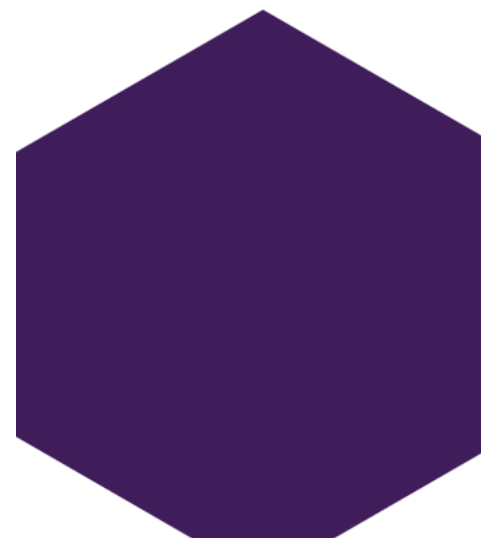
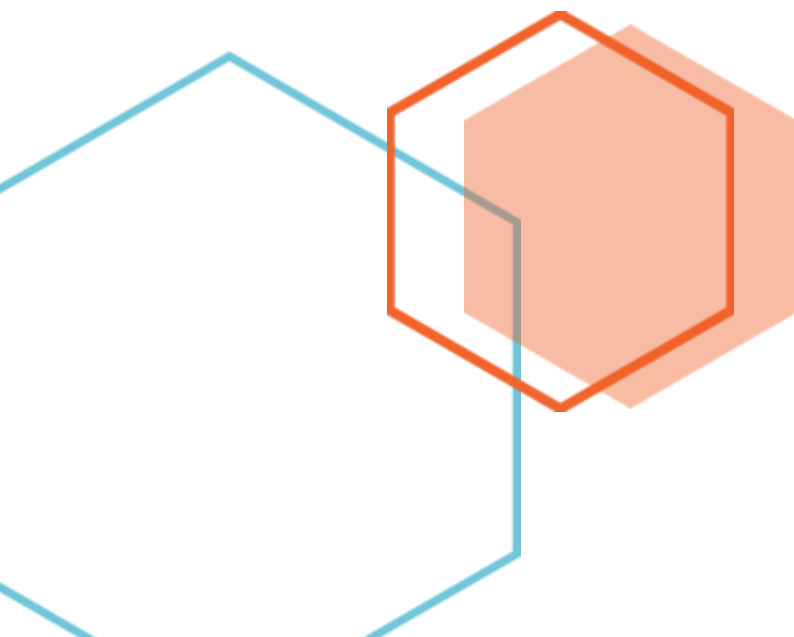




PENNSYLVANIA HEALTH CARE COST CONTAINMENT COUNCIL

2018 ANNUAL REPORT

Collecting, analyzing and reporting data to improve the quality, and restrain the cost, of healthcare in the state of PA – a reflection of progress.



Executive Director's Message

The Value Proposition

Many years ago, I was talking with PHC4's Interim Director at the time, Cliff Jones, about how best to communicate PHC4's value. Mr. Jones was one of the founders of PHC4, during his tenure as President of the PA Chamber of Commerce, along with his close friend Julius Uhlein, then President of the PA AFL-CIO.

Cliff told me that people want to know three things. Is the work of high quality? Is it useful? Who cares about it? I often reflect back on that conversation.

On the first issue, the Council data has been widely published in esteemed journals and studies and widely reported in the popular media. To my knowledge, the integrity of the council's data and its analytics has never been challenged.

Secondly, is it useful and who uses it? Well, in addition to the more than half a million reports and studies that are downloaded each year from PHC4's website, thousands of specially requested datasets have been provided to health care providers, organizations, academic researchers, consultants and other government agencies since PHC4's inception. Directly following this letter I have listed the special data requests the council filled in 2018. Those commissioned by government users are provided free of charge but carry a market value of approximately \$135,000 annually.

