



**2022**

**PENNSYLVANIA HEALTH CARE COST  
CONTAINMENT COUNCIL**

# **ANNUAL REPORT**

---

Collecting, analyzing and reporting  
data to improve the quality, and  
restrain the cost, of healthcare in the  
state of Pennsylvania

**[www.phc4.org](http://www.phc4.org)**

August 2023



# EXECUTIVE DIRECTOR'S MESSAGE

Barry D. Buckingham

*Serving as PHC4's Executive Director since September of 2021 has been quite fulfilling and gives me a great sense of pride. The talent and dedication of PHC4's staff and Council are unmatched! Coming aboard in this role, even following the uncertain era we all experienced through the COVID-19 pandemic, was a smooth transition.*

*2022 was very a successful year. The Council continues to be a source of tremendous support and guidance. The addition of three legislators to the council has been very beneficial and their engagement has been excellent. The healthcare facilities reporting the data that is the basis for our reporting continue to be outstanding and cooperative. The staff continues to perform at an extraordinary level. Recruitment of new employees has been successful. The opportunities to serve the Commonwealth are expanding as the return to “normal” post pandemic has played out.*

*PHC4 has a focus on innovation and a constant effort to improve reporting and expand the reach of the information provided. Several key accomplishments which will enhance effectiveness in reaching our goals were completed this year:*

- *A complete overhaul of the Website which was launched on July 31, 2023*
- *Introduction of simplified report summaries geared towards the healthcare consumer*
- *Addition of a LinkedIn page to our social media efforts, to which everyone is encouraged to follow*
- *Operational process review and improvement taking advantage of opportunities to leverage state systems and modern technologies*
- *An outside audit of data security continuing the agency's emphasis on privacy and security*

*These efforts as well as others prepare PHC4 to meet our mission in the future. Working with other stakeholders, PHC4 will enhance the reporting that informs decisions for legislators, purchasers and providers of healthcare and health insurance, and the citizens of the Commonwealth.*

# GOVERNANCE

## EXECUTIVE COMMITTEE

- **Chair**  
Robert S. Bair – President, PA Building & Construction Trades Council
- **Vice Chair**  
Karen Groh – President & CEO, Lebanon Valley Chamber of Commerce
- **Treasurer**  
Arthur Steinberg – President, AFT Pennsylvania
- **Chair, Data Systems Committee**  
David Kelley, MD – Chief Medical Officer, Office of Medical Assistance Programs, Pennsylvania Department of Human Services
- **Chair, Education Committee**  
Joe Huxta – Retired, Mack Trucks, Inc.
- **Chair, Mandated Benefits Committee**  
Tom Duzak – United Steelworkers of America VEBA Trustee
- **Immediate Past-Chair**  
Samuel Denisco – Principal, Cozen O'Connor Public Strategies

## COUNCIL MEMBERS

## ADDITIONAL COUNCIL MEMBERS

- Valerie A. Arkoosh, MD, MPH – Acting Secretary of Human Services
- The Honorable Senator Camera Bartolotta – Chair, Senate Labor and Industry Committee
- Dr. Debra L. Bogen – Acting Secretary of Health
- George M. Book, Jr. – President & CEO, West Shore Chamber of Commerce
- The Honorable Representative Bryan Cutler – Republican Leader, House of Representatives
- Samuel Denisco – Principal, Cozen O'Connor Public Strategies
- Mark Dever – Manager, Global Compensation & Benefits, TIMET
- Randy DiPalo – Retired, Plumbers and Pipefitters, Local 520
- The Honorable Representative Dan Frankel – Democratic Chair, House Health Committee
- Jodi Frantz (Designee, PA Insurance Department) – Chief of Staff, PA Department of Insurance
- Martin Gaynor, PhD – E.J. Barone Professor of Economics and Public Policy, Carnegie Mellon University
- The Honorable Michael Humphreys – Acting Insurance Commissioner
- Muneeza Iqbal, MPH (Designee, Secretary of Health) – Deputy Secretary for Health Resources & Services
- Brad Klein, MD, MBA, FAAN, FAHS, FAANEM – Abington Neurological Associates, Ltd, and Clinical Associate Professor of Neurology, Sidney Kimmel Medical College of Thomas Jefferson University
- Neal Leshner – Director of Government Affairs, PA Chamber of Business and Industry
- Gregory Martino – CVS Health
- Matthew D. McHugh, PhD, JD, MPH, RN, FAAN – Associate Director, Center for Health Outcomes & Policy Research, University of Pennsylvania School of Nursing
- Michael Seim, MD – Senior Vice President & Chief Quality Officer, WellSpan Health
- Abdoul Sosseh – Vice President of Enterprise Analytics, Thomas Jefferson University and Jefferson Health
- Adele Towers, MD, MPH FACP – Associate Professor of Medicine and Psychiatry, University of Pittsburgh and Senior Clinical Advisor, UPMC Enterprises
- Monica Virgilio – Pennsylvania AFL-CIO
- Michael Yantis – Vice President, State Government Affairs, Highmark, Inc.



