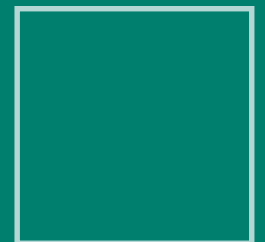
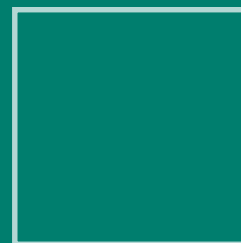


A HOSPITAL PERFORMANCE REPORT

15 COMMON MEDICAL PROCEDURES AND TREATMENTS

NORTHWESTERN PENNSYLVANIA - REGION 2



Pennsylvania Health Care
Cost Containment Council
1999

A Pennsylvania Hospital Performance Report

15 Common Medical Procedures and Treatments

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Foreword

The Pennsylvania Health Care Cost Containment Council (PHC4) was established as an independent state agency by the General Assembly and Governor of the Commonwealth of Pennsylvania in 1986. To help improve the quality and restrain the cost of health care, PHC4 promotes health care competition through the collection, analysis and public dissemination of uniform cost and quality-related information. Thanks to the vision of its General Assembly, Pennsylvania has begun to build a new health care marketplace where purchasers, consumers, providers, payors, and policy makers can make more informed decisions about the delivery of health care. This *Hospital Performance Report* is one of a series of public reports designed to achieve this goal, and is based on a previous PHC4 report, the *Hospital Effectiveness Report*, published from 1989 through 1994. Additional information related to this report is posted on the PHC4 web site at www.phc4.org.

What is the purpose of this report?

Before we make a major purchase, we normally familiarize ourselves with as much information as we can gather about the available products or services. By comparing what we can learn about the quality of the product as well as what will be charged for it, we decide on what we believe is the best quality product for the best possible price. So it should be with health care services. Unfortunately, the information available to consumers and purchasers to make such decisions is limited and often not widely accessible. PHC4's *Hospital Performance Report* can help to fill that vacuum of information and assist consumers and purchasers in making more informed health care decisions. This report can also serve as an aid to providers in pinpointing additional opportunities for quality improvement and cost containment. It should not be used in emergency situations.

What is included in the report?

- ◆ The report, which covers inpatient hospital discharges during 1997, is divided into nine regional versions. The information reported is hospital-specific.

The following counties are included in this report:

Cameron	Clarion	Clearfield
Crawford	Elk	Erie
Forest	Jefferson	Lawrence
McKean	Mercer	Potter
Venango	Warren	

- ◆ The report encompasses 15 selected Diagnosis Related Groups (DRGs). These DRGs have been chosen due to a combination of factors, including a high degree of variation in mortality, high volume, significant resource consumption, and diversity across diagnoses and procedures. These DRGs represent approximately 15% of all hospital discharges statewide. A description of the DRGs can be found on page 10.
- ◆ All Pennsylvania general and specialty acute care hospitals, regardless of bed size, are included. The number of cases, a risk-adjusted mortality rating, a risk-adjusted average length of hospital stay, and the average hospital charge for each of the 15 DRGs form the basis of the report.

What is a DRG?

A Diagnosis Related Group (DRG) is a part of an illness classification system adopted and modified by the federal government for standard health care reporting and billing purposes by hospitals and insurance companies. The system groups similar medical conditions and surgical procedures into hundreds of illness categories, called DRGs, based on the patients' diagnoses and procedures.

Where does the data come from?

Pennsylvania hospitals are required by law to submit certain information to the PHC4. The 1997 data compiled for the purpose of this publication is reported as it was submitted to the PHC4 by Pennsylvania hospitals. The data was subject to standard verification processes by

the PHC4. In addition, hospitals are required to submit data which indicates in simple terms "how sick the patient was," or in technical jargon, a "severity score" or "risk-adjusted."

What is meant by risk-adjusted?

The PHC4 and the hospitals use a sophisticated patient risk classification system, called Atlas™, to abstract severity scores based on patient medical records and assign patients to an appropriate illness category. These categories, measured from the point of admission to the hospital, range from a patient who is not very sick to a patient who is near death. These severity scores allow PHC4 to adjust for patients at greater risk of dying or staying in the hospital for a longer period of time than other patients. The Atlas™ system was developed by MediQual Systems, Inc., now owned by Cardinal Information Corporation, and is based on the examination of numerous Key Clinical Findings such as lab tests, EKG readings, vital signs, patient's medical history, imaging results, pathology, age, sex, and operative/endoscopy findings. PHC4 also adjusts independently for the presence of cancer in the patient population included in this report.

