

RYAN A. BIZZARRO, CHAIRMAN

414 MAIN CAPITOL BUILDING
P.O. BOX 202003
HARRISBURG, PENNSYLVANIA 17120-2003
(717) 772-2297
FAX: (717) 780-4767



HOUSE DEMOCRATIC POLICY COMMITTEE

WEBSITE: WWW.PAHOUSE.COM/POLICYCOMMITTEE

EMAIL: POLICY@PAHOUSE.NET

[Twitter](#) [Facebook](#) [Instagram](#) @PADEMPOLICY

HOUSE OF REPRESENTATIVES

COMMONWEALTH *of* PENNSYLVANIA

House Democratic Policy Committee Hearing

Navigating Healthcare and Corporate Consolidation

Monday, October 18, 2021 | 1:00 pm – 3:00 pm

Representative Maureen Madden

1:00 pm

John Nespoli, President
St. Luke's University Health Network

Maggie Murphy, CEO
National Alliance on Mental Illness

Margo Opsasnick, CEO
Delta Medix

Q & A with Legislators

2:00 pm

Kristin Volchansky, Political Organizer
Action Together NEPA

Maddie Lopez-Vazquez
Lehigh Valley Hospital - Pocono

Q & A with Legislators

RYAN A. BIZZARRO, CHAIRMAN

414 MAIN CAPITOL BUILDING
P.O. BOX 202003
HARRISBURG, PENNSYLVANIA 17120-2003
(717) 772-2297
FAX: (717) 780-4767



HOUSE DEMOCRATIC POLICY COMMITTEE

WEBSITE: WWW.PAHOUSE.COM/POLICYCOMMITTEE

EMAIL: POLICY@PAHOUSE.NET

   @PADEMPOLICY

HOUSE OF REPRESENTATIVES
COMMONWEALTH *of* PENNSYLVANIA



PA House Democratic Policy Hearing on Navigating Healthcare Consolidation

Testimony of John Nespoli, President St. Luke's Hospital Lehighton Campus

October 18, 2021

Good afternoon. My name is John Nespoli and I am the President of St. Luke's Hospital Lehighton Campus as well as the new Carbon Campus, slated to be opening in a few weeks. I have a master's degree in Public Health from the University of Michigan and over 40 years' experience in healthcare administration. I have led hospital and healthcare networks in five different states. In 2009, I was brought in to lead Sacred Heart Hospital, a facility that largely served a vulnerable high Medicaid population in Allentown. In 2018, St. Luke's University Health Network acquired Sacred Heart and I became a St. Luke's employee, overseeing the integration of Sacred Heart into the Network. That same year, St. Luke's acquired the Blue Mountain Health System, and after the successful integration of Sacred Heart, I was asked to move up to manage the transition of the Lehighton Hospital into the St. Luke's system.

Thank you for allowing me to testify before members of the House Democratic Policy Committee on the issue of Hospital Consolidation. I understand that this Committee is interested in hospital consolidation and how it ultimately impacts patient care.

My testimony today has four objectives:

1. Explain the reasons that hospitals may need to consolidate;
2. Provide an overview of the benefits of hospital consolidation;
3. Provide specific examples of how St. Luke's University Health Network's consolidation efforts have benefited the communities it serves;
4. Review the current regulatory and legislative processes currently in place for hospital consolidation.

First, why do hospitals need to consolidate?

In my experience, I have seen small hospitals without network support struggle with:

- Recruiting quality physicians, both primary care and specialists
- Affording capital expenses required to keep a hospital current
- Accessing capital markets/and bond financing, which often are not available to smaller hospitals
- Affording back office administrative support to keep up with increasing government regulations and insurer requirements;



- Upgrading to federally compliant Electronic Medical Records (EMR) systems, which are incredibly expensive to license, operate, and maintain;
- Improving and expanding provider networks and robust quality programs that lead to better outcomes and lower costs for patients.

Second, what are the benefits of hospital and healthcare consolidation?

One of the biggest advantages of having a consolidated network is top tier physician recruitment. Large health networks can recruit outstanding physician talent to local communities given the ability of the network to provide more competitive compensation and benefits as well as stronger professional and continuing education opportunities. Large networks also bring recruitment and retention power for nurses, other medical professionals, administrators, and support staff.

Networks like St. Luke's that provide care across urban, suburban, and rural areas are also able to make specialty care available to small rural hospitals that would not have otherwise been able to offer those services. When people must travel long distances for care, they often do not get the care they need. The results can be devastating - unmanaged diabetes, undetected cancer, and other pathology that could be avoided. Local access does save lives and prevents disease.

Large networks also have the capability to provide medical and nursing education programs to nursing students, medical students and medical residents in the local communities. Many of these students stay in the local community to practice, following graduation.

It will come as no surprise that the increase of government regulations and insurer requirements have led to higher administrative burdens and therefore, an increase in the cost of running independent hospitals and physician practices. Consolidated health systems provide cost containment by having a smaller number of administrative employees in a centralized location which spreads these costs across many hospitals.

Larger systems are also able to improve quality measures and patient safety outcomes. Consolidated health networks are better able to bring best practices in clinical quality, patient experience and employee engagement. This includes advanced processes for performance improvement and the ability to benchmark to other hospitals within the network achieving best practices.

Consolidation allows hospitals to access cutting edge technology. Large networks bring the technical expertise to implement sophisticated electronic medical records systems and implement innovative healthcare technologies. One example is the innovative Artificial Intelligence (AI) we are using at St. Luke's for sepsis diagnosis. Sepsis is a national challenge where patients get sick, very quickly. While a physician can analyze 30-40 variables in their head with 60% accuracy, AI can do 1,000 data points in



that same time period with 95% accuracy. Healthcare innovations like this one rely on a robust team of people who can understand and implement these technologies, a benefit that comes from having a large consolidated system.

Larger health systems can also afford to provide non-reimbursable services that serve the greater good of the community. At St. Luke's, we pride ourselves on our Community Health Department, which is unmatched when it comes to community outreach. Our programs include integrating community health workers in underserved schools, providing mobile dental and primary care for vulnerable populations, focusing specifically on children and the homeless, and creating partnerships with other community-based organizations to establish long term health equity outcomes. Expanded wellness programs, health screenings and preventative care are major benefits that consolidation brings to smaller hospitals, as they can access and implement advanced scheduling protocols and technology that increase the screening and prevention of disease in the community.

Third, I want to provide an overview of how St. Luke's University Health Network has done consolidation well. While St. Luke's expanded and thrived at the Bethlehem location for decades, other hospitals have come to St. Luke's looking for assistance in maintaining and expanding their mission.

These facilities are as follows:

- Quakertown Community Hospital in 1995; The greater Quakertown area now has access to a new St. Luke's Upper Bucks Medical Surgical campus and the old campus has been converted to a comprehensive behavior health center for the community.
- Allentown Osteopathic in 1997; St. Luke's made major investments to modernize this downtown Allentown Hospital and it now has one of the busiest emergency departments in the state.
- Coaldale State Hospital (now Miners Campus) in 2000. Coaldale had a negative fund balance close to \$3 million, but three years after integration into the St. Luke's system, it had a replenished fund balance and no long-term debt. It now is listed as one of the top 100 hospitals in the country in the small hospital category, placing it in the top 1 per cent.
- Warren Hospital (NJ) in 2012. Warren was the worst financially performing hospital in New Jersey when St. Luke's bought it. By 2015, it was ranked as one of the best;
- Sacred Heart in 2018; Sacred Heart serves inner city Allentown, one of the most economically challenged areas in the state. St. Luke's has made major investments in the hospital and services to the community, including a new detox unit, behavioral health unit, and a partnership with a new FQHC to expand access to primary care and prevention.
- Blue Mountain (now Lehighton) in 2018; Lehighton had a Leapfrog quality grade of D before being integrated into the network. St. Luke's quality improvement program recently earned the campus the highest Leapfrog grade of A. Also, this November, we are opening a new medical surgical hospital that can care for the highest acuity patients making it rare to leave the



community for care. Over thirty new specialists have joined the Carbon campus. The old Lehigh campus will become a center of excellence in behavioral health and post-acute care.

- Easton in 2020; this hospital with a large Medicaid population was owned by a for-profit entity. The campus was slated to close at the beginning of the COVID-19 pandemic. St. Luke's worked with the owner as well as state and federal government officials to acquire the hospital and maintain services to the vulnerable population it serves; And a new adolescent behavioral health service will be opening at this campus later this year.
- Penn Foundation in 2021; this partnership allows both organizations to continue expanding on both inpatient and outpatient behavioral health and substance use disorder treatments. Not all hospitals can offer these robust services, as mental health providers are in short supply and the cost of these programs are not fully reimbursed. Being a part of a large network allows us to financially support these vital services.

When St. Luke's merges with underperforming hospitals, or organizations like Penn Foundation that are looking to expand services and provider networks, we pour all our energy and resources into building those facilities up in the community. Millions of dollars have been invested in communities that would have otherwise been left without quality healthcare, or any healthcare at all. I have worked for many hospitals and healthcare systems before coming to St. Luke's and I have never been a part of an organization that cares so much about the community it serves.

Lastly, I want to explain that healthcare consolidation doesn't happen without the oversight and approval of both state and federal government. At the federal level, potential anti-trust issues are reviewed by the Federal Trade Commission (FTC). We anticipate that this process is going to become more stringent. In a recent executive order, President Biden announced that his administration will be looking at additional scrutiny on hospital consolidation. Per their press release, the FTC and Department of Justice are currently reviewing and updating their merger guidelines "in order to reflect a rigorous analytical approach consistent with applicable law".

At the state level, all hospital consolidations must be reviewed and approved by the PA Attorney General's (AG) Office. This includes the review of all relevant documents including financial statements, antitrust issues, and nonprofit status review. The AG's office conducts site visits to ensure there is need for the consolidation in the community and that the organization will be financial stable enough to provide for quality patient care.

