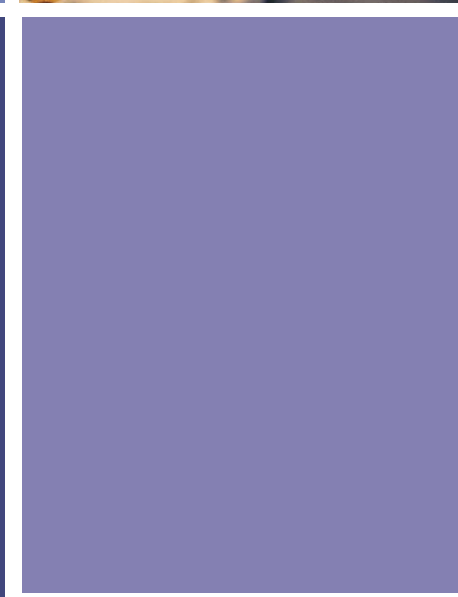# Measuring the Quality of Pennsylvania's Commercial HMOs
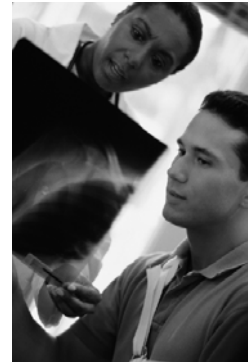
PHC4

Pennsylvania Health Care
Cost Containment Council
April 2006

Table of Contents

Key Findings

- Every Pennsylvania HMO performed better than the National HMO Average in the following categories:

  1) Cholesterol screening after acute cardiovascular events

  2) Beta blockers after a heart attack

  3) Providing the recommended childhood immunizations

- On average, Pennsylvania HMOs improved from the prior year in 11 of the 17 "Staying Healthy" measures.

- On average, the majority of diabetes "Staying Healthy" measures, as well hospitalization rates, improved at the statewide level; however, some plans did not show consistent progress on each measure from the previous year.

- Over half of the plans reported an increase from the prior year in the percent of plan members who gave their HMO the highest satisfaction rating.

- On average, Pennsylvania HMOs outperformed their national counterparts in all the "Member Satisfaction" measures for which there was a national average available.

- Since last year, there were significant decreases in HMO hospitalization rates for: adult asthma (-19.1%);

pediatric asthma (-14.3%); pediatric ear, nose, and throat infections (-32.0%); chronic obstructive pulmonary disorder (-15.9%); and diabetes (-9.6%). There also was a significant increase in the HMO hospitalization rate for high blood pressure (+7.4%).

- The in-hospital complication rate after prostatectomy *decreased* 28.3%, from 8.4% in 2003 to 6.0% in 2004 for HMO members. During that same time, the rate for the indemnity sample *increased* 7.4%, from 8.8% in 2003 to 9.5 in 2004.

- The in-hospital complication rate after abdominal hysterectomy decreased 13.1% from 9.8% in 2003 to 8.5% in 2004 for HMO members. The in-hospital complication rate after vaginal hysterectomy decreased 21.2% from 7.3% in 2003 to 5.7% in 2004 for HMO members. Despite these improvements, both rates were still higher than the same rates for the indemnity sample.

- Neck and back surgeries are 9.6% more likely to be performed in the inpatient setting for HMO members than for indemnity members. Similarly, breast cancer procedures were 9.9% more likely to be performed in the inpatient setting for HMO members than for indemnity members.

About this Report

HMOs often appeal to those who purchase health insurance because, in part, they offer a number of attractive features. These features include:

- Emphasis upon prevention and primary care services for HMO members;

- More efficient management of the health care process;

- Ability to hold down costs; and

- Small out-of-pocket costs for consumers for many services.

While HMOs have delivered on many of these goals, there has been a concern about a perceived lack of continuity of care and access to necessary services and medications. These perceptions have driven a desire by Pennsylvania purchasers, consumers and policymakers for more objective information about the cost and quality of health care for those in HMOs and related Point-of-Service plans.

About this Report

What is an HMO?

Most Pennsylvanians receive their health care benefits through their employer or from a government-sponsored program, such as Medicare or Medical Assistance. An HMO is an organized system that provides prepaid health benefits to a defined group of members. Unlike traditional insurers, HMOs typically offer and encourage members to take advantage of a host of educational materials, disease management programs, preventive health services and other initiatives to keep their members healthy. HMO members usually are required to select a Primary Care Physician (PCP) who has the responsibility to coordinate the various health services available to members. HMOs may share financial responsibility with PCPs and other providers for the services provided to members. "Point-of-Service" (POS) options offered by HMOs often combine the structure of HMOs (members select PCPs and usually access non-primary care services through pre-approved referrals) with the flexibility to access services without pre-approved referrals and the option to leave the network of participating providers by paying an additional fee. A summary of the characteristics of the types of health insurance plans is provided in the following table.

	HMO	Point-of-Service	Fee-for-Service
Can you get covered services from providers not in the network?	No	Yes, for an additional charge	Yes
Do you have a lot of paperwork?	No claim forms	No claim forms for in-network care	You need a claim form
Do you need to choose a PCP?	Yes	Yes	No
Do you need a referral from your PCP to go to a specialist?	Yes	Usually	No

About the Data

The data in this report is for Calendar Year 2004. However, some HMOs submitted 2003 data for several of the measures, which is allowable under National Committee for Quality Assurance (NCQA) rules. These measures include: Childhood Immunizations, Beta Blocker after a Heart Attack, and "Bad" Cholesterol Controlled after Acute Cardiovascular Events. Much of the data in the report is risk-adjusted. Please refer to the Technical Report for a full description of this methodology. See page 36 for more information about the data in this report.

How to Use this Report

*T*he quality of care provided by a managed care network directly affects the health of employees and their families, workforce productivity, and an employer's direct and indirect health care costs. This report provides comparisons of the quality and value offered by Pennsylvania HMOs. Here's how to use this report to explore HMO utilization, clinical outcomes and member satisfaction.

Helping to Keep Members Healthy

Keeping patients healthy is a goal of all HMOs. Successful measures in this category include high rates of members receiving screening procedures, appropriate medication usage and disease monitoring.

Questions to ask an HMO representative:

- How are members made aware of insurance coverage for screening procedures, preventive services and education programs?

- Are programs in place to increase member utilization of screenings and preventive services?

- How do you compare your outcomes with other HMOs? Did you score consistently well across all effectiveness of care measures included in this report?

Preventing Hospitalization through Primary Care

One goal of an HMO network, and especially primary care, is to decrease preventable or avoidable hospitalizations. Reporting hospitalization rates for health problems that should not require hospitalization serves as one way to analyze the effectiveness of primary care and HMOs. The statewide average scores for all HMOs in the report provide a point of comparison for each HMO. For these measures, a higher hospitalization rate is a poorer outcome of care and suggests a less effective HMO network of health providers.

Questions to ask an HMO representative:

- Does your management plan hold the primary care network accountable for treatment of these conditions to avoid inpatient hospitalizations?

- How is member compliance with recommended healthy behaviors assessed?

Managing Ongoing Illnesses

HMO members with chronic obstructive pulmonary disease (COPD), asthma, diabetes and mental health conditions are at higher risk for hospitalization if appropriate and ongoing treatment is not received. A higher hospitalization rate suggests poorer management of a chronic disease. Generally, shorter lengths of stay suggest that patients recuperated in less time – a positive outcome. Longer stays in the hospital may indicate adverse or unexpected outcomes, lack of discharge planning, or over-utilization of resources. On the other hand, shorter stays may indicate under-utilization of health care resources or too-soon discharges that cause additional admissions in the future.

Questions to ask an HMO representative:

- Are hospitalization rates high? Are rehospitalizations higher than other plans?

How to Use this Report

How are the providers in the network held accountable for performance?

- What does length of stay indicate? Does a lengthy inpatient stay suggest minimal management or high quality care? Does a short length of stay suggest appropriate use of services or is the HMO discharging members too quickly?

- Is the HMO performing well across the reported indicators of managing ongoing illnesses? Is there an area for improvement? What can the HMO do to improve scores? How well do the reported measures act as a proxy for typical chronic illness management?

Follow-up to an Emergency Situation

HMO members being treated for a heart attack need quick, appropriate treatment and follow-up by a medical professional.

Questions to ask an HMO representative:

- Do the HMO's members have higher than expected mortality? If so, how will the HMO address this issue with providers?

- Are members receiving appropriate procedural care after the heart attack? Did this care include catheterization, a PTCA/Stent or coronary artery bypass graft (CABG) surgery?

Surgical Procedures

Procedures are performed either in an inpatient or an ambulatory surgery setting. Location frequently provides insight into differing treatment standards among HMOs and may help identify treatment patterns by physicians or hospitals in the HMO provider networks. Practice patterns often vary across providers and geographic locations. Procedure rates provide one way to study differences across HMOs associated with network management. Differences among procedure locales may suggest a divergence of network standards and protocols, or the HMO's referral to less expensive ambulatory care settings. Complications may lead to potential patient injury, increased insurance premiums, and increased costs due to rehospitalizations and higher levels of post-procedure utilization.

Questions to ask an HMO representative:

- If lengths of stay differ significantly across HMOs, what are the reasons for this variation?

- Does the HMO have a plan in place to address a higher than expected percent of complications?

- How do scores translate into potential premium savings?

Staying Healthy
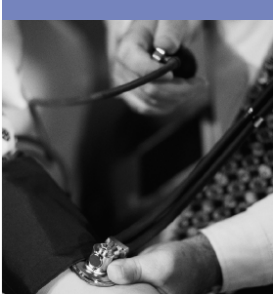
*H*MOs provide direct services to members, usually at a modest cost, for the prevention or early detection of health problems. In this section (pages 6 through 14), the graphs show how well the HMOs are providing preventive care to help their members stay healthy. The graphs on pages 6 through 8 show how well the HMO network is screening, testing and helping adult members with diabetes to control their disease.

Poorly Controlled Hemoglobin A1c Levels for Members with Diabetes

Regular Hemoglobin A1c (HbA1c) blood tests are recommended in order to monitor diabetes. The graph shows the percent of members with diabetes who have poorly controlled HbA1c levels.

Plan	Value
Geisinger Health Plan	19.2
UPMC Health Plan	22.6
HealthAmerica & HealthAssurance	22.8
Keystone Health Plan Central	23.8
Aetna Health Inc.	24.0
HMO State Average	25.5
Keystone Health Plan West	26.0
CIGNA Healthcare	28.2
Keystone Health Plan East	29.3
HMO National Average	30.7
First Priority Health	34.6
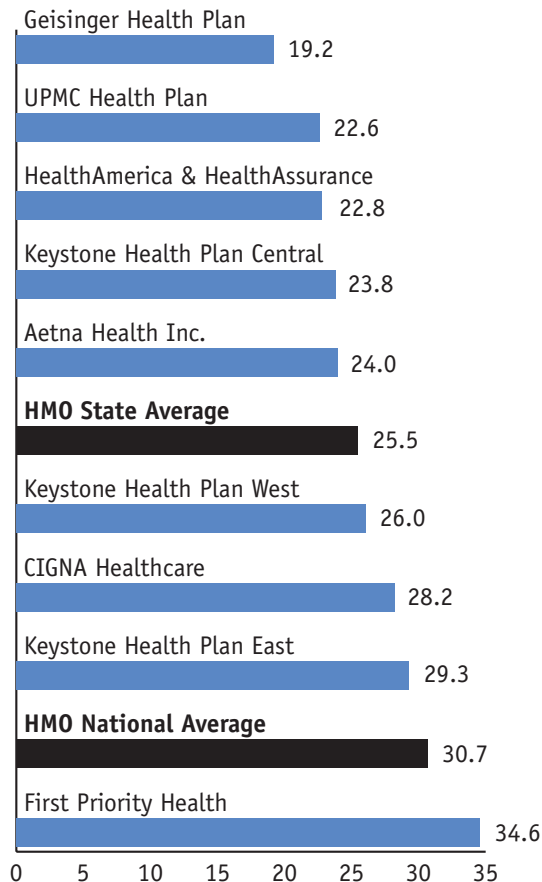
Hemoglobin A1c Blood Tests for Members with Diabetes

The graph shows the percent of members with diabetes who had their HbA1c tested at least once in the past year.
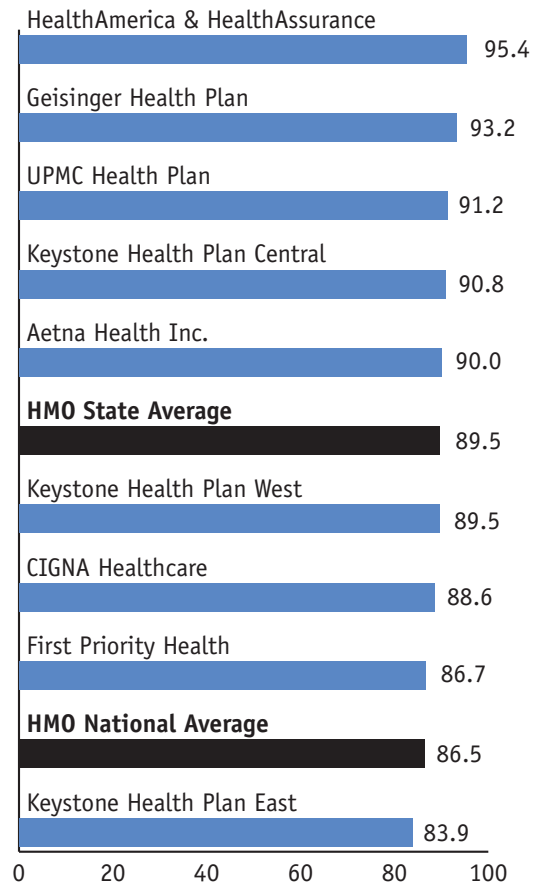
Plan	Value
HealthAmerica & HealthAssurance	95.4
Geisinger Health Plan	93.2
UPMC Health Plan	91.2
Keystone Health Plan Central	90.8
Aetna Health Inc.	90.0
HMO State Average	89.5
Keystone Health Plan West	89.5
CIGNA Healthcare	88.6
First Priority Health	86.7
HMO National Average	86.5
Keystone Health Plan East	83.9

Staying Healthy

Generally, those HMOs with the **higher percentages** are doing a **better** job of preventing illness and helping their members stay healthy. The **one exception** is the first measure, Poorly Controlled Hemoglobin A1c Levels, in which the lowest percentage is the best outcome.