What is measured in the report and why is it important?

The PHC4's mission is to provide the public with information that will help to improve the quality of health care services while also providing opportunities to restrain costs. The measurement of quality in health care is not an exact science and is still in its beginning stages. And while there may be a number of ways to define quality, for the purposes of this report, three factors are suggested:

- ◆ *Volume of Cases* - For each hospital, the number of cases treated in each DRG is reported. This can give a patient or a purchaser an idea of the experience each facility has in treating such patients. Studies have suggested that in at least some areas, the number of cases treated by a physician or hospital can be a factor in the success of the treatment. **Note:** Small or specialty hospitals may report low volume due to the unique patient population they serve or geographic location.

- ◆ *Risk-adjusted Mortality Rates* - PHC4 has used risk-adjusted mortality statistics as a measure of quality since it began publishing reports in 1989. Using a complex mathematical formula that assesses the degree of illness for patients upon their admission to the hospital, PHC4 calculates an expected, or predicted, number of deaths. In simple terms, based upon how sick the patients are, PHC4's method determines the number of patients one could reasonably expect to die in a given hospital in a given DRG. Hospitals that treat sicker patients are given "credit" in the system; more patients can be expected to die because they are more seriously ill.
- ◆ *Risk-adjusted Length of Stay* - This measure represents a step forward in the measurement of the quality of care. How long a patient stays in the hospital can reflect how successful the treatment is that the hospital provides, and has an impact on the resources brought to bear in delivering treatment. In much the same way as the mortality measure, key patient risk factors related to how sick patients are when admitted to the hospital are taken into account. These patient risk factors are then adjusted or accounted for so that, for example, a younger, healthier patient is not treated the same statistically as an older, sicker one. These adjustments allow for an apples to apples comparison - patient severity or risk factors cannot explain the remaining differences. Yet after patient risk factors have been equalized among hospitals in the same treatment categories, there are still differences in the length of hospitalization.

The risk-adjusted mortality and risk-adjusted length of stay figures in this report are important measures of quality as well as resource utilization, but cannot be considered the only measures. The measurement of quality is highly complex and the information used to capture such measures is limited. A hospital death is frequently an unavoidable consequence of a patient's medical condition. Hospitals and physicians may do everything right and still the patient can die. However, after taking the significant risk factors available to the PHC4 into account, there are differences with respect to patient mortality and lengths of hospitalization that exist among hospitals.

Hospital charges

This report also includes the average hospital charge for each of the 15 medical and surgical treatment categories. While charges are what the

hospital reports on the billing form, they may not accurately represent the amount a hospital receives in payment for the services it delivers. Hospitals usually receive less in actual payments than the listed charge. Charges do represent a benchmark as negotiations between hospitals and insurers regarding payment generally begin with the charge figure. And hospital charges are used almost universally by those attempting to assess the costs of health care. Until a better method is developed, hospital charges represent a consistent, while imperfect, way to discuss the relative costs of health care.

Understanding the tables

Symbols representing risk-adjusted mortality ratings are displayed in the report. These symbols reflect a comparison of a hospital's actual mortality rate and its expected mortality rate. A dark circle ● means that the hospital's actual mortality rate was significantly higher, statistically speaking, than the rate expected or predicted by PHC4's mathematical formula. A circle with a dot inside ⊙ means that the difference between the two figures was insignificant - the hospital performed as expected. An open circle ○ means that the actual mortality rate was significantly lower, statistically, than the expected rate. Numbers related to these ratings are posted on PHC4's Internet site at www.phc4.org, or are available upon request from the PHC4 office.

The risk-adjusted average length of stay reflects the number of days spent in the hospital by patients that completed a full course of treatment. These data are adjusted to take important health risk factors into account.

The number of cases represent separate hospital admissions, not individual patients. A patient readmitted several times would be included each time in the number of cases. Hospitals that had fewer than five cases evaluated for risk-adjusted mortality were not rated; such low volume cannot be considered meaningful and, as such, the data are excluded. *Not Rated* appears in the table next to these hospitals. The hospital names have been shortened in many cases for formatting purposes. Finally, hospital names may be different today than in 1997 due to mergers. A list of hospital changes is included in the back of the report.