# Technical Advisory Group

The Technical Advisory Group was established by the Pennsylvania Health Care Cost Containment Council to respond to issues related to research methodology, statistical expertise, and risk-adjustment methods. This group brings together seasoned professionals (including physicians, biostatisticians, and health services researchers) who offer advice in a setting that encourages and contributes to methodological advances and keeps the Council's reports on the cutting edge.

**David B. Nash, M.D., MBA, FACP – Chair**  
Founding Dean Emeritus, Jefferson School of Population Health  
Philadelphia, PA

**Steven Belle, Ph.D.**  
Professor  
Graduate School of Public Health  
University of Pittsburgh  
Pittsburgh, PA

**Paul N. Casale, M.D., FACC**  
Cardiologist  
Lancaster, PA

**Daniel J. Glunk, M.D., FACP**  
Chief Quality Officer  
Susquehanna Health  
Williamsport, PA

**George R. Green, M.D.**  
Physician-in-Chief, Division of Allergy & Immunology  
Department of Medicine  
Abington Memorial Hospital  
Abington, PA

**Donald Liss, M.D.**  
Chief Medical Officer, Health Partners Plans  
Philadelphia, PA

**Robert Shipp, III, PhD, BSN, RN, NEA-BC**  
Vice President, Population Health Strategies  
Hospital and Healthsystem Association of PA



**David B. Nash, MD MBA, FACP**  
Chair of the Technical Advisory Committee  
Founding Dean Emeritus  
Jefferson College of Population Health



# MEET OUR STAFF



Heather Nairn  
Deputy Executive Director



Barry D. Buckingham  
Executive Director



Renée Greenawalt  
Special Assistant



Research



Budget & Administration



Financial Reporting



Information Services



## **REQUEST PHC4 DATA**

### **Special Requests, Custom Reports & Specialized Data Analysis**

Access to good data is key to making informed healthcare decisions. PHC4 is very proud to be of value to the Commonwealth of Pennsylvania in providing credible, accurate information, a vital tool for healthcare consumers, providers, purchasers and policymakers.

PHC4 collects more than 1.7 million inpatient and 3.5 million ambulatory/outpatient records from Pennsylvania hospitals and ambulatory surgery centers each year. These records are available for those who wish to analyze detailed inpatient discharge and ambulatory/outpatient procedure data in the form of standard predetermined data files or custom data files. There are more than 70 data fields available, which include utilization and administrative data.

PHC4's comprehensive databases can help answer questions about the quality-of-care Pennsylvanians receive during their hospitalization and associated costs. PHC4 data and analyses also provide invaluable assistance to the Commonwealth's employers, labor organizations, consumers, providers, insurers, and policymakers who are seeking better value for their health care dollars. Between January 1, 2021, and December 31, 2022, PHC4 fulfilled 165 requests for datasets and reports, generating revenue in the amount of \$1,507,150. Revenue generated from sales of data covers the agency's operating expenses, providing about 20 percent of its annual operating budget.

Non-commercial clients, including hospitals, health systems, health care organizations, purchasers, and insurers comprise the majority of PHC4 data requestors, using the data for quality improvement, strategic planning, needs assessment, market share analyses, surgical outcome analyses and utilization reviews. The next largest category of requests come from academic health care researchers, both inside and outside the commonwealth. PHC4 is also a data partner with the Healthcare Cost & Utilization Project (HCUP), sponsored by the Agency for Healthcare Research and Quality. The family of databases, developed through a federal-state-industry partnership, is an essential data source for health researchers across the nation, providing comprehensive, accurate and timely data for use in evaluating cost, quality, and access to health care.

Commercial clients are those corporations/organizations that repackage and redistribute PHC4 data or analysis for a profit. A number of state agencies and members of the Pennsylvania General Assembly rely on PHC4 annually for reliable, accurate data, including the Attorney General, Auditor General, Department of Health, Department of Human Services, and the Patient Safety Authority. As an independent state agency, PHC4 provides data at no charge to policymakers and administrators, saving time, effort, and tax dollars.