In closing, I want to thank you for inviting me to participate in this important hearing. I hope that the testimony I have provided assists you with understanding how hospital consolidation can have a positive impact on patient care in the community. It is, however, important to note that although St. Luke's has the advantage of being a large hospital system in central eastern Pennsylvania, we are not



immune to critical issues that are facing all hospitals right now. Nearly two years have gone by and we are still battling the COVID-19 pandemic. Today we are currently treating over 100 COVID patients in our hospitals, and 85% of those patients are unvaccinated. Our healthcare staff are burned out from double shifts, overtime, and the tragedy of nearly 700 COVID related in-patient deaths across our hospitals since March of last year. Staff eligible for retirement have left and others are not interested in working additional shifts regardless of the financial incentives offered. Despite aggressive recruitment efforts, we have a major provider shortage across the network and have had to rely on staffing agencies. To add insult to injury, pre-pandemic staffing agency rates for nurses were around \$85/hour. Now we can't get an agency nurse to work for less than \$170/hour. This is the most challenging market for staff I have seen in my 45 years working in this field.

As you are all aware, the COVID-19 pandemic has had a negative impact on mental health. We have seen an increase in behavioral health patients and we simply do not have enough resources, providers, and beds for inpatient services. Assaults on healthcare workers have increased during this time, which does not help our staffing crisis. The challenge to meet the increased demand for behavioral health services is huge.

I would like to make myself available at any time to continue this conversation with the members of this Committee so that we can examine solutions to these pressing issues currently impacting healthcare in our state. Thank you again for your time.



Quality of Care Before and After Mergers and Acquisitions of Rural Hospitals

H. Joanna Jiang, PhD; Kathryn R. Fingar, PhD, MPH; Lan Liang, PhD; Rachel M. Henke, PhD; Teresa P. Gibson, PhD

Abstract

IMPORTANCE Rural hospitals are increasingly merging with other hospitals. The associations of hospital mergers with quality of care need further investigation.

OBJECTIVES To examine changes in quality of care for patients at rural hospitals that merged compared with those that remained independent.

DESIGN, SETTING, AND PARTICIPANTS In this case-control study, mergers at community nonrehabilitation hospitals in Federal Office of Rural Health Policy–eligible zip codes during 2009 to 2016 in 32 states were identified from Irving Levin Associates and the American Hospital Association Annual Survey. Outcomes for inpatient stays for select conditions and elective procedures were derived from the Healthcare Cost and Utilization Project State Inpatient Databases. Difference-in-differences linear probability models were used to assess premerger to postmerger changes in outcomes for patients discharged from merged vs comparison hospitals that remained independent. Data were analyzed from February to December 2020.

EXPOSURES Hospital mergers.

MAIN OUTCOMES AND MEASURES The main outcome was in-hospital mortality among patients admitted for acute myocardial infarction (AMI), heart failure, stroke, gastrointestinal hemorrhage, hip fracture, or pneumonia, as well as complications during stays for elective surgeries.

RESULTS A total of 172 merged hospitals and 266 comparison hospitals were analyzed. After matching, baseline patient characteristics were similar for 303 747 medical stays and 175 970 surgical stays at merged hospitals and 461 092 medical stays and 278 070 surgical stays at comparison hospitals. In-hospital mortality among AMI stays decreased from premerger to postmerger at merged hospitals (9.4% to 5.0%) and comparison hospitals (7.9% to 6.3%). Adjusting for patient, hospital, and community characteristics, the decrease in in-hospital mortality among AMI stays 1 year postmerger was 1.755 (95% CI, –2.825 to –0.685) percentage points greater at merged hospitals than at comparison hospitals ($P < .001$). This finding held up to 4 years postmerger (DID, –2.039 [95% CI, –3.388 to –0.691] percentage points; $P = .003$). Greater premerger to postmerger decreases in mortality at merged vs comparison hospitals were also observed at 5 years postmerger among stays for heart failure (DID, –0.756 [95% CI, –1.448 to –0.064] percentage points; $P = .03$), stroke (DID, –1.667 [95% CI, –3.050 to –0.283] percentage points; $P = .02$), and pneumonia (DID, –0.862 [95% CI, –1.681 to –0.042] percentage points; $P = .04$).

CONCLUSIONS AND RELEVANCE These findings suggest that rural hospital mergers were associated with better mortality outcomes for AMI and several other conditions. This finding is important to enhancing rural health care and reducing urban-rural disparities in quality of care.

JAMA Network Open. 2021;4(9):e2124662. doi:10.1001/jamanetworkopen.2021.24662

Open Access. This is an open access article distributed under the terms of the CC-BY License.

Key Points

Question Are mergers and acquisitions associated with the quality of care at rural hospitals?

Findings This case-control study including 172 merged hospitals and 266 comparison hospitals that remained independent compared premerger to postmerger changes in in-hospital mortality for common conditions and complications for elective procedures. Adjusted for patient, hospital, and community characteristics, decreases in mortality among stays for acute myocardial infarction, heart failure, stroke, and pneumonia postmerger were greater at merged hospitals than at comparison hospitals.

Meaning These findings suggest that rural hospital mergers were associated with better mortality outcomes for certain conditions.

+ Supplemental content

Author affiliations and article information are listed at the end of this article.

Introduction

More than one-third of US community hospitals are located in rural areas, serving as the principal source of care for 60 million people, nearly 20% of the US population.^{1,2} For the past few decades, rural hospitals have faced declining populations, worsening economic conditions, and persistent shortages of clinicians,³ putting them at greater risk of closure than their urban counterparts.⁴⁻⁷ To avoid closure, merger and acquisition, hereafter referred to as *merger*, may be an option for sustaining rural hospitals and ensuring essential access to care for their communities.⁸ The number of mergers among rural hospitals has increased significantly since the mid-2000s, in parallel with the accelerating number of closures.^{9,10}

Although mergers may enhance rural hospital survival, they may also have effects on quality of care. Prior studies on this topic tended to focus on urban hospitals, with the primary concern that consolidation could lead to increased market power. These studies were inconclusive on the association between hospital mergers and quality of care as measured by mortality, readmissions, complications, clinical processes, and patient experience.¹¹⁻¹⁶ To our knowledge, only 1 recent study, by O'Hanlon and colleagues,¹⁷ specifically examined quality of care along with access to care and financial performance after rural hospital affiliation with health systems. The authors found significant improvement in hospital operating margins after system affiliation but no difference in patient experience and 30-day hospital-wide all-cause readmissions.¹⁷

Given that most rural hospitals are the only acute care hospital in the community, mergers would not necessarily lead to greater market consolidation. However, rural hospital mergers may increase market power through collective negotiation with payers. Mergers also could lead to reductions in service lines.¹⁷ A potential benefit of merger for small and isolated rural hospitals is that it may enable access to needed financial resources (eg, capital), clinical expertise (eg, specialized services), and new technologies (eg, electronic health records).¹⁸ Mergers may also offer opportunities for rural hospitals to join alternative payment models, such as accountable care organizations.⁸ Thus, rural hospitals may be able to provide higher quality of care after mergers.

The purpose of this study was to assess changes in inpatient quality of care for rural hospitals that merged or were acquired compared with rural hospitals that remained independent. We expanded on prior research by leveraging all-payer discharge databases to measure hospital quality in terms of mortality and complications. We used multiple data sources to identify mergers and used a difference-in-differences (DID) design to compare changes in quality between merged hospitals and independent hospitals.

Methods

The Healthcare Cost and Utilization Project (HCUP) databases used in this case-control study are consistent with the definition of limited data sets under the Health Insurance Portability and Accountability Act Privacy Rule and do not constitute research involving human participants requiring review by an institutional review board or participant informed consent. This study follows the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline for observational studies.

Study Population and Data

We included community, nonrehabilitation, non-long-term, general acute care hospitals in rural zip codes defined as eligible to receive funding by the Federal Office of Rural Health Policy.¹⁹ We identified hospital mergers from 2009 to 2016 using data from Irving Levin Associates and the American Hospital Association's (AHA) Annual Survey (eAppendix 1 in the [Supplement](#)). We selected rural comparison hospitals in the same states as merging hospitals that reported no system membership to the AHA throughout the study period. Information on hospital attributes were

obtained from the AHA, and community characteristics were drawn from the American Community Survey and Area Health Resources Files.

To measure quality of care, we used all-payer discharge data from the 2008 to 2018 HCUP State Inpatient Databases (SID)²⁰ to identify inpatient stays that met denominator specifications for the Agency for Healthcare Research and Quality's (AHRQ) medical mortality Inpatient Quality Indicators (IQIs).²¹ These IQIs measure in-hospital death for 6 medical conditions identified by principal diagnosis—acute myocardial infarction (AMI), heart failure, acute stroke, gastrointestinal hemorrhage, hip fracture, and pneumonia. We also included inpatient stays that met specifications for select AHRQ Patient Safety Indicators (PSIs) after elective operative procedures,²² which measure complications during and after surgery, including hemorrhage or hematoma, respiratory failure, pulmonary embolism or deep vein thrombosis, and sepsis. We limited the SID to 32 states for which a rural hospital merger occurred between 2009 and 2016. Data from the 2008 and 2017 to 2018 SID were included to ensure that each hospital had at least 1 premerger year and 2 postmerger years.

Discharge records were assigned to the merged or comparison group and were further categorized as occurring in the premerger or postmerger period, anchored by a merger index date (eAppendix 2 in the [Supplement](#)). For mergers, the premerger to postmerger period was determined from announcement and closure dates provided by the source or obtained through public information searches. For comparison hospitals, an index date corresponding to merger dates was randomly assigned within strata used for coarsened exact matching (CEM).

Primary Independent and Dependent Variables

The primary exposure was the hospital's merger status. The primary outcome was in-hospital deaths for IQIs and complications for PSIs. We examined the results overall for any IQI and for each of the individual measures. We additionally report the results overall for any PSI and for the individual PSI measures.

Other Variables

We included all discharge-level variables specified in the IQI and PSI software in the models.^{23,24} Some exceptions were made if a variable could not be defined across all years owing to a change in coding. The IQI and PSI risk adjustments and all deviations from the specifications are provided in eAppendix 3 in the [Supplement](#).

Statistical Analysis

We used CEM to match discharges at merged and comparison hospitals by the hospital's state, critical access status, bed number (<30 vs ≥30), and ownership (public, private nonprofit, or private for profit). Cells with merged hospitals but not for comparison hospitals were coarsened (ie, combined) with other cells to retain discharges at all merged hospitals. Discharges in cells with comparison hospitals but no merged hospitals were excluded to make the groups more comparable. Initially, we identified discharges at 172 merged hospitals and 549 comparison hospitals in rural areas. After CEM, the final sample consisted of discharges at 172 merged hospitals and 266 comparison hospitals, and imbalances between merged and comparison hospitals in the distributions of location (state), critical access status, bed number, and ownership were reduced (eTable 1 in the [Supplement](#)). Residual differences in these characteristics were adjusted for in regression models.

