

ANNUAL REPORT JULY 2021

PENNSYLVANIA HEALTH CARE COST CONTAINMENT COUNCIL

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

Executive Director's Message

In a few weeks' time, I will be leaving PHC4 after 30 years, the last 12 of which I have been privileged to serve as its Executive Director. When the Council appointed me as the Executive Director in November of 2009, I identified two main goals (among many others) to accomplish as top priorities.

The first was to reestablish financial and budgetary security for the agency, which had suffered significant reductions to its budget appropriation over the years due to across-the-board budget cuts during the economic recession. The second was elimination of the periodic sunset provision in the agency's enabling legislation, which over time had resulted in numerous interruptions to operations and a substantial decline in morale and security for the staff, and uncertainty for the Council's stakeholders and regulated community.



Joe Martin – Executive Director

In 2014, when the Council's enabling legislation was not reauthorized, I and key members of the Council worked with then Governor Corbett's office to establish an Executive Order without an enddate to allow for the continuation of the agency's operations. PHC4 was finally reauthorized in 2020 and while the sunset provision was not eliminated, it was lengthened to ten years instead of five.

Also crucial to reestablishing fiscal stability was the reestablishment of access to the agency's special request data sales revenue, which had been limited in past years, causing significant budgetary challenges? By cultivating positive relationships with former Senator Pat Vance, the Senate Majority Leader's Office as well as the Speaker's Office in the House of Representatives, we were successful in this effort to regain full access to 100% of its data sales revenue.

PHC4's Research Department, led by now retired Flossie Wolf has achieved successful growth in expanding the content of the agency's public reporting, statistical analysis, and risk-adjustment modeling. Among the many accomplishments of the agency, PHC4 was the first entity to publish risk-adjusted data, publishing the Hospital Performance Report annually since 1991. PHC4's Financial Analysis Reports demonstrate the financial health of PA hospitals, including detailed uncompensated care levels, and the impact of COVID-19. There are too many other "firsts" to mention here.

PHC4's public reporting has led the way in focusing attention on readmissions and preventable hospitalizations. PHC4 has provided a valuable service to Pennsylvanians through its many public reports, including those focused on orthopedic surgery, the ongoing opioid epidemic and cardiac surgery. Pennsylvania was also one of the first in the country to publish a report on episodes of care. A unique collaboration between pediatric heart surgeons and PHC4 produced the pediatric heart surgery report, a very valuable resource for parents faced with challenging healthcare decisions affecting their child. Jane Keck sustains these efforts as the senior Research Manager.

PHC4's Information Technology and Data Collection Departments provide the key infrastructure that underlies everything the agency does. The agency relies on a very complex operation with a streamlined, modernized data collection process, robust cyber-security system and processes with a priority for the protection of private health information. Chief Information Officer Rob Andersen leads these efforts.

Under Director of Administration and Budget Tim Reigel, the agency's Budget and Administration Department has focused on a strict adherence to robust policy and procedures, enabling efficient and effective operations, as well as maintaining key relationships with the Office of the Budget and the Office of Administration. For as long as memory serves the agency has achieved an unqualified opinion - the best you can get - from an outside independent auditing firm.

The agency's Special Data Requests Department has not only achieved continued success in generating revenue to supplement the general budget appropriation, but also reflects a wide range of data users to include businesses, hospitals, physicians, researchers, and state government, who use the data in a variety of ways to promulgate improvements in the health care

PHC4 has not only survived a long and tumultuous period, but has done so successfully, despite budget and staffing cuts, to build a strong foundation on which to expand and grow to evolve to meet the needs of tomorrow.

I'd like to congratulate my successor Barry Buckingham, a health economist by training who comes to PHC4 with an extensive background in health policy in the private and public sector. I wish him well and know he will do a fine job.

It is with a certain amount of sadness but a great deal of pride that I leave this fine organization. PHC4 has been a national leader in its field and has done a lot of good things for many people. I have had the honor of working with lots of great people of the years: Council staff, Council members, other public officials and outside allies. I think that is what I will miss the most.

What our supporters say...



Sam Denisco, PHC4 Chairman Vice President, Government Affairs, PA Chamber of Business & Industry

""The data and analyses provided by PHC4 have been invaluable to the Commonwealth's employer community and consumers at large by helping bring transparency to the system in order to reduce costs and improve the quality of health care in the state. I'm honored to chair PHC4 and, along with my fellow board members, working with the Council to continue PHC4's long tradition of providing the public with vital, easy to understand data to better inform their health care decisions."