**During the calendar years 2021 & 2022, many entities relied on PHC4 for accurate, reliable healthcare data. Complete listings of PHC4's special reports and requests for data (applicant & project description) are published in the Pennsylvania Bulletin.**



# 2021-2022 DATA REQUESTS

## 2021 Clients

Agency for Healthcare Research & Quality  
Allegheny County Health Department  
Appalachian Regional Healthcare, Inc.  
Brian Rucco  
Bryn Mawr Surgery Center  
Cancer Study Group  
Capital Health  
Constitution Surgery Alliance  
Crozer Keystone Health System  
Deborah Heart and Lung Center  
Drexel University Dornsifes School of Public Hlth  
Evangelical Community Hospital  
Excelsa Health  
Geisinger Health System  
Highmark Health  
Hospital & Healthsystem Association of PA  
Hunterdon Healthcare  
IBM  
Inspira Health Network  
Jian Strategic Marketing  
Lehigh Valley Health Network  
LifePoint Health  
Main Line Health  
Monongahela Valley Hospital  
Mount Nittany Health  
National Board of Medical Examiners  
Nemours/Alfred I. duPont Hospital for Children  
New York University Grossman School of Medicine  
North Pointe Surgery Center  
OSS Health  
PA Department of Health  
PA Department of Human Services  
PA Department of the Auditor General  
PA Office of Attorney General  
Penn Highlands Healthcare  
Penn State College of Medicine  
Penn State Hershey Health System  
Pennsylvania Patient Safety Authority  
Philadelphia Department of Public Health  
Philadelphia Inquirer  
Renzi Podiatry/Save Your Soles Campaign  
SG-2, LLC  
St. Clair Hospital  
Stratason, LLC  
Syntellis Performance Solutions, LLC  
Temple University Health System  
Thomas Jefferson University  
University of Pennsylvania  
University of Pennsylvania – School of Medicine  
University of Pennsylvania School of Nursing  
University of Pittsburgh  
University of Pittsburgh Medical Center  
Veralon Partners, Inc.  
Weill Cornell Medicine  
WellSpan Health  
West Virginia University Medicine

## 2022 Clients

Agency for Healthcare Research & Quality  
Allegheny County Health Department  
Cancer Study Group  
Capital Health  
Cayuga Health System  
Doylestown Hospital  
Drexel University Dornsifes School of Public Hlth  
Evangelical Community Hospital  
Excelsa Health  
Fulton County Medical Center  
Geisinger Health System  
Good Shepherd Rehab Network  
Guthrie Clinic LTD.  
Health Economics Resource Center  
Highmark Health  
Hospital & Healthsystem Association of PA  
IBM  
Inspira Health Network  
Intellimed  
Jian Strategic Marketing  
Kutztown University of Pennsylvania  
Lehigh Valley Health Network  
LifePoint Health  
Main Line Health  
Monongahela Valley Hospital  
Mount Nittany Health  
Nemours/Alfred I. duPont Hospital for Children  
PA Commission on Crime and Delinquency  
PA Department of Health  
PA Department of Human Services  
PA Department of the Auditor General  
PA Legislative Budget and Finance Committee  
PA Office of Attorney General  
Penn Highlands Healthcare  
Penn State College of Medicine  
Penn State Hershey Health System  
Pennsylvania Insurance Department  
Pennsylvania Patient Safety Authority  
Philadelphia Department of Public Health  
Renzi Podiatry/Save Your Soles Campaign  
RWJBarnabas Health System  
Safety-Net Association of Pennsylvania  
St. Clair Hospital  
Stratason, LLC  
Syntellis Performance Solutions, LLC  
Temple University Health System  
University Hospitals Health System, Inc.  
University of Pennsylvania  
University of Pittsburgh  
University of Pittsburgh Medical Center  
University of Rochester Medical Center  
Vizient Inc.  
WellSpan Health  
West Virginia University Medicine



# CASE STUDIES

Throughout the year, PHC4 highlights the utilization of PHC4's data and the work done by special request data clients in the area of health research.



## Effects of Payment Reform on Post-Acute Care After Lower Extremity Joint Replacement

Robert E. Burke, MD, MS, FHM  
Associate Division Chief for Research,  
Division of General Internal Medicine  
Assistant Professor of Medicine, Perelman  
School of Medicine  
University of Pennsylvania



## Understanding Variations in Perioperative Care for Lung Cancer

Tyler Grenda, MD  
Assistant Professor  
Division of Thoracic Surgery, Department of Surgery  
Sydney Kimmel Medical College  
Thomas Jefferson University

## Health Care Access Expansions and Use of Veterans Affairs and Other Hospitals by Veterans



Jean Yoon, PhD  
Health Economist, Health  
Economics Resource Center  
VA Palo Alto  
Healthcare System  
Adjunct Professor, University  
of California, San Francisco