In descriptive analyses, we compared baseline characteristics of discharges at merged and comparison hospitals that met any IQI or PSI denominator specification. Owing to the large sample size of the SID, small differences can be statistically significant. Instead, we used standardized mean differences (SMDs) to assess balance in hospital and patient characteristics between merged and comparison groups.^{25,26} We also created trend graphs for the IQIs and PSIs 5 years before and after the merger or index date for merged and comparison hospitals.

Finally, we used linear probability models specifying mortality and complications as binary outcomes. We included a DID parameter, which was the interaction between merged (vs comparison hospitals) × postmerger year (vs premerger period). The DID coefficient can be interpreted as the difference in premerger to postmerger percentage point changes in rates of in-hospital mortality (or perioperative or postoperative complications) between merged and comparison hospitals. We present annual DID estimates for up to 5 years after the merger. The models produce robust SEs that account for within-hospital correlations and were conducted in Stata statistical software version 15.1 (StataCorp). We tested for statistical significance at the .01, .05 and .10 level using 2-sided tests, and significance was set at $P < .05$. Tests for the parallel trends assumption found no violations and are provided in eTable 2 in the [Supplement](#). Data were analyzed from February to December 2020.

In sensitivity analyses, we used logistic regression (vs linear probability models) to assess the robustness of our results to model specification. We also measured outcomes for stays in the catchment areas of merged and comparison hospitals (vs stays treated at those hospitals) to examine associations between mergers and quality at the population level (eAppendix 4 in the [Supplement](#)).

Results

Study Sample

After CEM matching, our sample contained 303 747 IQI and 175 970 PSI discharges at 172 merged hospitals and 461 092 IQI and 278 070 PSI discharges at 266 comparison hospitals during the premerger period (**Table 1**). For each study population, baseline patient characteristics were comparable between merged and comparison hospitals in mean (SD) age (IQI: 72.9 [15.2] years vs 73.6 [15.0] years; PSI: 60.9 [15.5] years vs 61.9 [15.3] years), sex (IQI: 135 823 [44.7%] men and 167 924 [55.3%] women vs 211 443 [45.9%] men and 249 649 [54.1%] women; PSI: 64 855 [36.9%] men and 111 115 [63.1%] women vs 108 101 [38.9%] men and 169 969 [61.1%] women), and expected payer (IQI: 232 567 patients with Medicare [76.6%] vs 349 894 patients with Medicare [75.9%]; PSI: 88 607 patients with Medicare [50.4%] vs 141 613 patients with Medicare [50.9%]). Baseline characteristics were also similar between groups in community income, urban/rural location, number of chronic conditions, All Patient Refined Diagnosis Related Group risk-of-mortality score, select comorbidities, and travel distance (Table 1). Additional baseline comorbidities also were similar across the merged and comparison groups (eTable 3 in the [Supplement](#)). Patient baseline characteristics remained similar between groups in the postmerger period (eTable 4 in the [Supplement](#)).

Volume Trends

Figure 1 displays trends in the volume of inpatient stays for each of the 6 medical conditions in the premerger and postmerger periods (eTable 5 in the [Supplement](#)). From 4 years to 1 year premerger, the mean number of AMI stays at merged hospitals remained stable annually at approximately 24 to 26 stays (translating to approximately 1 admission every other week) but increased from a mean (SD) of 26 (62) stays per year at 1 year postmerger to 35 (86) stays per year at 5 years postmerger, or by 35%. For merged hospitals, the median (interquartile range) number of AMI stays was 7 (15) stays at 1 year postmerger and 5 (14) stays at 5 years postmerger; and for the 113 merged hospitals with 5 years of postmerger data, 41 had an increase in AMI stays. In contrast, the mean AMI volume declined after 2 years postmerger for comparison hospitals. We observed an inverse association between AMI mortality rates and volumes in the overall study sample (eFigure 2 in the [Supplement](#)). Mean volumes of stays for heart failure, stroke, gastrointestinal hemorrhage, and pneumonia decreased steadily over the period for both merged and comparison hospitals, but remained stable for hip fracture (eTable 5 in the [Supplement](#)). The mean volume of elective procedures also decreased similarly for both merged and comparison hospitals (eFigure 1 in the [Supplement](#)).

Mortality and Complications

Figure 2 displays trends in the in-hospital mortality rates for each of the 6 medical conditions before and after mergers (eTable 6 in the [Supplement](#)). The annual mortality rate for AMI stays fluctuated between 7.8% and 10.9% during the premerger period at merged hospitals but declined to 6.3% at 1 year postmerger and continued to decrease to 4.3% at 5 years postmerger. Mortality rates for heart failure, stroke, and pneumonia decreased steadily over the study period but remained stable for gastrointestinal hemorrhage and hip fracture for both merged and comparison hospitals (eTable 6 in the [Supplement](#)). Complications after elective procedures also decreased similarly for both merged and comparison hospitals.

Table 1. Baseline Patient Characteristics for Discharges in the Premerger Period at Study Hospitals After Coarsened Exact Matching^a

Characteristic	Any IQI			Any PSI		
	Hospitals, No. (%)		SMD	Hospitals, No. (%)		SMD
	Merged (n = 303 747)	Comparison (n = 461 092)		Merged (n = 175 970)	Comparison (n = 278 070)	
Age, mean (SD), y	72.9 (15.2)	73.6 (15.0)	-0.04	60.9 (15.5)	61.9 (15.3)	-0.06
Sex						
Men	135 823 (44.7)	211 443 (45.9)	-0.02	64 855 (36.9)	108 101 (38.9)	-0.04
Women	167 924 (55.3)	249 649 (54.1)	0.02	111 115 (63.1)	169 969 (61.1)	0.04
Expected payer						
Medicare	232 567 (76.6)	349 894 (75.9)	0.02	88 607 (50.4)	141 613 (50.9)	-0.01
Medicaid	17 189 (5.7)	26 251 (5.7)	0.00	14 266 (8.1)	20 792 (7.5)	0.02
Private insurance	36 748 (12.1)	56 349 (12.2)	0.00	63 080 (35.8)	95 082 (34.2)	0.03
Self-pay or no charge	10 842 (3.6)	15 288 (3.3)	0.01	4184 (2.4)	7799 (2.8)	-0.03
Other	5789 (1.9)	8763 (1.9)	0.00	4890 (2.8)	11 181 (4.0)	-0.07
Community income, quartile						
First (lowest)	135 881 (44.7)	198 443 (43.0)	0.03	68 972 (39.2)	106 488 (38.3)	0.02
Second	110 933 (36.5)	157 690 (34.2)	0.05	70 911 (40.3)	99 477 (35.8)	0.09
Third	40 326 (13.3)	79 912 (17.3)	-0.11	26 121 (14.8)	52 832 (19.0)	-0.11
Fourth (highest)	8147 (2.7)	15 397 (3.3)	-0.04	5779 (3.3)	13 553 (4.9)	-0.08
Location of residence						
Metropolitan	59 526 (19.6)	78 392 (17.0)	0.07	36 101 (20.5)	43 944 (15.8)	0.12
Rural, metropolitan-adjacent	162 086 (53.4)	225 998 (49.0)	0.09	75 235 (42.8)	121 708 (43.8)	-0.02
Rural, remote	81 930 (27.0)	156 298 (33.9)	-0.15	64 517 (36.7)	112 206 (40.4)	-0.08
Chronic conditions, No.						
None	3090 (1.0)	6019 (1.3)	-0.03	7056 (4.0)	10 024 (3.6)	0.02
1	8413 (2.8)	14 499 (3.1)	-0.02	19 775 (11.2)	28 221 (10.1)	0.04
2	16 233 (5.3)	26 099 (5.7)	-0.01	25 162 (14.3)	38 209 (13.7)	0.02
≥3	276 011 (90.9)	414 475 (89.9)	0.03	123 977 (70.5)	201 616 (72.5)	-0.05
APR-DRG mortality risk score, mean (SD)	2.2 (0.9)	2.2 (0.8)	0.01	1.3 (0.6)	1.3 (0.6)	-0.02
Select comorbidities ^b						
Congestive heart failure	42 179 (13.9)	67 876 (14.7)	-0.02	6005 (3.4)	10 359 (3.7)	-0.02
Chronic pulmonary disease	111 349 (36.7)	171 419 (37.2)	-0.01	27 631 (15.7)	45 771 (16.5)	-0.02
Peripheral vascular disease	25 303 (8.3)	39 613 (8.6)	-0.01	8917 (5.1)	15 799 (5.7)	-0.03
Diabetes ^c	104 274 (34.3)	153 312 (33.2)	0.02	36 936 (21.0)	59 342 (21.3)	-0.01
Hypertension	196 733 (64.8)	294 600 (63.9)	0.02	95 283 (54.1)	154 636 (55.6)	-0.03
MSUD ^d	58 924 (19.4)	88 212 (19.1)	0.01	24 555 (14.0)	40 525 (14.6)	-0.02
Distance to hospital, mean (SD), mi	5.8 (6.1)	5.8 (6.2)	0.01	6.8 (6.8)	6.3 (6.4)	0.08

Abbreviations: APR-DRG, All Patient Refined Diagnosis Related Group; IQI, Inpatient Quality Indicator; MSUD, mental or substance use disorder; PSI, Patient Safety Indicator; SMD, standardized mean difference.

^a Data are taken from up to 10 baseline years, depending on the year of the merger or index date; comparison hospitals were randomly assigned an index date corresponding to the year of merged hospitals in the strata determined by the matching variables. The

Agency for Healthcare Research and Quality's Quality Indicator software was used to define the IQIs and PSIs (eAppendix 3 in the [Supplement](#)).

^b Complete list of comorbidities is provided in eTable 3 in the [Supplement](#).

^c Includes diabetes with and without complications.