And third, who cares about it? Since its inception in 1986, PHC4 has been supported by hundreds of individuals and organizations throughout the state and the U.S.—a point reflected in the various statements of support you will find on the following pages. Respected leaders such as Rick Bloomingdale of the PA AFL-CIO, Gene Barr of the PA Chamber of Business and Industry, Andy Carter of the Hospital and Healthsystem Association of PA, David Nash, MD, Founding Dean of the Thomas Jefferson College of Population Health, Karen Feinstein, PhD, of the Jewish Healthcare Foundation, Linda Aiken, RN, PhD, of the University of Pennsylvania, William Gaynor, MD, Pediatric Heart Surgeon at the Children's Hospital of Philadelphia, and Todd Shamash, Esq. Senior Vice President at Capital Blue Cross and Deputy Chief of Staff to former Governor Tom Corbett. The bill to reauthorize PHC4 as an independent state agency lists House Majority Leader Bryan Cutler as its chief sponsor. And PHC4 is a valuable partner in current Governor Tom Wolf's efforts to curb and eradicate the opioid epidemic that is such a threat to our quality of life, our economic well-being, our families and communities here in Pennsylvania.

Finally, I want to acknowledge our staff for the tremendous work that they do, and to our board members for the unwavering support that they provide. I especially want to acknowledge our board's executive officers – Chairman Frank Snyder, Secretary Treasurer for the PA AFL-CIO, Vice-Chairman Bob Johnston of East Penn Manufacturing, and Todd Shamash, Senior Vice-President, General Counsel and Corporate Secretary for Capital Blue Cross.



One must have good data/information to make good decisions. Nowhere is that more true than in health care. PHC4 is very proud to be of value to the Commonwealth of Pennsylvania as it wrestles with the significant challenges facing our citizens.

2018 Data Requests

During the calendar year 2018, many entities relied on PHC4 for accurate, reliable healthcare data. A full listing of CY2018 special reports and requests for data (applicant & project description) is available online at <https://www.pabulletin.com/secure/data/vol49/49-12/436.html>

Agency for Healthcare Research & Quality
Allegheny County Health Department
Armstrong County Memorial Hospital
Boston University School of Medicine
Capital Health
Children's Hospital of Philadelphia
Community Health Systems
Coordinated Health
Crozer Keystone Health System
DLP Memorial Medical Center
Drexel University
Evangelical Community Hospital
Excela Health
Faegre Baker Daniels, LLP
Foundation for Advance of International
Medical Education & Research
Fulton County Medical Center
Georgetown University
Good Shepherd Rehab Network
Highmark Health
Indiana Regional Medical Center
Intalere (formerly DataBay Resources)
Jacqueline B. Bittner, Esq.
Jian Strategic Marketing
Kaufman, Hall & Associates
Lancaster General Health
Lehigh University
Lehigh Valley Health Network
Monongahela Valley Hospital
Mount Nittany Health
Nemours/Alfred I. DuPont Hospital for
Children
New Solutions, Inc.
OptumInsight
OSS Health

Penn Highlands Healthcare
Penn State Hershey Health System
Pennsylvania Department of Aging
Pennsylvania Department of Health
Pennsylvania Department of Human
Services
Pennsylvania Department of the Auditor
General
Pennsylvania Office of Attorney General
Pennsylvania Patient Safety Authority
Philadelphia Department of Public Health
Public Health Management Corporation
Reading Hospital and Medical Center
Renzi Podiatry/Save Your Soles Campaign
Safety-Net Association of Pennsylvania
SG-2, LLC
Shouldice Hospital
St. Luke's University Health Network
Summit Health
SUNY Upstate Medical University
Temple University College of Public Health
The Children's Home of Pittsburgh
The Pulmonary Institute of Redstone
Thomas Jefferson University/1889 Jefferson
Center for Population Health
Truven Health Analytics
University of Pennsylvania
University of Pennsylvania – School of
Nursing
University of Pittsburgh
University of Pittsburgh Medical Center
UPMC Susquehanna Health
USA Today
WellSpan Health
Yale School of Public Health

Opioids – Addressing the Crisis

Like the rest of the nation, Pennsylvania faces an opioid crisis. PHC4's hospitalization data is crucial to understanding how this issue affects residents as well as the next steps in attacking the problem. Rarely a day goes by without hearing about a drug overdose in our community.

Chances are good that you or someone you know is affected by the opioid crisis. Opioid overdose has been described as the worst public health crisis in the Commonwealth of Pennsylvania, and nationwide, in decades.

The Centers for Disease Control and Prevention (CDC) reports there were 71,568 drug overdose deaths in the United States between January 2017 and January 2018. 5,456 or 7.6% of them were in Pennsylvania. Drug overdose deaths increased 6.6% from the previous year nationwide and 17.5% in Pennsylvania. The Pennsylvania Department of Drug and Alcohol Programs estimates that during 2016, more than 4,600 Pennsylvania residents lost their battle with opioid-use disorder, equating to approximately 13 Pennsylvanians dying every day from an opioid overdose.