## Studies on Physician Characteristics and Patient Outcomes



John Norcini, PhD  
Research Professor,  
Department of Psychiatry  
Upstate Medical University  
Fellow of Presence, Center  
at Stanford Medical School  
President Emeritus,  
Foundation for  
Advancement of  
International Medical  
Education and Research

**NEW**

PA Health Care Cost  
Containment Council

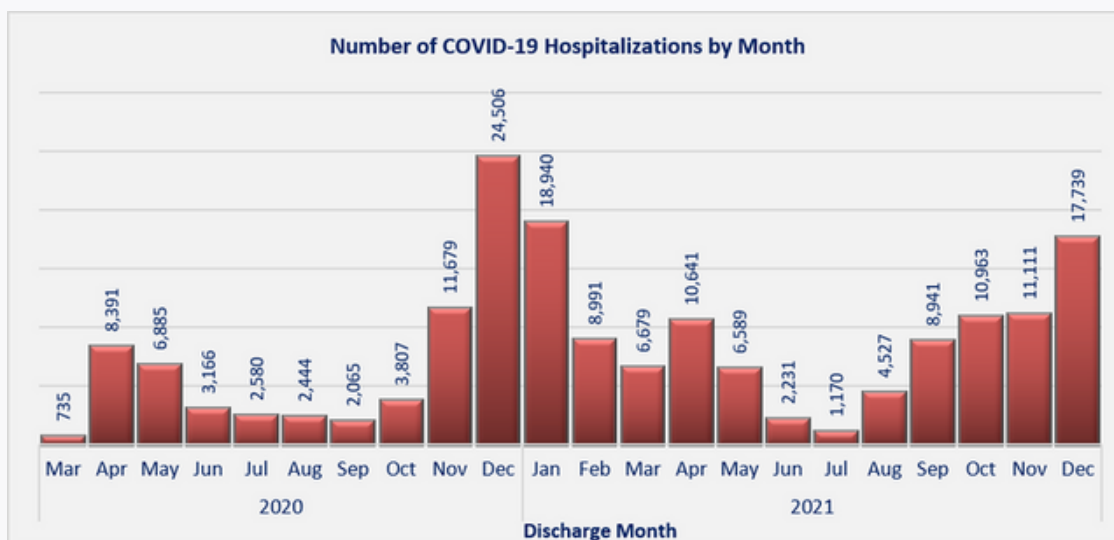
**PHC4**  
Research  
Briefs

## Publications/Projects 2021-2022

During 2021 and 2022, PHC4 released updated versions of its annual flagship reports, as well as six new research briefs; four of them focused specifically on the COVID-19 pandemic, one on maternal hospitalizations and one looks at the trends in hospitalization for opioid overdose between 2016-2021. Also new during this timeframe is PHC4's mandated reporting on the financial impact to Pennsylvania's hospitals during the COVID-19 Disaster Emergency.

### COVID-19 Hospitalizations in Pennsylvania March 2020 to December 2021

PHC4's clinical reporting on COVID-19 includes hospitalization data and mortality findings for the twenty-one-month period March 1, 2020, through December 31, 2021. During those months, there were 174,780 COVID-19 hospitalizations in Pennsylvania hospitals. The number of monthly COVID-19 hospitalizations was highest in December 2020 at 24,506 cases. The in-hospital mortality rate was highest in April 2020 at 19.2%. There were peaks in admissions in the following months: April 2020 (8,391), December 2020 (24,506), April 2021 (10,641) and December 2021 (17,739). There were peaks in the mortality rate in April 2020 (19.2%), August 2020 (10.4%), Jan 2021 (13.8%), Jun 2021 (10.6%) and October 2021 (14.9%).