What is meant by non-compliance?

Hospitals are required under Pennsylvania law (Act 89) to submit timely, accurate health care data to the PHC4. The PHC4, acting upon the advice of its Technical Advisory Group, a panel of physicians and other health care experts, has determined that hospitals missing the required UB 92 data and/or patient severity scores in excess of 15% overall are non-compliant with state law and are excluded from this report. These hospitals are listed in the back of this report. Hospitals exceeding the 15% threshold in specific DRGs are noted as *Non-Compliant* for those specific DRGs only. Although data specific to non-compliant hospitals is not included in this report, their records have been included in the overall research for in-hospital mortality, length of stay and charges and, as such, are reflected in the statewide and regional totals.

Additional information about the figures and symbols in this report as well as the methods used to calculate the statistics is available from the PHC4 upon request or can be accessed through the PHC4 web site at www.phc4.org.

FINAL WORDS - How to use the report

- ◆ **Patients/Consumers** - can use this report as an aid in making decisions about where to seek treatment for the categories detailed in this report. As with any health care decision, PHC4 urges the reader to use this report in conjunction with a physician or other health care provider when making a health care decision.
- ◆ **Group Benefits Purchasers/Insurers** - can use this report as part of a process in determining where employees, subscribers, members, or participants should go for their health care.
- ◆ **Health Care Providers** - can use this report as an aid in identifying opportunities for quality improvement and cost containment.
- ◆ **Policy Makers/Public Officials** - can use this report to enhance their understanding of health care issues, to ask provocative questions, to raise public awareness of important issues and to help constituents identify quality health care options.

- ◆ **All of the previously mentioned groups** can use this information to raise important questions about why differences in the quality and efficiency of care exist.

This report can be used as a tool. The report should not be used to generalize about the overall quality of care at a hospital, but instead to examine hospital performance in specific treatment categories. This report does point out differences. The statistical methods used eliminate many of the clinical and medical differences among the patients in different hospitals thereby allowing us to explore the real differences in mortality and the length of hospitalization among hospitals. The pursuit of these issues can play an important and constructive role in raising the quality while restraining the cost of health care in the Commonwealth of Pennsylvania.

Acknowledgments

PHC4 wishes to thank its Data Systems Committee members, particularly chairman, Richard C. Dreyfuss (Hershey Foods Corporation) and vice-chairman Thomas F. Duzak (United Steelworkers of America), for their contribution to this report.

PHC4 also wishes to thank its Technical Advisory Group members, especially chairman David B. Nash, MD, MBA, for their contribution to PHC4's efforts over the years, including this report.