Pennsylvania has taken an aggressive approach in responding to this crisis. The American Medical Association (AMA) and the Pennsylvania Medical Society (PAMED) have recognized the state as a national model for its approach, for increasing access to treatment for addiction, enhancing access to naloxone and providing comprehensive care to patients with pain.

It may come as no surprise that the Pennsylvania Health Care Cost Containment Council has focused a majority of its own research and publication efforts on the opioid issue over the past year. For Fiscal Year 2018/2019, significant staff time and resources were devoted specifically to expanding the reporting on the opioid epidemic and related issues in Pennsylvania.

"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."



*-Frank Snyder, Council Chair
& Secretary Treasurer,
Pennsylvania AFL-CIO*



"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."

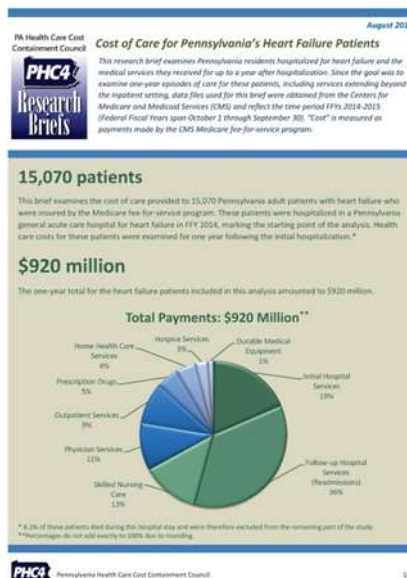
-Gene Barr, President, PA Chamber of Business & Industry



"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."

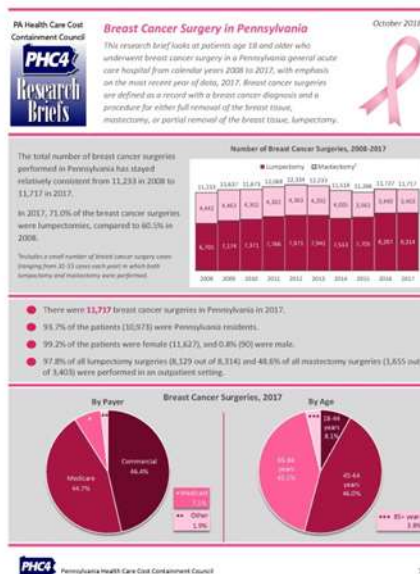
-Rick Bloomingdale President Pennsylvania AFL-CIO

New Projects and Publications in 2018



Cost of Care for Pennsylvania's Heart Failure Patients

This new research brief examines adult PA Medicare fee-for-service residents hospitalized for heart failure and the medical services they received for up to a year after hospitalization. Cost breakdowns by service type are provided. Population-based rates by county are also shown.



Breast Cancer Surgery in Pennsylvania

This brief examines the 11,717 breast cancer surgeries performed in PA hospitals in 2017. Included are trends between 2008 and 2017, age and payer breakdowns, and surgery rates by county. Statewide, there were 20.8 breast cancer surgeries performed per 10,000 female residents.

“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 WHAMglobal 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.”



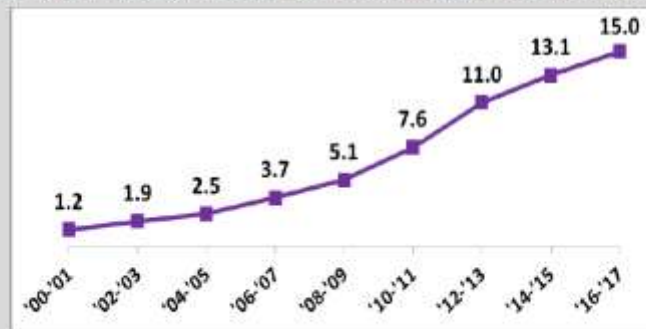
-Karen Wolk Feinstein, PhD,
President & CEO
Jewish Healthcare
Foundation

Hospitalizations for Newborns with Neonatal Abstinence Syndrome

An increase of more than 1,000%.

