





Rick Bloomingdale President, Pennsylvania AFL-CIO



HEALTH



With changing political dynamics on the federal level, our nation's health care policy is at a crossroads. As providers and consumers work to stay on top of the changing health care landscape, the Council's role in independent health care data is more important than ever. For the past 30 years, the Council's reputation of providing up-to-date, accurate and reliable analyses of health care in the Commonwealth has been unparalleled. The important work of the Council has played a pivotal role in keeping health care in the state affordable and accessible and helping consumers and group purchasers identify the most efficient and effective health care options to meet their needs.

President & Chief Executive Officer
Pennsylvania Chamber of Business & Industry

Letter from Leadership

Dear Friends of PHC4,

Transparency was not a catch phrase or a common principle in 1986 when the Pennsylvania General Assembly created the Pennsylvania Health Care Cost Containment Council. Today, PHC4 is a recognized national leader in public health care reporting and a champion of transparency.

At the time of PHC4's genesis, health care in the commonwealth was experiencing double-digit increases. The organization's founding was forged when key stakeholders were brought together to tackle the challenge of runaway costs. The primary goal of the effort was to provide purchasers of health care benefits—businesses, labor unions and other stakeholders—with actionable information used to improve quality and restrain costs.

PHC4 trailblazers could not have envisioned that, 30 years into the future, more than 840,000 public reports on patient treatment results would be downloaded from the PHC4 website annually and nearly 100 organizations and individuals would utilize PHC4's special request process each year to purchase and use data. Nor could the founders have imagined that the team they assembled would help to transform the face of public health, safety and accountability worldwide.

Since PHC4's inception, the 25-member board of directors, representing business, labor, consumers, health care providers, insurers and state government, has proven to be an excellent example of how organizations representing many interests can come together for a common purpose: to address the problem of escalating health care costs, ensure the quality of health care and increase access for all citizens regardless of ability to pay.

Thanks to the collaborative efforts of the council members, staff and stakeholders, the innovative independent state agency is poised and positioned to meet future health care challenges. By working together to promote transparency via public health reporting, PHC4 remains dedicated to advancing the quality of care for patients in efforts to restrain overall costs of health care for Pennsylvania businesses and families.

Yours in good health,

Joe Martin Frank Snyder
Executive Director Council Chair



Joe Martin Executive Director, PHC4



Frank Snyder, Council Chair Secretary Treasurer, PA AFL-CIO



Bob Johnston, Vice Chair Benefits Manager East Penn Manufacturing Co.



Todd Shamash, Esq., Treasurer Senior Vice President and General Counsel, Capital BlueCross



For many years, PHC4 has provided **valuable data** and research that has enhanced our efforts to improve clinical quality and patient satisfaction, to make our care more affordable, and to enhance our community's overall health.

Jan L. Bergen President & Chief Executive Officer Lancaster General Health/Penn Medicine



PHC4 is the data engine for implementing population health programs and therefore its mission is totally aligned with the future of the delivery system.

David B. Nash, M.D., MBA Dean, Jefferson College of Population Health



PHC4 provides an essential platform to help make informed decisions on cost and quality of health care in Pennsylvania. The Pennsylvania Department of Health has depended on PHC4 data to develop several of our innovation initiatives. We must continue to build on this important foundation to further advance our work offering transparency in order to continue to improve health care quality at a lower cost.

Karen M. Murphy, Ph.D., R.N., Secretary, Pennsylvania Department of Health



Slowly, but surely, the nation is moving toward **total health performance transparency.** It is a worthy direction. PHC4 has been in the vanguard for years. They illuminate the path.

Karen Wolk Feinstein, Ph.D.
President and Chief Executive Officer,
Jewish Healthcare Foundation

A History of Firsts

30 Years of Promoting Health Care Transparency to Improve Care and Costs

2016 marks the 30th anniversary of the Pennsylvania Health Care Cost Containment Council (PHC4), which was created by the Pennsylvania General Assembly in 1986 as a result of collaboration among Pennsylvania businesses and labor unions and other key stakeholders to enact marketoriented health care reforms. PHC4 is an independent state agency charged with collecting, analyzing, and reporting information that can be used to improve the quality and restrain the cost of health care in the state. Today, PHC4 is a recognized national leader in public health care reporting.

