Center for Health Policy Research

Beyond Patient Care:

Community Impact of Pennsylvania Hospitals

An Analysis of FY 2022 Data

October 2023

Beyond Patient Care: Community Impact of Pennsylvania Hospitals

By Ayse Yilmaz, MHA, Obaid Zaman, MPP, Sushma Sharma, PhD, Ki Lee, PhD

Acknowledgements

The Hospital and Healthsystem Association of Pennsylvania (HAP) would like to thank the Pennsylvania Department of Labor and Industry's Center for Workforce Information and Analysis for generously providing data critical to this effort.

Beyond Patient Care: Community Impact of Pennsylvania Hospitals

An Analysis of FY 2022 Data

Table of Contents

Introduction

Hospitals are vital to Pennsylvania communities.

They provide around-the-clock care for all people, regardless of ability to pay. During calendar year (CY) 2022, that included:[1]

1.4 MILLION inpatient discharges	**5.5 MILLION** emergency department visits	**40 MILLION** outpatient visits	**37,888** staffed beds	**124,056** births

But hospitals' critical role extends beyond patient care. Pennsylvania hospitals support their communities by:

- Addressing community health needs and, absent a public hospital system, providing critical public health infrastructure
- Providing charity care to Pennsylvanians when they need it most
- Supporting care for millions of Pennsylvanians by sharing in the cost of Medicare and Medicaid
- Educating and training the next generation of clinicians to care for Pennsylvanians
- Attracting billions in federal research funding for health care innovation
- Employing staff, building infrastructure, and purchasing equipment and supplies
- Supporting other industries such as facilities, grounds, and fleet maintenance
- Generating additional economic activity in sectors such as construction, financial services, and hospitality

This analysis examines how, even through the continued strain of a historic health care workforce crisis, ballooning expenses, insufficient payments, and other pressures that threaten hospitals' long-term financial sustainability, the hospital community continued its vital economic role regionally and across the state. It demonstrates that the viability of hospitals is critical to the health and economies of the commonwealth and its communities.

Findings from this paper should be used to inform policy discussions surrounding topics that affect Pennsylvanians' access to high-quality health care, including, but not limited to, strengthening hospitals' long-term sustainability, bolstering the health care workforce, expanding behavioral health care access, promoting innovative care and payment models, advancing health equity, reforming medical liability, serving rural communities and vulnerable patient populations, and improving licensing and credentialling.

Pennsylvania Hospitals:

- ✓ Deliver **$9 BILLION** in community benefit
- ✓ Contribute **$182 BILLION** to state and local economies
- ✓ Support **590,186 JOBS** for Pennsylvanians
- ✓ Generate more than **$37.4 BILLION** in wages, salaries, and benefits

Community Benefits of Pennsylvania Hospitals

Hospitals invest in the health of their communities.

This includes programs and initiatives that directly target community and population health needs, public health efforts, charity care and financial assistance to support patients who are uninsured or underinsured, and other community-focused activities. Hospitals also partner with the state and federal governments to support health care access by absorbing shortfalls from Medicare and Medicaid, which pay below the cost of providing care.[2]

Non-profit hospitals—71 percent of hospitals statewide—report to the Internal Revenue Service (IRS) how much community service they provide each year through Form 990, Schedule H. This includes charity care and other community benefits at cost, bad debt, and Medicare shortfall. Additionally, a limited portion of the community benefit provided by investor-owned hospitals is captured via Centers for Medicare & Medicaid Services (CMS) cost reports. Between these sources, Pennsylvania hospitals reported a total community benefit of $9 billion for fiscal year (FY) 2022. (Figure 1).

Figure 1. Total Community Benefits Reported by Pennsylvania Hospitals

Community benefit	Total Community Benefits of all PA hospitals
Financial Assistance & Other Community Benefits at Cost	
Charity care (financial assistance at cost)	$397,539,168
Medicaid shortfall	$2,636,279,265
Cost of other government programs	$73,727,708
CHIP shortfall	$116,201
Community health improvement services and community benefit operations	$244,968,191
Health professions education	$1,186,281,004
Subsidized health services	$796,658,154
Research	$693,840,001
Cash and in-kind contributions for community benefit	$184,557,669
Bad Debt & Medicare	
Medicare shortfall (including DSH and IME)	$2,628,548,673
Bad debt	$141,165,642
Total Community Benefit	**$8,983,681,676**

Community Benefits of Pennsylvania Hospitals (cont.)

While these figures represent a significant investment in Pennsylvania communities, they are a conservative estimate of Pennsylvania hospitals' total community benefit due to the limitations of publicly reported data. National studies confirm that non-profit and investor-owned hospitals had similar unreimbursed Medicaid costs as a share of expenses.[3]

Some specific needs hospitals address in their communities are highlighted below:

Community health needs: Non-profit hospitals conduct a community health needs assessment (CHNA) every three years and adopt an implementation strategy to meet the community health needs identified through the CHNA. Hospitals identifies their communities' needs such as financial barriers, illness prevention, adequate nutrition, and adopt implementation strategies using the input of public health experts representing their communities. Below are a few examples of the needs Pennsylvania hospitals have addressed in 2022:

Mental health conditions (Children's Hospital of Philadelphia)

CHOP identified mental health challenges, such as high rates of depression among youth and adults and persisting suicide rate among youth, as the highest priority need within its community. Potential solutions CHOP is proposing include improved care coordination; increased access to safe, structured after-school activities; and increasing the behavioral health workforce.

Preventing illness and reducing health disparities (Jefferson Health)

Jefferson Health proposes addressing chronic health conditions through public education, virtual wellness programs, and better coordination between community organizations and health system partners. Jefferson recognizes racism as a public health crisis and proposes increasing people of color in health care leadership and hiring people with lived experience to work in historically marginalized communities.

Diversity, respect, equity, and inclusion (Main Line Health)

Main Line Health is continuing to focus on the needs of the diverse communities it serves through several initiatives, like increasing access to LGBTQ-inclusive care and services, hiring to reflect the diversity of the community it serves, and educating its workforce to provide the best care to its diverse community.

Health care access and quality (Lancaster General Health)

Lancaster General Health determined that health care access and quality is one of the major needs of Lancaster County. It's focusing on initiatives that increase access to health care, such as addressing social determinants of health and eliminating health disparities to achieve health equity.

Substance use disorder (Heritage Valley Health System)

Heritage Valley Health System identified substance use disorder treatment as a major area of need and is planning to combat this challenge by increasing its inpatient and outpatient service capacity and to provide programs to help those recovering from substance use disorder to stay healthy.

Rural Maternal Health Disparities (UPMC Center for High-Value Health Care)

UPMC Center for High-Value Health Care recognizes that pregnant and postpartum individuals living in rural communities are more likely to experience poor maternal health outcomes than the general population. The research-focused objectives of the project include directly engaging with rural pregnant/postpartum individuals to understand their maternal health-related needs and priorities, and determine strategies to support their engagement as members of a research team.

Training tomorrow's health care workforce

According to the Association of American Medical Colleges, the nation will experience a shortage of physicians approaching 124,000 by 2034.[4] A 2021 Mercer report projected that Pennsylvania will face a shortfall of 20,345 registered nurses by 2026, the most severe shortage among all states.[5] A 2022 HAP survey of Pennsylvania hospitals found average statewide vacancy rates are more than 30 percent for registered nurses, nursing support staff, certified registered nurse practitioners, respiratory therapists, and medical technologists/lab technicians.[6]

Pennsylvania hospitals train thousands of doctors, nurses, and other clinicians each year through their partnerships with the commonwealth's 1,322 health care professional training programs. This includes 305 nursing programs and nine medical schools associated with Pennsylvania hospitals and health systems. Pennsylvania hospitals also partner with community organizations and educators to recruit, educate, and train tomorrow's health care professionals. Some examples of these partnerships include:

Talent Attraction Program (Allegheny Health Network)

This unique work-study initiative grows the number of allied health professionals and nurses from underrepresented communities. Participants have their tuition covered and receive specialized support as they train for and advance their health care careers.