The rate of neonatal abstinence syndrome (NAS) in newborns increased 1,096% between FYs 2000-2001 and FYs 2016-2017, from 1.2 to 15.0 per 1,000 newborn stays.

Rate of Neonatal Abstinence Syndrome per 1,000 Newborn Stays, FYs 2000-2001 to FYs 2016-2017



Each data point represents two years of data.

In March 2018, PHC4 released a new research brief showing that the rate of newborns suffering from drug withdrawal increased more than 1,000% between Fiscal Years 2000-2001 and Fiscal Years 2016-2017. Referred to as Neonatal Abstinence Syndrome (or NAS), this array of problems develops shortly after birth in newborns who were exposed to addictive drugs, most often opioids, while in the mother’s womb. Withdrawal signs develop because these newborns are no longer exposed to the drug for which they have become physically dependent.

Specifically, PHC4’s research found that the rate of NAS in newborns increased 1,096%—from 1.2 per 1,000 newborn hospitalizations to 15.0.

Newborns with NAS had:

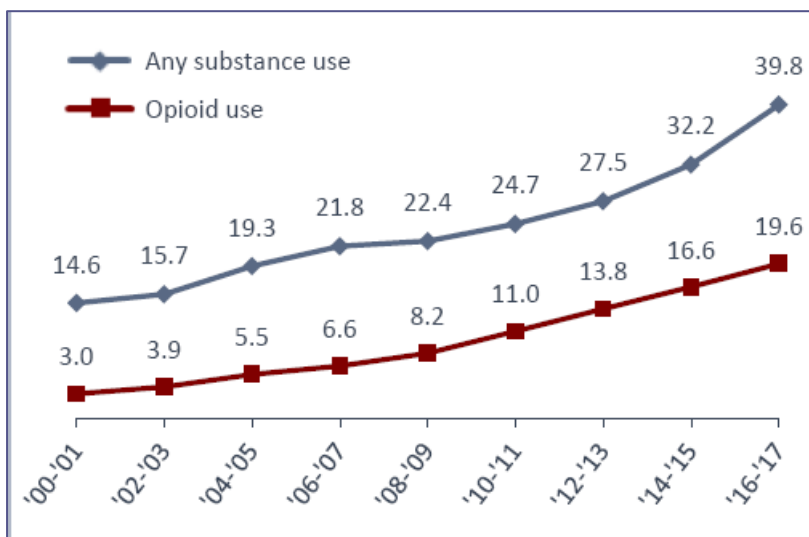
- Longer hospital stays
- More complications (low birth weight, prematurity, difficulty feeding, and respiratory distress)
- A higher proportion of hospital stays paid by Medicaid

PHC4 Research Briefs – Focus on Opioids

Since January 2016, PHC4 has published eight different, eye-opening research briefs examining hospitalizations for substance use, in particular 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.

Three of these briefs focused on maternal and neonatal hospitalizations related to substance use. As noted earlier, one of the reports showed a shocking 1,096% increase over 15 years in Pennsylvania hospital admissions for babies born addicted to opioids. The most recently issued brief, *Maternal Hospital Stays Involving Substance Use and Opioids*, reported that substance use was present in 1 of every 25 maternal hospital stays (or 39.8 per 1,000) in the two-year period 2016-2017. The rate was 1 in 69 (or 14.6 per 1,000) in 2000-2001. Opioid drugs were the most common substance used—accounting for about 49% of the 11,103 maternal hospital stays where substance use was present in 2016-2017. Opioid use was present in 1 of every 51 maternal hospital stays (or 19.6 per 1,000) during this period. The rate was 1 in 329 (or 3.0 per 1,000) in 2000-2001.

Substance Use Rate per 1,000 Maternal Stays



"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 the most recent work on opioid related overdoses and hospitalizations."