PHC4's work has been marked by a series of "firsts" and led to their reputation as a trusted health care data aggregator and reporter. PHC4 stood out as the first in the nation to issue hospital report cards, to release studies on hospital infection rates and issued a groundbreaking study on hospital readmission rates. PHC4 publishes comprehensive reports on issues such as drugrelated hospitalizations, bariatric surgery, depression and firearm related injuries.

PHC4 held a meeting marking the milestone in November to recognize the critical work of PHC4, which featured guest speaker Dr. David Nash of Jefferson College of Population Health. Internationally recognized for his work in public accountability for outcomes, physician leadership development, and quality-of-care improvement, Dr. Nash spoke about the history of health care transparency, emphasizing PHC4's leadership role in bringing the health care system to where it is today.

At the meeting, Dr. Nash was presented with the 2016 PHC4 Health Care Leadership Award for his vision, dedication, and commitment to the council.

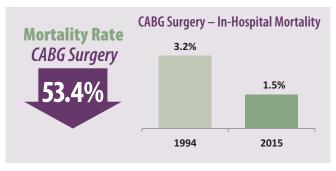
PHC4's firsts and Dr. Nash's presentation is available online at phc4.org.

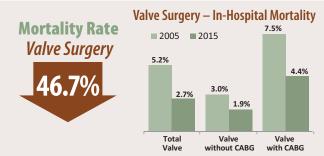




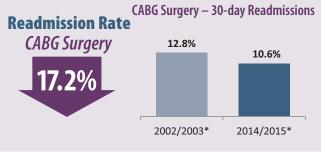
PHC4's Impact—Cardiac Reports Illustrate Empirical Validation of the Council's Impact

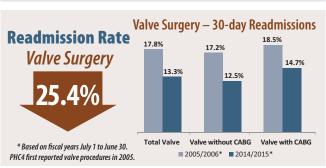
Coronary artery bypass graft (CABG) and valve surgeries are costly, frequently performed surgeries. Although most CABG/valve patients have an excellent prognosis for survival, results following surgery may vary among hospitals and surgeons. There is evidence that information contained in reports like the PHC4 **Cardiac Surgery Report** encourage hospitals and surgeons to examine their processes and make changes that can improve quality of care and ultimately save lives. For the full report, visit our website www.phc4.org.







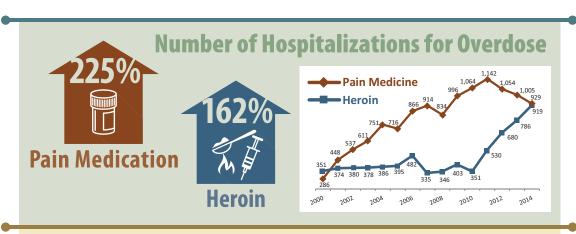


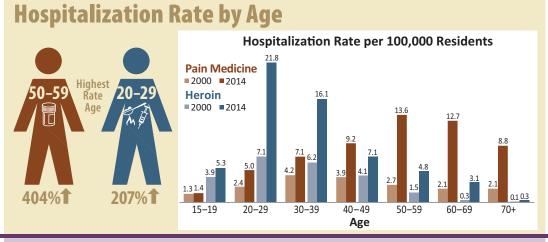


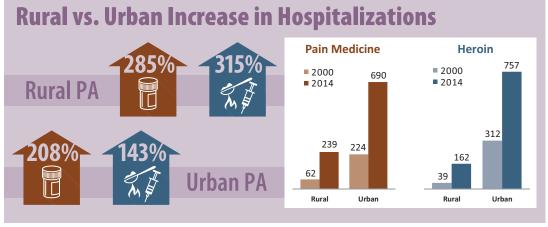


Confronting the Opioid Issue — A Very Expensive Problem in PA

The PHC4 research brief **Hospitalizations for Overdose of Pain Medication and Heroin** estimates that hospitalizations for pain medication and heroin overdose amounted to an estimated **\$12.2 million** in payments. For the full brief, visit our website www.phc4.org.







Featured Reports

As part of its mission to provide purchasers of health care benefits—businesses, labor unions and other stakeholders—with actionable information used to improve quality and restrain costs, PHC4 collects over 4.5 million inpatient hospital discharge and ambulatory/outpatient procedure records each year from hospitals and freestanding ambulatory surgery centers in Pennsylvania. The Council shares this data with the public through free reports highlighting various health care topics in Pennsylvania.