NORTHWESTERN HOSPITALS

Heart Attack

Heart Failure and Shock

Major Vessel Operations EXCEPT HEART

	Heart Attack				Heart Failure and Shock				Major Vessel Operations EXCEPT HEART			
	CASES	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE	CASES	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE	CASES	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE
Brookville	60	●	6.1	\$6,543	124	●	4.5	\$4,725	5	●	7.7	\$12,415
Charles Cole Memorial	60	●	7.2	\$8,534	80	●	5.9	\$5,130	0			
Clarion	64	●	5.0	\$6,042	284	●	3.2	\$3,337	0			
Clearfield	126	●	6.0	\$9,009	168	●	6.2	\$7,624	2	**Not	Rated	
Corry Memorial	53	●	4.9	\$11,573	98	●	4.5	\$7,836	0			
DuBois Regional	86	●	6.1	\$9,951	219	●	4.7	\$6,418	7	●	5.9	\$22,061
Elk County Regional	20	●	3.4	\$4,789	57	○	4.3	\$4,911	0			
Ellwood City	52	●	4.6	\$5,447	203	●	5.3	\$5,378	0			
Hamot	307	○	5.6	\$12,831	388	●	5.6	\$8,743	80	●	9.9	\$43,627
Horizon	229	●	5.9	\$7,106	482	●	5.0	\$4,962	17	●	9.0	\$20,133
Jameson Memorial	163	●	7.2	\$9,999	350	●	5.7	\$6,020	6	●	9.2	\$29,728
Kane Community	29	○	2.7	\$6,565	96	○	4.8	\$5,318	0			
Meadville	167	●	5.1	\$8,234	272	●	4.6	\$5,314	12	●	7.1	\$18,064
Metro Health Center	30	●	5.4	\$9,660	199	●	5.6	\$7,037	3	**Not	Rated	
Northwest	175	●	4.8	\$7,499	357	○	4.0	\$4,925	12	●	7.2	\$23,653
Punxsutawney Area	77	●	6.5	\$5,828	125	●	5.2	\$4,145	3	**Not	Rated	
Saint Francis - New Castle	104	●	6.3	\$8,828	197	●	4.7	\$5,737	5	●	7.4	\$20,776
Saint Marys Regional	71	●	5.2	\$6,536	126	●	4.3	\$4,523	2	**Not	Rated	
Saint Vincent	293	●	5.6	\$16,221	407	●	5.2	\$10,021	171	●	7.7	\$39,597
Sharon Regional	151	●	8.5	\$13,085	366	●	5.7	\$6,754	8	●	9.4	\$47,526
Titusville Area	81	●	3.9	\$6,292	93	●	3.3	\$4,940	0			
Union City Memorial	10	●	4.1	\$6,648	72	●	5.9	\$6,602	0			
United Community	64	●	5.0	\$6,020	154	●	5.8	\$5,887	12	●	9.0	\$18,209
Warren General	129	●	7.2	\$11,331	152	●	5.2	\$6,538	1	**Not	Rated	
Northwestern Pennsylvania	2,752		5.7	\$10,401	5,369		5.0	\$6,208	356		8.3	\$35,958
Statewide	29,262		6.3	\$14,875	61,998		5.4	\$10,228	6,670		9.0	\$45,882

- Mortality significantly greater than Expected.
- Mortality not significantly different than Expected.
- Mortality significantly less than Expected.
- * Did not submit required data.
- ** Had fewer than five cases evaluated.

Risk-adjusted: The Mortality and Average Length of Stay figures adjust for the degree of illness present when a patient is admitted to the hospital. Please see page 2.

Risk-adjusted Length of Stay: reflects the average number of days hospitalized.

NORTHWESTERN HOSPITALS

Vascular Operations EXCEPT HEART

Vascular Disorders EXCEPT HEART

Stroke

	CASES	Vascular Operations			Vascular Disorders			Stroke				
		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE		
Brookville	16	●	6.1	\$8,849	5	●	3.1	\$2,467	37	●	4.2	\$5,277
Charles Cole Memorial	0				16	●	7.9	\$5,877	39	●	9.3	\$7,056
Clarion	3	**Not	Rated		22	●	5.3	\$4,491	71	●	4.3	\$4,460
Clearfield	10	●	9.0	\$14,525	22	●	6.1	\$5,770	92	●	6.2	\$8,312
Corry Memorial	0				11	●	4.0	\$6,304	27	●	5.0	\$9,736
DuBois Regional	17	●	4.1	\$8,948	32	●	5.6	\$7,016	97	●	3.9	\$5,757
Elk County Regional	1	**Not	Rated		8	●	5.7	\$5,410	18	●	3.8	\$4,743
Ellwood City	7	●	9.8	\$16,171	20	●	6.0	\$4,958	64	●	5.5	\$6,366
Hamot	45	●	7.7	\$20,549	80	●	6.1	\$6,698	234	●	5.7	\$10,325
Horizon	32	●	6.3	\$13,969	64	●	5.9	\$4,076	152	●	5.0	\$5,600
Jameson Memorial	34	●	8.8	\$19,513	47	●	6.7	\$5,310	107	●	6.6	\$8,463
Kane Community	0				6	●	5.6	\$5,045	21	●	4.3	\$6,597
Meadville	56	●	4.4	\$8,697	42	●	6.5	\$5,742	120	●	5.3	\$6,240
Metro Health Center	4	**Not	Rated		20	●	5.8	\$6,208	25	●	5.3	\$7,549
Northwest	17	●	8.3	\$18,180	35	●	5.1	\$5,800	207	●	5.2	\$6,945
Punxsutawney Area	1	**Not	Rated		25	●	5.3	\$3,529	60	●	5.6	\$4,986
Saint Francis - New Castle	44	●	4.6	\$12,184	39	●	5.3	\$4,898	59	●	5.4	\$6,783
Saint Marys Regional	5	●	4.9	\$9,373	26	●	4.8	\$3,985	60	●	4.4	\$5,535
Saint Vincent	153	○	5.6	\$21,374	78	●	5.9	\$7,729	258	●	6.1	\$9,908
Sharon Regional	34	●	6.1	\$13,914	32	●	6.5	\$7,126	137	●	5.7	\$7,861
Titusville Area	1	**Not	Rated		23	●	5.7	\$5,117	45	●	4.1	\$6,543
Union City Memorial	0				6	●	6.4	\$6,347	11	●	4.8	\$8,064
United Community	20	●	5.7	\$11,528	14	●	4.1	\$4,453	59	●	6.4	\$6,441
Warren General	5	●	6.5	\$13,051	28	●	5.6	\$4,963	72	●	5.8	\$7,094
Northwestern Pennsylvania	557		6.0	\$16,105	751		5.8	\$5,722	2,189		5.5	\$7,500
Statewide	11,503		6.8	\$26,069	9,413		5.8	\$9,412	29,903		6.3	\$12,601