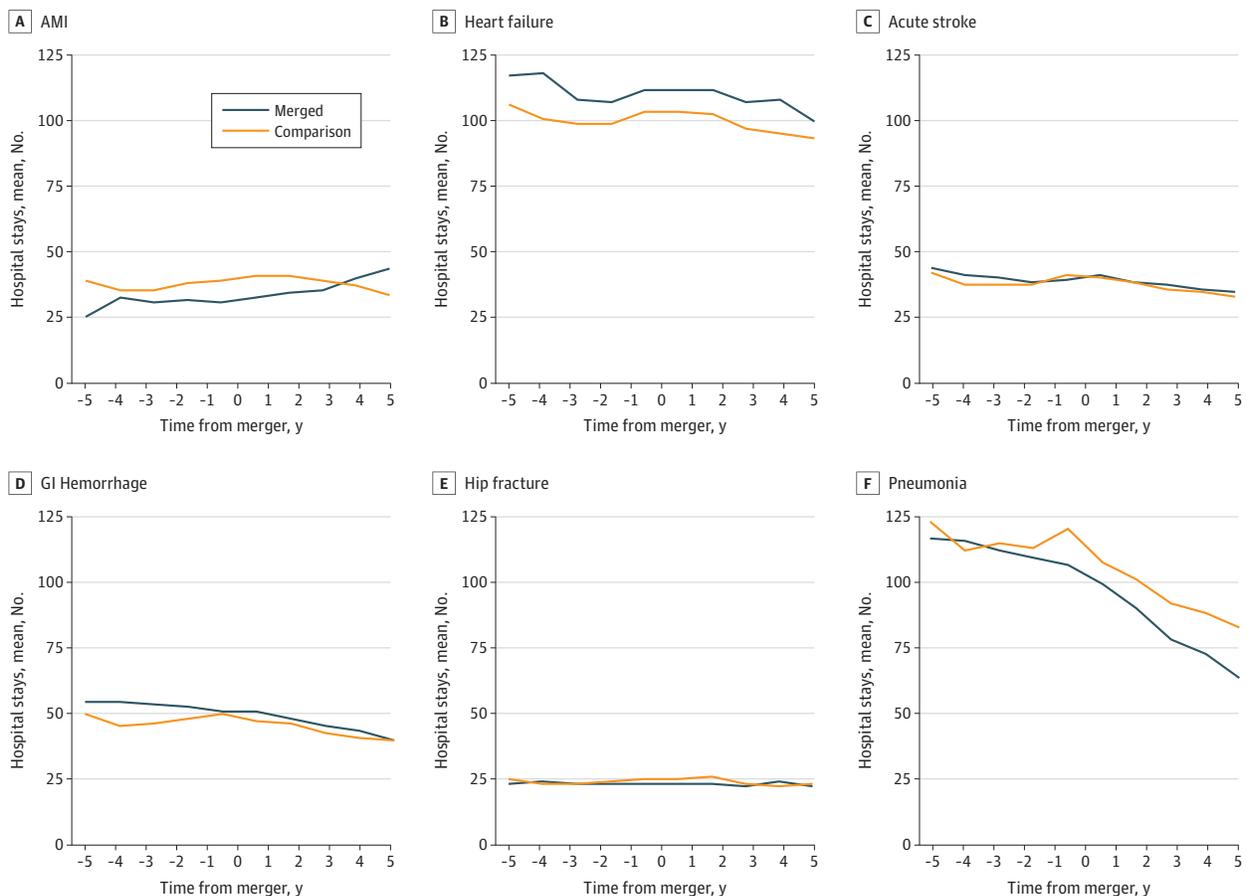
^d Includes alcohol abuse, depression, drug abuse, or psychoses.

DID Results

Table 2 presents unadjusted premerger and postmerger mortality and complication rates for merged and comparison hospitals and adjusted DID estimates from the linear probability models. Consistent with the downward trends in Figure 2, the observed mortality rate decreased across all 6 conditions at both merged and comparison hospitals. Overall, the risk of mortality of all stays combined for 6 conditions had a greater decrease at merged hospitals than at comparison hospitals postmerger, from a difference of -0.443 (95% CI, -0.813 to 0.073) percentage points at 1 year ($P = .02$) to -0.757 (95% CI, -1.348 to -0.166) percentage points at 5 years ($P = .01$). Because mortality rates had decreased for both groups of hospitals (ie, negative premerger to postmerger change), a greater reduction at merged hospitals is represented by a negative estimate.

In-hospital mortality among AMI stays at merged hospitals decreased by 4.4 percentage points from the premerger to the postmerger period (from 9.4% to 5.0%) but decreased by less magnitude among AMI stays at comparison hospitals (1.6 percentage points, from 7.9% to 6.3%). This was confirmed with the adjusted DID estimates, which show that the difference in risk of AMI mortality 1 year postmerger was -1.755 (95% CI, -2.825 to -0.685) percentage points greater at merged hospitals than at comparison hospitals ($P < .001$). This trend continued up to 4 years postmerger (DID, -2.039 [95% CI, -3.388 to -0.691] percentage points; $P < .01$). The decrease in the risk of mortality was also greater for heart failure stays at merged vs comparison hospitals at 3 and 5 years postmerger (DID, -0.756 [95% CI, -1.448 to -0.064] percentage points; $P = .03$), as well as for acute stroke stays (DID, -1.667 [95% CI, -3.050 to -0.283] percentage points; $P = .02$) and pneumonia

Figure 1. Mean Annual Number of Stays Across Hospitals for Each Inpatient Quality Indicator Before and After Mergers



All hospitals were required to have at least 1 year of premerger and 2 years of postmerger data. The set of discharges at hospitals included in the 3-, 4-, and 5-year means before and after the merger is for a different set of hospitals than the full sample. AMI indicates acute myocardial infarction; and GI, gastrointestinal.

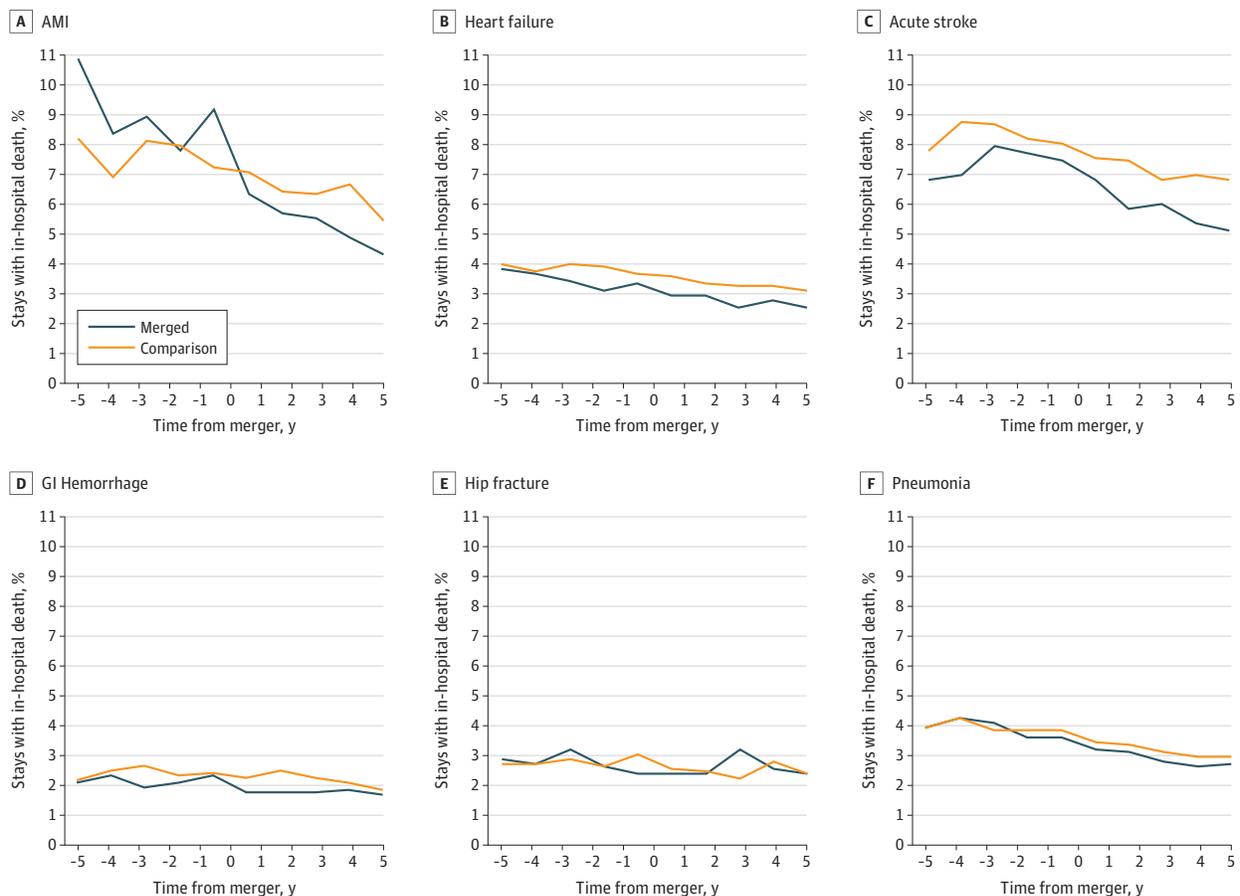
stays (DID, -0.862 [95% CI, -1.681 to -0.042] percentage points; $P = .04$) at 5 years postmerger (Table 2).

No significant difference was found between merged and comparison hospitals in changes of complication rates after elective procedures for the PSIs overall or for the individual PSIs (eTable 7 and eFigure 1 in the Supplement). The estimates from the logistic regression models were robust with respect to the direction and significance of the linear probability estimates (eTable 8 in the Supplement). Except for heart failure, the catchment area results were null (eTable 9 in the Supplement).

Discussion

In this case-control study, we found a significantly greater reduction in inpatient mortality for several common conditions (ie, AMI, heart failure, acute stroke, and pneumonia) among patients admitted to rural hospitals that merged or were acquired than among patients admitted to rural hospitals that remained independent. Although mortality for these conditions declined for all hospitals during the study period, the premerger to postmerger reductions at merged hospitals exceeded those at comparison hospitals after adjusting for patient, hospital, and community characteristics. Understanding the impact of mergers and acquisitions on rural hospital quality is critical for informing rural health policy and health care management. These findings suggest that rural hospital mergers were associated with quality improvement.

Figure 2. Percentage of All Stays That Resulted in In-Hospital Death for Each Inpatient Quality Indicator Before and After Mergers



All hospitals were required to have at least 1 year of premerger and 2 years of postmerger data. The set of deaths included in the 3-, 4-, and 5-year percentages before and after the merger is for a different set of hospitals than the full sample. AMI indicates acute myocardial infarction; and GI, gastrointestinal.