Eye Exams Performed for Members with Diabetes

Retinal eye exams are recommended on a regular basis (usually annually) to reduce the risk of blindness from diabetes. The graph shows the percent of members with diabetes who received an eye exam in the past year.

HMO	Percent
HealthAmerica & HealthAssurance	67.7
UPMC Health Plan	67.2
HMO State Average	58.5
Aetna Health Inc.	58.1
Keystone Health Plan Central	57.7
Geisinger Health Plan	57.4
Keystone Health Plan West	57.2
Keystone Health Plan East	55.1
HMO National Average	51.0
First Priority Health	48.5
CIGNA Healthcare	44.0

Monitoring Kidney Disease for Members with Diabetes

Kidney disease may be a problem for members with diabetes. The graph shows the percent of members with diabetes who were screened or treated for kidney disease.

HMO	Percent
HealthAmerica & HealthAssurance	68.9
UPMC Health Plan	67.6
CIGNA Healthcare	61.1
Geisinger Health Plan	58.2
Keystone Health Plan Central	57.9
Aetna Health Inc.	57.7
HMO State Average	57.0
Keystone Health Plan East	53.0
Keystone Health Plan West	52.6
HMO National Average	52.0
First Priority Health	40.7
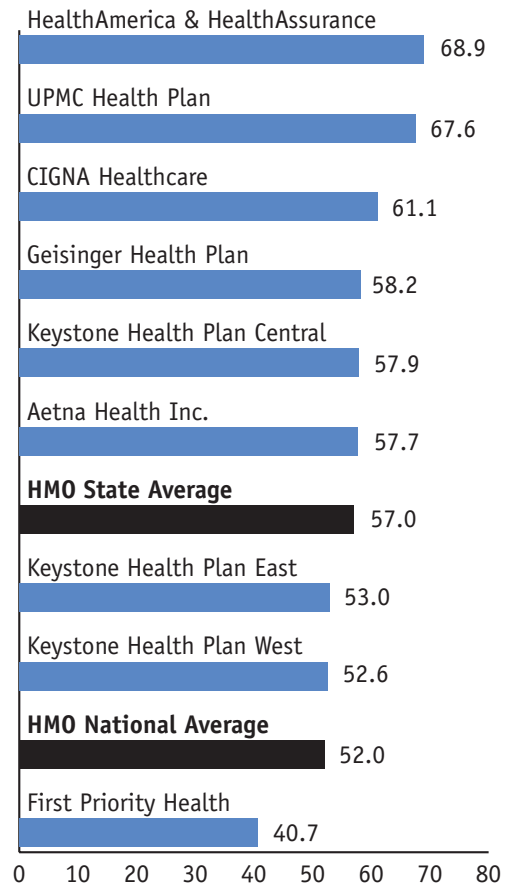
Staying Healthy

Cholesterol Screening for Members with Diabetes

Cholesterol screening (LDL-C or low-density lipoprotein cholesterol) is recommended on a regular basis for members with diabetes. The graph shows the percent of members with diabetes who received a cholesterol screening in the past year.

HealthAmerica & HealthAssurance — 95.6
Geisinger Health Plan — 95.4
Aetna Health Inc. — 94.7
UPMC Health Plan — 94.2
Keystone Health Plan Central — 93.2
HMO State Average — 93.0
CIGNA Healthcare — 92.5
Keystone Health Plan West — 91.7
HMO National Average — 91.0
Keystone Health Plan East — 90.8
First Priority Health — 90.2

(0   20   40   60   80   100)
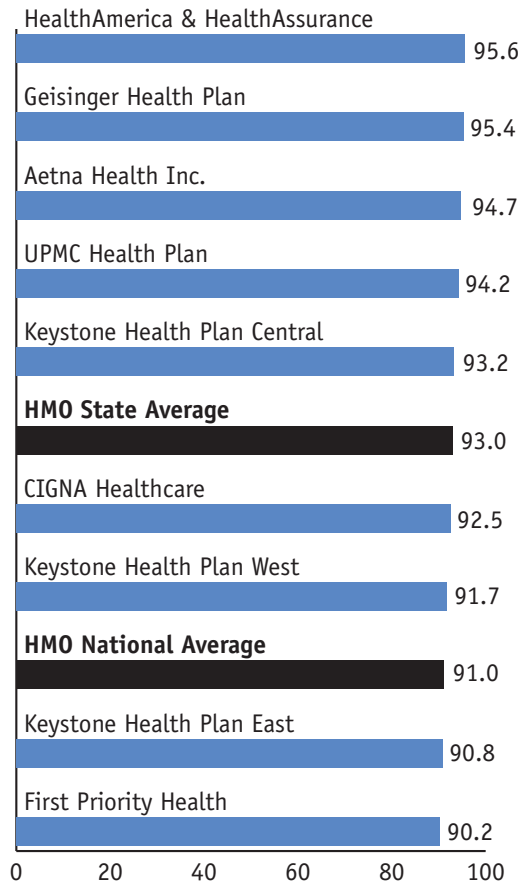
"Bad" Cholesterol Controlled for Members with Diabetes

The graph shows the percent of members with diabetes whose LDL-C ("bad" cholesterol) levels are under control.
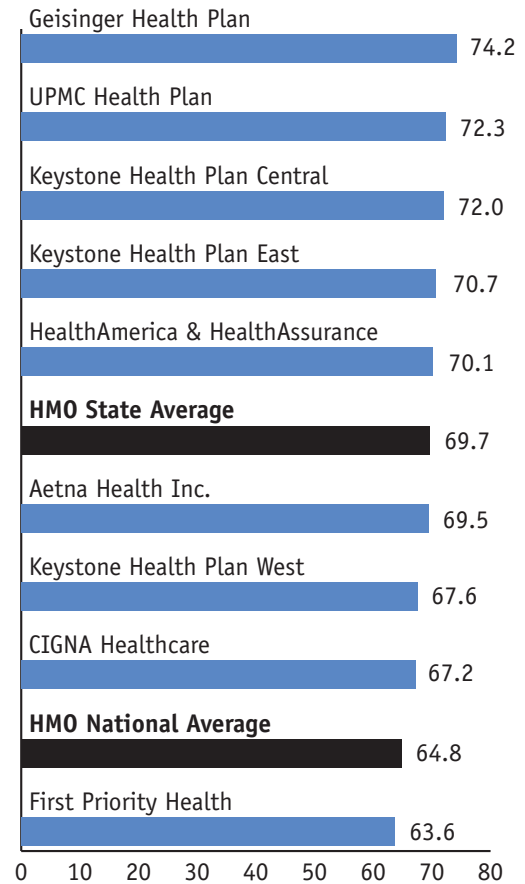
Geisinger Health Plan — 74.2
UPMC Health Plan — 72.3
Keystone Health Plan Central — 72.0
Keystone Health Plan East — 70.7
HealthAmerica & HealthAssurance — 70.1
HMO State Average — 69.7
Aetna Health Inc. — 69.5
Keystone Health Plan West — 67.6
CIGNA Healthcare — 67.2
HMO National Average — 64.8
First Priority Health — 63.6

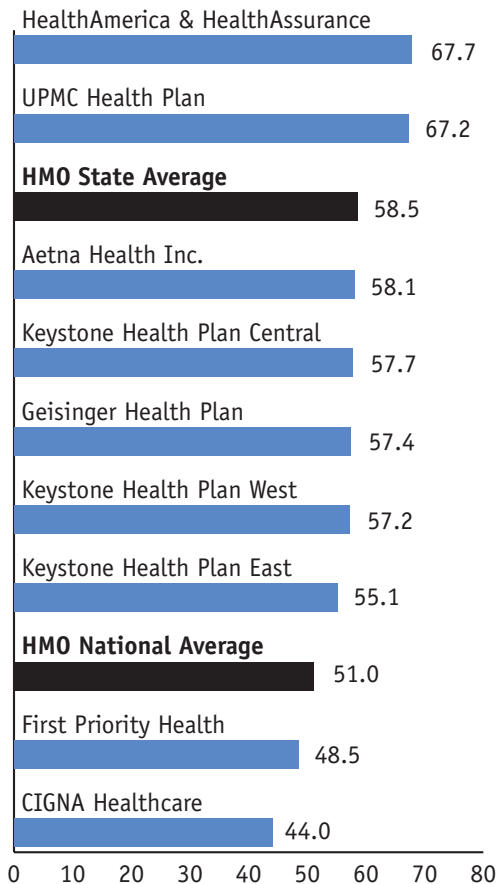(0   10   20   30   40   50   60   70   80)

Staying Healthy

Generally, those HMOs with the **higher percentages** are doing a **better** job of preventing illness and helping their members stay healthy.

Childhood Immunizations

Immunizations protect children from vaccine-preventable diseases, saving hundreds of lost school days and millions of dollars. The graph shows the percent of children receiving recommended immunizations by their second birthday.

Keystone Health Plan Central
83.2

Geisinger Health Plan
82.3

Keystone Health Plan West
81.9

HealthAmerica & HealthAssurance
81.1

UPMC Health Plan
81.0

HMO State Average
80.3

Aetna Health Inc.
80.0

Keystone Health Plan East
78.3

CIGNA Healthcare
74.1

First Priority Health
74.0

HMO National Average
72.5

0   20   40   60   80   100

Prenatal Care

The graph shows the percent of HMO female members who were seen by their doctor during the first three months of pregnancy.

HealthAmerica & HealthAssurance
98.1

UPMC Health Plan
98.1

Aetna Health Inc.
97.4

Keystone Health Plan West
96.8

CIGNA Healthcare
94.8

Geisinger Health Plan
94.8

Keystone Health Plan Central
93.9

HMO State Average
93.8

First Priority Health
90.8

HMO National Average
90.8

Keystone Health Plan East
83.1

0   20   40   60   80   100

Staying Healthy

Screening for Breast Cancer

An x-ray of the breast, or mammogram, can help find cancer in the breast when the tumor is too small to be felt during breast examination. The graph shows the percent of female members (age 52 to 69) who had at least one mammogram within the past two years.