Frank Snyder, PHC4 Vice-Chairman Secretary Treasurer, Pennsylvania AFL-CIO

"For over 30 years, the Pennsylvania Health Care Cost Containment Council ("PHC4") has served as the go-to data collection agency when addressing health care access, delivery, quality, and cost containment. The comprehensive, issue specific reports, continue to meet the needs of today's most relevant health concerns. For



example, the disease of addiction has regularly found itself among the top news stories throughout all 67 counties. Reaching epidemic levels, PHC4's wide-ranging analyses have been used in developing practical solutions to curb this modern-day epidemic."



Todd Shamash, PHC4 Treasurer President and Chief Executive Officer, Capital Blue Cross

"I am very proud to be associated with the dedicated staff and the proud history and mission of the Council. The work performed is vital, including recent work on COVID-19 and continued visibility on opioid related overdoses and hospitalizations."

What our supporters say...

David B. Nash, MD MBA PHC4 Chairman of the Technical Advisory Committee Founding Dean Emeritus Jefferson College of Population Health (JCPH)

"Our ailing healthcare system needs accurate and comprehensive outcomes data now more than ever and HC4 continues to deliver on its promise to do just that!"





Rick Bloomingdale President Pennsylvania AFL-CIO

"Our union health and welfare funds rely on PHC4 as a valuable resource in helping our members make choices that provide the best health care in the most cost-efficient manner. That in turn helps us improve quality and make health care affordable for all Pennsylvanians."

Gene Barr, President, PA Chamber of Business & Industry

"The Pennsylvania Health Care Cost Containment Council is an invaluable resource for employers and employees. The Council's comprehensive, unbiased medical data helps bring transparency to a complicated subject matter, helping to reduce costs and improve the quality of health care throughout the Commonwealth. The PA Chamber has been proud to support PHC4 since its inception."



What our supporters say...



Karen Wolk Feinstein, PhD President & CEO Jewish Healthcare Foundation

"In response to PHC4's reports showing alarming rates of maternal hospital stays involving substance use and newborn stays with Neonatal Abstinence Syndrome (NAS), the Jewish Healthcare Foundation and WHAM global launched the Pennsylvania Perinatal Quality Collaborative with over 40 birth sites and 10 health plans to reduce maternal mortality and improve care for moms with opioid use disorder and babies with NAS. PHC4's timely reports continue to help guide our healthcare policy agendas and performance improvement projects across the State."

Andy Carter, President and CEO The Hospital and Healthsystem Association of Pennsylvania

"When Pennsylvanians have to make decisions about their care, they look at a variety of factors – chief among them are quality and cost. For more than three decades, PHC4 has been providing Pennsylvania's patients, families, policymakers, and members of the media with up-to-date reports about cost, quality, and health care's most pressing issues. PHC4 also helps the hospital community measure its progress as it works toward its core mission of reducing the cost of care, improving the quality of care, and promoting access to care for all. The Hospital and Healthsystem Association of Pennsylvania and the state's hospital community are proud to be longstanding partners with PHC4, supporting its critical mission of providing data and analysis that can help us examine health care trends and opportunities to improve, and we thank the council for its dedication to this mission."



Governance

Purchasers

- 6 Business
- 6 Labor
- 1 Consumer

Insurers

- > 1 Commercial
- > 1 Blue Cross/Blue Shield
- ➢ 1 HMO

Providers

- > 2 Hospitals
- > 2 Physicians
- > 1 Nurse
- 1 Health Care
 Quality
 Improvement
 Expert

State Government

- Secretary of Health
- Secretary of Human
 Services
- InsuranceCommissioner

PHC4's Council Members (FY2020-21)

Executive Officers

Sam Denisco, Chair - Business Frank Snyder, Vice Chair – Labor Todd Shamash, Esquire, Treasurer – Health Plans

Council Members

The Honorable Jessica Altman – Insurance Commissioner of Pennsylvania **Official Designee – Michael Humphreys** Gene Barr – Business The Honorable Alison Beam – Acting Secretary of Health **Official Designee - Jared Shinabery** Mary Beth Clark, RN, MPA, MSN, EdD – Quality Improvement Mark Dever - Business Randy DiPalo – Labor Tom Duzak - Labor Lisa Frank – Labor Martin Gaynor, PhD – Health Economics & Outcomes Research Joe Huxta - Business **Edward Karlovich – Hospitals** Brad Klein, MD, MBA, FAAN, FAHS, FAANEM - Physicians Greg Martino – Health Matthew D. McHugh, PhD, JD, MPH, RN, FAAN – Nurses Ernest Sessa – Consumer Representative Frank Sirianni – Labor The Honorable Meg Snead – Acting Secretary, Pennsylvania Department of Human Services Official Designee - David Kelley, MD, MPH Adele Towers, MD, MPH, FACP – Physicians