We found significantly greater improvement in mortality for patients with AMI at merged hospitals than comparison hospitals for the first 4 years after mergers. This could be because merged hospitals had more resources and support to adopt defined clinical pathways available for AMI through transfer of technology and expertise from the larger system. Previous research has found that adoption of hospital strategies for AMI management is associated with lower 30-day risk-standardized mortality rates,²⁷ although it is not clear how quickly improvement can be achieved.²⁸ It is also worth noting that the mean volume of AMI stays increased at merged hospitals after mergers. The inverse association between AMI mortality rates and inpatient volumes has been well documented in the literature,²⁹⁻³² and was also observed in this study, but volume-outcome research thus far has not been specific to rural hospitals.³³

Significant improvements in mortality for the other 3 conditions (ie, heart failure, stroke, and pneumonia) did not occur immediately after mergers but rather 3 to 5 years later. This timeframe is consistent with research indicating that adoption of quality improvement approaches is complex and requires internal diffusion within given health care organizations prior to improved outcomes.^{34,35} Merged hospitals achieved greater improvement in mortality outcomes for stays with these conditions than comparison hospitals did. Heart failure and pneumonia are high-volume conditions in rural areas with aging populations, and ensuring timely initial evaluation and treatment for acute stroke is particularly challenging. With reduced access to care, rural residents with these conditions are at greater risk of death than their urban counterparts.^{36,37} Mergers can allow partnerships with urban hospitals to facilitate implementation of clinical pathways and protocols for improving patient outcomes.³⁸ Through mergers, rural hospitals can also gain access to capital investment in electronic health records and clinical decision support systems for enhancing technological capabilities.³⁹ Furthermore, sharing staff and expertise as part of the merger can help alleviate workforce shortages and improve the hospital's clinical services.

Table 2. Changes in Quality and Patient Safety for Stays at Hospitals That Merged vs at Comparison Hospitals

Quality indicator	In-hospital death (IQI) or complication (PSI), % ^a				Pre-post difference between merged and comparison hospitals, DID estimate % (95% CI) ^b				
	Merged hospitals		Comparison hospitals		Model 1				Model 4 (5 y postmerger) ^c
	Premerger	Postmerger	Premerger	Postmerger	1 y postmerger	2 y postmerger	Model 2 (3 y postmerger) ^c	Model 3 (4 y postmerger) ^c	
Any IQI mortality	4.3	3.2	4.4	3.8	-0.443 (-0.813 to 0.073) ^d	-0.476 (-0.881 to -0.072) ^d	-0.541 (-0.965 to -0.117) ^d	-0.656 (-1.181 to -0.132) ^d	-0.757 (-1.348 to -0.166) ^d
AMI	9.4	5.0	7.9	6.3	-1.755 (-2.825 to -0.685) ^e	-1.601 (-2.797 to -0.406) ^e	-1.615 (-2.98 to -0.25) ^d	-2.039 (-3.388 to -0.691) ^e	-1.095 (-2.572 to 0.382)
Heart failure	3.5	2.7	3.8	3.3	-0.491 (-1.004 to 0.023) ^f	-0.325 (-0.83 to 0.18)	-0.658 (-1.204 to -0.112) ^d	-0.634 (-1.28 to 0.012) ^f	-0.756 (-1.448 to -0.064) ^d
Acute stroke	7.5	5.8	8.2	7.2	-0.389 (-1.392 to 0.613)	-0.696 (-1.839 to 0.447)	-0.278 (-1.351 to 0.796)	-1.078 (-2.244 to 0.089) ^f	-1.667 (-3.05 to -0.283) ^d
GI hemorrhage	2.3	1.8	2.5	2.2	-0.409 (-0.884 to 0.067) ^f	-0.493 (-1.019 to 0.034) ^f	-0.295 (-0.859 to 0.269)	-0.039 (-0.637 to 0.559)	-0.124 (-0.714 to 0.467)
Hip fracture	2.8	2.4	2.9	2.4	0.054 (-0.567 to 0.674)	-0.01 (-0.622 to 0.602)	0.591 (-0.129 to 1.311)	-0.225 (-1.118 to 0.668)	-0.039 (-0.997 to 0.919)
Pneumonia	4.0	2.8	4.0	3.2	-0.233 (-0.71 to 0.245)	-0.356 (-0.88 to 0.168)	-0.552 (-1.163 to 0.059) ^f	-0.535 (-1.195 to 0.124)	-0.862 (-1.681 to -0.042) ^d
Any PSI complication	1.8	1.6	1.8	1.6	-0.084 (-0.346 to 0.177)	-0.122 (-0.406 to 0.162)	-0.006 (-0.29 to 0.277)	-0.216 (-0.538 to 0.106)	-0.115 (-0.445 to 0.214)

Abbreviations: AMI, acute myocardial infarction; DID, difference-in-differences; GI, gastrointestinal; IQI, Inpatient Quality Indicator; PSI, Patient Safety Indicator.

^a The premerger and postmerger period descriptive data are based on all premerger and postmerger years available from each hospital, up to 10 years before the merger and 10 years after the merger. Sample sizes in the premerger and postmerger periods are shown in eTable 10 in the Supplement.

^b DID estimates are from linear probability models and can be interpreted as the premerger postmerger-percentage point difference between merged and comparison hospitals in the percentage of admitted patients who died in the hospital (IQI) or who experienced complication (PSI). All models are adjusted according to the Agency for Healthcare Research and Quality's Quality Indicator software, with some exceptions, plus additional patient, hospital, and community characteristics (eAppendix 3 in the

Supplement). For both the merged and comparison groups, the rate of the IQIs and PSIs generally decreased from the premerger to the postmerger period. Thus, a negative DID estimate indicates that the decrease in the intervention group was greater than the decrease in the comparison group.

^c The third, fourth, and fifth postmerger year models are separate models that include only hospitals with 3 or more, 4 or more, and 5 or more postmerger years of data, respectively.

^d $P < .05$.

^e $P < .01$.

^f $P < .10$.

The findings of this study regarding the positive outcomes associated with mergers in rural hospital quality challenge a common argument in prior research that hospital consolidation is likely to result in greater market power and higher prices but poorer quality. The association between mergers and quality of care appears to function differently in urban vs rural settings. In urban markets, hospital consolidation was found to either hurt quality^{12,13,15} or have no measurable impact.^{11,16} In contrast, although a study by O'Hanlon and colleagues¹⁷ reported no differences in patient experience and readmissions for rural hospitals with system affiliation using self-reported hospital data, our study found that mergers were associated with better patient outcomes in rural hospitals using all-payer discharge-level data and indicators of hospital quality.⁴⁰ Future research should examine whether there are differential outcomes for rural hospitals that are acquired by large hospital systems than for rural hospitals that merge locally with another hospital, or for those that were already merged or affiliated before a second merger.

Limitations

This study has several limitations. First, although our methods adjusted for patient, hospital, and community characteristics through use of CEM and DID models, there are potentially unmeasured variables endogenous to the likelihood of merger and the quality indicators. Some imbalances across hospitals persisted after matching, but we controlled for these variables, and discharges in the merged and comparison groups were similar on all factors examined. Second, our study spans the *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)* and the *ICD-10-CM* periods, affecting use of the quality indicators. Third, if rural hospitals that merge significantly curtail service lines or transfer patients with higher risk to urban centers, or if patients die during transfer to another hospital or out of the hospital, this could account for a greater reduction in mortality for these hospitals. However, we did not find evidence of accelerating decreases in volume after mergers in the clinical conditions examined.

Conclusions

This case-control study found that rural hospital mergers were associated with decreased in-hospital mortality for AMI and several other conditions. These findings indicate that mergers of rural hospitals are not necessarily associated with adverse changes in the quality of care at these hospitals. Mergers may enable rural hospitals to improve quality of care through access to needed financial, clinical, and technological resources, which is important to enhancing rural health and reducing urban-rural disparities in quality. This hypothesis needs to be assessed using data sources that capture data both on quality and hospital resources. Despite the positive association between mergers and quality, merging may not be an option for some rural hospitals, which may remain financially vulnerable and thus at risk of eliminating services or shuttering.

ARTICLE INFORMATION

Accepted for Publication: July 8, 2021.

Published: September 20, 2021. doi:10.1001/jamanetworkopen.2021.24662

Open Access: This is an open access article distributed under the terms of the [CC-BY License](#). © 2021 Jiang HJ et al. *JAMA Network Open*.

Corresponding Author: H. Joanna Jiang, PhD, Agency for Healthcare Research and Quality, 5600 Fishers Lane, Rockville, MD 20857 (joanna.jiang@ahrq.hhs.gov).

Author Affiliations: Agency for Healthcare Research and Quality, Rockville, Maryland (Jiang, Liang); IBM Watson Health, Sacramento, California (Fingar); IBM Watson Health, Cambridge, Massachusetts (Henke); IBM Watson Health, Rochester, New York (Gibson).

Author Contributions: Drs Henke and Fingar had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Concept and design: All authors.

Acquisition, analysis, or interpretation of data: Jiang, Fingar, Liang, Henke.

Drafting of the manuscript: Jiang, Fingar, Henke.

Critical revision of the manuscript for important intellectual content: All authors.

Statistical analysis: Jiang, Fingar, Henke, Gibson.

Obtained funding: Jiang, Henke.

Administrative, technical, or material support: Fingar, Henke, Gibson.

Supervision: Jiang, Fingar, Henke.

Conflict of Interest Disclosures: Drs Fingar, Henke, and Gibson reported receiving funding from the Agency for Healthcare Research and Quality paid to IBM Watson Health during the conduct of this study. No other disclosures were reported.

Funding/Support: This research was supported by contract No. HHS-290-2018-00001-C from the AHRQ.

Role of the Funder/Sponsor: AHRQ staff directed the contract and participated in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, and approval of the manuscript; and decision to submit the manuscript for publication.

Disclaimer: The views expressed in this article are those of the authors and do not necessarily reflect those of AHRQ or the US Department of Health and Human Services.