UPMC Health Plan — 88.6
HealthAmerica & HealthAssurance — 82.8
Geisinger Health Plan — 77.8
HMO State Average — 74.1
Keystone Health Plan Central — 73.8
HMO National Average — 73.4
Keystone Health Plan West — 72.0
First Priority Health — 71.9
Aetna Health Inc. — 70.6
Keystone Health Plan East — 69.7
CIGNA Healthcare — 65.3

0 20 40 60 80 100
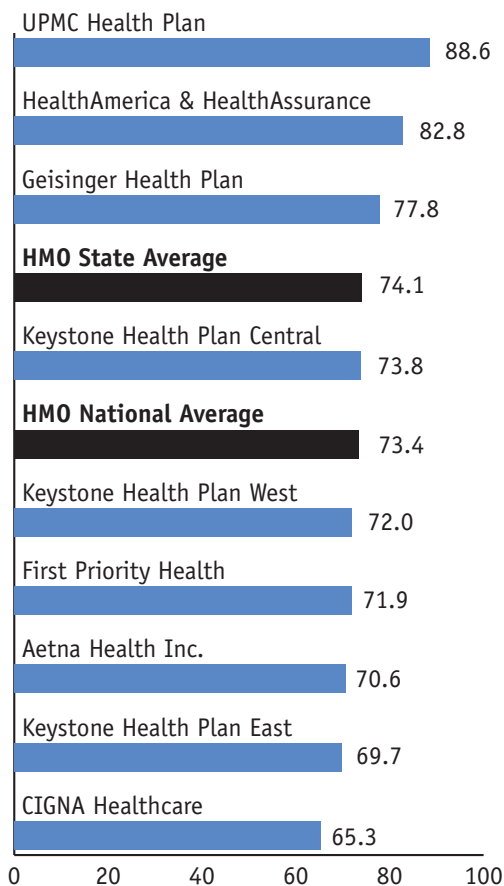
Screening for Cervical Cancer

Women are more likely to survive if cervical cancer is found early through a Pap test. The graph shows the percent of adult women who received a Pap test within the past three years.
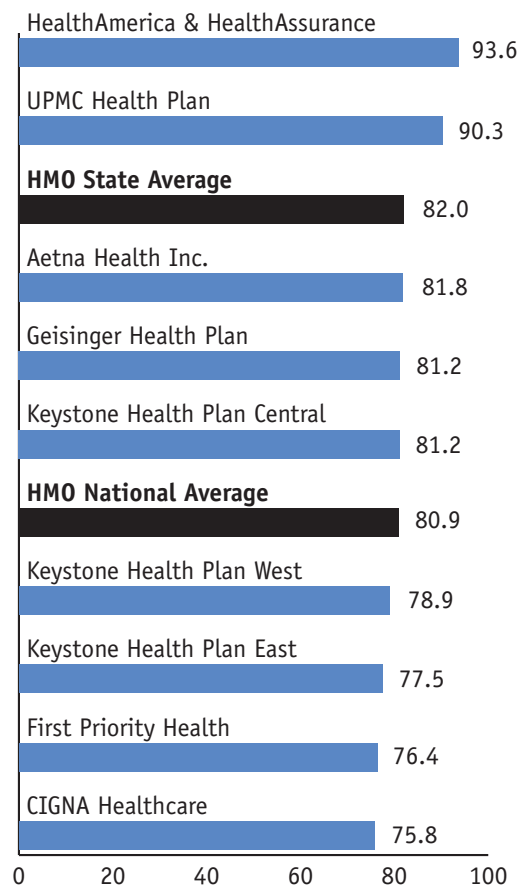
HealthAmerica & HealthAssurance — 93.6
UPMC Health Plan — 90.3
HMO State Average — 82.0
Aetna Health Inc. — 81.8
Geisinger Health Plan — 81.2
Keystone Health Plan Central — 81.2
HMO National Average — 80.9
Keystone Health Plan West — 78.9
Keystone Health Plan East — 77.5
First Priority Health — 76.4
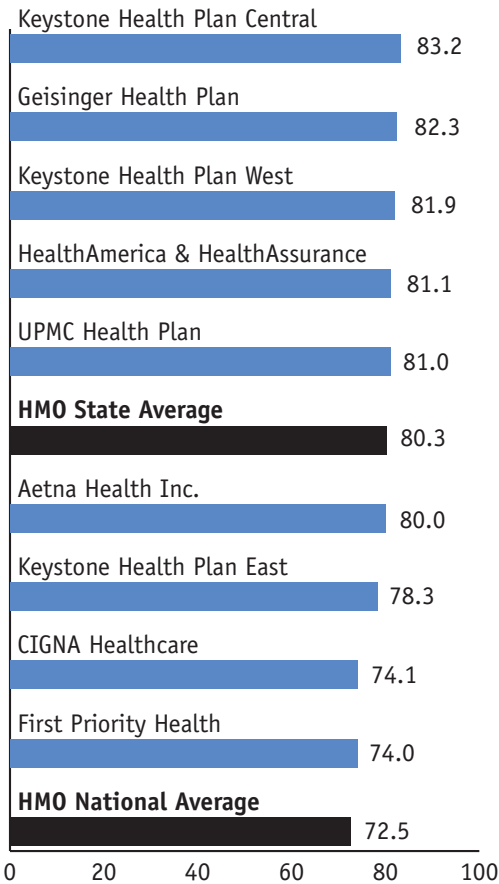CIGNA Healthcare — 75.8

0 20 40 60 80 100

Staying Healthy

Generally, those HMOs with the **higher percentages** are doing a **better** job of preventing illness and helping their members stay healthy.
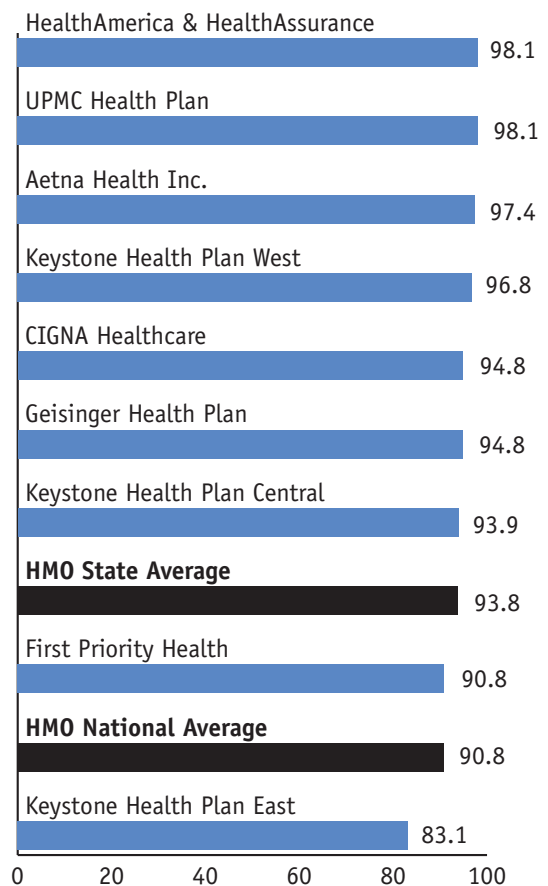
Cholesterol Screening after Acute Cardiovascular Events

The level of "bad" (LDL-C) cholesterol in the blood is directly related to clogged arteries, which can lead to a heart attack. The graph shows the percent of members tested for "bad" cholesterol after a heart attack, a balloon procedure or heart bypass surgery.
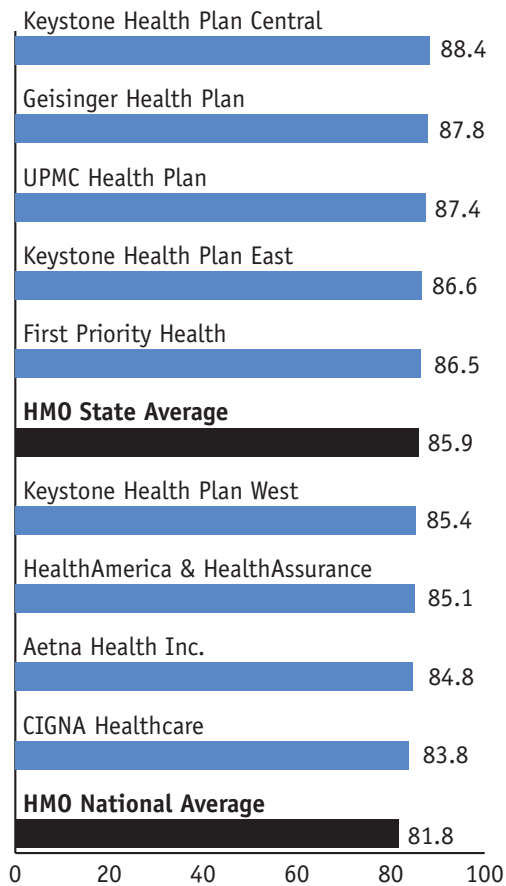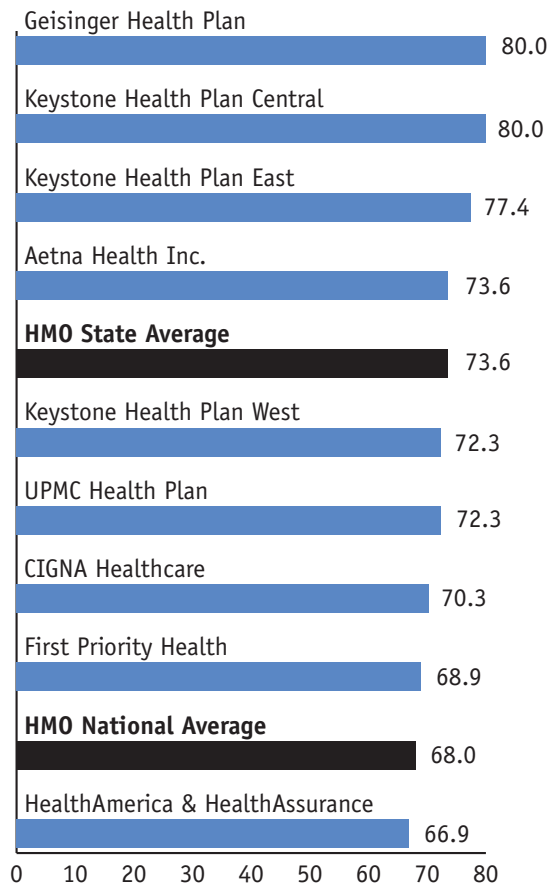
HMO	Percent
Keystone Health Plan Central	88.4
Geisinger Health Plan	87.8
UPMC Health Plan	87.4
Keystone Health Plan East	86.6
First Priority Health	86.5
HMO State Average	85.9
Keystone Health Plan West	85.4
HealthAmerica & HealthAssurance	85.1
Aetna Health Inc.	84.8
CIGNA Healthcare	83.8
HMO National Average	81.8

"Bad" Cholesterol Controlled after Acute Cardiovascular Events

A "bad" cholesterol level less than 130 mg/dL means there is a decreased risk of heart attack. The graph shows the percent of members who had a "bad" cholesterol score of less than 130 mg/dL after a heart attack, a balloon procedure or heart bypass surgery.

HMO	Percent
Geisinger Health Plan	80.0
Keystone Health Plan Central	80.0
Keystone Health Plan East	77.4
Aetna Health Inc.	73.6
HMO State Average	73.6
Keystone Health Plan West	72.3
UPMC Health Plan	72.3
CIGNA Healthcare	70.3
First Priority Health	68.9
HMO National Average	68.0
HealthAmerica & HealthAssurance	66.9

Staying Healthy

Controlling High Blood Pressure

High blood pressure (hypertension) is a major risk factor for a number of diseases and must be closely monitored and controlled. The graph shows the percent of members (age 46 to 85) diagnosed with high blood pressure whose blood pressure was under control.

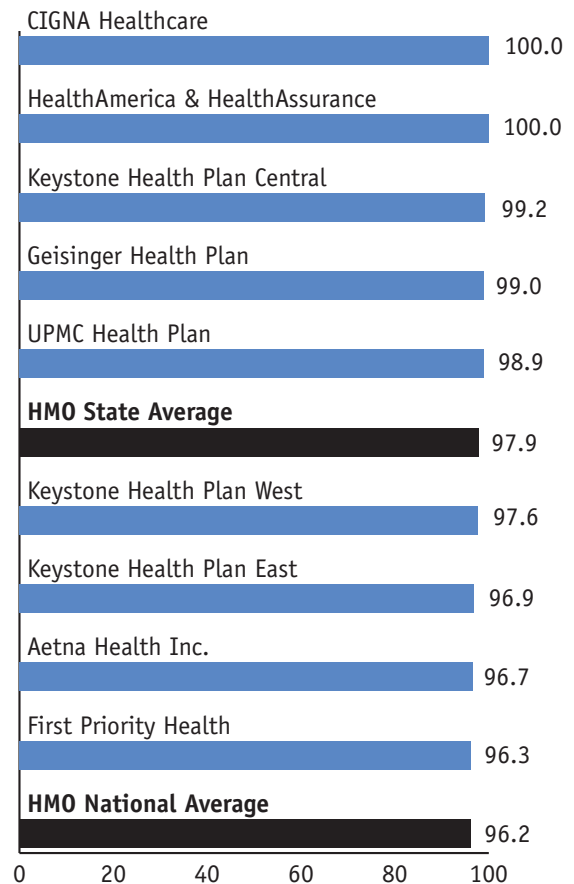| Plan	Value
Keystone Health Plan Central	78.1
Geisinger Health Plan	75.4
Aetna Health Inc.	73.3
HealthAmerica & HealthAssurance	73.2
First Priority Health	72.2
HMO State Average	72.0
Keystone Health Plan East	70.7
Keystone Health Plan West	70.3
UPMC Health Plan	69.1
HMO National Average	66.8
CIGNA Healthcare	59.4
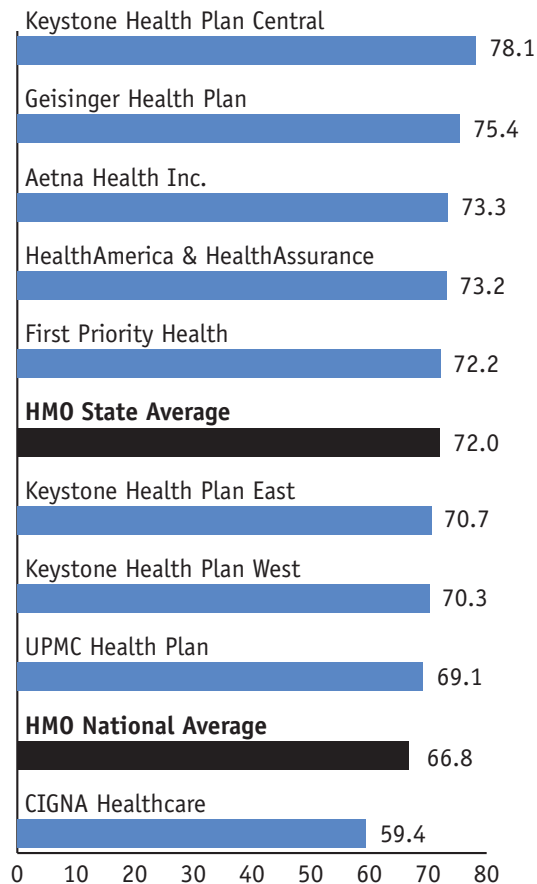
Beta Blockers after a Heart Attack

Use of beta blockers after a heart attack can help prevent future heart attacks. The graph shows the percent of members who had a heart attack and received beta blockers.