Cultural & Linguistic Workforce Development Centers (St. Luke's University Health Network)

This partnership with the Hispanic Center Lehigh Valley helps develop a bilingual health care workforce by providing specialized training and education for health care careers along with support to complete English as a Second Language (ESL) and/or GED programs. Participants can enroll in programs to become phlebotomists, nurse's aides, dental assistants, emergency medical technicians, community health workers, EKG technicians, and pharmacy technicians.

Pathways Programs (Reading Hospital – Tower Health)

This program introduces students to the wide array of careers in health care through a variety of pathways, including a high school internship program, job shadowing opportunities, youth volunteering, and a college student internship focused on screening patients for social determinants of health and referral to support services.

Healthcare Careers Internship Program (Evangelical Community Hospital)

This annual internship program introduces local high school students to health care careers. Students get hands-on experience interacting with hospital staff and patients and learn a variety of patient care skills, including CPR certification, lifting and transferring techniques, personal care skills, taking vital signs, bathing, making hospital beds, and more.

Economic Impact of Pennsylvania Hospitals

Definitions

Hospitals' economic contributions consist of the **direct impact**, **indirect impact**, and **induced impact** of hospital economic activity.[8] To clarify, the following definitions appear throughout this white paper:

Direct impact: This is what hospitals spend for operations, including wages they pay to employees, and everything they purchase—from supplies, equipment, and technology, to services provided through contracts with third parties (like contracts for laundry services or parking operations).

Indirect impact: This is the economic activity generated by third-party suppliers as a result of their contracts and financial arrangements with hospitals. For example, indirect impact includes the wages that pay the parking attendant who works for the local business to which the hospital outsources parking services.

Induced impact: This relates to what a physician, nurse, lab technician, or even the contracted parking attendant spends in the hospital's neighborhood for coffee, lunch, groceries, dry cleaning, etc. In other words, it is the change in economic activity resulting from the changes in spending by workers whose earnings are affected by a final demand change. Sometimes called the "household spending effect," it is the economic activity generated by all workers whose earnings are affected by a hospital's direct and indirect impacts.[9] Induced impact includes spending by hospital employees, as well as employees of third-party suppliers that serve hospitals.

Ripple impact: This is the sum of the hospital's indirect and induced impacts. Multipliers are used to calculate economic ripple impacts—HAP uses separate regional and state Regional Input-Output Modeling System (RIMS) multipliers, obtained from the U.S. Department of Commerce's Bureau of Economic Analysis (BEA).

Total economic impact: This is the combined economic impact attributable to hospitals' direct impact plus their ripple impact as those dollars circulate across the commonwealth.

Methodology

The HAP Center for Health Policy Research based its economic impact analysis of statewide and regional hospital economic activity on data received from the U.S. Department of Health & Human Services (HHS) FY 2022 Hospital Cost Report Information System (HCRIS), and other published sources. To analyze the statewide and regional impact of employment and salaries, HAP obtained 2022 hospital employment and wages by region from the Pennsylvania Department of Labor and Industry's Center for Workforce Information and Analysis.

To calculate ripple impacts, HAP applied statewide and regional 2020 RIMS multipliers, which were calculated by the BEA during March 2022.

HAP used state and hospital employee data based on Quarterly Census of Employment and Wages (QCEW) reports from the U.S. Bureau of Labor and Statistics.

Analyses of top employers were based on 2022 fourth-quarter county profiles from the Pennsylvania Department of Labor and Industry's Center for Workforce Information and Analysis.

HAP's source for HHS research funding was NIH RePORTER, which includes reported funding from the National Institutes of Health (NIH), the Agency for Healthcare Research and Quality, and other HHS operating divisions.

Hospital utilization data were obtained from the Pennsylvania Department of Health, Division of Health Informatics' Hospital Questionnaire, CY 2022, and the Pennsylvania Health Care Cost Containment Council's (PHC4) Financial Analysis, Fiscal Year 2022 (for General Acute Care and Non-General Acute Care hospitals).

Pennsylvania Hospitals' Statewide Economic Impact

The total statewide impact of hospital economic activity

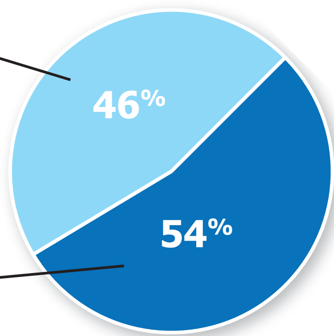
As depicted in Figure 2, Pennsylvania hospitals and health systems contribute $182 billion to the commonwealth's economy through:

The hospital community's direct and ripple impact on Pennsylvania's 2022 economy represents 20 PERCENT of the commonwealth's 2022 gross domestic product.

Figure 2: Total Economic Activity of Pennsylvania Hospitals, 2022

- **$83 BILLION** in **direct impact**—the dollars hospitals pay out for employee salaries, wages, and benefits and for the many goods and services needed to provide health care services and support hospital and health system operations
- **$99 BILLION** in **ripple impact**—the additional economic activity that results from the circulation of hospital dollars in local communities and across the state

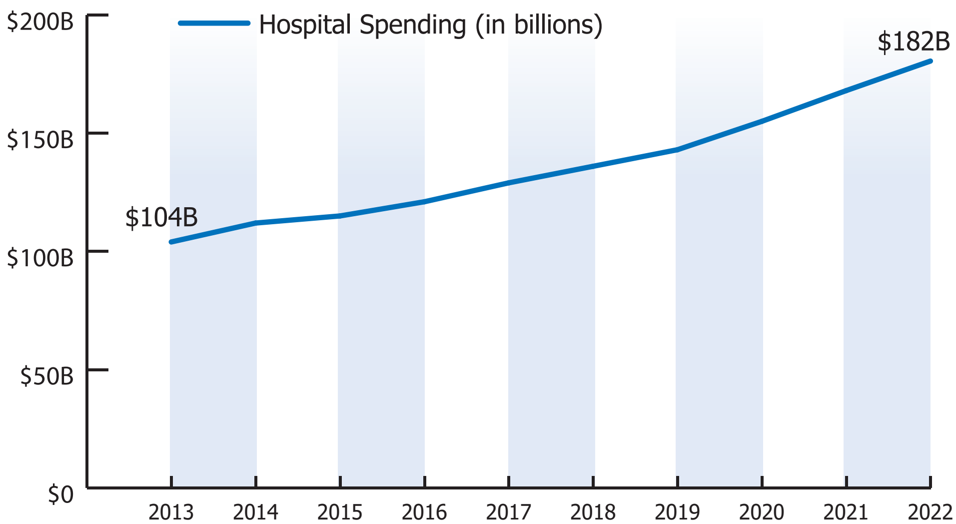
TOTAL: $182 BILLION



Source: HAP's 2023 analysis of HHS HCRIS FY 2022 data, coupled with data provided directly to HAP by Pennsylvania health systems

HAP's analysis confirms that the industry's economic activity has increased steadily—by **76 PERCENT** during the last 10 years (see Figure 3).

Figure 3. The Trend in the Total Economic Activity of Pennsylvania Hospitals: 2012–2022



Source: HAP's annual analyses of HHS HCRIS data (2012 through 2022), coupled with data provided directly to HAP by Pennsylvania health systems (2012 through 2022)

Pennsylvania Hospitals' Statewide Economic Impact (cont.)