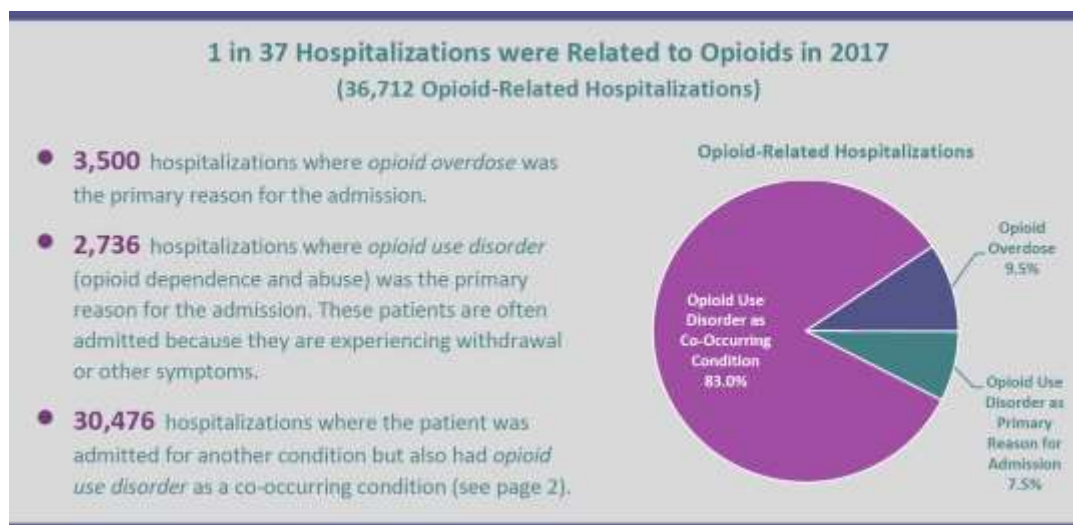
-Todd Shamash, Esq.
Senior Vice President,
General Council & Corporate
Secretary,
Capital Blue Cross

2018 Reports Focused on Opioids:

- *Hospitalizations for Newborns with Neonatal Abstinence Syndrome*
- *Hospitalizations for Opioid Overdose 2016-2017*
- *Hospitalizations for Opioid Overdose – Population Differences*
- *Hospitalizations for Opioid Overdose and Opioid Use Disorder*
- *Maternal Hospital Stays involving Substance Use and Opioids*

Hospital Admissions for Opioid Overdose and Opioid Use Disorder

In a research brief published in October 2018, *Hospitalizations for Opioid Overdose and Opioid Use Disorder*, it was reported that in 2017, 1 in 37 hospital admissions were opioid-related. The number of opioid-related hospital admissions increased 103.6% between 2008 and 2015!



While recent data is beginning to show some overall reduction in opioid overdose admissions, these numbers are still alarming. PHC4 is committed to continue to analyze and report on hospitalizations resulting from substance use, including opioid abuse, and to continue to supply data about opioid-related hospitalizations to the Governor's Opioid Data Dashboard, including data on neonatal abstinence syndrome, and maternal opioid use.

“PHC4 data is a unique source of information on patients cared for in PA hospitals including their clinical outcomes and complications as well as utilization information important in studying quality and safety of care as well as costs of care through measures of readmissions, length of stay, and discharge disposition. As a research database it has many advantages over Medicare data because it includes patients of all ages thus allowing studies of such pressing national and state health problems as the opioid epidemic.”



-Linda H. Aiken, PhD, FAAN, FRCN, Director, Center for Health Outcomes & Policy Research, University of Pennsylvania

Maximizing the Data: Special Requests, Custom Reports & Specialized Data Analysis

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 and December 31, 2018, PHC4 fulfilled 123 requests for datasets and reports.

Revenue from the 100 requests from entities other than PA state agencies totaled \$758,645. All revenue generated from sales of data covers operating expenses, providing about 20 percent of PHC4's annual operating budget.

Non-commercial clients, including hospitals, health systems, health care organizations, purchasers, and insurers initiate most PHC4 data requests (67), using the data for quality improvement, strategic planning, needs assessment, market share analyses, surgical outcome analyses and utilization reviews. Academic health care researchers, both inside and outside the commonwealth, placed 20 research requests in calendar year 2018.

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 – corporations/organizations that repackage and redistribute PHC4 data or analysis for a profit – ordered 11 requests during 2018.

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.

Valuable Resource for Healthcare Consumers, Purchasers & Providers

PHC4's Hospital Performance Report (HPR) includes cost and quality information to assist consumers and purchasers in making more informed health care decisions and serves as an aid to providers in highlighting additional opportunities for quality improvement and cost containment.



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, heart failure, etc., to calculate risk for the patients in this report.

The HPR displays hospital-specific outcomes for 16 different medical conditions and surgical procedures, covering adult inpatient hospital discharges, regardless of payer, and is divided into three regional versions: Western, Central and Northeastern, and Southeastern Pennsylvania. All of the state's general acute care and several specialty general acute care hospitals are included

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.