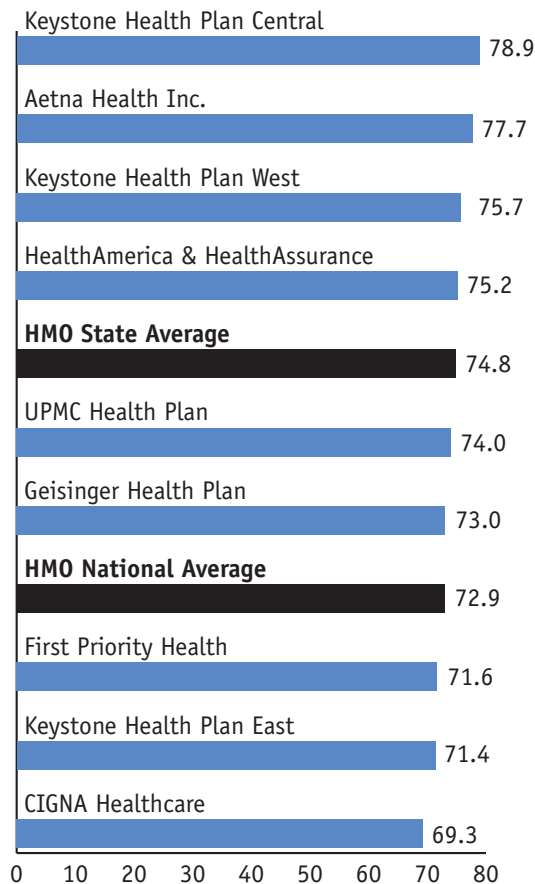| Plan	Value
CIGNA Healthcare	100.0
HealthAmerica & HealthAssurance	100.0
Keystone Health Plan Central	99.2
Geisinger Health Plan	99.0
UPMC Health Plan	98.9
HMO State Average	97.9
Keystone Health Plan West	97.6
Keystone Health Plan East	96.9
Aetna Health Inc.	96.7
First Priority Health	96.3
HMO National Average	96.2

Staying Healthy

Generally, those HMOs with the **higher percentages** are doing a **better** job of preventing illness and helping their members stay healthy.
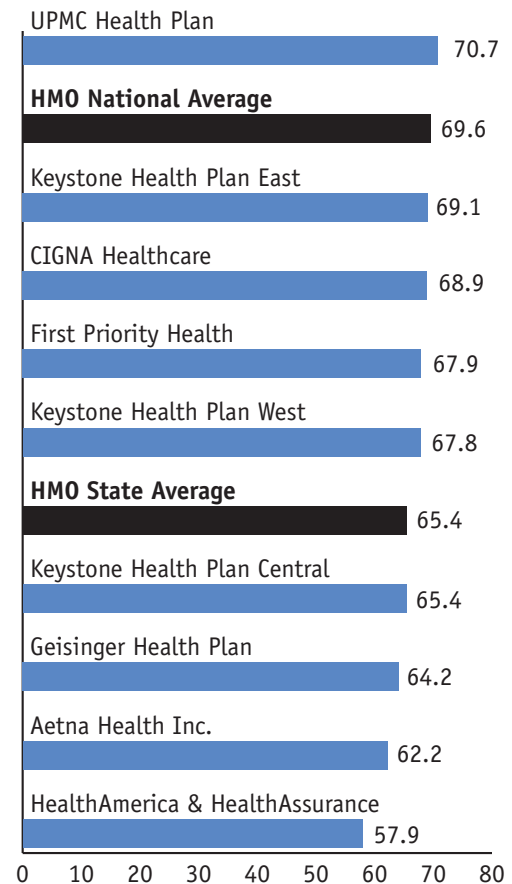
Appropriate Medications for Members with Asthma

The Expert Panel of the National Heart, Lung, and Blood Institute has recommended use of comprehensive drug therapy designed to reverse and prevent airway inflammation associated with asthma. This graph shows whether members with persistent asthma are being prescribed medications acceptable as a primary therapy for long-term control of asthma.

Keystone Health Plan Central
78.9

Aetna Health Inc.
77.7

Keystone Health Plan West
75.7

HealthAmerica & HealthAssurance
75.2

HMO State Average
74.8

UPMC Health Plan
74.0

Geisinger Health Plan
73.0

HMO National Average
72.9

First Priority Health
71.6

Keystone Health Plan East
71.4

CIGNA Healthcare
69.3

0 10 20 30 40 50 60 70 80

Advising Smokers to Quit

Because smoking is a risk factor for heart disease and other health problems, getting smokers to quit is one of the basic prevention efforts of HMOs. The graph shows the percent of adult members (smokers) advised to quit smoking during a visit to a doctor during the past year.

UPMC Health Plan
70.7

HMO National Average
69.6

Keystone Health Plan East
69.1

CIGNA Healthcare
68.9

First Priority Health
67.9

Keystone Health Plan West
67.8

HMO State Average
65.4

Keystone Health Plan Central
65.4

Geisinger Health Plan
64.2

Aetna Health Inc.
62.2

HealthAmerica & HealthAssurance
57.9

0 10 20 30 40 50 60 70 80

Staying Healthy

Colorectal Cancer Screening

Adults are recommended to have routine colorectal cancer screenings even if they do not have an increased risk for developing colorectal cancer. The graph shows the percent of adults (age 51 to 80) who had one or more of following screenings: fecal occult blood test (FOBT), flexible sigmoidoscopy, double contrast barium enema (DCBE), or colonoscopy during the recommended timeframes.

Geisinger Health Plan — 55.7
UPMC Health Plan — 54.3
Keystone Health Plan Central — 51.8
Keystone Health Plan West — 51.3
HMO National Average — 49.0
HMO State Average — 48.1
Keystone Health Plan East — 47.9
Aetna Health Inc. — 46.0
HealthAmerica & HealthAssurance — 41.6
First Priority Health — 39.7
CIGNA Healthcare — 39.2

0   10   20   30   40   50   60
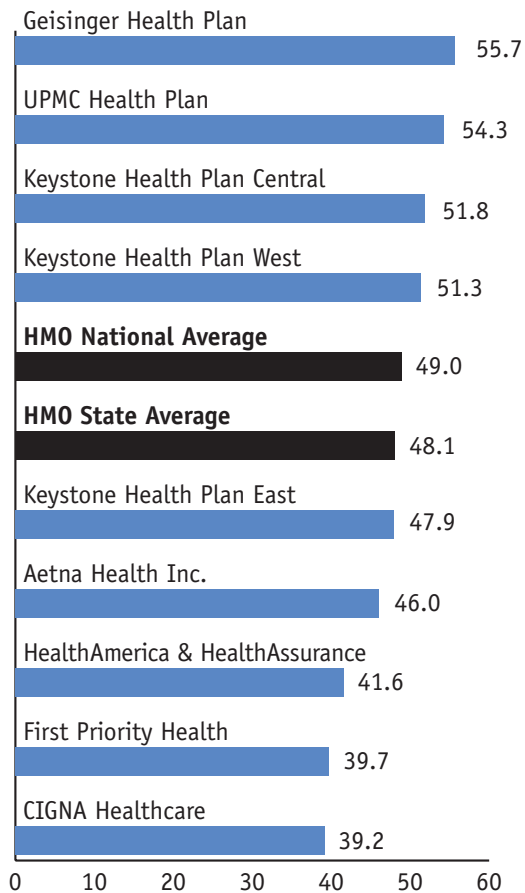
Preventing Hospitalization through Primary Care

Pages 15 and 16 include several clinical conditions for which effective primary care can prevent or manage an illness. When the HMO provider network is functioning properly, care for these conditions can generally be provided on an outpatient basis, thereby avoiding "unnecessary" or "preventable" hospitalizations.

Hospitalization Rate*, Statistical Rating

Generally, **lower scores** indicate that the HMO network was **more effective** in keeping members with these conditions out of the hospital.

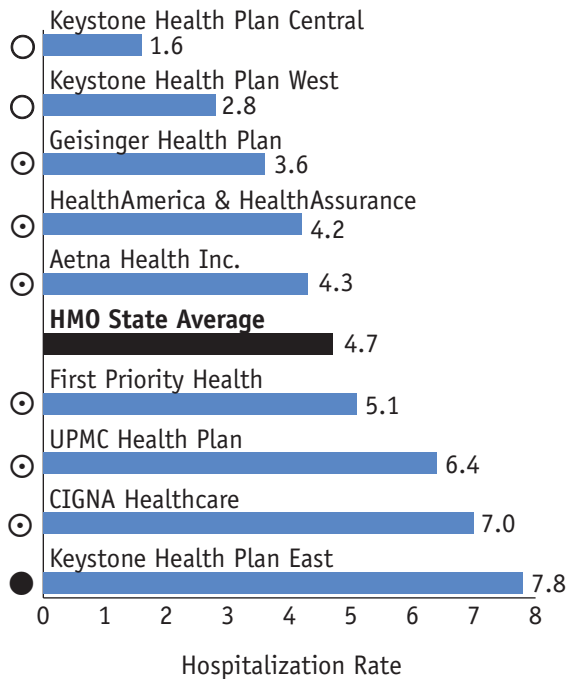The difference between the expected and actual hospitalization rates was statistically:

○ Lower than expected
⊙ Same as expected
● Higher than expected

* The number of hospital admissions per 10,000 members, adjusted for patient risk factors.
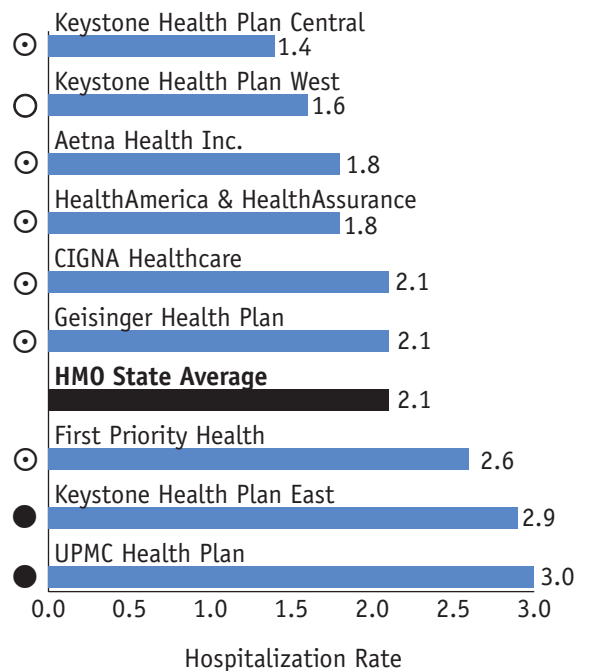
Ear, Nose and Throat Infections

Includes medical conditions that cause an inflammation of the various parts of the head and throat. Outcomes are reported separately for pediatric and adult members.