While Pennsylvania hospitals remain economic drivers in their communities, many face financial strain in the wake of the COVID-19 pandemic and historic inflation. Based on data from PHC4, 39 percent of Pennsylvania's general acute care hospitals posted a negative operating margin for FY 2022 and another 13 percent had an operating margin of less than 4 percent.[10]

Hospital community's contributions to Pennsylvania's Gross Domestic Product

The hospital industry has been and will continue to be a leading contributor to the economy. Data from the BEA indicate that Pennsylvania's gross domestic product (GDP) during 2022 totaled $932 billion (in current dollars).[11] When considering the direct plus ripple impact of the hospital community on Pennsylvania's economy, hospitals account for 20 percent of the commonwealth's 2022 GDP.[12]

According to an analysis of private industries taken from BEA data, hospitals are ranked 10th in terms of their direct economic contribution to the Pennsylvania state GDP (Figure 4).[13] Beyond this direct impact, Pennsylvania's hospital community creates additional economic activity in many industries such as construction; real estate; and professional, scientific, and technical services.[14]

Figure 4. Annual Gross Domestic Product by Industry in Pennsylvania, 2020.*

Industry	Contribution to State GDP (Rank)
Finance, insurance, real estate, rental, and leasing	1
Professional and business services	2
Manufacturing	3
Wholesale trade	4
Retail trade	5
Ambulatory health care services	6
Broadcasting (except Internet) and telecommunications	7
Transportation and warehousing	8
Construction	9
Hospitals	**10**

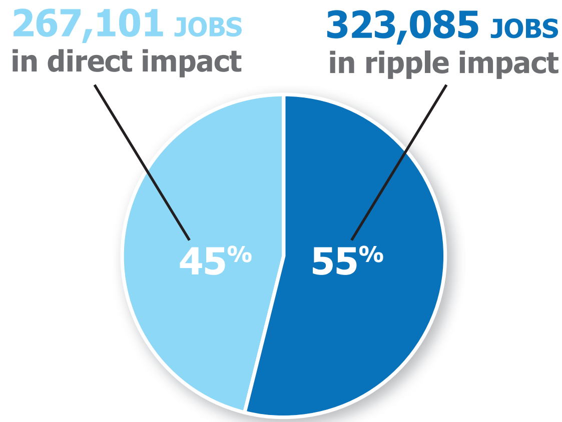
*This ranking compares all industries at each NAICS Industry level so industries listed here may belong to different hierarchical levels.

Total statewide economic impact on employment

Pennsylvania hospitals directly employed more than 267,000 workers during 2022. Employment generated by the industry's indirect and induced economic effects resulted in the employment of more than 323,000 Pennsylvanians. The total number of hospital-supported jobs, therefore, is more than 590,000—or one of every ten jobs in the state (i.e., 10% of Pennsylvania's entire workforce).[15] (See Figure 5.)

Figure 5. Total Employment Attributable to Hospitals during 2022

TOTAL: 590,186



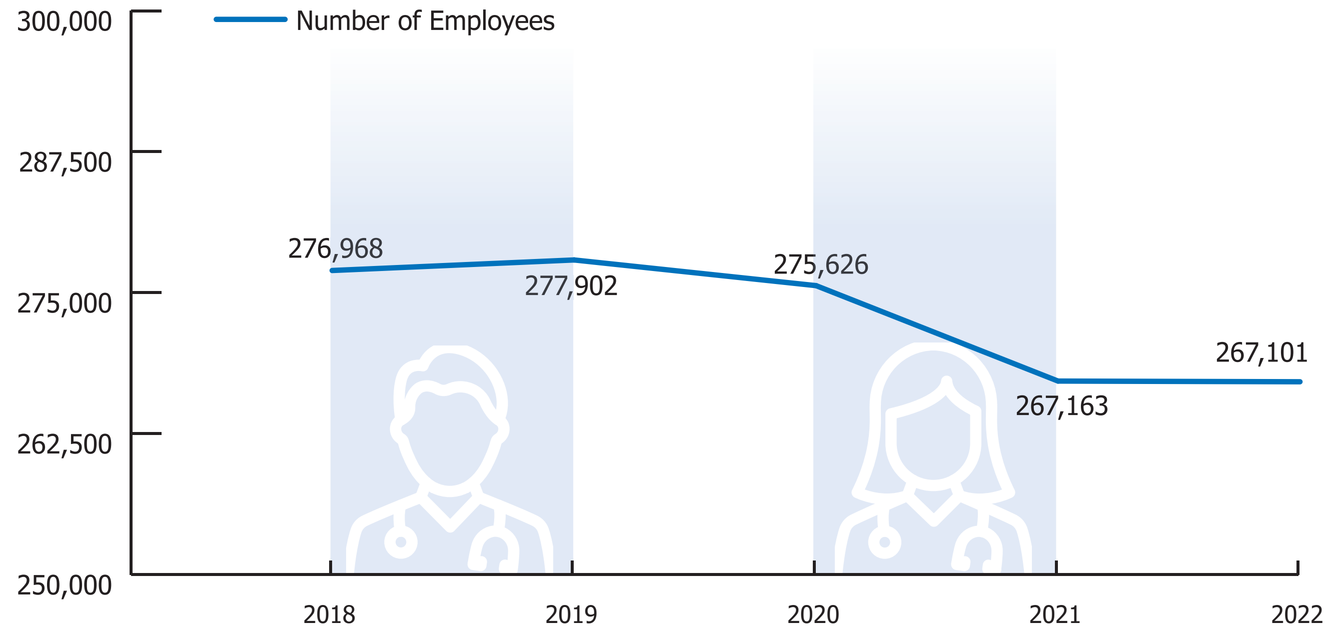
Source: Annual Census of Employment and Wages (QCEW) reports from the U.S. Bureau of Labor and Statistics, 2018–2022.

Figure 6 illustrates the year-to-year change in employment at Pennsylvania hospitals from 2018 to 2022.[16]

As HAP reported earlier this year, amid a national health care workforce crisis, Pennsylvania faces some of the most persistent and severe shortages of health care professionals in the nation. Through a December 2022 survey conducted by HAP, Pennsylvania hospitals reported significant vacancy rates in key clinical positions and cited lack of qualified candidates as a primary challenge in filling open positions.[17]

Despite these challenges, hospitals remain among the top job-creating sectors in the commonwealth, as discussed in more detail later in this section.

Figure 6. Employment at Pennsylvania Hospitals, 2018–2022

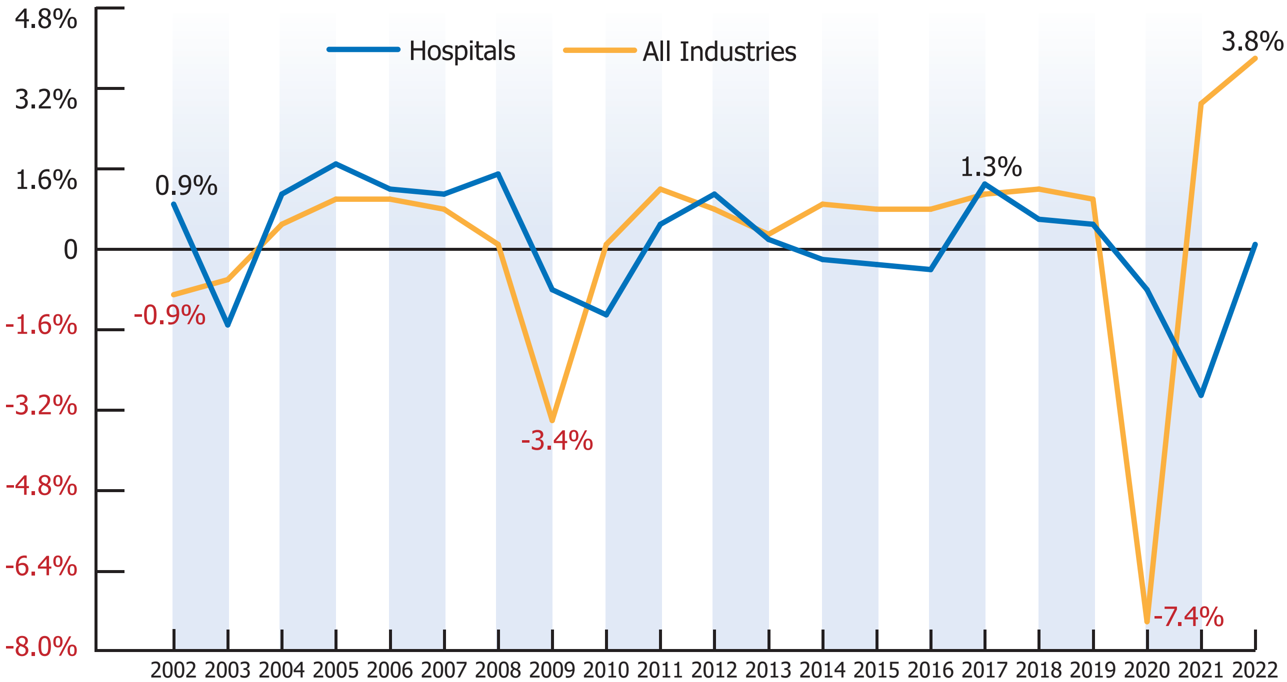


Source: Annual Census of Employment and Wages (QCEW) reports from the U.S. Bureau of Labor and Statistics, 2018–2022.