Steven A. Wolfe – Hospitals

2020 Data Requests

During the calendar year 2020, many entities relied on PHC4 for accurate, reliable healthcare data. A full listing of CY2020 special reports and requests for data is available online at <u>www.pabulletin.com</u>

Agency for Healthcare Research & Quality **Albert Einstein Healthcare Network** Allegheny County Health Department **Capital Health Children's Hospital of Philadelphia Community Health Systems Doylestown Hospital Evangelical Community Hospital Excela Health Geisinger Health System Good Shepherd Rehab Network Highmark Health Hospital Executive Council** Hospital & Healthsystem Association of Pennsylvania **Indiana Regional Medical Center** Intalere International Business Machines Corporation (IBM) Jian Strategic Marketing Lehigh Valley Health Network LifePoint Health Main Line Health **Monongahela Valley Hospital** Mount Nittany Health Nemours/Alfred I. duPont Hospital for Children **OSS Health Penn Highlands Healthcare** Penn State Hershey Health System Pennsylvania Commission on Crime and Delinquency

Pennsylvania Department of Health Pennsylvania Department of Human Services Pennsylvania Department of the Auditor General Pennsylvania Legislative Budget and Finance Committee Pennsylvania Office of Attorney General Pennsylvania Patient Safety Authority Pennsylvania Senator Pam Lovino **Philadelphia Department of Public Health Reading Hospital and Medical Center** Renzi Podiatry/Save Your Soles Campaign **RKSB Health Care Consulting RWJBarnabas Health System** Safety-Net Association of Pennsylvania Sg-2, LLC St Luke's University Health Network Stratasan, LLC **Tandigm Health Temple University College of Public Health Thomas Jefferson University** University of California San Francisco **University of Pennsylvania** University of Pennsylvania - School of Medicine **University of Pittsburgh University of Pittsburgh Medical UPMC** Pinnacle Warren General Hospital WellSpan Health Yale School of Public Health **Yale University**

2020 Data User Series - 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.



"We would recommend PHC4 data to other researchers because it is a comprehensive and detailed inpatient dataset that can be obtained through an efficient and reasonably priced request process."... Dr. Rie Sakai-Bismark Health care regionalization services assign patients who are critically ill, or have high-risk conditions, to hospitals that perform higher numbers of relevant specialized treatments and surgeries. Dr. Rie Sakai-Bizmark, Investigator, The Lundquist Institute and Assistant Professor of Pediatrics, David Geffen School of Medicine at UCLA, used inpatient discharge data to study the effects of regionalization on pediatric patients requiring cardiac surgery. The objective of the study entitled, *Impact of Pediatric Cardiac Surgery Regionalization on Health Care Utilization and Mortality*, was to evaluate the volume-outcome relationship and to examine the effect of regionalization on in-hospital mortality, length of stay and cost. Using a large database of hospital discharges including Pennsylvania, the researchers working on her team explored regionalization trends in pediatric cardiac surgery and assessed differences in the trends across states, estimating the number of avoidable deaths and the number of transfers, in order to assess the impact of regionalization.

Dr. Sakai-Bizmark stated, "The Pennsylvania Health Care Cost Containment Council's (PHC4) inpatient discharge data were integral to our investigation of regionalization trends and outcomes in pediatric cardiac surgery across the country. Including Pennsylvania in our multi-state dataset allowed us to account for approximately 46% of the U.S. population." She also explained, "Our models showed that patients receiving pediatric cardiac surgery in high-volume hospitals had lower mortality rates and lower hospital costs. This indicates that regionalization had a beneficial impact on patient outcomes."

The study found that high-volume hospitals tend to take higher risk patients and was published in PubMed Central.1 In describing the study's data requirements, Dr. Sakai-Bizmark noted that she was able to obtain the PHC4 data needed for the project and would like to use PHC4 data for future projects on inpatient care, including a study of health issues in the homeless population.

Dr. Rie Sakai-Bizmark utilizes large administrative databases to focus on health services research. She applies existing frameworks and methodologies for implementation science to the transition of research into real world healthcare settings, which currently include health screenings for newborn infants. She evaluates the effectiveness and efficacy of a range of health interventions, screenings, and regionalization policies to guide healthcare policies. Specializations have included pediatric cardiology, asthma, and diabetes mellitus.