The reports often include:

- Hospital-specific, risk-adjusted outcome measures: in-hospital complication, readmission for a complication, mortality and any unplanned readmission.
- Average charges and average Medicare payments for hospitals.
- Surgeon volume.
- County-level utilization rates.

• Key findings, including regional and statewide trends.

Taken together, this information can be helpful to patients, families, and purchasers in making more informed health care decisions and can serve as an aid to providers in highlighting additional opportunities for quality improvement and cost containment.

PHC4's most recent reports and research briefs in 2016 highlight:

- Spinal Fusions in Pennsylvania
- Knee and Hip Replacements Report with Hospital Specific Complication Ratings
- Neonatal and Maternal Hospitalizations Related to Substance Use
- Measuring the Financial Health of PA Hospitals & Surgery Centers
- Focusing on Localized Information
- The Hospital Performance Report

These reports and others are available online for free at phc4.org.



Orthopedic Reports

Valuable Resources Available

Two 2016 reports examined procedures that thousands of Pennsylvanians experience annually: spinal fusions and hip and knee replacements.

Spinal Fusions

The report on spinal fusion procedures provided valuable information for health consumers and payors, demonstrating a 67.2% increase between 2004 and 2014. There were 21,393 spinal fusions performed in Pennsylvania hospitals in 2014, up from 12,794 in 2004. Rates doubled for Pennsylvania residents age 65 and older and increased more than 60% for those age 45 to 64. In addition to the number of procedures, complications and readmissions, the report also looks at county-level population based utilization rates. Residents of Western PA had higher rates of spinal fusion than other areas of the state and southeastern PA residents had the lowest rates, pointing to the debate within the clinical community regarding the appropriateness of spinal fusion procedures, especially since, for some patients, other less complex treatment may yield similar benefits.

Hip and Knee Replacements

PHC4's online reports provide instant access to data, which revealed 36,307 knee replacements and 19,866 hip replacements were performed in Pennsylvania hospitals in 2014. Overall, 2.2% of patients experienced a complication following knee replacement surgery. For hip replacements, the complication rate was 2.8%. Increases in the number of knee and hip procedures performed on patients age 18-64 are particularly noteworthy especially since complications following these procedures can contribute to employment-related issues such as lost productivity and lost wages. Approximately 41% of the complications occurred in patients age 18-64.

Surgical site bleeding, joint and wound infections, sepsis, blood clots in the lung and pneumonia are types of complications following knee and hip replacement surgeries. Considering those surgeries have increased more than 40 percent in the last decade, more people than ever need reliable information to help them and their families select their care options.



New Report— Pediatric Heart Surgery

For those selecting a hospital for their child or others who are interested in tracking the quality and costs of health care, the Pediatric and Congenital Heart Surgery report will provide helpful data to inform decision making. The report examines hospital-specific mortality, volume of cases and national comparisons.

Maximizing the Data

Special Requests, Custom Reports and Specialized Data Analysis

Between January 1 and December 31, 2016, PHC4 fulfilled 129 requests for datasets and reports, surpassing the number of requests from any previous year in the agency's history.

Revenue from the 101 requests from entities other than PA state agencies totaled \$867,617. 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 (57), using the data for quality improvement, strategic planning, needs assessment, market share analyses, surgical outcomes analyses and utilization reviews.

Academic health care researchers, both inside and outside the commonwealth, placed 31 research requests in calendar year 2016.

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 or other organizations that repackage and redistribute PHC4 data or the resultant analysis for a profit—ordered 12 requests during 2016.

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.





Profiles of Success—Data Makes the Difference

PHC4 Data — A Valuable Component in Campaign to Reduce Lower Extremity Amputations

Hospitalization data from PHC4 helped uncover little-known facts about lower extremity amputations in southeastern Pennsylvania. Armed with this knowledge, Dr. Ronald Renzi applied for and received the Innovator's Circle Award from Abington Health Foundation and founded the Save Your Soles campaign.



"The campaign is a grassroots effort aimed at reducing major lower extremity amputations in the Philadelphia area. Peripheral arterial disease and diabetes are the leading causes of lower extremity amputation. The Save Your Soles campaign provides education on diabetes and screenings for peripheral arterial disease at numerous community events across the region" explains Dr. Renzi.