Hospitals have been a steady employer for the commonwealth since the beginning of the century.

During statewide financial struggles, hospitals continue to support jobs for their communities (see Figure 7).

Figure 7. Percent Change in Employment Compared to Previous Year for Hospitals and All industries in PA



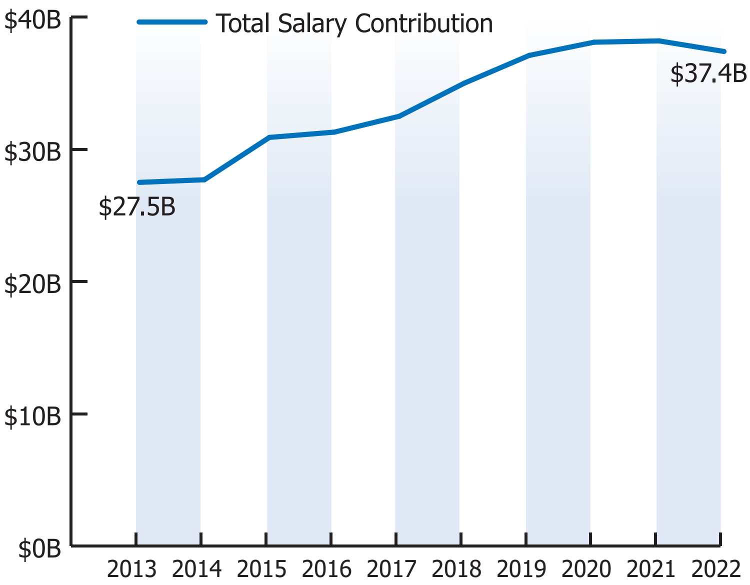
Total statewide economic impact on wages

Pennsylvania hospitals generated more than $37.4 billion in direct and ripple wages during 2022, including $19.5 billion in direct wages and more than $17.9 billion in ripple wages (i.e., indirect plus induced—see the "Definitions" section for details) across hospital-supported industries (see Figure 8).

A longitudinal view illustrates that salaries provided and supported by Pennsylvania hospitals also have been increasing. Total hospital salary contributions in the commonwealth increased **36 PERCENT** from 2012 to 2022 (see Figure 9).

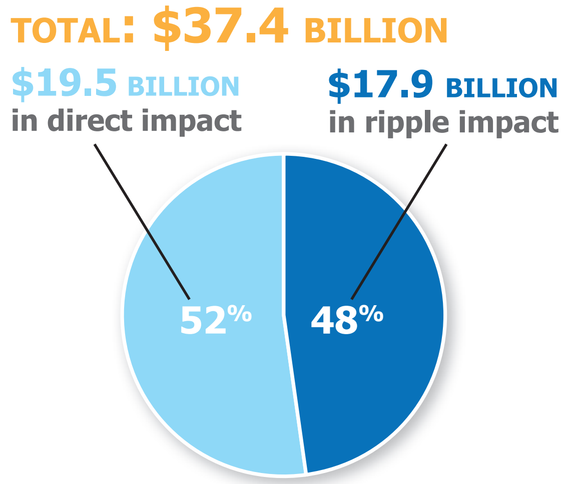
Hospitals also provide higher average annual wages for their employees ($74,138) compared to all industries throughout Pennsylvania ($67,279) (see Figure 10).[18]

Figure 9. Total Salary Contribution Trends of Pennsylvania Hospitals, 2012–2022



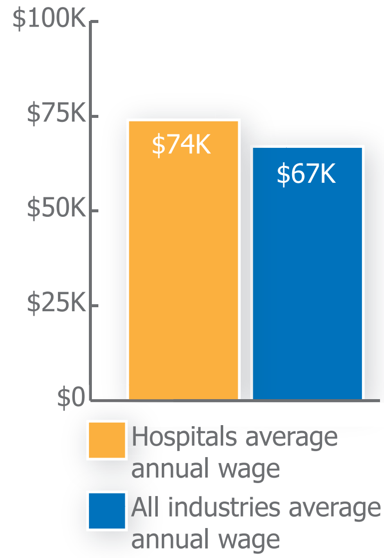
Source: HAP's annual economic impact analyses, 2012–2022

Figure 8. Total Salary Contribution by Pennsylvania Hospitals, 2022



Source: HAP's annual economic impact analysis, 2022

Figure 10. Statewide Average Annual Wages for Hospitals and All Industries, 2022



Source: Pennsylvania Department of Labor & Industry, Center for Workforce Information & Analysis

Figure 11. Pennsylvania Industry Ranks in Average Annual Employment and Total Annual Wages, 2022

Based on a number of financial indicators, hospitals are among the top-employing industries in Pennsylvania. A state analysis of 75 industries in Pennsylvania shows that hospitals rank fifth in the number of people they employ and fourth in the total wages they pay annually (see Figure 11).[19]

Selected Industry Title	Avg. Annual Employment (Rank)	Total Annual Wages Rank
Food services and drinking places	1	10
Professional, scientific, and technical services	2	1
Ambulatory health care services	3	2
Administrative and support services	4	5
Hospitals	**5**	**4**
Social assistance	6	13
Educational services	7	7
Nursing and residential care facilities	8	14
Specialty trade contractors	9	8
Management of companies and enterprises	10	9

Pennsylvania Hospitals' Regional Economic Impact

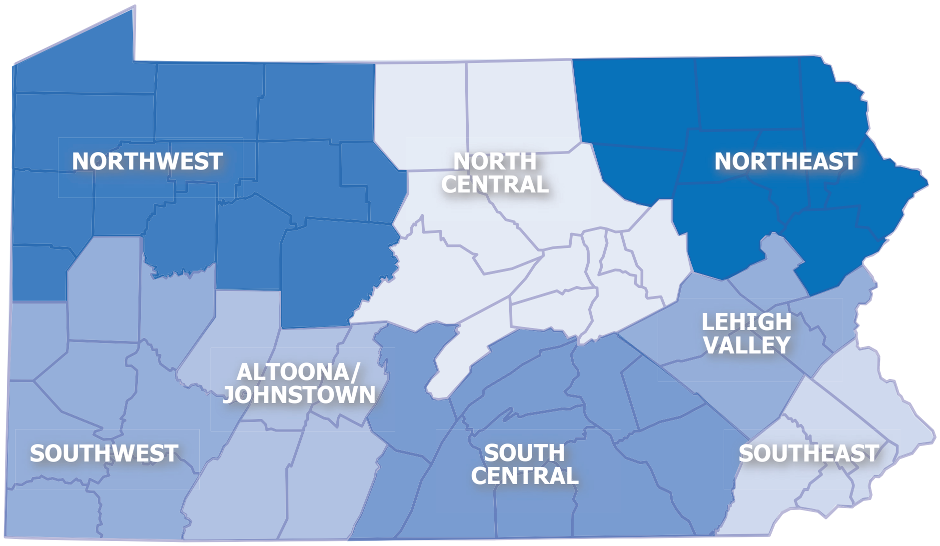
Pennsylvania is divided into nine regions by PHC4.[20] HAP combined the two Philadelphia-area regions into one ("Southeast"), as shown in Figure 10. The list of counties in each region is in Appendix A.