Additional Contributions: Michael Head, Sarah Bloemers, and Minya Sheng (IBM Watson Health) assisted with data management, programming, and statistical support. Mary Beth Schaefer (IBM Watson Health) provided editorial review of the manuscript. Rhona Limcango (AHRQ) consulted on the Inpatient Quality Indicators and Patient Safety Indicators. These individuals were compensated for their work. The Healthcare Cost and Utilization Project partner organizations that contributed to the data used in this study were the Arizona Department of Health Services, Arkansas Department of Health, California Office of Statewide Health Planning and Development, Georgia Hospital Association, Illinois Department of Public Health, Indiana Hospital Association, Iowa Hospital Association, Kansas Hospital Association, Kentucky Cabinet for Health and Family Services, Louisiana Department of Health, Maine Health Data Organization, Maryland Health Services Cost Review Commission, Michigan Health & Hospital Association, Minnesota Hospital Association, Mississippi State Department of Health, Missouri Hospital Industry Data Institute, Montana Hospital Association, Nevada Department of Health and Human Services, New Mexico Department of Health, New York State Department of Health, North Carolina Department of Health and Human Services, Ohio Hospital Association, Oklahoma State Department of Health, Oregon Association of Hospitals and Health Systems, Oregon Office of Health Analytics, South Carolina Revenue and Fiscal Affairs Office, South Dakota Association of Healthcare Organizations, Tennessee Hospital Association, Texas Department of State Health Services, Virginia Health Information, Washington State Department of Health, West Virginia Department of Health and Human Resources, West Virginia Health Care Authority, and Wisconsin Department of Health Services.

REFERENCES

1. American Hospital Association. Fast facts on U.S. hospitals, 2021. Accessed February 3, 2021. <https://www.aha.org/system/files/media/file/2021/01/Fast-Facts-2021-table-FY19-data-14jan21.pdf>
2. US Census Bureau. Measuring America. Published December 8, 2016. Accessed February 3, 2021. <https://www.census.gov/content/dam/Census/library/visualizations/2016/comm/acs-rural-urban.pdf>
3. American Hospital Association. Rural report: challenges facing rural communities and the roadmap to ensure local access to high-quality, affordable care. Accessed February 3, 2021. <https://www.aha.org/system/files/2019-02/rural-report-2019.pdf>
4. Pink GH, Thompson K, Howard HA, Holmes M. Geographic variation in the 2016 profitability of urban and rural hospitals. *Findings Brief: NC Rural Health Research Program*. March 2018. Accessed February 3, 2021. https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2018/03/Geographic-Variation-2016-Profitability-of-Rural-Hospitals.pdf
5. Khullar D, Bond AM, Schpero WL. COVID-19 and the financial health of US hospitals. *JAMA*. 2020;323(21):2127-2128. doi:10.1001/jama.2020.6269
6. Bai G, Yehia F, Chen W, Anderson GF. Varying trends in the financial viability of US rural hospitals, 2011-17. *Health Aff (Millwood)*. 2020;39(6):942-948. doi:10.1377/hlthaff.2019.01545

7. Kaufman BG, Thomas SR, Randolph RK, et al. The rising rate of rural hospital closures. *J Rural Health*. 2016;32(1):35-43. doi:10.1111/jrh.12128
8. Noles MJ, Reiter KL, Boortz-Marx J, Pink G. Rural hospital mergers and acquisitions: which hospitals are being acquired and how are they performing afterward? *J Healthc Manag*. 2015;60(6):395-407. doi:10.1097/OO115514-201511000-00005
9. Williams D Jr., Thomas SR, Howard HA, Pink GH. Rural hospital mergers from 2005 through 2016. *Findings Brief: NC Rural Health Research Program*. August 2018. Accessed February 3, 2021. https://www.shepscenter.unc.edu/wp-content/uploads/dlm_uploads/2018/08/Rural-Hospital-Mergers.pdf
10. US Government Accountability Office. Rural hospital closures: number and characteristics of affected hospitals. Accessed February 3, 2021. <https://www.gao.gov/assets/gao-18-634.pdf>
11. Ho V, Hamilton BH. Hospital mergers and acquisitions: does market consolidation harm patients? *J Health Econ*. 2000;19(5):767-791. doi:10.1016/S0167-6296(00)00052-7
12. Mukamel DB, Zwanziger J, Bamezai A. Hospital competition, resource allocation and quality of care. *BMC Health Serv Res*. 2002;2(1):10. doi:10.1186/1472-6963-2-10
13. Sari N. Do competition and managed care improve quality? *Health Econ*. 2002;11(7):571-584. doi:10.1002/hec.726
14. Mutter RL, Romano PS, Wong HS. The effects of US hospital consolidations on hospital quality. *Int J Econ Bus*. 2011;18(1):109-126. doi:10.1080/13571516.2011.542961
15. Hayford TB. The impact of hospital mergers on treatment intensity and health outcomes. *Health Serv Res*. 2012;47(3 Pt 1):1008-1029. doi:10.1111/j.1475-6773.2011.01351.x
16. Beaulieu ND, Dafny LS, Landon BE, Dalton JB, Kuye I, McWilliams JM. Changes in quality of care after hospital mergers and acquisitions. *N Engl J Med*. 2020;382(1):51-59. doi:10.1056/NEJMsa1901383
17. O'Hanlon CE, Kranz AM, DeYoreo M, Mahmud A, Damberg CL, Timbie J. Access, quality, and financial performance of rural hospitals following health system affiliation. *Health Aff (Millwood)*. 2019;38(12):2095-2104. doi:10.1377/hlthaff.2019.00918
18. Cutler DM, Scott Morton F. Hospitals, market share, and consolidation. *JAMA*. 2013;310(18):1964-1970. doi:10.1001/jama.2013.281675
19. Health Resources and Services Administration. Federal Office of Rural Health Policy (FORHP) data files. Updated January 2021. Accessed March 17, 2021. <https://www.hrsa.gov/rural-health/about-us/definition/datafiles.html>
20. Healthcare Cost and Utilization Project. SID database documentation. Updated February 2021. Accessed March 17, 2021. <http://www.hcup-us.ahrq.gov/db/state/sidbdbdocumentation.jsp>
21. Agency for Healthcare Research and Quality. Inpatient Quality Indicators technical specifications. Accessed March 17, 2021. https://www.qualityindicators.ahrq.gov/Modules/IQI_TechSpec_ICD10_v2020.aspx
22. Agency for Healthcare Research and Quality. Patient Safety Indicators technical specifications. Accessed March 17, 2021. https://www.qualityindicators.ahrq.gov/Modules/PSI_TechSpec_ICD10_v2021.aspx
23. Agency for Healthcare Research and Quality. Inpatient Quality Indicators (IQI) parameter estimates. Updated July 2020. Accessed March 17, 2021. https://www.qualityindicators.ahrq.gov/Downloads/Modules/IQI/V2020/Parameter_Estimates_IQI_v2020.pdf
24. Agency for Healthcare Research and Quality. Patient Safety Indicators (PSI) parameter estimates. Updated July 2020. Accessed March 17, 2021. https://www.qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2020/Parameter_Estimates_PSI_v2020.pdf
25. Murad MH, Wang Z, Chu H, Lin L. When continuous outcomes are measured using different scales: guide for meta-analysis and interpretation. *BMJ*. 2019;364:k4817. doi:10.1136/bmj.k4817
26. Cohen J. *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. Erlbaum; 1988.
27. Bradley EH, Curry LA, Spatz ES, et al. Hospital strategies for reducing risk-standardized mortality rates in acute myocardial infarction. *Ann Intern Med*. 2012;156(9):618-626. doi:10.7326/0003-4819-156-9-201205010-00003
28. Learn PA, Bach PB. A decade of mortality reductions in major oncologic surgery: the impact of centralization and quality improvement. *Med Care*. 2010;48(12):1041-1049. doi:10.1097/MLR.0b013e3181f37d5f
29. Luft HS, Hunt SS, Maerki SC. The volume-outcome relationship: practice-makes-perfect or selective-referral patterns? *Health Serv Res*. 1987;22(2):157-182.
30. Thiemann DR, Coresh J, Oetgen WJ, Powe NR. The association between hospital volume and survival after acute myocardial infarction in elderly patients. *N Engl J Med*. 1999;340(21):1640-1648. doi:10.1056/NEJM199905273402106

31. Tu JV, Austin PC, Chan BT. Relationship between annual volume of patients treated by admitting physician and mortality after acute myocardial infarction. *JAMA*. 2001;285(24):3116-3122. doi:10.1001/jama.285.24.3116
32. Farley DE, Ozminkowski RJ. Volume-outcome relationships and in-hospital mortality: the effect of changes in volume over time. *Med Care*. 1992;30(1):77-94. doi:10.1097/00005650-199201000-00009
33. Schlenker RE, Hittle DF, Hrinkevich CA, Kaehny MM. Volume/outcome relationships in small rural hospitals. *J Rural Health*. 1996;12(5):395-409. doi:10.1111/j.1748-0361.1996.tb00807.x
34. Rundall TG, Shortell SM, Blodgett JC, Henke RM, Foster D. Adoption of lean management and hospital performance: results from a national survey. *Health Care Manage Rev*. 2021;46(1):E10-E19. doi:10.1097/HMR.0000000000000287
35. Shortell SM, Bennett CL, Byck GR. Assessing the impact of continuous quality improvement on clinical practice: what it will take to accelerate progress. *Milbank Q*. 1998;76(4):593-624, 510. doi:10.1111/1468-0009.00107
36. Primm K, Ferdinand AO, Callaghan T, Akinlotan MA, Towne SD Jr, Bolin J. Congestive heart failure-related hospital deaths across the urban-rural continuum in the United States. *Prev Med Rep*. 2019;16:101007. doi:10.1016/j.pmedr.2019.101007
37. Wilcock AD, Zachrisson KS, Schwamm LH, Uscher-Pines L, Zubizarreta JR, Mehrotra A. Trends among rural and urban Medicare beneficiaries in care delivery and outcomes for acute stroke and transient ischemic attacks, 2008-2017. *JAMA Neurol*. 2020;77(7):863-871. doi:10.1001/jamaneurol.2020.0770
38. Cadilhac DA, Purvis T, Kilkenny MF, et al; New South Wales Strokes Services Coordinating Committee; Agency for Clinical Innovation. Evaluation of rural stroke services: does implementation of coordinators and pathways improve care in rural hospitals? *Stroke*. 2013;44(10):2848-2853. doi:10.1161/STROKEAHA.113.001258
39. Mitchell J, Probst J, Brock-Martin A, Bennett K, Glover S, Hardin J. Association between clinical decision support system use and rural quality disparities in the treatment of pneumonia. *J Rural Health*. 2014;30(2):186-195. doi:10.1111/jrh.12043
40. Romano PS, Mutter R. The evolving science of quality measurement for hospitals: implications for studies of competition and consolidation. *Int J Health Care Finance Econ*. 2004;4(2):131-157. doi:10.1023/B:IHFE.0000032420.18496.a4