- Mortality significantly greater than Expected.
- ◎ Mortality not significantly different than Expected.
- Mortality significantly less than Expected.
- * Did not submit required data.
- ** Had fewer than five cases evaluated.

Risk-adjusted: The Mortality and Average Length of Stay figures adjust for the degree of illness present when a patient is admitted to the hospital. Please see page 2.

Risk-adjusted Length of Stay: reflects the average number of days hospitalized.

NORTHWESTERN HOSPITALS

Adult Pneumonia

Adult Lung Infections

Lung Cancer

	CASES	Adult Pneumonia			CASES	Adult Lung Infections			CASES	Lung Cancer		
		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE
Brookville	39	●	4.9	\$4,936	20	●	6.3	\$5,652	9	●	7.0	\$7,768
Charles Cole Memorial	121	●	7.0	\$6,503	9	●	10.6	\$9,215	12	*Non-Compliant		
Clarion	153	●	4.9	\$4,833	32	●	6.3	\$7,134	11	●	5.2	\$5,454
Clearfield	129	●	6.7	\$7,086	38	●	8.7	\$9,323	8	●	6.3	\$6,164
Corry Memorial	54	●	5.3	\$10,030	6	●	10.8	\$18,860	6	●	4.6	\$9,110
DuBois Regional	138	●	5.2	\$6,480	40	●	6.3	\$6,926	41	●	6.4	\$10,275
Elk County Regional	25	●	4.5	\$4,610	6	●	4.9	\$5,458	2	**Not Rated		
Ellwood City	99	●	6.5	\$6,624	19	●	7.6	\$9,332	8	●	4.0	\$5,891
Hamot	168	●	5.8	\$8,771	46	●	9.4	\$14,723	48	●	6.1	\$9,864
Horizon	268	●	5.3	\$4,763	98	●	7.3	\$7,003	60	●	5.0	\$5,383
Jameson Memorial	185	●	6.6	\$6,876	46	●	9.0	\$8,305	29	●	8.6	\$9,556
Kane Community	58	●	5.2	\$5,440	23	●	6.0	\$6,987	11	●	4.0	\$4,922
Meadville	154	●	6.3	\$6,199	54	●	9.6	\$8,590	33	●	8.1	\$8,231
Metro Health Center	107	●	5.1	\$6,119	12	●	6.9	\$8,504	13	●	7.1	\$9,234
Northwest	356	●	5.3	\$6,037	97	●	6.5	\$7,605	43	●	6.5	\$8,800
Punxsutawney Area	51	●	5.7	\$4,352	42	●	7.2	\$5,850	7	●	7.5	\$5,358
Saint Francis - New Castle	81	●	5.7	\$6,374	37	●	7.4	\$10,276	23	●	6.1	\$9,490
Saint Marys Regional	102	●	4.9	\$5,471	21	●	6.4	\$7,146	17	*Non-Compliant		
Saint Vincent	259	●	6.3	\$9,537	43	●	9.5	\$14,176	53	●	7.2	\$11,601
Sharon Regional	164	●	6.3	\$7,162	31	●	9.3	\$10,793	51	●	5.4	\$7,214
Titusville Area	107	○	4.1	\$4,941	36	●	5.8	\$7,432	7	●	5.5	\$7,374
Union City Memorial	22	●	6.9	\$9,715	2	**Not Rated			3	**Not Rated		
United Community	91	●	6.3	\$6,534	30	●	8.7	\$9,377	12	●	4.9	\$4,201
Warren General	74	●	5.9	\$7,561	29	●	9.6	\$9,854	24	●	6.2	\$7,441
Northwestern Pennsylvania	3,185		5.7	\$6,671	856		7.7	\$8,910	562		6.2	\$8,239
Statewide	33,728		6.1	\$10,685	13,574		8.5	\$16,697	7,057		6.7	\$14,609