The regional impact of hospital economic activity

Examining hospital economic activity by region illustrates the significant effect of the hospital community on local economies across Pennsylvania, ranging from $2 billion total economic activity in the smallest region (Altoona/ Johnstown) to $52 billion in the largest region (Southeast). To calculate the hospital community's regional economic impact, HAP applied regional multipliers from the BEA.[21]

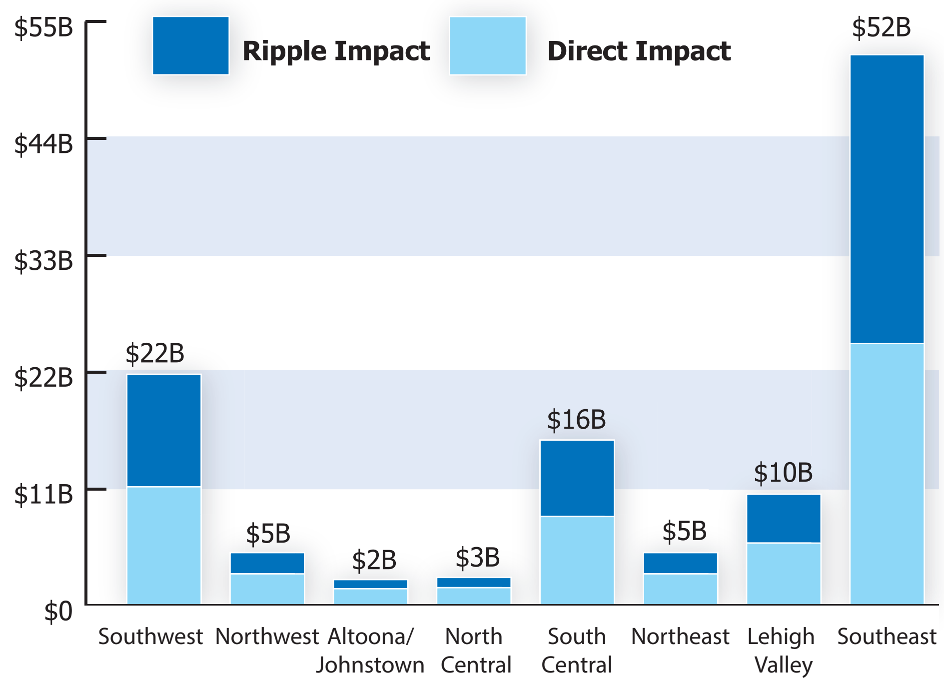
Figures 13 through 15 represent regional contributions in total (direct plus ripple) hospital economic activity, total salaries, and total employment.

Figure 12. Pennsylvania Regions



Source: PHC4

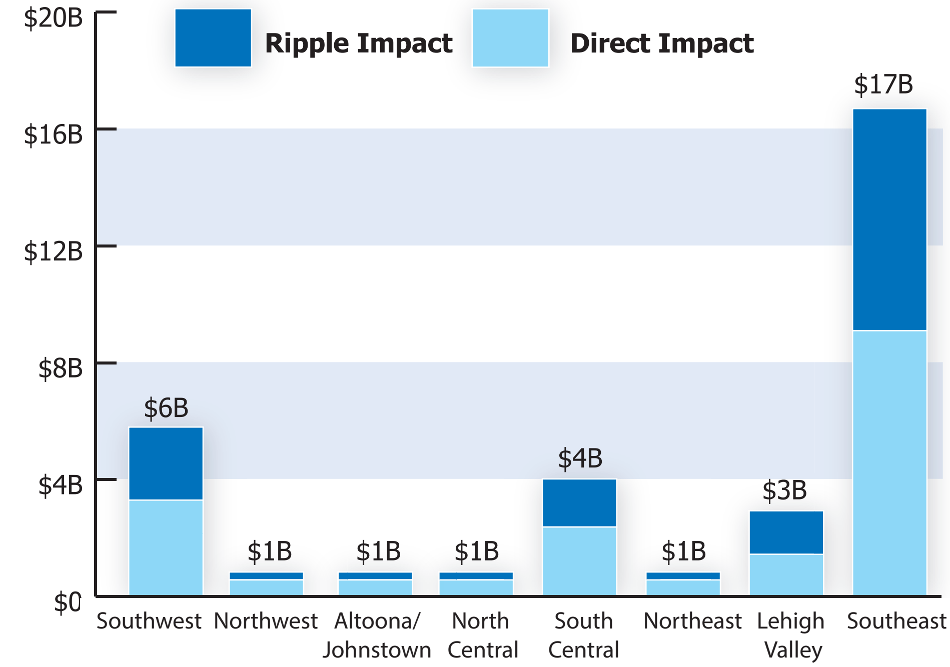
Figure 13. Pennsylvania Hospital Economic Activity by Region, 2022



Source: HAP's 2023 analysis of HHS HCRIS FY 2022 data, coupled with data provided directly to HAP by Pennsylvania health systems

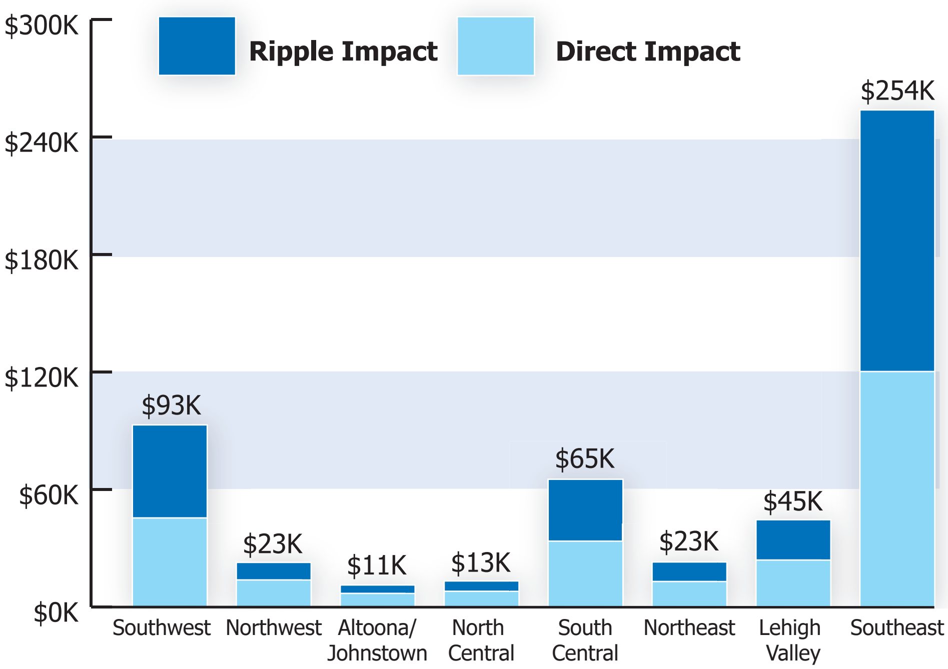
Pennsylvania Hospitals' Regional Economic Impact (cont.)