SUPPLEMENT.

eAppendix 1. Merger Definition

eAppendix 2. Assignment of Merger Dates Across Data Sources

eAppendix 3. Summary of Deviations From Quality Indicator Software

eAppendix 4. Catchment Area Sensitivity Analysis

eTable 1. Baseline Characteristics of Study Hospitals Before and After Coarsened Exact Matching

eTable 2. Tests for Premerger Period Parallel Trends Between the Merged and Comparison Groups

eTable 3. Baseline Comorbidities Among Stays for Time-Sensitive Conditions and Elective Procedures for the Merged and Comparison Groups

eTable 4. Comparison of Patient Mix in the Premerger and Postmerger Periods

eTable 5. Mean Hospital-Level Number of Stays for Each IQI Before and After Merger

eTable 6. In-Hospital Mortality Among Stays for Each IQI Before and After Merger

eTable 7. Changes in the Individual PSIs for Stays at Hospitals That Merged and at Comparison Hospitals

eTable 8. Changes in Quality and Patient Safety for Stays at Hospitals That Merged and at Comparison Hospitals Assessed Using Logistic Regression Models

eTable 9. Changes in Quality and Patient Safety for Stays in the Catchment Areas of Hospitals That Merged and in the Catchment Areas of Comparison Hospitals

eTable 10. Premerger and Postmerger Period Sample Sizes

eFigure 1. Mean Annual Number of Stays for Elective Procedures Across Hospitals and Percentage of All Stays With Any PSI Complication

eFigure 2. Hospital Scatter Plots of Inpatient Volume and In-Hospital Mortality Rates for the IQIs

**PA House Democratic Policy Hearing
Navigating Healthcare Consolidation
October 18, 2021**

**Margo M. Opsasnick
Chief Executive Officer
Delta Medix, PC
Scranton, PA**

Consolidation within the Healthcare Space

In order to understand the inter connectivity of Hospital Systems and Physician Practices you need to understand the different types of relationships between the two as well as the evolution of those relationships.

There have always been employed physicians but not in the Community setting and not in the numbers we see today. Academic Medical Centers like University of Pennsylvania, Thomas Jefferson University and University of Pittsburgh have always had “employed” physicians. Physicians at Academic Medical Centers have an academic appointment most often in the Medical School associated with the Medical Center and a Clinical appointment in the Hospital. These physicians belong to what is referred to as a Practice Plan. Academic Medical Centers are generally (not always) in major metropolitan areas.

Employed physicians in the Community setting are a more recent phenomenon which is the result of consolidation within the healthcare space.

For many years, medicine was a collaborative partnership between Hospitals and Private Practice physicians. Physicians were not employed by hospitals but were independent small businesses. Hospitals and physicians served the Community in which they resided. They were loosely affiliated.

That changed about 20 years ago. Changes came about in both hospital and physician practice structures. In the hospital arena, Community Hospitals themselves were merged to form Health Systems. In some cases, larger hospitals acquired smaller hospitals to form large Hospital Systems.

At the same time, across the United States, we started to experience physician shortages. Many physicians chose to forgo primary care for more lucrative specialty practices. This caused a shortage of primary care physicians. At the same time the number of Seniors in the Country was rising. Seniors are consumers of healthcare particularly specialty physicians. This taxed the specialty services.

The end result was consolidation of hospitals and hospitals and physicians within the healthcare space.

Health Systems were investing large amounts of money in physical plant, technology and Human Resources. In order to protect these investments Health Systems began to set up Primary Care Networks whereby the Hospital employed the Primary Care Physicians (Family Practice, Internal Medicine and Pediatricians). This worked well for the practitioners because as a general rule Primary Care Physicians were on the lower end of the pay scale and running a small business was burdensome. Hospital systems benefited because these same Primary Care Physicians, who were employed by the Hospital or Hospital System directed their patients to the Hospital owned facilities for both inpatient and outpatient care.

In the past decade, Hospitals and Hospital Systems have increasingly acquired specialty practices and employed specialists particularly in areas like Cardiology, Orthopedists, Surgery who generate large amounts of money due to the procedure driven nature of their specialties.

A recent study by the Physicians Advocacy Institute and Avalere Health reported 70% of all US physicians are employed by hospitals or corporate entities. Between January 1, 2019, and January 1, 2021, 48,000 physicians chose employment with hospitals and health systems or corporate entities. This is a 25% increase in corporation-owned practices. What does this mean for healthcare? Most importantly what does this mean for patient care?

Positive impacts of consolidation within the healthcare space:

Hospitals and hospital systems have greater resources than individual physicians or physician groups. This allows for Hospital Systems to provide high quality tools which allow physicians to deliver high quality care. We live in a technology driven world. Technologic advances in medicine move at warp speed. Scientific and technologic advancements have not only increased life expectancy but have improved the quality of life. Technology is expensive. Hospital Systems role is to provide the technology physicians need to provide high quality care.

There are physician shortages all across the Country. No area, urban or rural, is immune to physician shortages. Hospital Systems are much better suited to recruit new talent. Recruitment is more than just recruiting Human Resources. Often it takes high quality services and new technology to attract high quality talent. It is incumbent on the Hospital or Health System to provide quality service lines and state of the art technology which enhances their ability to recruit high quality physicians. The delivery of specialized services and cutting-edge technology is very costly. These circumstances encourage the consolidation of Hospitals and physicians in order to achieve economies of scale.

Medical services are critical to patient centric care. Physicians develop and implement the service line while the Hospital provides the foundation and resources. Like technology, new programs and patient centric services are very costly. Consolidation allows Health Systems to achieve economies of scale when implementing new service lines across multiple hospitals and communities.

Negative impacts of consolidation within the healthcare space:

Consolidation results in the loss of independence for physicians. There is a concern among critics of consolidation that employed physicians could lose clinical autonomy resulting in the loss of high-quality, cost-effective care for their patients. This has been characterized as a “shift towards the corporatization of healthcare” and critics feel if left unchecked, could result in an inappropriate incursion into the practice of medicine.

Some people, opposed to consolidation note that marketplace incentives make physician practices attractive acquisition targets by corporate entities: Hospitals and large Health Systems have a vested interest in a physician’s referrals in order to maintain a steady stream of revenue. Critics warn employed physicians must learn to balance the needs of their “employer” with those of their patient.

Consolidation of the health care delivery system including hospitals and physician’s stifles and, in many cases, eliminates competition.

The future:

COVID-19 has exacerbated financial vulnerabilities of physician practices. The acquisition of private physician practices across the U.S. accelerated after the onset of the pandemic. The majority of the 48,000 physicians choosing employment by hospitals in the 2019-2021 period did so after the start of the COVID-19 pandemic. The consolidation of hospitals into larger hospital systems and the consolidation of physician practices with hospitals are expected to continue into the future at least in the short and midterm. It is incumbent upon all Healthcare leaders and physicians to always work in a collaborative manner with the ultimate goal being to serve the needs to the patients and the Community.

I would like to thank the Democratic Policy Committee for allowing me to speak today. I cannot think of a more important topic than the health and well-being of the members of our community.

Margo Opsasnick is the Chief Executive Officer of Delta Medix. Under her leadership Delta Medix has developed into the largest independent Multispecialty Medical Group in Northeastern Pa. Delta Medix offers General and Vascular Surgery, Urology, Pulmonary and Critical Care Medicine, Ear Nose and Throat and Internal Medicine. Delta Medix has a Breast Care Center, the Center for Comprehensive Cancer Care, and an Allergy Center. Margo has formed a clinical affiliation between Delta Medix and Jefferson Kimmel Cancer Center which has brought clinical trial research to Northeast Pa.

Margo serves as the Administrator to the Commonwealth Health Cancer Network which is a collaboration of Oncology providers accredited by the American College of Surgeons Commission on Cancer.

Prior to joining Delta Medix, Margo was the Administrator for the Department of Surgery at Thomas Jefferson University and a consultant to the Dean of Jefferson Medical College.

Margo is Founder/President of the Foundation for Cancer Care which serves NEPA cancer patients and their families. She has served as Board President of Saint Joseph Center.

She graduated from The University of Scranton and received a Master in Business Administration from the Fox School of Business at Temple University.

Geisinger Health
100 N. Academy Ave.
Danville, PA 17822
geisinger.org



Testimony of
Janet Tomcavage, MSN, RN
Executive Vice President, Chief Nurse Executive

PA House of Representatives Democratic Policy Committee Hearing
October 18, 2021

October 15, 2021

Dear House Democratic Policy Committee;

Thank you for the opportunity to provide input on several significant issues we're seeing within healthcare today. My name is Janet Tomcavage, and I'm the executive vice president and chief nurse executive at Geisinger.

As you know, healthcare systems across the country are feeling the pain of staffing shortages, retention challenges and the relentlessness of the ongoing COVID pandemic — and we, at Geisinger, are no different. These are very real issues, with very real consequences.

Our employees are exhausted, at times overwhelmed, anxious and some are growing frustrated at what has transpired in our communities — including the politicization of pandemic related mitigation and prevention measures. Yet they continue to show up to work every day, courageously committed to meeting patients' needs while facing whatever comes their way. However, we can't ignore the collective impact these issues have on our employees' ability to provide the highest quality of care to our patients and their communities.

Significant impact of the ongoing pandemic

- Despite some trends improving nationally, COVID-19 continues to pose a significant impact in Geisinger's local communities at levels approaching the 2020 holiday season — and we've yet to hit the heart of the dangerous cold and flu season.
- COVID-19 admissions currently make up about 15-20% — and in some locations close to 40% — of the patients in our hospitals (with 1 in 6 hospital beds currently being occupied by COVID patients).
- Our current COVID-19 levels impact both COVID and non-COVID care. Our communities can find themselves in a dangerous situation if hospital beds aren't available for people who experience car accidents, heart attacks and strokes or those who need elective procedures for advancing medical conditions.
- Because our employees live in the communities we serve, they too are at risk. We currently have more than 1,000 employees out on quarantine as we follow DOH guidelines to help ensure our patient facilities are as safe as possible from the spread of COVID.
- This impacts our ability to provide the care patients and our communities need.
- The current burden from COVID-19 and resulting impact on staffing have caused us to delay dozens of non-emergency procedures, which ultimately impacts the health and quality of life our communities deserve.