- Mortality significantly greater than Expected.
- ◐ Mortality not significantly different than Expected.
- Mortality significantly less than Expected.
- * Did not submit required data.
- ** Had fewer than five cases evaluated.

Risk-adjusted: The Mortality and Average Length of Stay figures adjust for the degree of illness present when a patient is admitted to the hospital. Please see page 2.

Risk-adjusted Length of Stay: reflects the average number of days hospitalized.

NORTHWESTERN HOSPITALS

Adult Diabetes

Kidney Failure

Adult Septicemia

	Adult Diabetes				Kidney Failure				Adult Septicemia			
	CASES	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE	CASES	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE	CASES	Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE
Brookville	15	●	4.6	\$4,283	11	●	4.8	\$4,183	23	●	7.7	\$6,327
Charles Cole Memorial	21	●	5.1	\$3,585	16	●	7.0	\$5,994	42	●	8.8	\$7,541
Clarion	47	●	3.6	\$3,074	26	●	5.6	\$6,330	41	●	6.8	\$7,341
Clearfield	40	●	4.7	\$5,060	13	●	8.9	\$9,433	93	●	7.1	\$7,379
Corry Memorial	15	●	3.5	\$5,153	6	**Not Rated			29	●	7.2	\$11,274
DuBois Regional	36	●	3.5	\$4,205	53	●	5.9	\$8,939	99	●	6.2	\$7,773
Elk County Regional	5	●	2.4	\$2,729	2	**Not Rated			4	**Not Rated		
Ellwood City	36	●	4.7	\$4,157	11	●	6.1	\$5,051	22	●	8.8	\$8,377
Hamot	32	●	4.5	\$5,948	60	●	5.9	\$10,879	102	●	7.2	\$10,509
Horizon	68	●	4.1	\$2,814	57	●	5.5	\$5,089	152	●	6.3	\$5,900
Jameson Memorial	36	●	5.3	\$4,980	40	●	5.6	\$7,401	90	●	6.6	\$6,505
Kane Community	10	●	4.0	\$2,675	10	●	5.5	\$6,121	14	●	6.6	\$7,601
Meadville	52	●	3.7	\$3,435	59	●	6.4	\$7,838	89	●	7.1	\$7,537
Metro Health Center	20	●	4.8	\$4,003	9	●	4.7	\$6,444	17	●	7.9	\$8,273
Northwest	62	●	3.9	\$4,215	23	●	6.2	\$7,188	119	●	6.0	\$7,310
Punxsutawney Area	7	●	4.4	\$2,813	13	●	5.3	\$4,735	36	●	6.3	\$4,802
Saint Francis - New Castle	19	●	4.6	\$4,442	15	●	5.6	\$6,151	30	●	6.8	\$7,739
Saint Marys Regional	21	●	3.4	\$3,259	18	●	5.0	\$6,287	41	●	5.7	\$6,077
Saint Vincent	49	●	3.6	\$6,458	72	●	5.5	\$11,099	107	●	7.0	\$11,373
Sharon Regional	64	●	4.7	\$4,753	30	●	7.6	\$8,760	113	●	8.4	\$10,298
Titusville Area	19	●	3.2	\$3,577	7	●	6.7	\$6,943	17	●	4.9	\$7,153
Union City Memorial	5	**Not Rated			1	**Not Rated			1	**Not Rated		
United Community	24	●	5.0	\$4,925	12	●	8.4	\$8,980	20	●	7.0	\$8,120
Warren General	14	●	3.1	\$4,241	7	**Not Rated			62	●	8.2	\$8,097
Northwestern Pennsylvania	789		4.2	\$4,243	600		6.0	\$7,973	1,440		6.9	\$8,022
Statewide	8,970		4.4	\$7,703	7,345		6.7	\$13,671	18,199		7.4	\$13,909

- Mortality significantly greater than Expected.
- Mortality not significantly different than Expected.
- Mortality significantly less than Expected.
- * Did not submit required data.
- ** Had fewer than five cases evaluated.