Good news reported!

Significant 5-year declines in statewide and regional in-hospital mortality & readmission rates



"Arriving when it did, I view this report as a "holiday gift" to the entire healthcare quality and safety network; our collective determination to raise the quality bar can have a strongly positive effect."

**David Nash, MD, MBA,
FACP
Dean, Jefferson College of
Population Health
Chair, PHC4 Technical
Advisory Group**



Relevant Data Source with Easy Access

**How often are county residents hospitalized?
Find out here!**



In recent years, the Council has focused efforts on creating new ways to make the data more meaningful and to simplify its presentation. One of the tools developed to accomplish this is the county profiles, which provides county-specific information on hospitalization rates for a variety of conditions. During 2018, PHC4 expanded its county profile application and re-designed it to be easily accessible by any mobile device. Users, such as **consumers, legislators, providers and policymakers**, can search by county to discover localized inpatient admission data through population-based reports. It includes, for example, information on the number of county residents admitted to Pennsylvania hospitals, where they went for treatment, breakdowns by age and payer, and/or county hospitalization rates and statewide comparisons for a variety of conditions.

“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.”



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

“Children’s Hospital of Philadelphia is proud to contribute to the 3rd report by PHC4 of outcomes for congenital cardiac surgery. This ongoing effort makes Pennsylvania a national leader when it comes to improving health outcomes for children needing pediatric heart surgery. The project began when surgeons from centers in Pennsylvania and Delaware approached PHC4 with the concept of a collaboration of surgeons, hospitals, the Society of Thoracic Surgeons (STS) and PHC4 to begin public reporting of outcomes for congenital heart surgery. This unique effort helps ensure that children in Pennsylvania and Delaware receive the highest quality care.”



-J. William Gaynor, MD
Children’s Hospital of
Philadelphia

Strategic Planning & Goals

In 2016, PHC4 commemorated its 30-years of accomplishments. In conjunction with marking that milestone, the Council launched a new, strategic planning endeavor to assess the Council’s progress on previously established targets, to develop a shared vision and to identify new strategic goals that would ensure leadership in product and service delivery, as well as PHC4’s position and sustainability moving into the future. Resulting from the strategic planning process was the development of major themes and priority areas for which to focus the Council’s activity and resources in the coming years. To date, the Council has achieved significant progress in several areas:

- ✓ **Enhance cyber-security measures and incorporate cyber-security activity into ongoing work plans;**
- ✓ **Enhance and simplify presentation of the data;**
- ✓ **Expand the collection, analysis and reporting beyond the hospital setting;**
- ✓ **Implement better marketing, communication, and education strategies;**
- ✓ **Develop cost analytics strategy utilizing public-sector data (Medicare & Medicaid);**
- ✓ **Develop strategic partnerships – state health agencies, universities, business coalitions, etc...**

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
Insurance Commissioner

Official Delegates

Alison Beam – Insurance
Department

Carolyn Byrnes, MPH, CPH –
Department of Health

David Kelley, MD, MPH –
Department of Human
Services

PHC4's Leadership Team (FY2018-19)

Executive Committee

Frank Snyder, Chair – Labor

Robert Johnston, Vice Chair – Business

Todd Shamash, Esquire, Treasurer – Health Plans

Tom Duzak, Mandated Benefits Committee Chair – Labor

Joseph Huxta, Education Committee Chair – Business

Council Members

The Honorable Jessica Altman – Insurance Commissioner of Pennsylvania

Gene Barr – Business

Mary Beth Clark, RN, MPA, MSN, EdD – Quality Improvement

Samuel Denisco – Business

Randy DiPalo – Labor

Mark Dever – Business

Lisa Frank - Labor

Edward Karlovich – Hospitals

Brad Klein, MD, MBA, FAAN, FAHS, FAANEM - Physicians

The Honorable Rachel Levine, MD – Pennsylvania Secretary of Health

Gregory S. Martino – Health Plans

Matthew D. McHugh, PhD, JD, MPH, RN, FAAN – Nurses

The Honorable Teresa Miller – Pennsylvania Secretary of Human
Services

Ernest Sessa – Consumer Representative

Frank Sirianni – Labor

Adele Towers, MD, MPH, FACP – Physicians

Steven A. Wolfe - Hospitals



Pennsylvania Health Care Cost Containment Council

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www.phc4.org



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.