Reduction in nursing school applications and experienced nurses

- While enrollment at nursing schools have increased this year compared to last year, we are seeing decline overall.
- The financial burden that nursing students encounter continues to rise, and many simply can't afford it.
- At the same time, we're seeing experienced nurses retiring, leaving significant gaps with new graduates less prepared for the increasing acuity of patients in the hospital setting.
- With an aging patient population in Pennsylvania, we know the need for specialized clinical care and support for complex medical conditions is on the rise.
- This requires more training and onboarding for new nurses — especially for critical care areas. This is a challenge, given staffing restrictions due to the pandemic.

October 15, 2021

- We're also seeing RNs leaving inpatient nursing roles sooner to pursue ambulatory and advanced practitioner roles. This is driven in part by nurses wanting better work/life balance, but also better pay in advanced practice roles.
- Our inpatient RN vacancy rate has climbed by nearly 10% across the Geisinger system during the pandemic (635 in 2019 to 800 today).
- Geisinger has seen a 92% increase in nurses moving out of the hospital to an ambulatory clinical role in 2021 compared to 2020.
- To help with this problem, we recently launched Geisinger's Nursing Scholars Program. The program offers a generous loan to ease the financial burden of going to nursing school in exchange for a 5-year work commitment as a Geisinger inpatient nurse.
- Our hope is that by supporting our employees' career goals, they will want to continue to be a part of our organization and in turn, help lessen the nursing gap that continues to grow in our system – and within our communities.

Increasing competition within the nursing profession

- There's currently an extremely competitive traveling nurse market that is putting unprecedented pressure on hospitals to raise costs for nursing services. For example, the cost per hour of a critical care traveler nurse has risen by over 110% in the last year.
- While we have had success in recruitment of new nurses (5% increase) through the first three quarters of 2021, nurse terminations have increased by 35% over the same time period, creating high vacancy rates.
- Even non-RN resources are scarce – nursing assistants can find other jobs in the market that are less demanding (physically and mentally).
- There's also an increase in behavioral health needs of our patients, requiring one-to-one companions, which significantly impacts the workforce.
- Turnover for clinical roles and support services roles (excluding providers) within Geisinger hit 17.82% in 2021, above the national average and an increase over the prior year.
- We are investing millions of dollars each year in recruiting and retention bonuses to attract and retain the top talent that is the hallmark of Geisinger's exceptional care reputation and service delivery.

I've been in the nursing profession for a long time, starting my career as a medical surgical nurse in Annapolis, MD, 40 years ago. What my colleagues and I are seeing today, in our hospitals and clinics is truly unprecedented. While staffing concerns in healthcare are not new, the pressures brought on by the pandemic are unparalleled.

We greatly appreciate your committee's interest in the dynamics we are facing in light of the ongoing pandemic and the labor market. The healthcare field is both challenging and rewarding, and our team is passionate about our vision of making better health easy. We are committed to our patients, our communities and our team and welcome the opportunity to share more about our amazing organization and the care we provide every day. Geisinger looks forward to working with the PA Legislature on solutions to address healthcare workforce staffing issues that are impacting not only Geisinger patients but patient throughout the Commonwealth.

Sincerely,

Janet Tomcavage, MSN, RN Executive Vice President, Chief Nurse Executive

Testimony on the Consumer Impact of Hospital Consolidation in Pennsylvania

October 18, 2021

Thank you Chairman Bizzaro and the House Democratic Policy Committee for holding this hearing, and for allowing me the opportunity to submit comments on rising healthcare costs in Pennsylvania. This is a serious issue that impacts all of Pennsylvania. In many communities, rural ones especially, a hospital closing or providers consolidating and leaving networks may be the difference between life or death. My name is Antoinette Kraus, and I am the executive director of the Pennsylvania Health Access Network (PHAN). PHAN is Pennsylvania's only consumer-led organization where we strive to achieve high quality, truly affordable, and equitable healthcare for all Pennsylvanians.

Healthcare markets are rapidly changing and consolidating, and everyday individuals and small businesses are unfairly bearing the brunt. This is an issue nationwide. Ninety percent of hospital markets in the United States are now consolidated, and Pennsylvania is not immune to this change. In fact, the number of hospitals consolidated into a health system has risen by roughly 25% in little more than a decade, leaving less than 2,000 independent hospitals nationwide. Each year, PHAN answers nearly 10,000 calls and regularly engages with consumers from 61 of Pennsylvania's 67 counties. More and more, people tell us about losing their doctors, being locked out of life-saving care, and being priced out of care in their own community, leaving people to make an unthinkable choice between their health, financial stability, employability, or family life.

In 2018, we were fortunate to partner with Altarum's Healthcare Value Hub, through the support of the Robert Wood Johnson Foundation, to conduct the first-ever [Pennsylvania-specific survey](#) of healthcare affordability, and we repeated the study last year in late 2020. Both times, we captured data representing Pennsylvania adults across all insurance types and have been able to generate regional reports for five parts of the state.

It comes as no surprise that 1 in 2 Pennsylvania adults have had a healthcare affordability burden in the last year. This statistic is astounding. There are very few issues that affect half of the adult population in any state. This means that half of Pennsylvania adults struggled to pay bills, went uninsured due to high premium costs, or failed to get the care they needed due to costs. These numbers are highest in the Northwest region of the commonwealth, where a staggering 68% of adults reported facing an affordability burden in the last year. More and more, each year, our data shows that Pennsylvanians are using up all of their savings, taking on credit card debt, or foregoing basic necessities, like food, heat, or rent, in order to pay for care.

Given these numbers, it is no surprise that the survey shows 9 in 10 Pennsylvania adults supporting legislative action to lower healthcare costs. Pennsylvanians even cited hospitals charging too much money as the number two reason why they believe healthcare coverage is unaffordable, second only to high prescription drug costs.

This illustrates the significant impact of hospital and provider consolidation on consumers. [Studies show](#) that horizontal hospital consolidation leads to a price increase of 20-40% across the board. Even worse,

these prices rise without an increase in efficiency or quality of care. This means that Pennsylvanians are paying more for care and are getting less. In a time when income and economic stability are uncertain, this is unacceptable.

We saw the negative impact of consolidation up close just a few years ago, with the split between the UPMC Hospital System and Highmark Health System. Pennsylvanians were terrified of losing access to trusted doctors, and some were even forced to cross state lines to receive the lifesaving care they needed. Hospitals should not have the power to decide where and when patients can access care.

Further, quality of and access to healthcare improves when there is competition in the market. More and more, private equity firms are influencing healthcare. In fact, [between 2010 and 2020](#), private equity spending in health care had tripled to \$750 million. This is due to boutique firms buying up physician groups and forcing them to leave insurance networks, increasing their bottom line. This has the effect of further increasing costs for Pennsylvanians, eliminating competition, and forcing consumers into certain hospital systems by eliminating choice, a critical component of quality healthcare. [A recent study](#) conducted in Pennsylvania found that the result of a merger of six orthopedic groups was a 15%-25% price increase across payers. Pennsylvanians deserve more from their healthcare system.

Pennsylvania can take strong steps to navigate the issue of hospital consolidation. Pennsylvania needs strong regulations and oversight to mitigate the risks that consolidation poses. The limited processes we currently have are insufficient to confront the challenges of a hyper-consolidated environment. Last year, Governor Wolf put forward an ambitious agenda in his Whole Person Health Reform package. One provision, the Health Value Commission, would accomplish two goals that would help consumers in this space: 1) strong monitoring, benchmarking of healthcare spending, and accountability for cost increases, increases which have become a feature of consolidation, and 2) increased oversight and public transparency during mergers, acquisitions, corporate affiliations, or changes of ownership. Doing both of these things would prioritize consumers and puts access to care ahead of hospital and provider interests.

This is good, but we must ensure everyone has a voice and everyone is protected. A stronger oversight process, that takes public input and stakeholder engagement seriously, will ensure that hospitals and providers will be held accountable for and potentially head-off anti-competitive or anti-consumer practices after the change is complete. We need to ensure the Attorney General is empowered to the fullest extent by having the General Assembly further outlawing anti-competitive practices, such as all-or-nothing bargaining, anti-tiering, or anti-steering clauses to name just a few. Pennsylvania wouldn't be alone in these endeavors, in this past legislative session, Oregon passed legislation along these lines and is now considered to have the most comprehensive merger review process in the country. Lastly, consumers are directly connected to the healthcare workforce, as care is dependent upon those who provide the care. Consolidation often brings changes such as staffing ratios and reductions in pay, among others. These changes have been known to lead to a decline in care, weaker inspection performances, and overall increased mortality rates. All of this should be fully explored in a comprehensive public interest review process.

Lawmakers have started to lead on this issue. Democratic Chair of the House Health Committee Dan Frankel has proposed legislation to lessen the harmful impact of consolidation. His proposed bills would create a system for fair contracting between hospital systems and provider networks that are part of a larger system with a unique ability to pay themselves for health care delivery, known as integrated delivery networks (IDNs). By increasing oversight in the beginning of the merger process, these pieces of

legislation allow for much needed accountability to keep our healthcare system in check, and keep costs from rising unnecessarily.

Lastly, Pennsylvania should consider creating and implementing an all-payer claims database (APCD) as a way to increase transparency and curb high costs. An APCD is a comprehensive database of healthcare claims and data from hospitals, providers and health plans. Comprehensive data is critical for understanding the healthcare market, and is a valuable and effective tool when creating targeted policies aimed at lowering costs. Further, coordinated data collection and reporting requirements for providers and hospitals could reduce administrative burdens and lessen the incentive to consolidate. An important feature of public-facing, searchable tool, would be the ability to see the negotiated rate paid by insurance plans/patients – not the chargemaster rate - for a specific procedure at a hospital. [19 states have already established](#) an APCD, and more are in the process of passing legislation. Pennsylvania should be next.

In closing, sky-high hospital prices are the main driver of escalating healthcare costs in Pennsylvania, costs which place affordable high-quality care out of reach for too many Pennsylvanians who desperately need it. Remembering that Pennsylvania had our nation's first hospital, a place where people came together to care for those most vulnerable, we must not forget the community benefit that hospitals have and must not prioritize corporate interests over the health and welfare of our communities and the people who live in them. We appreciate the attention being brought to this issue, and the opportunity to provide comments and recommendations. Thank you for your time, and please do not hesitate to reach out if you have questions or require any additional information.

Contact Information:

Antoinette Kraus, Executive Director
Pennsylvania Health Access Network
267-971-1680
akraus@pahealthaccess.org