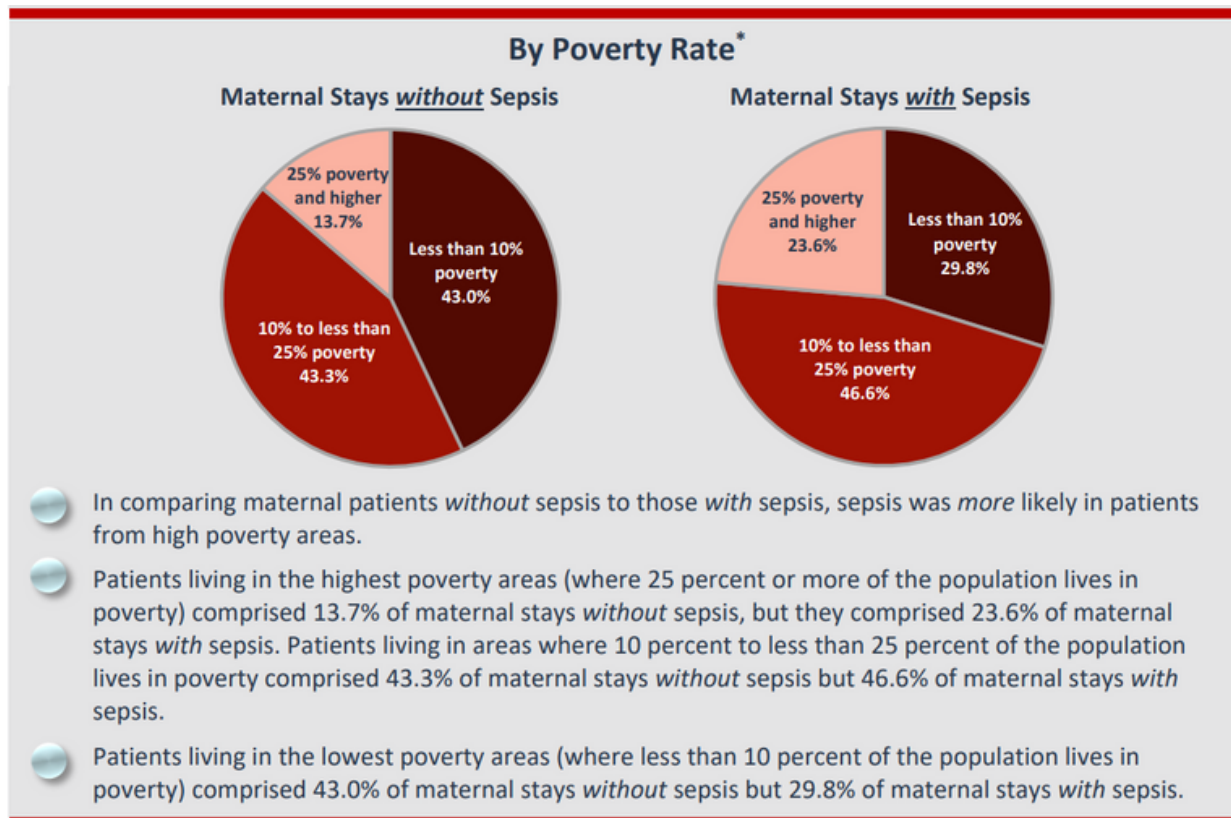
## Maternal Hospitalizations and Sepsis

Inspired by the Pennsylvania Department of Health's focus and work on maternal health, PHC4 published a new research brief, *Maternal Hospitalizations and Sepsis*, in conjunction with National Women's Health Week in 2021.

Sepsis in patients hospitalized for a delivery or other pregnancy-related condition, is an important maternal health issue. Sepsis is a life-threatening condition characterized by a system-wide inflammatory response to infection that can worsen to acute organ dysfunction.

Sepsis was present in 6.9 out of every 1,000 maternal hospitalizations during the five-year timeframe from October 2015 through September 2020. This brief shows that maternal patients with sepsis have a statistically higher mortality rate and stay in the hospital longer than those without sepsis. The brief also highlights sociodemographic differences among maternal patients with sepsis, and also reports rates by county.

According to the research brief, sociodemographic differences showed that Hispanic patients and Black, non-Hispanic patients were more likely to be affected as were patients living in high poverty areas.



\*Poverty rates reported in this brief were based on 2019 US Census Bureau estimates at the patient zip code level.