Pediatric (Under Age 18)

	Rating	Plan	Rate
	○	Keystone Health Plan Central	1.6
	○	Keystone Health Plan West	2.8
	⊙	Geisinger Health Plan	3.6
	⊙	HealthAmerica & HealthAssurance	4.2
	⊙	Aetna Health Inc.	4.3
		HMO State Average	4.7
	⊙	First Priority Health	5.1
	⊙	UPMC Health Plan	6.4
	⊙	CIGNA Healthcare	7.0
	●	Keystone Health Plan East	7.8

Hospitalization Rate

Adult (Age 18 to 64)

	Rating	Plan	Rate
	⊙	Keystone Health Plan Central	1.4
	○	Keystone Health Plan West	1.6
	⊙	Aetna Health Inc.	1.8
	⊙	HealthAmerica & HealthAssurance	1.8
	⊙	CIGNA Healthcare	2.1
	⊙	Geisinger Health Plan	2.1
		HMO State Average	2.1
	⊙	First Priority Health	2.6
	●	Keystone Health Plan East	2.9
	●	UPMC Health Plan	3.0

Hospitalization Rate

Note: The "HMO State Average" includes all listed HMOs and Highmark POS. Highmark is not listed due to low volume of records.

Preventing Hospitalization through Primary Care

Hospitalization Rate*, Statistical Rating

Generally, **lower scores** indicate that the HMO network was **more effective** in keeping members with these conditions out of the hospital.

The difference between the expected and actual hospitalization rates was statistically:
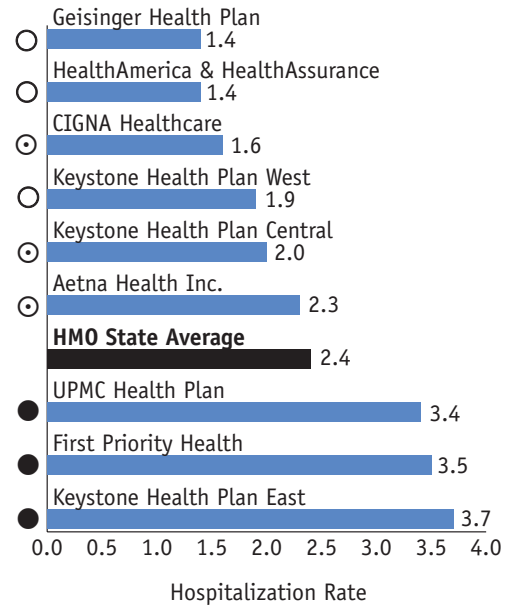
○   Lower than expected

⊙   Same as expected

●   Higher than expected

* The number of hospital admissions per 10,000 members, adjusted for patient risk factors.

Note: The "HMO State Average" includes all listed HMOs and Highmark POS. Highmark is not listed due to low volume of records.
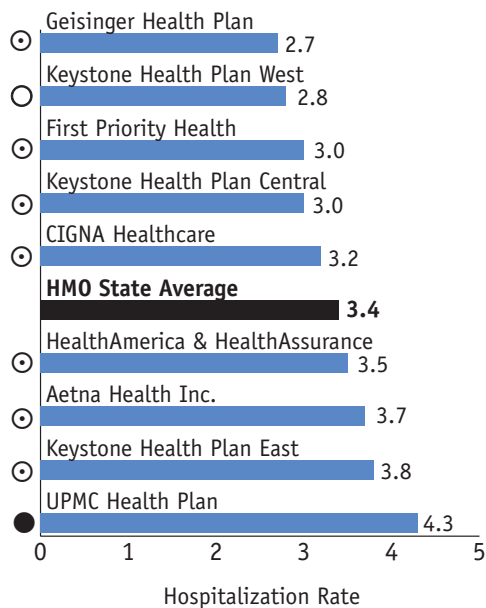
High Blood Pressure

Hypertension, or high blood pressure, is an adult chronic condition that can lead to serious cardiac and circulatory problems if untreated.

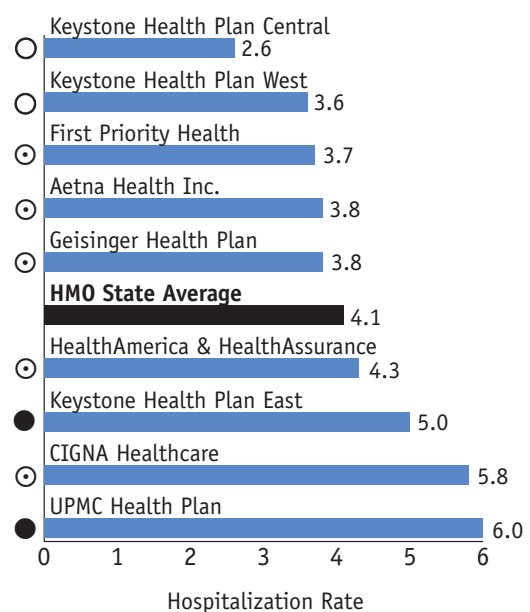|	Plan	Rate
○	Geisinger Health Plan	1.4
○	HealthAmerica & HealthAssurance	1.4
⊙	CIGNA Healthcare	1.6
○	Keystone Health Plan West	1.9
⊙	Keystone Health Plan Central	2.0
⊙	Aetna Health Inc.	2.3
	HMO State Average	2.4
●	UPMC Health Plan	3.4
●	First Priority Health	3.5
●	Keystone Health Plan East	3.7

Hospitalization Rate (0.0 – 4.0)

Gastrointestinal Infections

Includes a variety of viral, bacterial or parasitic infections of the digestive tract with symptoms including severe nausea, vomiting, abdominal pain, diarrhea, and fever.

	Plan	Rate
⊙	Geisinger Health Plan	2.7
○	Keystone Health Plan West	2.8
⊙	First Priority Health	3.0
⊙	Keystone Health Plan Central	3.0
⊙	CIGNA Healthcare	3.2
	HMO State Average	**3.4**
⊙	HealthAmerica & HealthAssurance	3.5
⊙	Aetna Health Inc.	3.7
⊙	Keystone Health Plan East	3.8
●	UPMC Health Plan	4.3

Hospitalization Rate (0 – 5)

Kidney/Urinary Tract Infections

These infections are common, second only to respiratory infections. Women are especially prone. These infections are usually treated with antibacterial medications.

	Plan	Rate
○	Keystone Health Plan Central	2.6
○	Keystone Health Plan West	3.6
⊙	First Priority Health	3.7
⊙	Aetna Health Inc.	3.8
⊙	Geisinger Health Plan	3.8
	HMO State Average	4.1
⊙	HealthAmerica & HealthAssurance	4.3
●	Keystone Health Plan East	5.0
⊙	CIGNA Healthcare	5.8
●	UPMC Health Plan	6.0

Hospitalization Rate (0 – 6)

Managing Ongoing Illnesses

Chronic Obstructive Pulmonary Disease (COPD)

COPD is an incurable disease of the lungs. It includes chronic lung disorders that obstruct the airways or damage the air sacs deep in the lungs. The disease results from damage to the lungs over a period of years from such factors as smoking, occupational exposure (breathing chemical fumes, cotton, wood or mining dust), or from bacterial or viral infections. The HMO and its physicians are partners in helping members control their disease and receive appropriate medical treatment if a hospitalization becomes necessary.

Hospitalization Rate, Statistical Rating

Generally, **lower scores** indicate that the HMO network was **more effective** in keeping members with these conditions out of the hospital.

The difference between the expected and actual hospitalization rates was statistically:

○ Lower than expected

⊙ Same as expected

● Higher than expected

Hospitalization for COPD

HMO	Hospital Admissions	Hospitalization Rate	Statistical Rating, Hospitalization Rate	Length of Stay	Statistical Rating, Percent Rehospitalized
Aetna Health Inc.	102	2.4	○	3.7	⊙
CIGNA Healthcare	10	4.4	⊙	4.1	NR
First Priority Health	43	4.9	⊙	4.0	⊙
Geisinger Health Plan	63	4.3	⊙	3.2	⊙
HealthAmerica & HealthAssurance	130	4.1	⊙	4.0	⊙
Keystone Health Plan Central	34	2.7	○	4.1	⊙
Keystone Health Plan East	185	4.1	⊙	3.9	⊙
Keystone Health Plan West	191	3.4	⊙	4.3	⊙
UPMC Health Plan	92	7.0	●	4.2	⊙
HMO State Total/Average[1]	857	3.8		4.0	
Fee-for-Service Sample[2]	329			3.6	

[1] Includes all listed HMOs and Highmark POS. Highmark is not listed due to low volume of records.

[2] The Fee-for-Service Sample provides a comparison with traditional health insurance. Refer to the Technical Report for details.

Number of HMO members hospitalized in 2004 where COPD was the principal reason for hospitalization.

Hospitalization rate per 10,000 HMO members, adjusted for patient risk factors.

Symbols indicate whether the difference between the expected and actual rates was statistically significant.

Average number of days spent in the hospital, adjusted for patient risk factors.

Symbols indicate whether the difference between the expected and actual percent of members rehospitalized within 180 days was statistically significant.

Managing Ongoing Illnesses

Asthma

Asthma is a chronic inflammatory disease of the lungs' airways which makes breathing difficult. It is the most common chronic childhood disease. Studies have shown that when patients are taught how to control their disease by following established asthma management guidelines, hospitalizations, repeat hospitalizations and emergency room visits can be decreased and quality of life improved.

Hospitalization Rate, Statistical Rating

Generally, **lower scores** indicate that the HMO network was **more effective** in keeping members with these conditions out of the hospital.

The difference between the expected and actual hospitalization rates was statistically:

○   Lower than expected

⊙   Same as expected

●   Higher than expected

Hospitalization for Asthma

HMO	Pediatric (Under 18)				Adults (Age 18 to 64)				
	Hospital Admissions	Hospitalization Rate	Statistical Rating, Hospitalization Rate	Length of Stay	Hospital Admissions	Hospitalization Rate	Statistical Rating, Hospitalization Rate	Length of Stay	Statistical Rating, Percent Rehospitalized
Aetna Health Inc.	219	12.7	⊙	2.0	252	5.7	○	3.2	⊙
CIGNA Healthcare	20	16.1	⊙	2.1	23	8.6	⊙	3.5	⊙
First Priority Health	45	10.9	⊙	2.1	60	6.6	⊙	3.3	⊙
Geisinger Health Plan	56	11.4	⊙	2.1	107	7.3	⊙	3.3	●
HealthAmerica & HealthAssurance	112	9.8	○	2.0	196	6.3	⊙	3.6	⊙
Keystone Health Plan Central	59	10.1	○	2.2	56	4.5	○	3.2	⊙
Keystone Health Plan East	479	25.9	●	1.8	418	9.0	●	3.2	⊙
Keystone Health Plan West	125	6.6	○	1.9	340	6.4	○	3.3	⊙
UPMC Health Plan	56	11.8	⊙	1.9	168	13.5	●	3.4	⊙
HMO State Total/Average	1,172	13.4		1.9	1,627	7.2		3.3	
Fee-for-Service Sample	241			2.1	437			3.2	

| Number of pediatric HMO members hospitalized in 2004 where asthma was the principal reason for hospitalization. | Hospitalization rate per 10,000 pediatric HMO members, adjusted for patient risk factors. | Symbols indicate whether the difference between the expected and actual rates was statistically significant. | Average number of days spent in the hospital, adjusted for patient risk factors. | Number of adult HMO members hospitalized in 2004 where asthma was the principal reason for hospitalization. | Hospitalization rate per 10,000 adult HMO members, adjusted for patient risk factors. | Symbols indicate whether the difference between the expected and actual rates was statistically significant. | Average number of days spent in the hospital, adjusted for patient risk factors. | Symbols indicate whether the difference between the expected and actual percent of members rehospitalized within 180 days was statistically significant. |

Managing Ongoing Illnesses

Diabetes

A hospitalization for diabetes or a short-term complication of diabetes may represent a problem with access to health care services or deficiencies in outpatient management and follow-up in diabetes care. Appropriate preventive care can minimize these types of admissions. By having easy access to appropriate medical supplies, educational resources and medical tests performed on a regular basis, people with diabetes can better monitor their disease, thus reducing the overall number of hospitalizations.

Hospitalization Rate, Statistical Rating

Generally, **lower scores** indicate that the HMO network was **more effective** in keeping members with these conditions out of the hospital.