Figure 14. Pennsylvania Hospital Salary Contributions by Region, 2022



Source: HAP's 2023 analysis of Pennsylvania Department of Labor & Industry, 2022 Q4 Hospital Employment and Wages, by Region

Figure 15. Pennsylvania Hospital Employment Contributions by Region, 2022



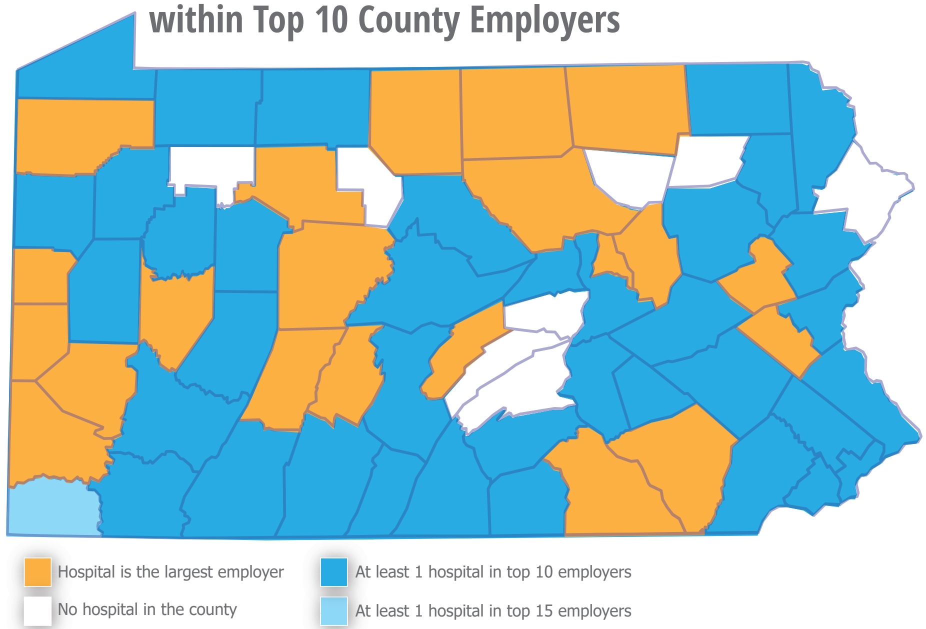
Source: HAP's 2023 analysis of HHS HCRIS FY 2022 data, coupled with data provided directly to HAP by Pennsylvania health systems

Hospitals Are Top Employers Within Their Counties

HAP's analysis of each county's top 50 employers and industries reveals that:

- In 58 counties—87 percent of Pennsylvania's 67 counties— at least one hospital is among the top ten largest employers (Figures 16-18)
- In all of the 39 rural counties that have a hospital—81 percent of Pennsylvania's 48 rural counties, at least one hospital is among the top ten largest employers
- In 21 counties, a hospital is the largest employer (Figures 16 and 17)[22]

Figure 16. Pennsylvania Counties and Hospitals' Rank within Top 10 County Employers



Source: Pennsylvania Department of Labor and Industry, Center for Workforce Information and Analysis

Figure 17. List of Counties with Hospitals as Top Employer

Top Employer (21 Counties)	
Allegheny	Lancaster
Armstrong	Lawrence
Beaver	Lehigh
Blair	Lycoming
Bradford	Mifflin
Cambria	Montour
Carbon	Potter
Clearfield	Tioga
Columbia	Washington
Crawford	York
Elk	

Figure 18. List of Counties with at Least One Hospital within their Top 10 Employers

Top 10 Employer (58 Counties)			
Adams	Clearfield	Lackawanna	Philadelphia
Allegheny	Clinton	Lancaster	Potter
Armstrong	Columbia	Lawrence	Schuylkill
Beaver	Crawford	Lebanon	Somerset
Bedford	Cumberland	Lehigh	Susquehanna
Berks	Dauphin	Luzerne	Tioga
Blair	Delaware	Lycoming	Union
Bradford	Elk	McKean	Venango
Bucks	Erie	Mercer	Warren
Butler	Fayette	Mifflin	Washington
Cambria	Franklin	Monroe	Wayne
Carbon	Fulton	Montgomery	Westmoreland
Centre	Huntingdon	Montour	York
Chester	Indiana	Northampton	
Clarion	Jefferson	Northumberland	

Federal Health Care Research Funds

Pennsylvania hospitals and universities with hospital-affiliated medical schools have been remarkably successful at securing competitive federal health research dollars. During FY 2022, National Institutes of Health (NIH) awarded funds to only 21 percent of its applicants.[23] However, Pennsylvania hospitals and universities with hospital-affiliated medical schools brought nearly $1.9 billion in research awards from federal agencies (i.e., operating divisions within HHS) to Pennsylvania.[24] This constitutes 84 percent of the $2.2 billion in federal research funding awarded during FY 2022 to all Pennsylvania organizations (including research institutes, pharmaceutical companies, and non-hospital-affiliated universities). For a sense of scale, the research funds hospitals bring to the commonwealth would pay all the wages for Pennsylvania's accommodation industry.[25]

Hospitals play a key role in making Pennsylvania a national leader in medical research. During FY 2022, Pennsylvania ranked fourth among states with 4,463 funded projects and ranked fifth in funding with $2.2 billion received from federal agencies (Figure 19).[26]

Figure 20 provides the breakdown of research funding to Pennsylvania's hospitals and hospital-affiliated medical schools.

Figure 19: Health Research-related Federal HHS Funds received by Pennsylvania Organizations, FY 2022

Agency	Total Funding to all Pennsylvania-based organizations	Funding to Pennsylvania Hospitals and Universities with Medical Schools
AHRQ	$8,639,592	$8,208,188
CDC	$15,362,063	$13,337,305
FDA	$14,424,526	$2,525,384
NIH	$2,182,981,880	$1,862,306,752
Total	**$2,221,408,061**	**$1,886,377,629**

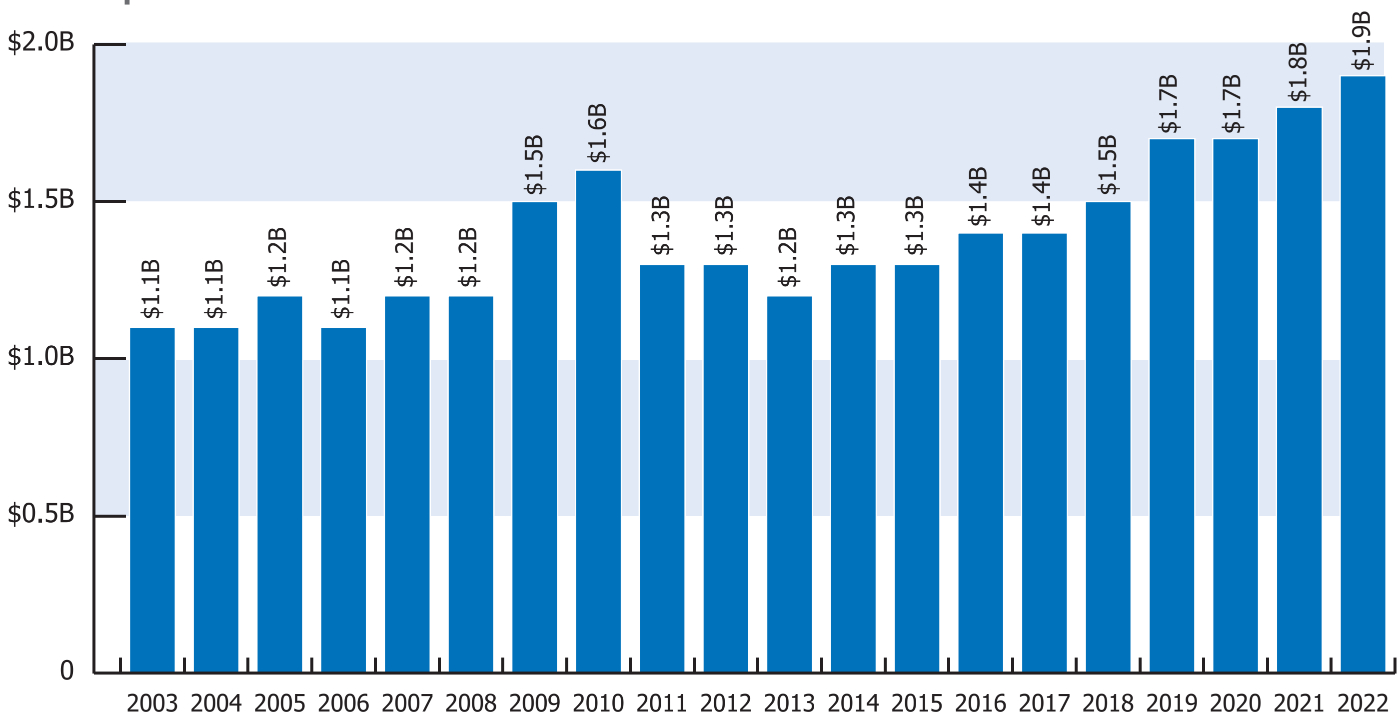
Figure 20: HHS Funds Awarded to Pennsylvania's Hospitals and Universities with Hospital-affiliated Medical Schools, FY 2022