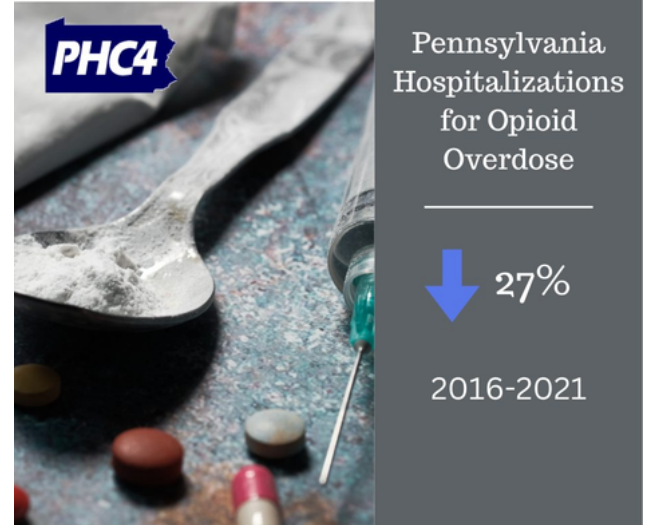


## Hospitalizations for Opioid Overdose, 2016 to 2021

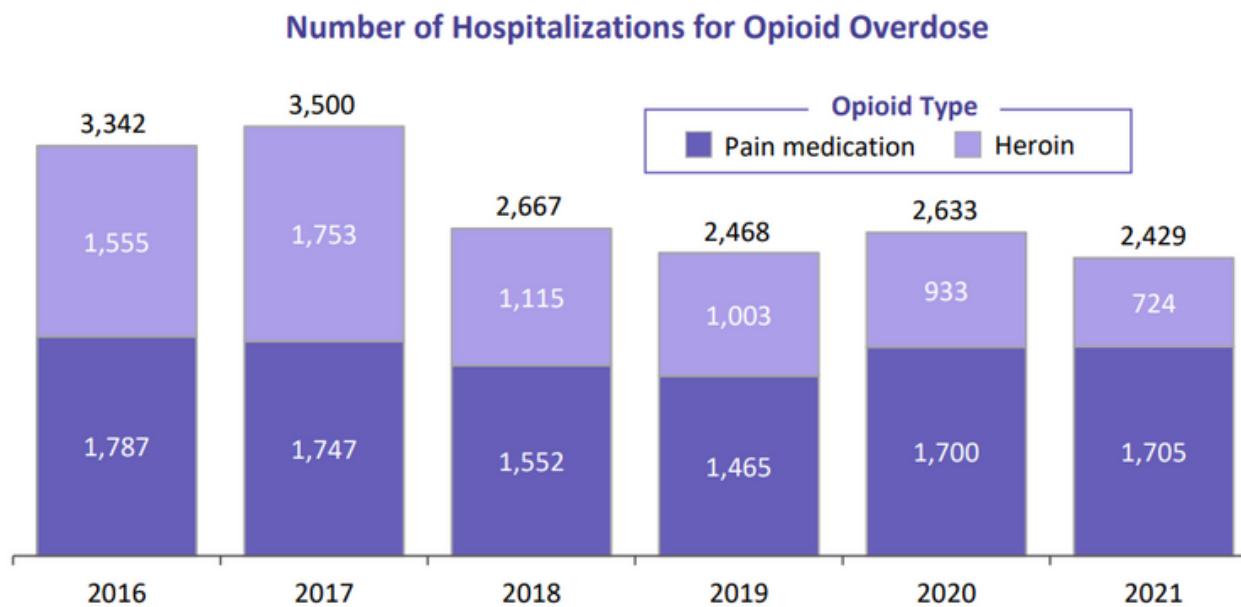
In October 2022, PHC4 published a new research brief about trends in hospitalizations for opioid overdose in Pennsylvania. The report looks at the six-year period from 2016 through 2021 and includes details about differences in overdose hospitalizations for pain medication and heroin. It also highlights differences in trends across race/ethnicity and poverty level.

This research brief looks at Pennsylvania residents, ages 15 and older, who were admitted to a Pennsylvania acute care hospital for an opioid overdose. Opioid overdoses of pain medication and heroin are displayed separately but are also combined to show totals.

In 2021 alone, Pennsylvanians were hospitalized for opioid overdose at a rate of 22.9 per 100,000. Sociodemographic differences showed Black, non-Hispanic residents, Hispanic residents, and male residents were more likely to be affected. County-level trends are also provided.



It is important to note this analysis includes only overdoses that resulted in a hospital admission (examples of cases not included: those treated with naloxone and/or treated in the emergency department and not admitted to the hospital, or overdose deaths that occurred outside the hospital setting).



Note: These numbers reflect overdoses that resulted in a hospital admission. They do not include all overdoses for Pennsylvania residents. Emergency department visits for opioid overdose are not included in these numbers.