With the use of customized hospitalization data purchased from PHC4, the campaign examined location and racial differences of

patients suffering lower extremity amputation. The data revealed large geographic and racial disparity in amputation rates noting that there are specific zip codes in southeastern Pennsylvania where amputation rates are five times higher than the national average. The campaign found that black males suffer major lower extremity amputation three times more often than white males in the Delaware Valley.

Equipped with these findings, the Save Your Soles campaign met with medical and community leaders, who were often unaware of the problem. Together, they worked to create targeted information and screening campaigns to heighten awareness, improve health care and eventually eliminate lower extremity amputations. Black males have been the focus of the campaign due to the high rate of amputation in this segment of the population. Over the last few years, the overall number of amputations continues to fall in Philadelphia and surrounding counties. As a group, black females in Philadelphia have experienced the largest decrease in amputations.

In describing PHC4's data, Dr. Renzi stated, "This data is very powerful, highly reliable and full of details."

He shared that the campaign has recently started tracking vascular surgery procedures designed to prevent amputations in patients with poor circulation and noted the procedures' effectiveness can be evaluated with PHC4 data.

PHC4 Data Studied to Evaluate a Community Improvement Program

Dr. Shreya Kangovi, founding executive director of the Penn Center for Community Health Workers, first purchased customized hospitalization data from PHC4 in 2012 to be used in evaluating a program in which community health workers (CHWs) provided social support, advocacy, and navigation to low-income patients during their transition from hospital to primary care. PHC4's hospital admission data was an important component of the randomized control trial conducted to evaluate this program, which found improvements across a variety of post-hospital outcomes.

"Health care organizations across the country are faced with a daunting challenge: reduce health care costs while providing high-quality care to the sickest, most vulnerable patients," stated Dr. Kangovi.

In explaining the development of the program, Dr. Kangovi notes that "Between 2010 and 2013, Penn Medicine researchers partnered with Philadelphia community members and Penn Medicine leadership to develop a potential solution called Individualized Management towards Patient-Centered Targets (IMPaCT). In the



The above summaries highlight articles submitted for the PHC4 Data Users Series. To view the articles, visit PHC4.org.



PHC4 has taken a leadership role in health care transparency dating back to 1986. PHC4 continues to be the credible, independent source of this information today. Understanding quality and cost is essential for employers and consumers in today's health care environment.

Bob Johnston, Vice Chair, PHC4 Benefits Manager East Penn Manufacturing Co.

IMPaCT model, CHWs help lowsocioeconomic status patients to set and achieve goals. CHWs are trained laypeople who share socioeconomic backgrounds with their patients and are natural helpers in their communities."

Results from the randomized controlled trial, which involved 446 hospitalized patients, are promising. As Dr. Kangovi notes, IMPaCT was shown to improve posthospital access to primary care, mental health, patient engagement, patient-provider communication and reduced hospital readmissions.

The program has continued to grow. In providing an update, Dr. Kangovi notes that Penn Medicine created the Penn Center for Community Health Workers (PCCHW) in 2014 to support further research, development and implementation of evidence-based CHW models of care. Since then the center has grown to 40 full-time employees who provide direct care for 1,500 Penn Medicine patients annually. Featured in the Washington Post, National Public Radio (NPR), and Forbes magazine, PCCHW has garnered national attention. Over 350 organizations across the country have accessed the IMPaCT toolkit for program implementation since February 2014. The center also provides training and technical assistance to a variety of organizations.

Dr. Kangovi plans to use PHC4 data for additional studies on multiple chronic conditions. In recommending PHC4 data to others, Dr. Kangovi expressed, "the quality of PHC4 data was very high and the PHC4 staff is personable, thorough, knowledgeable and very responsive." She notes further that the process of purchasing and analyzing the PHC4 data was simple and affordable.

PHC4 Data Used to Study Bleeding Disorders

Dr. Margaret Ragni has studied bleeding disorders for over 30 years. As a Professor of Medicine within the hematology/oncology division at the University of Pittsburgh, and as director of the Hemophilia Center of Western Pennsylvania, she draws on that history to treat patients, conduct clinical research, and to teach and mentor students, residents and fellows. As part of her work, Dr. Ragni has been using hospital discharge data from PHC4 for more than 10 years, having first learned about the data through PHC4's long-standing relationship with Pittsburgh's Jewish Healthcare Foundation.