Risk-adjusted: The Mortality and Average Length of Stay figures adjust for the degree of illness present when a patient is admitted to the hospital. Please see page 2.

Risk-adjusted Length of Stay: reflects the average number of days hospitalized.

NORTHWESTERN HOSPITALS

Gastrointestinal Bleeding

Major Intestinal Procedures

Hip Operations EXCEPT REPLACEMENTS

	CASES	Gastrointestinal Bleeding			CASES	Major Intestinal Procedures			CASES	Hip Operations EXCEPT REPLACEMENTS		
		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE		Risk-adjusted MORTALITY	Risk-adjusted LENGTH OF STAY	Average CHARGE
Brookville	36	⊙	4.1	\$4,371	41	⊙	9.1	\$11,996	15	⊙	5.5	\$7,617
Charles Cole Memorial	49	⊙	6.1	\$6,834	22	⊙	10.6	\$20,217	18	⊙	8.8	\$11,175
Clarion	58	⊙	3.6	\$5,158	34	⊙	7.2	\$16,051	26	⊙	4.8	\$10,081
Clearfield	59	⊙	4.4	\$6,549	39	⊙	10.5	\$20,575	36	⊙	6.7	\$12,648
Corry Memorial	32	⊙	3.8	\$9,177	12	⊙	6.8	\$23,140	0			
DuBois Regional	100	⊙	4.2	\$5,675	83	⊙	9.4	\$19,680	45	⊙	5.5	\$10,108
Elk County Regional	13	⊙	2.9	\$4,949	4	**Not	Rated		1	**Not	Rated	
Ellwood City	48	⊙	4.9	\$7,096	29	⊙	10.2	\$23,911	26	⊙	5.5	\$9,759
Hamot	152	⊙	4.6	\$8,334	116	⊙	10.8	\$24,658	92	⊙	5.1	\$12,532
Horizon	131	⊙	4.2	\$4,790	82	⊙	9.8	\$16,798	83	⊙	5.4	\$10,850
Jameson Memorial	92	●	4.7	\$7,576	68	⊙	11.8	\$22,146	57	⊙	5.3	\$11,486
Kane Community	30	⊙	4.3	\$5,818	6	⊙	12.6	\$19,973	8	⊙	8.1	\$12,093
Meadville	107	⊙	5.0	\$5,647	63	⊙	11.2	\$19,625	58	⊙	6.9	\$11,205
Metro Health Center	22	⊙	5.8	\$7,274	27	⊙	11.9	\$22,078	15	⊙	4.4	\$8,562
Northwest	146	⊙	3.8	\$5,498	54	⊙	8.7	\$17,414	56	⊙	5.8	\$10,988
Punxsutawney Area	46	⊙	4.9	\$4,555	52	⊙	7.2	\$10,731	22	⊙	4.5	\$8,217
Saint Francis - New Castle	48	⊙	5.6	\$7,777	27	⊙	10.1	\$19,295	19	⊙	4.5	\$8,582
Saint Marys Regional	53	⊙	4.2	\$5,199	6	⊙	7.2	\$12,186	24	⊙	6.3	\$10,821
Saint Vincent	174	⊙	4.7	\$8,976	166	⊙	10.6	\$25,601	123	⊙	6.0	\$15,458
Sharon Regional	103	⊙	4.7	\$6,729	46	⊙	11.4	\$21,765	30	⊙	5.4	\$15,645
Titusville Area	50	⊙	3.7	\$6,338	26	⊙	7.3	\$13,649	17	⊙	5.8	\$11,313
Union City Memorial	8	⊙	6.5	\$8,786	9	⊙	9.3	\$18,238	0			
United Community	46	⊙	4.4	\$5,236	20	⊙	12.2	\$22,959	24	⊙	5.1	\$8,535
Warren General	62	⊙	5.3	\$6,933	36	⊙	8.7	\$16,425	34	⊙	6.0	\$11,249
Northwestern Pennsylvania	1,791		4.5	\$6,600	1,141		10.0	\$20,190	879		5.7	\$11,795
Statewide	19,579		4.7	\$9,714	15,619		10.7	\$31,416	10,080		6.6	\$17,199

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Risk-adjusted: The Mortality and Average Length of Stay figures adjust for the degree of illness present when a patient is admitted to the hospital. Please see page 2.