Agency	Number of Projects	FY 2022 Total Funding
Children's Hospital of Philadelphia	317	$159,401,665
Drexel University	138	$60,610,711
Geisinger Clinic	14	$11,065,132
Pennsylvania State University	359	$147,780,521
Temple University	177	$77,098,069
The University of Pittsburgh	1,290	$679,688,042
Thomas Jefferson University	196	$79,946,843
University of Pennsylvania	1,366	$670,786,646
Total	**3,799**	**$1,862,306,752**

Federal Health Care Research Funds (cont.)

These organizations have been a major source for funding for the last 20 years. As seen in the figure below, Pennsylvania's hospitals and hospital-affiliated universities have brought nearly $28 billion in research funding to the state since 2003.[27]

Figure 21. Total HHS Funding by PA Hospitals and Hospital-affiliated Universities 2003-2022



Growing Role of Hospitals in Pennsylvania Economy:
Implications from the Data

Demographics show growth of elderly population: Demand for clinicians is rising as baby boomers age and live longer. According to U.S. Census 2021 estimates, Pennsylvania's population of those aged 65 and older (19.6%) exceeded the national average (17.3%), while Pennsylvanians living with disabilities (9.9%) also exceeded the national average (8.7%).[28] These numbers are expected to grow. Projections by the Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly estimate that, between 2010 and 2040, Pennsylvania's 65-and-older population will increase 66.4 percent.[29] Demand for health care for the elderly—often the most frequent users of hospital services—is anticipated to continue its upward trajectory.

Growth of health care jobs: Occupations related to health care also are growing steadily in Pennsylvania. A report by Penn State's Center for Economic and Community Development found an 18.3 percent increase in health care and social assistance sector jobs between 2008 and 2019, topping the list of the 11 growing industries across the commonwealth during that timeframe.[30] Despite the projected shortage of physicians, the Pennsylvania Department of Labor & Industry also projects the health care and social assistance industry will continue to be the biggest industry in Pennsylvania until 2030, with average estimated gains of 13,000 jobs each year.[32] Pennsylvania Department of Labor & Industry also projects that many health care support and health care practitioners/technical occupations such as physician assistants and nurse practitioners will be among the top occupations with more than 30 percent growth by 2030.[31]

Hospitals are expected to be a growing sector in the commonwealth. According to Pennsylvania Department of Labor and Industry, Pennsylvania hospitals are expected to employ more than 292,000 employees by 2030—a nearly 6 percent increase compared to 2020.[33]

Supporting Pennsylvania's workforce: The U.S. Centers for Disease Control and Prevention reports that employee absenteeism associated with five common diseases or risk factors (i.e., hypertension, diabetes, smoking, physical inactivity, and obesity) cost businesses more than $36.4 billion annually.[34] By providing services designed to improve the health of the commonwealth's workforce, Pennsylvania hospitals help to reduce the cost of this lost productivity.

Conclusion

Hospitals are critical to their communities, providing significant community and economic benefits.

Hospitals provide nearly $9 billion in community benefits and serve their communities by addressing population health needs, educating tomorrow's health care professionals, providing both charity care and unreimbursed care, and absorbing shortfalls from Medicare and Medicaid.

While hospitals are economic anchors in the communities they serve, they also provide extensive direct and ripple economic impacts throughout Pennsylvania. These hospitals provided the commonwealth a total economic value of $182 billion during 2022 in economic activity, including $83 billion in direct and $99 billion in ripple impacts.

The total economic value includes $37.4 billion in salaries, which support thousands of Pennsylvania families. Indeed, Pennsylvania hospitals and health systems contribute to 590,186 jobs, or 10 percent of the commonwealth's entire workforce—that means hospitals support one out of ten jobs across the state.[35] HAP's analysis shows a steady increase in all these values through the last ten years.

Helping to pave the way for new evidence-based technology and cutting-edge care delivery, during 2022 alone, Pennsylvania's hospitals and universities with hospital-affiliated medical schools attracted nearly $1.9 billion in federal research funds. These investments improve health and health care delivery not just for Pennsylvanians, but for patients across the country and around the world.

Appendix A

Counties Comprising Each Region

PHC4	Counties
Southwest	Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Washington, and Westmoreland
Northwest	Cameron, Clarion, Clearfield, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Potter, Venango, and Warren
Altoona/Johnstown	Bedford, Blair, Cambria, Indiana, and Somerset
North Central	Centre, Clinton, Columbia, Lycoming, Mifflin, Montour, Northumberland, Snyder, Tioga, and Union
South Central	Adams, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Perry, and York
Northeast	Bradford, Lackawanna, Luzerne, Monroe, Pike, Sullivan, Susquehanna, Wayne, and Wyoming
Lehigh Valley	Berks, Carbon, Lehigh, Northampton, and Schuylkill
Southeast	Bucks, Chester, Delaware, Montgomery, and Philadelphia

Endnotes

[1] Data is from HAP's internal Research Department Data Warehouse which combines data from the Pennsylvania Department of Health (PADOH), the Pennsylvania Health Care Cost Containment Council (PHC4) and other CMS data files.

[2] HAP's analysis of Schedule H data filed in 2021 for non-profit hospital benefits and FY2021 Medicare Cost Reports for for-profit hospital community benefits. Schedule H data: Internal Revenue Service (IRS), Charities and Nonprofits. Retrieved from: https://www.irs.gov/charities-and-nonprofits. Last accessed: 06/30/2023. In a fiscal year 2022 (FY22) basis, FY22 began on July 1, 2021, and ended on June 30, 2022. A small number of facilities (10) operate on a December 31, (2021) fiscal year end. Medicare Cost Reports data: Centers for Medicare and Medicaid Services. Cost Reports. FY 2021. Retrieved from: https://www.cms.gov/research-statistics-data-and-systems/downloadable-public-use-files/cost-reports. Last accessed: 06/22/2023.

[3] Bai G, Zare H, Hyman DA. Evaluation of Unreimbursed Medicaid Costs Among Nonprofit and For-Profit US Hospitals. JAMA Network Open. 2022 Feb 1;5(2):e2148232.

[4] "The Complexities of Physician Supply and Demand: Projections from 2019 to 2034." Published by Association of American Medical Colleges, June 2021. Retrieved from: https://www.aamc.org/media/54681/download. Last accessed: 06/27/2023.

[5] "US healthcare labor market." Published by Mercer, 2021. Retrieved from: https://www.mercer.us/content/dam/mercer/assets/content-images/north-america/united-states/us-healthcare-news/us-2021-healthcare-labor-market-whitepaper.pdf Last accessed: 09/12/2023.

[6] The Hospital and Healthsystem Association of Pennsylvania. Addressing Member Hospital Workforce Needs, Executive Summary. 01/23/2023. Retrieved from: https://www.haponline.org/Resource-Center?resourceid=766. Last accessed: 09/06/2022.

[7] National Center for Education Statistics, Integrated Postsecondary Education Data System. Number of Healthcare-Related Training Programs in PA. 2020-2021. Data obtained from Pennsylvania Department of Labor & Industry on 06/29/2023.