## Hospital Performance Report

Pennsylvania Health Care Cost Containment Council



October 2020 – September 2021 Data



December 2022



## Hospital Performance Report

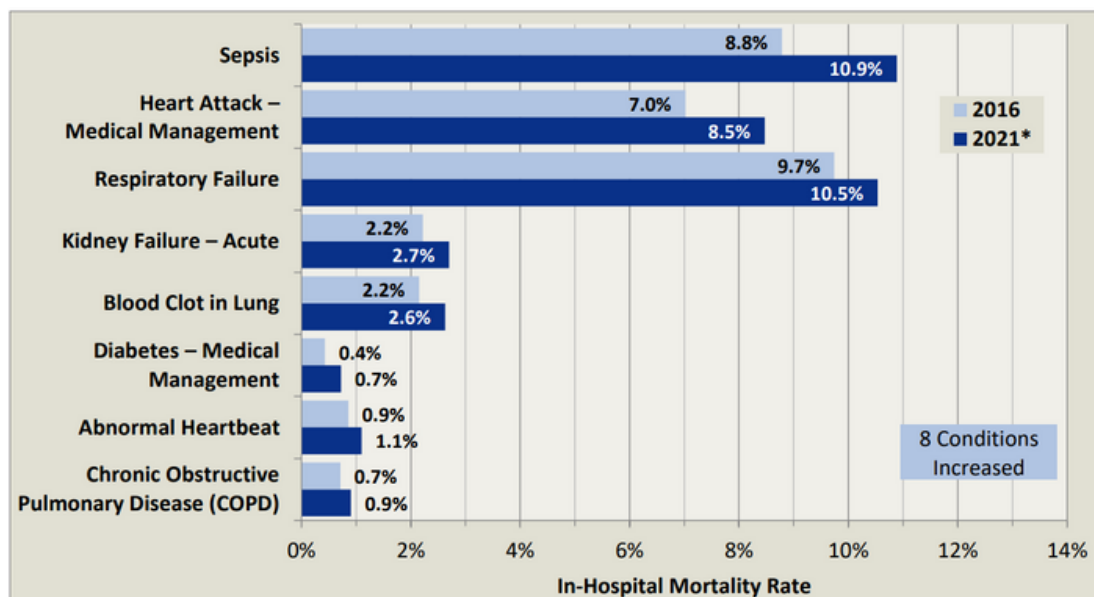
The Pennsylvania Health Care Cost Containment Council's (PHC4) [Hospital Performance Report](#) (HPR) displays performance information about Pennsylvania hospitals. The HPR can assist consumers and purchasers in making more informed health care decisions. The report can also serve as an aid to providers in highlighting additional opportunities for quality improvement and cost containment. It should not be used in emergency situations.

The measures reported include the total number of cases for each condition, risk-adjusted mortality, risk-adjusted 30-day readmission, and case-mix-adjusted average hospital charge for each condition. A complex formula ensures that hospitals receive "extra credit" for treating more seriously ill patients.

PHC4 uses clinical laboratory data, patient characteristics such as age, gender, race/ethnicity, and socioeconomic status, and billing codes that describe the patient's medical conditions such as the presence of cancer, diabetes, heart failure, etc., to calculate risk for the patients in this report. A comprehensive description of the risk-adjustment techniques used for this report can be found in the Technical Notes on PHC4's website at [www.phc4.org](http://www.phc4.org).

## Comparison of Mortality Rates 2016-2021

Eight conditions showed statistically significant increases in in-hospital mortality rates from FFY 2016 to FFY 2021. None of the reported conditions showed a statistically significant decrease in in-hospital mortality rates. The mortality rate was not reported for one condition, Chest Pain, due to low statewide mortality.



\* Cases with a COVID-19 diagnosis were excluded in 2021.

## Cancer Surgery Report

In May 2022, PHC4 released updated data to help cancer patients and their families make decisions about cancer surgical care in Pennsylvania. The [Cancer Surgery Volume in Pennsylvania](#) provides information about the number of cancer-related surgeries performed at Pennsylvania hospitals. Hospital surgical volume is reported for 11 types of cancers. While the volume of cases generally reflects the experience that a hospital has with performing each type of surgery, patients should use volume data in consultation with their physicians when making decisions about quality care since many factors may contribute to the overall outcome.

While the volume of cases generally reflects the experience that a hospital has with performing each type of surgery, patients should use volume data in consultation with their physicians when making decisions about quality care since many factors may contribute to the overall outcome.

**“There is strong evidence in the scientific literature showing a relationship between patient outcomes and hospital surgical volume,” said Barry Buckingham, PHC4’s Executive Director. “Reporting volume for these cancer surgeries is important for this reason and serves as another tool for cancer patients and their families to use when considering treatment options.”**

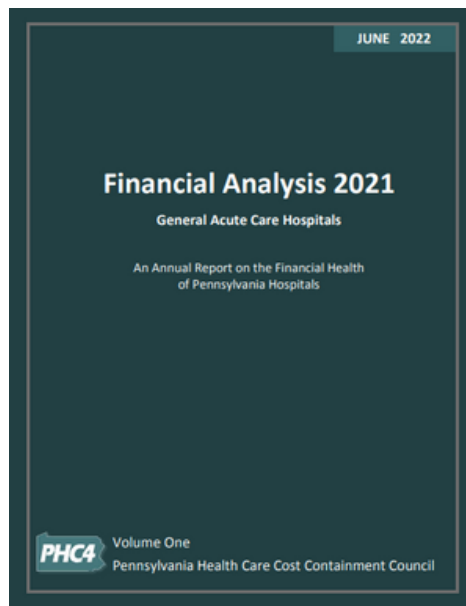
The analysis shows that many hospitals performed only one or two surgeries for some of these cancers. For cancers of the liver and stomach, a third or more of the hospitals performed only one or two surgeries in FY 2021 as highlighted in the table to the right.