She is conducting research on improving management of physical and mental disorders in homeless environments, especially in the area of maternal, infant, and child health.

Data on the Go – PHC4 Mobile Application www.phc4.org/m

How often are county residents hospitalized? Find out here.

County-specific hospitalization data

- ✓ Mobile ready platform
- ✓ Local Inpatient Data
- Hospital Admissions
- ✓ Population Based

✓ Age & Payer✓ Breakdowns

The PHC4 mobile application provides county-specific information on hospitalization rates for a variety of conditions. The application is easily accessible with any mobile device. Consumers, legislators, healthcare providers, policymakers and anyone can search by county to discover localized, inpatient admission data through population-based reports. **Hospital Admissions - Overall**

Opioid Overdose

Opioid Overdose and Opioid Use Disorder

Maternal Hospital Stays involving Opioids

Drug Withdrawal in Newborns

Breast Cancer Surgery

Heart Failure Episodes of Care

Potentially Preventable Hospitalizations

Diabetes

Sepsis

Super-Utilizers

C. difficile Infections (CDI)

New Publications/Projects in 2020

PA Health Care Cost Containment Council



During 2020, PHC4 released updated versions of its annual flagship reports, as well as six new research briefs; two of them focused specifically on the COVID-19 pandemic and all six of them impacted by it.

Since January 2016, PHC4 has published twelve research briefs illuminating the issue of hospitalizations for substance use, particularly opioids and the associated effects on Pennsylvania communities. Most of the briefs also display trends over time, age and payer breakdowns, population differences, and county rates. Furthermore, as the COVID-19 pandemic could be particularly stressful for those struggling with substance use, the data will be helpful in continuing the study of these issues during and after the COVID-19 crisis.

Research Briefs

In May 2020, PHC4 published Opioid Analysis: County Specific Data - Fiscal Year 2019.

The COVID-19 pandemic could be particularly stressful for those struggling with opioid use disorders. These individuals, who often have other chronic health or socioeconomic issues, are at higher risk for developing the severe respiratory symptoms associated with COVID-19. Further, the stress brought

about by this pandemic could affect treatment and recovery as well as increase the risk of relapse. Continuing its work on opioid-related issues, PHC4 has released county-specific rates of hospitalization for four opioid-related conditions in FY 2019 results that can serve as a baseline for continued study of opioids during and after the COVID-19 crisis.



PHC4 published **Potentially Preventable Hospitalizations** in June of 2020.

This research brief examines hospital admissions in FY 2019 for select conditions that might have been avoided with effective primary or preventive care. Continued attention to these hospitalizations is particularly important during the COVID-19 pandemic. Delaying primary and preventive care during this time could increase the risk of hospitalization particularly for those suffering from chronic illnesses.



1 in 9 hospitalizations could've been prevented in 2019!



Mechanical Ventilation in PA Hospitals— Pre-COVID-19 was published in August 2020.



Mechanical Ventilation in PA Hospitals-Pre-COVID-19

8/12/2020



This new research brief examined Pennsylvania hospitalizations involving mechanical ventilation in fiscal year (FY) 2019 (July 1, 2018 through June 30, 2019). The COVID-19 pandemic has highlighted the important role mechanical ventilators play in the management of severe respiratory illness. This brief examines hospital use of mechanical ventilation pre-COVID-19information that will be important in future COVID-19 analysis and provides important baseline information in understanding COVID-19 hospitalizations.

Three-Year Trends in Hospitalizations Related to Substance Use was published in October 2020.

PHC4 has updated its data on opioid-related hospitalizations and has extended the analyses to include alcohol, cocaine, and amphetamines. Maternal stays with opioid use and newborn stays with neonatal abstinence syndrome are also included. Statewide trends (2017-2019) and county-specific data (2019) are reported. As the COVID-19 pandemic could be particularly stressful for those struggling with substance use, the data will be helpful in continuing the study of these issues during and after the COVID-19 crisis.

Opioids, Alcohol, Cocaine and Amphetamines



Maternal Opioid Use and Neonatal Abstinence Syndrome (NAS)

Maternal Stays with Opioid Use

The hospitalization rate of maternal stays with opioid use **decreased 2%** between 2017 and 2019. The number of maternal stays with opioid use dropped from 2,709 to 2,565.

Maternal Stays with Opioid Use and Newborn Stays with NAS (Rate per 1,000 Maternal or Newborn Stays)



Newborn Stays with NAS

The hospitalization rate of newborn stays with neonatal abstinence syndrome (NAS) **decreased 12%** between 2017 and 2019. The number of newborn stays with NAS dropped from 1,879 to 1,610.