Dr. Ragni purchased PHC4 data to study the prevalence of venous thromboembolism (VTE) in pregnant, African-American women with sickle cell disease. By linking hospital discharge data with mortality and birth certificate data collected by the Pennsylvania Department of Health, PHC4 staff was able to provide Dr. Ragni with a robust dataset that was uniquely relevant to her research. Results of the study showed that the prevalence of pregnancy-related VTE was 1.5 to 5 times greater in the study population than in the general pregnancy population. These findings have resulted in changes to treatment protocols related to anticoagulant regimens. Moreover, higher prevalence of VTE among those in the study population who also had certain complications, such as pneumonia, acute chest syndrome and vasooclusive crisis, suggests increased opportunities to identify potential VTE (that might otherwise go undetected) among pregnant women with sickle cell disease.

Dr. Ragni expressed that PHC4 most definitely met the data needs of her research, and she described the data quality as excellent. She plans to continue using PHC4 data to examine important clinical questions. Working with her current medical students, she plans to assess the risk of VTE in women undergoing in vitro fertilization and the cost benefit of anticoagulation in that setting.

The Council (FY 2016 –2017)

Executive Committee

Frank Snyder Chair – Labor

Physicians

Bob Johnston Vice Chair – Business

Todd Shamash, Esquire Treasurer – Health Plans

Paul Casale, M.D. Chair, Data Systems Committee

Tom Duzak Chair, Mandated Benefits

Committee – Labor **Joe Huxta** Immediate Past Chair – Business

Council Members

Gene Barr - Business

Neal Bisno - Labor

David Campbell, M.D. – Physicians

Mary Beth Clark, R.N., M.P.A., M.S.N., Ed.D. – Quality Improvement (Appointed in 2017)

The Honorable Ted Dallas – Pennsylvania Secretary of Human Services

Randy DiPalo - Labor

Samuel Denisco – Business

Mark Dever - Business

Michael Doering – Quality Improvement

Edward Karlovich – Hospitals

Gregory S. Martino – Health Plans

Matthew D. McHugh, Ph.D., J.D., M.P.H., R.N., F.A.A.N. – Nurses (Appointed in 2017)

The Honorable Teresa Miller – Pennsylvania Insurance Commissioner

The Honorable Karen M. Murphy, Ph.D., R.N. – Pennsylvania Secretary of Health

Ernest Sessa – Consumers

Stephen A. Wolfe – Hospitals



Governance

Purchasers

6 Business 6 Labor 1 Consumer

Insurers

1 Commercial 1 Blue Cross/Blue Shield 1 HMO

Providers2 Hospitals

2 Physicians 1 Nurse 1 Health Care Quality Continuous Improvement Expert

State Government

Secretary of Health
Secretary of Human Services
Insurance Commissioner

Official Delegates

Johanna Fabian-Marks – Insurance Department

Carolyn Byrnes, M.P.H., C.P.H. – Department of Health

David Kelley, M.D., M.P.H. – Department of Human Services



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.

In Memoriam

Council Member Jack Steinberg 1931–2016

This year, PHC4 sadly bid farewell to long time Council Member Jack Steinberg, who passed away on April 14, 2016. Steinberg served as a labor representative, having been a founding member and a longtime leader and official in the Philadelphia Federation of Teachers. In that role, he held the position of union treasurer and chief trustee of the health and welfare fund, which he helped establish. Steinberg was involved with PHC4 for nearly as long as it has been in existence, originally appointed to the Council in July of 1989 and served until 1998. During that time he served as chair of the Data Systems and Education Committees respectively, was vice-chair of the Council in 1993/94 and again in 1997/98, and served as the Council's chairman in 1994/95. After a several year hiatus, Steinberg was reappointed to the Council in August of 2003 and served until his recent passing. He was a loyal and dedicated public servant, and a great representative of his constituency. He will be greatly missed.



Pennsylvania Health Care Cost Containment Council

225 Market Street, Suite 400 Harrisburg, PA 17101 Phone: 717-232-6787 Fax: 717-232-3821

www.phc4.org