The difference between the expected and actual hospitalization rates was statistically:

○   Lower than expected
⊙   Same as expected
●   Higher than expected

Hospitalization for Diabetes (Adults Age 18 to 75)

HMO	Members with Diabetes	Hospital Admissions	Hospitalization Rate	Statistical Rating, Hospitalization Rate	Length of Stay	Percent of Admissions for Short-term Complications of Diabetes	Statistical Rating, Percent Rehospitalized
Aetna Health Inc.	17,331	156	90.4	○	3.9	51.3	⊙
CIGNA Healthcare	1,044	17	153.1	⊙	3.4	52.9	⊙
First Priority Health	4,091	50	119.8	⊙	4.5	42.0	⊙
Geisinger Health Plan	6,002	51	85.6	⊙	3.5	49.0	⊙
HealthAmerica & HealthAssurance	14,806	132	90.0	○	3.8	45.5	⊙
Keystone Health Plan Central	6,113	79	126.1	⊙	4.2	44.3	⊙
Keystone Health Plan East	26,267	339	128.7	●	3.9	50.1	⊙
Keystone Health Plan West	23,397	263	114.6	⊙	3.8	53.6	⊙
UPMC Health Plan	9,308	108	111.0	⊙	3.9	58.3	⊙
HMO State Total/Average	109,035	1,199	110.0		3.8	50.5	
Fee-for-Service Sample		485			4.3	47.2	

Number of members with diabetes who met a standard definition for diabetes and continuous enrollment criteria in 2004.	Number of HMO members with diabetes hospitalized in 2004 where diabetes was the principal reason for hospitalization.	Hospitalization rate per 10,000 HMO members with diabetes, adjusted for patient risk factors.	Symbols indicate whether the difference between the expected and actual rates was statistically significant.	Average number of days spent in the hospital, adjusted for patient risk factors.	Percent of admissions for short-term complications of diabetes. These hospitalizations may be an immediate reflection of how well members are managing their diabetes.	Symbols indicate whether the difference between the expected and actual percent of members with diabetes that were rehospitalized within 180 days was statistically significant.

Managing Ongoing Illnesses

Mental Health

Depending upon the severity of the symptoms, depression and other mental health conditions can be extremely difficult to diagnose. More than twenty percent of adults suffer from a diagnosable mental disorder in a given year. While effective treatments and interventions are available, mental and depressive disorders are widely under-recognized and under-treated. Therefore, it is important to measure and report the number of HMO members receiving treatment for mental health conditions.

Post-hospitalization care is also important for several reasons. First, there is evidence that failure to coordinate post-hospitalization care can have serious consequences for the patient, including the need to be readmitted to the hospital. Additionally, a lack of adequate post-hospitalization care may indicate more pervasive problems with an HMO, such as the lack of adequate oversight by mental health professionals or lack of HMO-provided case management for hospitalized members.

HMO	Members Receiving Any Mental Health Services	Inpatient Admission Rate	Inpatient Hospitalization Length of Stay	Follow-up after Hospitalization		Antidepressant Medication Management		
				7 Days (Percent)	30 Days (Percent)	Members with at least 3 Follow-up Visits (Percent)	Effective Acute Phase Treatment (Percent)	Effective Continuation Phase Treatment (Percent)
Aetna Health Inc.	4.3	3.4	6.9	63.3	78.2	17.3	59.8	43.5
CIGNA Healthcare	4.5	2.8	5.8	56.5	75.4	11.8	68.4	54.0
First Priority Health	5.6	3.2	6.4	40.9	67.6	16.2	58.3	41.0
Geisinger Health Plan	4.6	3.4	5.2	50.0	76.9	12.8	62.7	46.0
HealthAmerica & HealthAssurance	5.0	3.1	4.8	61.1	83.9	14.4	62.9	47.2
Keystone Health Plan Central	4.7	6.8	4.5	61.9	81.2	18.7	61.2	46.9
Keystone Health Plan East	3.9	4.0	6.4	60.0	73.7	20.2	56.5	40.6
Keystone Health Plan West	6.2	3.7	5.6	56.1	80.0	16.2	67.2	50.4
UPMC Health Plan	6.5	3.8	7.0	68.3	86.1	44.1	76.4	63.0
HMO State Average	5.0	3.8	5.9	59.0	78.5	18.5	62.5	46.5
HMO National Average	5.5	2.9	6.2	55.9	76.0	20.0	60.9	44.3
	Percent of all HMO members receiving any mental health services in 2004.	Number of HMO members hospitalized in 2004 for a mental health condition per 1,000 plan members.	Average number of days spent in the hospital for treatment of a mental health condition.	Percent of members hospitalized for a mental health disorder who followed up with a doctor's visit within 7 days.	Percent of members hospitalized for a mental health disorder who followed up with a doctor's visit within 30 days of hospital discharge.	Percent of members diagnosed with a new episode of depression who had at least three follow-up visits with a provider within 12 weeks of diagnosis (the Acute Treatment Phase).	Percent of members diagnosed with a new episode of depression who were treated with antidepressant medication and remained on their prescribed drug during the entire 12-week Acute Treatment Phase.	Percent of members diagnosed with a new episode of depression who remained on their antidepressant prescription for 6 months.

Heart Attack

Heart Attack

A heart attack (Acute Myocardial Infarction) occurs when there is insufficient blood supply to an area of heart muscle. Heart attack is among the most common reasons for hospital admissions in the United States. People who have had a heart attack are at high risk for another one, and the mortality rates are high for these patients. Therefore, prevention of a second or subsequent attack should be a high priority.

Ultimately, treatment of a heart attack must address the underlying coronary disease that led to the attack. Several types of procedures are available, including catheterization, percutaneous

transluminal coronary angioplasty (PTCA)/Stent, and coronary artery bypass graft surgery (CABG). HMOs play an important part in ensuring that their members receive the appropriate treatment for their conditions.

In-Hospital Mortality, Statistical Rating

The difference between the expected and actual mortality was statistically:

○ Lower than expected
⊙ Same as expected
● Higher than expected

| HMO | Hospital Admissions | Hospitalization Rate | Number of Days | In-Hospital Mortality | | | Percent Receiving Catheterization | Percent Receiving PTCA/Stent | Percent Receiving CABG |
				Expected (Percent)	Actual (Percent)	Statistical Rating			
Aetna Health Inc.	361	8.6	6.2	2.9	3.4	⊙	93.5	71.5	9.3
CIGNA Healthcare	45	18.7	5.8	1.5	2.3	⊙	95.5	59.1	27.3
First Priority Health	140	16.0	7.5	2.5	5.1	⊙	96.4	60.7	21.4
Geisinger Health Plan	224	15.3	5.2	3.3	1.8	⊙	93.8	63.4	15.2
HealthAmerica & HealthAssurance	464	14.1	5.7	2.7	2.0	⊙	94.4	65.6	16.5
Keystone Health Plan Central	149	12.1	5.7	2.3	2.0	⊙	94.6	66.4	15.4
Keystone Health Plan East	512	11.8	6.5	2.2	1.4	⊙	92.3	63.8	14.0
Keystone Health Plan West	342	6.3	6.1	1.7	0.3	○	94.7	62.8	20.5
UPMC Health Plan	256	17.7	6.1	2.1	1.6	⊙	96.1	68.2	16.1
HMO State Total/Average	2,498	11.0	6.1	2.4	1.9		94.2	65.4	15.8
Fee-for-Service Sample	1,250		5.9	2.5	2.3		94.0	66.5	13.9

Number of HMO members hospitalized in 2004 where heart attack was the principal reason for hospitalization.	Number of heart attack hospitalizations per 10,000 members, adjusted for patient risk factors.	Average number of days spent in the hospital within 30 days of the heart attack, adjusted for patient risk factors.	The expected percent mortality within 30 days of hospitalization, adjusted for patient risk factors.	The actual percent mortality within 30 days of hospitalization.	Symbols indicate whether the difference between the expected and actual mortality was statistically significant.	Percent of heart attack patients receiving a cardiac catheterization within 30 days of hospitalization.	Percent of heart attack patients receiving a PTCA/Stent within 30 days of hospitalization.	Percent of heart attack patients receiving a CABG within 30 days of hospitalization.

Surgical Procedures

Hysterectomy

Hysterectomy is the surgical removal of the uterus. It is a procedure that may have a number of complications associated with it. Common reasons for performing a hysterectomy include uterine fibroids, uterine prolapse, abnormal bleeding, endometriosis and chronic pelvic pain.

Hysterectomies are performed as either an abdominal or a vaginal procedure. Procedure selection by physicians and complicated medical illnesses and diagnoses may result in longer lengths of stay and increased complication rates.

Hysterectomy is to be a treatment of last resort performed only after proper diagnostic tests confirm the underlying condition, conservative treatments have failed to improve the condition and fertility is not an issue.

| HMO | Total Hysterectomy Procedures | Procedure Rate | Statistical Rating, Procedure Rate | Abdominal Hysterectomies | | | | | | |
| | | | | Abdominal Hysterectomy Procedures | Procedure Rate | Statistical Rating, Procedure Rate | Length of Stay | In-Hospital Complications | | |
								Expected (Percent)	Actual (Percent)	Statistical Rating
Aetna Health Inc.	729	32.1	○	533	23.5	○	2.7	8.6	7.0	⊙
CIGNA Healthcare	62	44.5	⊙	52	37.4	⊙	2.7	8.2	5.8	⊙
First Priority Health	311	65.2	●	220	46.2	●	3.0	8.4	9.7	⊙
Geisinger Health Plan	409	54.4	⊙	314	41.8	●	2.5	9.2	7.7	⊙
HealthAmerica & HealthAssurance	1,091	69.3	●	713	45.3	●	2.5	8.5	7.2	⊙
Keystone Health Plan Central	429	65.4	●	272	41.4	⊙	2.4	8.5	7.7	⊙
Keystone Health Plan East	964	38.9	○	763	30.8	○	2.9	9.2	10.7	⊙
Keystone Health Plan West	1,586	57.8	●	1,040	37.9	⊙	2.7	8.7	8.2	⊙
UPMC Health Plan	625	106.0	●	414	70.2	●	2.7	8.8	10.4	⊙
HMO State Total/Average	6,229	53.0		4,337	36.9		2.7	8.7	8.5	
Fee-for-Service Sample	2,234			1,516			2.6	8.8	7.3	

Total number of hysterectomies performed in 2004 for non-cancerous, non-traumatic conditions.	Procedure rate per 10,000 female members, adjusted for patient risk factors.	Symbols indicate whether the difference between the expected and actual rates was statistically significant.	Number of hysterectomies involving an incision in the abdomen.	Procedure rate per 10,000 female members, adjusted for patient risk factors.	Symbols indicate whether the difference between the expected and actual rates was statistically significant.	Average number of days spent in the hospital, adjusted for patient risk factors.	Expected percent of complications is calculated taking into account patient risk factors.	The actual number of complications divided by the total number of abdominal hysterectomies.	Symbols indicate whether the difference between the expected and actual percents was statistically significant.

Surgical Procedures

Percent of Complications, Statistical Rating

The difference between expected and actual percent of complications was statistically:

○   Lower than expected

⊙   Same as expected

●   Higher than expected

HMO	Vaginal Hysterectomy Procedures	Procedure Rate	Statistical Rating, Procedure Rate	Length of Stay	In-Hospital Complications		
					Expected (Percent)	Actual (Percent)	Statistical Rating
Aetna Health Inc.	196	8.6	○	1.8	6.1	5.7	⊙
CIGNA Healthcare	10	7.1	○	2.0	5.2	0.0	⊙
First Priority Health	91	19.1	⊙	1.6	5.7	4.4	⊙
Geisinger Health Plan	95	12.6	○	1.6	5.3	4.2	⊙
HealthAmerica & HealthAssurance	378	24.0	●	1.7	5.0	5.3	⊙
Keystone Health Plan Central	157	23.9	●	1.5	4.9	1.9	⊙
Keystone Health Plan East	201	8.1	○	1.9	5.5	7.5	⊙
Keystone Health Plan West	546	19.9	●	1.7	4.9	7.0	●
UPMC Health Plan	211	35.8	●	1.8	5.5	6.2	⊙
HMO State Total/Average	1,892	16.1		1.7	5.2	5.7	
Fee-for-Service Sample	718			1.5	5.5	3.9	

Table header: **Vaginal Hysterectomies**

Number of hysterectomies involving removing the uterus through the vaginal canal. Includes laparoscopically assisted vaginal hysterectomy (LAVH).	Procedure rate per 10,000 female members, adjusted for patient risk factors.	Symbols indicate whether the difference between the expected and actual rates was statistically significant.	Average number of days spent in the hospital, adjusted for patient risk factors.	Expected percent of complications is calculated taking into account patient risk factors.	The actual number of complications divided by the total number of vaginal hysterectomies.	Symbols indicate whether the difference between the expected and actual percents was statistically significant.

Surgical Procedures

Breast Cancer Procedures

The most frequently used treatment for breast cancer is surgery, often supplemented by one or more other treatments. The type of surgical procedure to treat breast cancer is determined by the stage of the disease, the type of tumor, the age and health of the woman, and the woman's preference. Two different surgical procedures are used – lumpectomies and mastectomies.

Lumpectomy is the removal of the lump in the breast and some of the surrounding tissue.