Risk-adjusted Length of Stay: reflects the average number of days hospitalized.

Diagnosis Related Group (DRG) Descriptions

Heart Attack (DRG's 121, 122, 123): Includes medical treatment only.

Heart Failure and Shock (DRG 127): Congestive heart failure is an abnormal accumulation of fluid due to the heart's inability to pump a normal amount of blood. The term "shock" refers to heart shock, not shock resulting from injury.

Major Vessel Operations except Heart (DRG 110): Surgery to the aorta and other major arteries and veins in the chest area surrounding the heart, but not within the heart. Does not include coronary bypass, cardiac catheterization or valve procedures.

Vascular Operations except Heart (DRG 478): Surgical procedures on blood vessels in the head, neck, and the upper and lower limbs.

Vascular Disorders except Heart (DRG 130): Medical treatment for disorders of blood vessels in the head, neck, aorta, upper and lower limbs. Examples include varicose veins, aneurysm, and diabetes-related circulatory disorders. Conditions not included are hypertension and coronary artery disease.

Stroke (DRG 14): Sudden "attack" caused by hemorrhaging, a blockage or narrowing of vessels within the brain. Transient ischemic attack (temporary stroke symptoms) is not included.

Adult Pneumonia (DRG 89): Simple pneumonia (inflammation of the lung) includes viral and bacterial pneumonia, as well as pleurisy – an inflammation of the membrane surrounding the lungs.

Adult Lung Infections (DRG 79): Infections other than simple pneumonia including tuberculosis, pneumonitis and certain rare pneumonias.

Lung Cancer (DRG 82): Includes the initial diagnosis as well as follow-up care for patients with malignant and benign tumors. Does not include chemotherapy.

Adult Diabetes (DRG 294): Includes patients over age 35 hospitalized for control of the blood sugar. Conditions include coma, ketoacidosis and fluid imbalances. Kidney, eye, nervous system or circulatory complications related to diabetes are not included.

Kidney Failure (DRG 316): Short and long-term kidney (renal) failure due to hypertension, heart disease, or unknown causes. Does not include dialysis or transplants.

Adult Septicemia (DRG 416): Also known as blood poisoning, is a system-wide infection of the patient's blood. Does not include post-operative or post-injury infections.

Gastrointestinal Bleeding: (DRG 174): Bleeding from stomach or intestinal ulcers, inflammation of the stomach, or inflammation of small sac-like areas in the wall of the colon.

Major Intestinal Procedures (DRG 148): Major surgical procedures involving the intestines, including colostomy and other repairs to the intestines. Not included are procedures for hernia, appendix or biopsies.

Hip Operations, except Replacements - Adults (DRG 210): Includes surgery for hip fracture; does not include replacements or amputations.

Hospitals Excluded from the Report Due to Non-Compliance

(See page 4 for more details.)

*Bradford Regional Medical Center

*Millcreek Community Hospital

* Now compliant effective for the 3rd Quarter 1998 data reporting period. PHC4 wishes to acknowledge the hard work performed by the overwhelming majority of Pennsylvania hospitals in meeting the requirements of Act 89.

Hospital Name Changes and/or Mergers

Horizon Hospital System, Inc.'s name changed to UPMC, Horizon in 1998.

FOR MORE INFORMATION...

Please contact the Pennsylvania Health Care Cost Containment Council at:

225 Market Street, Suite 400

Harrisburg, PA 17101

Phone 717-232-6787

Fax 717-232-3821

www.phc4.org

The following additional information can be found on our web site -- www.phc4.org.

- ◆ Total Cases
- ◆ Actual Mortality
- ◆ Expected Mortality
- ◆ p-Value
- ◆ Average ASG (Admission Severity Group)
- ◆ Percent Age 65 and Over

Hospitals may have commented on this report. Copies of their comments are available by request.

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