Addressing the COVID-19 Pandemic, PHC4 published COVID-19 Hospitalizations in Pennsylvania – March to June 2020 in January 2021.

This research brief examines COVID-19 hospitalizations for patients of all ages, Pennsylvania residents and non-residents, who were discharged from Pennsylvania's acute care hospitals from March through June 2020. As these hospitalizations occurred during the first four months of the COVID-19 pandemic, the results form a basis for future analysis and comparison as subsequent data becomes available.

There were 19,177 COVID-19 hospitalizations in Pennsylvania between March and June 2020. This brief examines patient characteristics and outcomes for these hospital stays, including:

- County-specific and population-based hospitalization rates
- Age and payer breakdowns
- In-hospital mortality rates
- Length of stay findings



- There were **19,177** COVID-19 hospitalizations in Pennsylvania between March and June 2020.
- These patients spent a total of 168,511 days in the hospital. The average length of stay was 8.8 days. 17.4% of the patients stayed 14 days or longer.
- 15.7% of the patients required mechanical ventilation.
- 16.3% of the patients died during their hospitalization.



Public Reports in 2020

During June 2020, PHC4 released updated data to help cancer patients and their families make decisions about cancer surgical care in Pennsylvania. The <u>Cancer Surgery Volume in</u> <u>Pennsylvania</u> provides information about the number of cancerrelated 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.

"Reporting volume for these cancer surgeries is important because there is strong evidence in the scientific literature that links hospital surgical volume and patient outcomes," said Joe Martin, PHC4's Executive Director. "It's another tool for cancer patients and their families to use when considering treatment options."

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.

Bladder

- Brain
- Breast
- Colon
- Esophageal
- > Liver
- Lung
- Pancreatic
- Prostate
- Rectal

Cancer Surgeries Performed in FY 2019				
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	1,153	103	30	29.1%
Brain	1,277	36	2	5.6%
Breast	12,092	128	8	6.3%
Colon	3,604	132	13	9.8%
Esophagus	343	27	4	14.8%
Liver	549	33	11	33.3%
Lung	2,374	70	10	14.3%
Pancreas	505	27	8	29.6%
Prostate	3,035	80	16	20.0%
Rectum	966	82	27	32.9%
Stomach	309	59	32	54.2%

For cancers of the liver and stomach, a third or more of the hospitals performed only one or two surgeries in FY 2019 as highlighted in the table to the left.

*Does not include children's hospitals or hospitals that closed or merged.

Hospital Performance Report in 2020

The Pennsylvania Health Care Cost Containment Council's (PHC4) Hospital Performance Report (HPR) displays volume and outcome information about 16 different medical conditions and surgical procedures for Pennsylvania general acute care 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.

Comparison of Mortality Rates 2014-2019

Comparing the FFY 2019 results with data from FFY 2014, the report shows a statistically significant decrease from 2014 to 2019 in Statewide in-hospital mortality rates for eight of the 15 conditions reported. The largest decrease was in Respiratory Failure, where the mortality rate decreased from 12.5% in federal fiscal year 2014 to 8.2% in federal fiscal year 2019. No condition showed a statistically significant increase in the inhospital mortality rate during this time-period.









Measuring the Financial Health of Pennsylvania Hospitals

NEW - PHC4 Financial Reporting Brief

PHC4 published <u>Overdose and Substance Use Disorder among Pennsylvania Residents</u> <u>Age 65 and Older: Hospital Admissions and Emergency Department Visits</u>. This financial brief examines hospital admissions and emergency department visits for substance



use among Pennsylvania residents age 65 and older who were enrolled in the Medicare fee-for-service program. Payments by substance type are reported. County rates are included as are total payments by county. Analysis revealed that there were 7,833 hospitalizations and emergency department visits, specifically for substance use among Pennsylvania residents age 65 and older during the three-year period 2016, 2017, and 2018 at a cost of \$26.8 million.

PHC4 Report - Financial Analysis 2019



This annually published, **<u>Financial Analysis Report</u>** 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 focuses on general acute care (GAC) hospitals. Volume Two, concentrates on ambulatory surgery centers (ASCs). Finally, Volume Three focuses on non-GAC hospitals, which include rehabilitation hospitals, psychiatric hospitals, long-term acute care hospitals, and specialty hospitals.



Pennsylvania Health Care Cost Containment Council

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This report and other PHC4 publications are available online at 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 or 717-232-6787.