Lumpectomy procedures are performed in the inpatient and outpatient setting, though the majority are outpatient procedures. For this report, lumpectomies performed as a diagnosis procedure are not included; only patients with an identified cancer diagnosis are analyzed.

Mastectomy is the removal of the whole breast and some lymph nodes under the arm. Most mastectomy procedures are inpatient (the law mandates that a patient has a right to choose an

HMO	Total Breast Cancer Procedures	Procedure Rate	Lumpectomy		
			Lumpectomy Procedures	Percent Performed Inpatient	Inpatient Only Length of Stay
Aetna Health Inc.	457	20.8	333	8.4	1.3
CIGNA Healthcare	32	25.7	25	8.0	NR
First Priority Health	90	19.3	63	6.3	NR
Geisinger Health Plan	141	18.6	93	4.3	NR
HealthAmerica & HealthAssurance	361	22.8	281	3.6	1.4
Keystone Health Plan Central	132	20.0	96	4.2	NR
Keystone Health Plan East	699	28.8	533	9.2	1.2
Keystone Health Plan West	358	12.5	245	11.4	1.4
UPMC Health Plan	219	36.8	162	9.9	1.5
HMO State Total/Average	2,510	21.4	1,846	7.9	1.3
Fee-for-Service Sample	988		706	4.8	1.1

Total number of breast cancer procedures (lumpectomies and mastectomies) performed in 2004.	Procedure rate per 10,000 female members, adjusted for patient risk factors.	Number of lumpectomy procedures performed in 2004.	Percent of lumpectomies performed in an inpatient setting.	Average number of days spent in the hospital, adjusted for patient risk factors.

Surgical Procedures

inpatient procedure). Mastectomies performed as a preventive measure (removal of the breast before cancer is diagnosed) are not included in this analysis.

Reconstruction of the breast after a mastectomy can occur immediately or months and even years later. Under Pennsylvania law, HMOs are required to cover breast reconstruction for women who have a mastectomy.

Percent of Complications, Statistical Rating

The difference between expected and actual percent of complications was statistically:

○	Lower than expected
⊙	Same as expected
●	Higher than expected

HMO	Mastectomy						
			Inpatient Only				
				In-Hospital Complications			Percent with Reconstruction during the Same Admission
	Mastectomy Procedures	Percent Performed Inpatient	Length of Stay	Expected (Percent)	Actual (Percent)	Statistical Rating	
Aetna Health Inc.	124	94.4	2.1	5.4	2.6	⊙	33.3
CIGNA Healthcare	7	NR	NR	NR	NR	NR	NR
First Priority Health	27	85.2	2.9	3.5	4.8	⊙	4.3
Geisinger Health Plan	48	79.2	2.4	6.4	16.2	●	26.3
HealthAmerica & HealthAssurance	80	75.0	1.9	5.3	1.7	⊙	26.7
Keystone Health Plan Central	36	66.7	2.2	5.6	0.0	⊙	37.5
Keystone Health Plan East	166	97.6	2.3	5.3	5.7	⊙	30.9
Keystone Health Plan West	113	91.2	2.4	4.9	11.7	●	22.3
UPMC Health Plan	57	91.2	2.4	5.1	5.8	⊙	17.3
HMO State Total/Average	664	88.9	2.3	5.2	6.4		27.1
Fee-for-Service Sample	282	80.5	2.1	5.5	4.5		33.5

Number of mastectomy procedures performed in 2004.	Percent of mastectomies performed in an inpatient setting.	Average number of days spent in the hospital, adjusted for patient risk factors.	Expected percent of complications is calculated taking into account patient risk factors.	The actual number of complications divided by the total number of inpatient mastectomy procedures.	Symbols indicate whether the difference between the expected and actual percents was statistically significant.	Percent of reconstruction surgeries during the same admission.

Surgical Procedures

Neck and Back Procedures

Back pain affects over five million Americans annually and is the most common cause of job-related disability and missed workdays. When neck and back problems fail to respond to non-surgical treatments, decompression surgery may offer relief. Some of the more common procedures include laminectomy (removal of a part of the lamina - the back part of the bone over the spinal canal), discectomy (removal of a portion of a disk to relieve pressure on a nerve), and spinal fusion, which involves connecting two or more bones in the spine to improve stability, correct a deformity or treat pain.

Studies have shown that practice patterns for neck and back surgery vary across providers

| HMO | Total Neck & Back Procedures | Procedure Rate | With Fusion | | | | | |
| | | | Number of Procedures with Fusion | Percent Performed Inpatient | Length of Stay | In-Hospital Complications | | |
						Expected (Percent)	Actual (Percent)	Statistical Rating
Aetna Health Inc.	500	11.4	158	98.7	2.3	6.7	1.9	○
CIGNA Healthcare	68	25.6	23	73.9	1.8	6.9	0.0	⊙
First Priority Health	214	23.7	63	96.8	2.0	4.5	1.6	⊙
Geisinger Health Plan	384	26.2	162	87.7	2.7	6.3	8.6	⊙
HealthAmerica & HealthAssurance	924	28.7	347	87.3	2.2	5.8	5.3	⊙
Keystone Health Plan Central	312	25.4	128	72.7	2.2	7.1	7.6	⊙
Keystone Health Plan East	632	14.0	199	99.5	2.4	4.3	3.6	⊙
Keystone Health Plan West	1,451	27.6	526	97.5	2.2	5.1	3.5	⊙
UPMC Health Plan	592	43.8	200	100.0	2.3	5.0	4.6	⊙
HMO State Total/Average	5,118	22.5	1,822	93.2	2.2	5.5	4.4	
Fee-for-Service Sample	1,594		573	84.6	2.1	6.3	6.6	

Total number of neck and back procedures (with and without fusion) performed in 2004.	Procedure rate per 10,000 members, adjusted for patient risk factors.	Number of decompression procedures performed with fusion in 2004.	Percent of procedures performed in an inpatient setting.	Average number of days spent in the hospital, adjusted for patient risk factors.	Expected percent of complications is calculated taking into account patient risk factors.	The actual number of complications divided by the total number of neck and back procedures with fusion.	Symbols indicate whether the difference between the expected and actual percents was statistically significant.

Surgical Procedures

and geographic locations. Most health care professional organizations recommend conservative treatment before performing surgery, but recommendations for the duration of conservative treatment vary widely. Neck and back procedures are high volume, high cost surgeries with important implications for quality of care.

<div>

Percent of Complications, Statistical Rating

A statistical test is used to determine if the difference between expected and actual percent of complications was statistically:

○   Lower than expected

⊙   Same as expected

●   Higher than expected

</div>

HMO	Without Fusion					
	Number of Procedures without Fusion	Percent Performed Inpatient	Length of Stay	In-Hospital Complications		
				Expected (Percent)	Actual (Percent)	Statistical Rating
Aetna Health Inc.	342	90.1	1.8	4.1	5.5	⊙
CIGNA Healthcare	45	62.2	2.4	4.6	7.1	⊙
First Priority Health	151	94.0	1.4	4.5	2.9	⊙
Geisinger Health Plan	222	70.7	1.6	4.8	1.3	○
HealthAmerica & HealthAssurance	577	63.3	1.6	5.2	6.1	⊙
Keystone Health Plan Central	184	69.0	1.6	5.3	5.5	⊙
Keystone Health Plan East	433	87.1	1.7	4.0	3.7	⊙
Keystone Health Plan West	925	82.3	1.8	5.0	6.3	⊙
UPMC Health Plan	392	80.9	1.8	5.0	5.7	⊙
HMO State Total/Average	3,296	78.8	1.7	4.7	5.3	
Fee-for-Service Sample	1,021	72.1	1.4	4.8	3.1	

Number of decompression procedures performed without fusion in 2004.	Percent of procedures performed in an inpatient setting.	Average number of days spent in the hospital, adjusted for patient risk factors.	Expected percent of complications is calculated taking into account patient risk factors.	The actual number of complications divided by the total number of neck and back procedures without fusion.	Symbols indicate whether the difference between the expected and actual percents was statistically significant.

Surgical Procedures

Prostatectomy

Prostatectomy is the surgical removal of the prostate (radical prostatectomy). Generally, the entire prostate is removed when cancer is present. Prostatectomy substantially reduces prostate cancer mortality. Cancer of the prostate is one of the most common forms of cancer in American men. Risks, complications, and side effects that may occur during and after prostatectomy include excessive bleeding, which may require blood transfusion, incontinence, impotence, and narrowing of the urethra.

Percent of Complications, Statistical Rating

A statistical test is used to determine if the difference between expected and actual percent of complications was statistically:

- ○   Lower than expected
- ⊙   Same as expected
- ●   Higher than expected

HMO	Total	Procedure Rate	Length of Stay	In-Hospital Complications		
				Expected (Percent)	Actual (Percent)	Statistical Rating
Aetna Health Inc.	94	4.7	3.0	8.2	5.3	⊙
CIGNA Healthcare	15	13.4	2.8	7.9	0.0	⊙
First Priority Health	19	4.6	2.8	9.1	16.7	⊙
Geisinger Health Plan	32	4.5	3.1	8.3	0.0	⊙
HealthAmerica & HealthAssurance	63	3.9	2.9	7.9	7.9	⊙
Keystone Health Plan Central	19	3.2	2.7	7.8	0.0	⊙
Keystone Health Plan East	127	6.2	3.1	8.8	8.1	⊙
Keystone Health Plan West	151	5.7	2.8	8.0	3.3	○
UPMC Health Plan	66	8.8	3.0	8.0	10.6	⊙
HMO State Total/Average	587	5.4	2.9	8.2	6.0	
Fee-for-Service Sample	222		2.7	7.8	9.5	

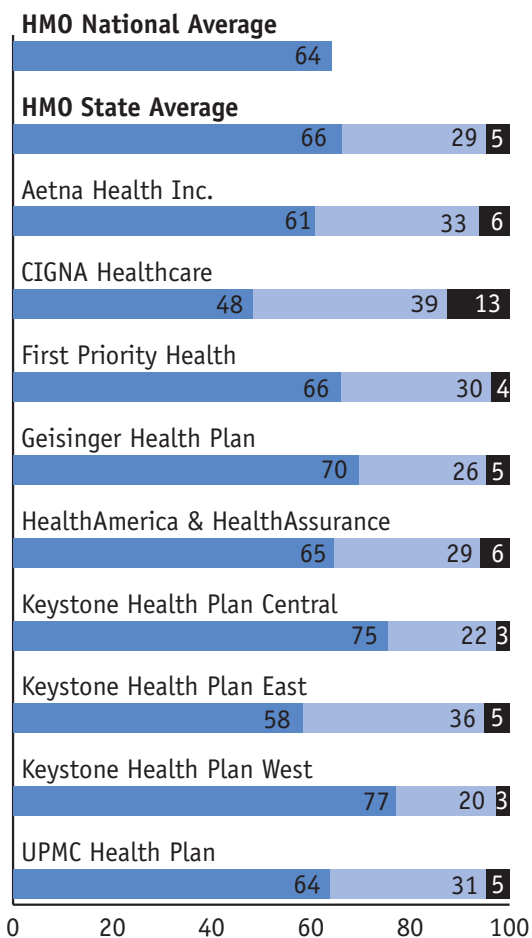|					
Total number of prostatectomy (radical) procedures performed in 2004.	Procedure rate per 10,000 male members, adjusted for patient risk factors.	Average number of days spent in the hospital, adjusted for patient risk factors.	Expected percent of complications is calculated taking into account patient risk factors.	The actual number of complications divided by the total number of prostatectomy procedures.	Symbols indicate whether the difference between the expected and actual percents was statistically significant.

Member Satisfaction
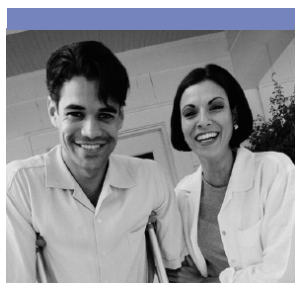
S atisfaction surveys offer a view of HMO quality and service from a member's perspective. These standardized member satisfaction measures were taken from the annual Consumer Assessment of Health Plans Survey® (CAHPS) for calendar year 2004. Independent research companies conduct the survey for each HMO and the resulting member satisfaction measures become part of the HMO's accreditation review. State average and national averages, when available, are included.

Overall Rating of Plan

How would you rate your health plan?
Percent who gave their plan a rating of:

- 8 to 10 (highest rating)
- 5 to 7
- 0 to 4

HMO National Average
64

HMO State Average
66 | 29 | 5

Aetna Health Inc.
61 | 33 | 6

CIGNA Healthcare
48 | 39 | 13

First Priority Health
66 | 30 | 4

Geisinger Health Plan
70 | 26 | 5

HealthAmerica & HealthAssurance
65 | 29 | 6

Keystone Health Plan Central
75 | 22 | 3

Keystone Health Plan East
58 | 36 | 5

Keystone Health Plan West
77 | 20 | 3

UPMC Health Plan
64 | 31 | 5

Appointments for Routine Care

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health care provider for health care?

