERGER REMEDIES MANUAL (2020), 34-35 https://www.justice.gov/atr/page/file/1312416/download.

[383] Federal Trade Commission (F.T.C.), FTC OPERATING MANUAL at § 12.5.1 (1998).

[384] Nancy D. Beauliue et al., *Changes in Quality of Care in Hospitals after Mergers and Acquisitions*, 382 NEW ENG. J. MED. 51, 52 (2020).

[385] *Antitrust Applied: Hospital Consolidation Concerns and Solutions*, *Hearing to Examine Antitrust Applied Before S. Comm. on the Judiciary*, 117th Cong. 6 (2021) (statement of Martin Gaynor, Professor Econ. & Pub. Pol'y, Carnegie Melon Univ.), https://www.judiciary.senate.gov/imo/media/doc/Gaynor_Senate_Judiciary_Hospital_Consolidation_May_19_2021.pdf.

[386] Mark Holmes, *Financially Fragile Rural Hospitals: Mergers and Closures*, 76 N.C. J. MED. 37, 38 (2015). The author notes that "When a hospital is financially challenged, it may sometimes merge with (or be acquired by) a larger hospital system. A recent study during the 2005–2012 period found that hospitals with lower profitability and higher debt—that is, financially fragile hospitals—were more likely to merge. Merging hospitals experienced a decrease in operating margin—meaning they were even less profitable. of eliminated management positions. Thus, even though a challenged hospital may find that a merger is a viable option, its finances generally worsen after a merger."

margins, these results may not be attained.[387] Hence, the argument that the proposed merger conditions may deter mergers that would allow rural hospitals to avoid exit is not supported by research. For this reason, the Agencies should consider accepting mergers in underserved areas only under those proposed conditions.

CONCLUSION

Millions of Americans lack geographic access to hospitals and primary care physicians because they live in hospital deserts. This article demonstrated that such deserts are neither natural nor inevitable. In fact, they result from several business strategies implemented by hospitals in America. These strategies, which include the use of non-compete agreements in the labor market, and the tactic of merging with competitors, reduce access to care for rural residents and aggravate the shortage of nurses and physicians which plagues underserved areas. By shedding light on these strategies, this article illustrated that the wounds and losses hospital deserts inflict on the most vulnerable Americans cannot be treated adequately without the healing power of antitrust law.

This article made three proposals. First, antitrust enforcers and the courts should expand their merger analyses by assessing the impact of hospital mergers on labor markets rather than focusing solely on the impact of those mergers on the price and quality of hospital services. Second, they should treat all non-compete agreements in the healthcare sector as per se illegal. And third, they should accept mergers in rural areas only under the condition that the merged entity will not shut down facilities or cut healthcare services in rural communities already lacking access to care. By implementing these proposals, the courts can help mitigate the racial and health disparities that so profoundly harm America.

[387] Marissa J. Noles et al., *Rural Hospital Mergers and Acquisitions: Which Hospitals Are Being Acquired and How Are They Performing Afterward?*, 60 J. HEALTHCARE MGMT. 395, 396, 403 (2015).