[8] Bureau of Economic Analysis, U.S. Department of Commerce. Regional Input-Output Modeling System (RIMS II): An Essential Tool for Regional Developers and Planners. See Glossary, p. 67. December 2013. Retrieved from: https://apps.bea.gov/regional/pdf/rims/RIMSII_User_Guide.pdf. Last accessed: 12/15/2020.

[9] Ibid.

[10] Pennsylvania Health Care Cost Containment Council. Financial Analysis 2022-General Acute Care Hospitals. June 2023. Retrieved from: https://www.phc4.org/reports/fin/22/docs/fin2022report_volumeone.pdf. Last accessed: 07/25/2023.

[11] Bureau of Economic Analysis, U.S. Department of Commerce. GDP and Personal Income. See Interactive Tables, Annual Gross Domestic Product (GDP) by State, GDP in current dollars. Selection criteria: NAICS, Pennsylvania, 2022. Retrieved from: https://www.bea.gov/itable/regional-gdp-and-personal-income. Last updated: 03/31/2023. Last accessed: 05/16/2023.

[12] HAP calculated the hospital community's contribution to the GDP by dividing the 2022 Pennsylvania GDP ($932 billion) by the community's total—direct plus ripple—economic impact ($182 billion).

[13] Industry categories are a mix of North American Industry Classification System (NAICS) sector and sub-sector groupings of industries. Sub-sectors were used where applicable, such as to capture data specifically for the Hospital industry. Other industries only have sector level data available and these were included when determining the ranking of industries.

[14] HAP's 2023 analysis of 2021 annual data downloaded from U.S. Bureau of Economic Analysis. Annual Gross Domestic Product by State, GDP in current dollars. Selection Criteria: NAICS, Pennsylvania, All Statistics in Table, 2021. Retrieved from: https://www.bea.gov/itable/regional-gdp-and-personal-income. Last accessed: 08/25/2023.

[15] HAP's analysis of annual 2022 All Industries Employment data received from U.S. Bureau of Labor and Statistics and the results of HAP's 2022 Economic Impact Analysis (590,186 total jobs supported by Pennsylvania hospitals).

[16] U.S. Bureau of Labor and Statistics, Quarterly Census of Employment and Wages (QCEW) Dataviewer. See Multi-Year Data option #19 for one area, one industry, annually. Selection criteria: Period: 2018 to 2021; Ownership: Private and State Government; Industry "NAICS 622 Hospitals." Last accessed: 09/09/2022.

[17] The Hospital and Healthsystem Association of Pennsylvania. A Roadmap for Growing Pennsylvania's Health Care Talent. 01/23/2023. Retrieved from: https://www.haponline.org/Resource-Center?resourceid=942. Last accessed: 07/25/2023.

[18] HAP's 2023 analysis of 2022 annual data received from Pennsylvania Department of Labor & Industry, Center for Workforce Information & Analysis. Data inquiry: 05/17/2023.

[19] U.S. Bureau of Labor and Statistics, Quarterly Census of Employment and Wages (QCEW) Dataviewer. See NAICS Industries by Geography option #8 for NAICS sub-sectors, one area. Selection criteria: Period: 2022; Quarter: Annual Averages, Ownership: Private; State: Pennsylvania. Last accessed: 6/21/2023.

[20] See Service and Data Requests – Regional Map. Pennsylvania Health Care Cost Containment Council (PHC4). Retrieved from: http://www.phc4.org/services/datarequests/regionalmap.htm. Last accessed: 12/15/2020. Note: HAP's analysis combined Region 9 (County of Philadelphia) with Region 8 (counties bordering Philadelphia County).

[21] Note: HAP's commonwealth-wide impacts do not equal the sum of the regional economic impacts because, per BEA's guidance, HAP's research department calculated state and regional effects independently using BEA's state and regional multipliers, respectively. Moreover, HAP's statewide analysis also includes system-level data that cannot be attributed to a single region.

[22] Pennsylvania Department of Labor and Industry, Center for Workforce Information and Analysis. Pennsylvania Top 50 Employers & Industries. 4th Quarter, 2022. Retrieved from https://www.workstats.dli.pa.gov/Products/Top50/Pages/default.aspx. Last accessed: 06/27/2023.

Endnotes (cont.)

[23] National Institutes of Health, Research Portfolio Online Reporting Tools. "Research Project Grants: Competing Applications, Awards, and Success Rates." Retrieved from: https://report.nih.gov/nihdatabook/report/20. Last accessed: 06/27/2023.

[24] National Institutes of Health. NIH Reporter, Quick Search. Retrieved from: https://reporter.nih.gov/. Search criteria: State: PA, FY: 2022. Last accessed: 6/27/2023.

[25] Pennsylvania Department of Labor and Industry, Center for Workforce Information and Analysis Quarterly Census of Employment and Wages (QCEW). Filters: Industry level: Subsector (3 digit). Time Period type: Annual. Ownership: Aggregate of all types. Last accessed: 07/05/2023.

[26] National Institutes of Health. NIH RePORTER. Search criteria: FY 2022. Select Chart and Summary By: State. Retrieved from: https://reporter.nih.gov/. Last accessed: 06/27/2023.

[27] National Institutes of Health. NIH RePORTER. Search criteria: FY 2022. Select Chart and Summary By: State. Retrieved from: https://reporter.nih.gov/. Last accessed: 06/27/2023.

[28] Quick Facts: Pennsylvania and United States. U.S. Census Bureau. Retrieved from: https://www.census.gov/quickfacts/PA. Last accessed: 06/28/2023.

[29] Pennsylvania Population Projections 2010-2040. March 2014. The Center for Rural Pennsylvania (See pp. 22 to 24.) Retrieved from: https://www.rural.palegislature.us/documents/reports/Population_Projections_Report.pdf. Last accessed: 06/28/2023.

[30] Alter TR, Fuller TR, Hoy RL, Martino NC, Schmidt CH, and Sontheimer T. Pennsylvania: Bust to Boom? Great Recession to Recovery and Beyond. Center for Economic and Community Development, Department of Agricultural Economics, Sociology, and Education, Penn State University. June 2019. Retrieved from: https://aese.psu.edu/research/centers/cecd/publications/market-trends/pennsylvania-bust-to-boom-great-recession-to-recovery-beyond-2008-2018. Last accessed: 06/28/2023.

[31] Pennsylvania Department of Labor & Industry, Center for Workforce Information & Analysis. Long-term Industry Employment Projections for Pennsylvania. Retrieved from: https://www.workstats.dli.pa.gov/Products/employment-projections/Pages/LTIPStatewideData.aspx. Last accessed: 06/28/2023.

[32] Pennsylvania Department of Labor & Industry, Center for Workforce Information & Analysis. Long-term Occupational Employment Projections for Pennsylvania. Retrieved from: https://www.workstats.dli.pa.gov/Products/employment-projections/Pages/LTOPStatewideData.aspx. Last accessed: 06/29/2023.

[33] Pennsylvania Department of Labor and Industry. Long Term Industry Projections. Hospitals. Retrieved from: https://paworkstats.geosolinc.com/vosnet/lmi/profiles/profileDetails.aspx?session=inddetail&valueName=industry&section=empProjections. Last accessed: 06/30/2023.

[34] Workplace Health Promotion. National Center for Chronic Disease Prevention and Health Promotion. Retrieved from: https://www.cdc.gov/chronicdisease/resources/publications/factsheets/workplace-health.htm. Last accessed: 06/28/2023.

[35] HAP's analysis of annual 2022 All Industries Employment data received from U.S. Bureau of Labor and Statistics and the results of HAP's 2021 Economic Impact Analysis.

The Hospital + Healthsystem
Association of Pennsylvania

30 North Third Street, Suite 600
Harrisburg, PA 17101-1703
www.HAPonline.org
(717) 564-9200