Cancer Surgeries Performed in FY 2021				
Cancer	Total Number of Surgeries Performed in PA	Number of Reported* Hospitals that Performed the Surgery	Reported* Hospitals that Performed Only One or Two of these Surgeries	
			Number of Hospitals	Percent of Hospitals
Bladder	1,132	92	24	26.1%
Brain	1,384	41	3	7.3%
Breast	12,116	119	7	5.9%
Colon	3,436	121	10	8.3%
Esophagus	313	30	6	20.0%
Liver	560	30	11	36.7%
Lung	2,225	61	7	11.5%
Pancreas	499	27	8	29.6%
Prostate	2,248	76	18	23.7%
Rectum	860	82	26	31.7%
Stomach	315	57	28	49.1%

\*Does not include children's hospitals or hospitals that newly opened, closed, or merged (as of the report preparation date).



# Reporting on the Financial Health of Pennsylvania Hospitals



## Financial Analysis 2021

This annually published, [Financial Analysis Report](#) is a three-volume series of reports that includes statewide data and facility-specific information about the financial health of Pennsylvania's hospitals.

Volume One, published in June 2022, focused on general acute care (GAC) hospitals. Volume Two, published in October 2022, concentrated on ambulatory surgery centers (ASCs). Finally, Volume Three, released in November 2022 focused on non-GAC hospitals, which include rehabilitation hospitals, psychiatric hospitals, long-term acute care hospitals, and specialty hospitals. Each report contains information about facility-specific uncompensated care, net patient revenue, operating margin, and total margin.

A high-quality, cost-effective health care delivery system requires financially healthy hospitals and health systems. Since fiscal year 1989, the Pennsylvania Health Care Cost Containment Council (PHC4) has produced a series of financial reports measuring the financial condition and utilization of the Commonwealth's hospitals and health systems.

Information contained in these reports is derived from annual hospital financial statements, supplemented with additional data supplied by each hospital. Every reasonable effort is made to ensure the accuracy of the information contained therein. Each facility has the opportunity to review its data and to make corrections. The responsibility for data accuracy lies with each hospital.



# Reporting on the Financial Health of Pennsylvania Hospitals

## PHC4 COVID-19 Disaster Emergency Report

Within Act 15 of 2020, the Pennsylvania General Assembly directed the PHC4 to provide aggregated data on the effect of the COVID-19 disaster emergency on Pennsylvania hospitals and health care facilities for one year following the termination or expiration of the COVID-19 disaster emergency.

**Act 15 of 2020 required that these reports include the following data points:**

- Increased costs related to provider and staff training, including training on pandemic preparedness plans and the use of telemedicine
- Increased staffing costs
- Costs related to COVID-19 testing
- Costs associated with sourcing and purchasing additional supplies and equipment
- Costs associated with setting up emergency operations centers, including construction and retrofitting facilities to provide separate screening and security areas
- Costs associated with providing housing and care for patients who do not require hospitalization but do not have housing in order to prevent spread of COVID-19
- Loss of revenues due to suspension of elective services not related to COVID-19
- Other data points required to be reported by hospitals or health care facilities to the Federal government or State government to receive COVID-19 assistance.

In completing the report, PHC4 aggregated data related to COVID-19 expenses and lost revenue as reported by hospitals and health systems in the Commonwealth, and published a series of quarterly installments between January 2021 and November 2022

**Results indicate that Pennsylvania's hospitals and health systems reported \$7.9 billion in COVID-19 related expenses and revenue losses for the period January 2020 – June 2022.**



**Act 15 of 2020**



The logo for PHC4, featuring the letters "PHC4" in a bold, white, sans-serif font. The text is set against a dark blue background that is shaped like the outline of the state of Pennsylvania. The logo is positioned in the upper center of the page.

# PHC4

**This report and other PHC4 publications are available online at [www.phc4.org](http://www.phc4.org). Additional financial, hospitalization and ambulatory procedure health care data is available for purchase. For more information contact PHC4's Data Requests Unit at [specialrequests@phc4.org](mailto:specialrequests@phc4.org) or 717-232-6787.**

## CONTACT US



**717-232-6787**



**[socialmedia@phc4.org](mailto:socialmedia@phc4.org)**



**225 Market Street, Suite 400, Harrisburg, PA 17101**



**[www.phc4.org](http://www.phc4.org)**



**Follow us for Updates!**