Percent who answered yes:

HMO State Average
73

Aetna Health Inc.
78

CIGNA Healthcare
79

First Priority Health
72

Geisinger Health Plan
73

HealthAmerica & HealthAssurance
73

Keystone Health Plan Central
74

Keystone Health Plan East
81

Keystone Health Plan West
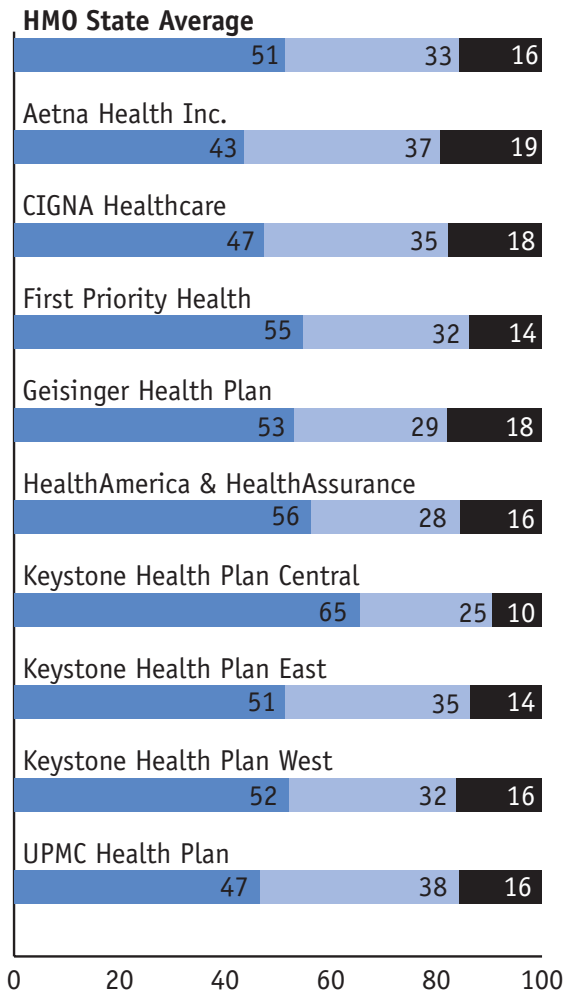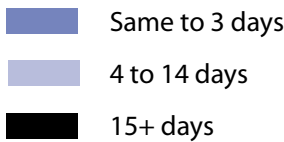61

UPMC Health Plan
78
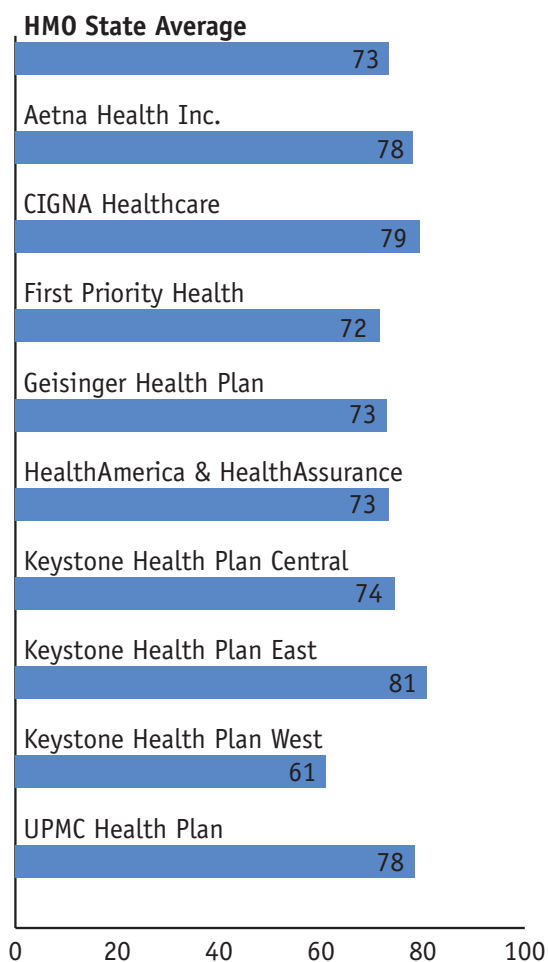
Note: Numbers may not add up to 100% due to rounding.

Member Satisfaction

Waiting for Routine Care

In the last 12 months, not counting times you needed health care right away, how many days did you usually have to wait between making an appointment and actually seeing a provider?
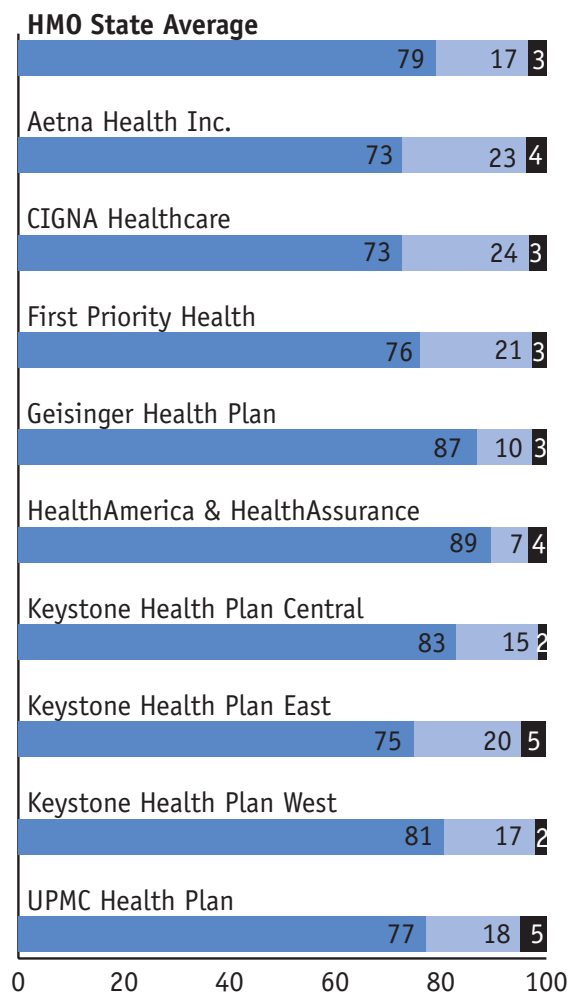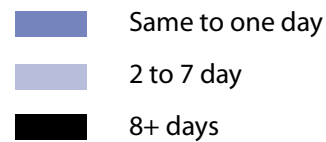
Percent who answered:

- Same to 3 days
- 4 to 14 days
- 15+ days

HMO State Average

Plan	Same to 3 days	4 to 14 days	15+ days
HMO State Average	51	33	16
Aetna Health Inc.	43	37	19
CIGNA Healthcare	47	35	18
First Priority Health	55	32	14
Geisinger Health Plan	53	29	18
HealthAmerica & HealthAssurance	56	28	16
Keystone Health Plan Central	65	25	10
Keystone Health Plan East	51	35	14
Keystone Health Plan West	52	32	16
UPMC Health Plan	47	38	16

Waiting for Care for an Injury or Illness

In the last 12 months, when you needed care right away for an illness, injury or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

Percent who answered:

- Same to one day
- 2 to 7 day
- 8+ days

HMO State Average

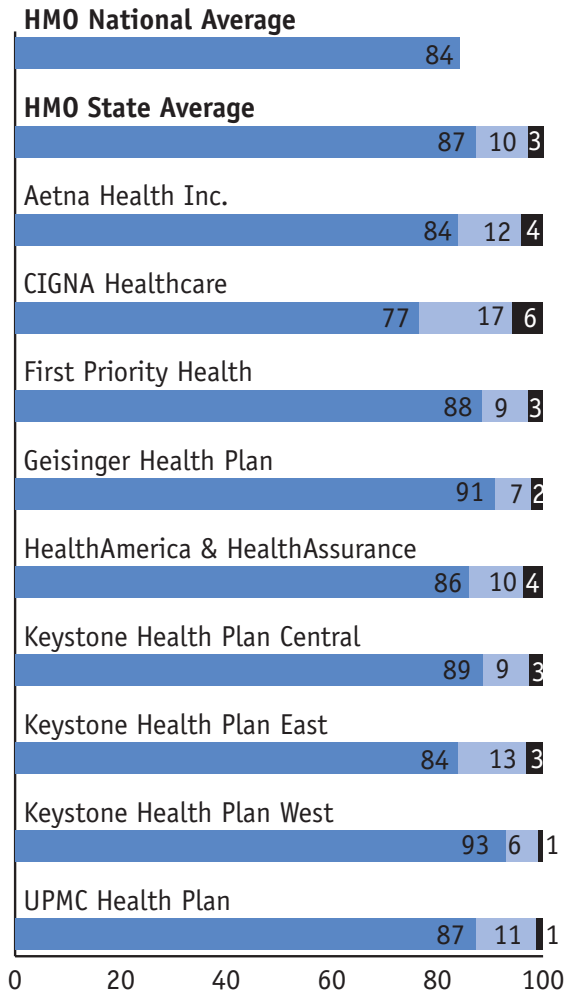| Plan	Same to one day	2 to 7 day	8+ days
HMO State Average	79	17	3
Aetna Health Inc.	73	23	4
CIGNA Healthcare	73	24	3
First Priority Health	76	21	3
Geisinger Health Plan	87	10	3
HealthAmerica & HealthAssurance	89	7	4
Keystone Health Plan Central	83	15	2
Keystone Health Plan East	75	20	5
Keystone Health Plan West	81	17	2
UPMC Health Plan	77	18	5

Member Satisfaction

Getting Needed Care

In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

Percent who answered:

- ■ Not a problem
- ■ A small problem
- ■ A big problem

HMO National Average
84

HMO State Average
87 | 10 | 3

Aetna Health Inc.
84 | 12 | 4

CIGNA Healthcare
77 | 17 | 6

First Priority Health
88 | 9 | 3

Geisinger Health Plan
91 | 7 | 2

HealthAmerica & HealthAssurance
86 | 10 | 4

Keystone Health Plan Central
89 | 9 | 3

Keystone Health Plan East
84 | 13 | 3

Keystone Health Plan West
93 | 6 | 1

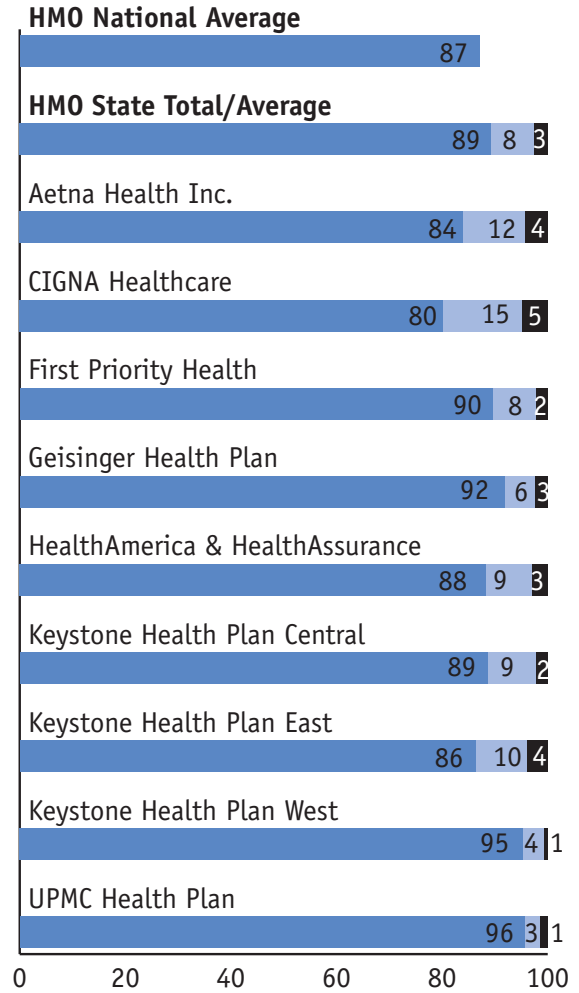UPMC Health Plan
87 | 11 | 1

0 20 40 60 80 100

Getting Approvals from the HMO

In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

Percent who answered:

- ■ Not a problem
- ■ A small problem
- ■ A big problem

HMO National Average
87

HMO State Total/Average
89 | 8 | 3

Aetna Health Inc.
84 | 12 | 4

CIGNA Healthcare
80 | 15 | 5

First Priority Health
90 | 8 | 2

Geisinger Health Plan
92 | 6 | 3

HealthAmerica & HealthAssurance
88 | 9 | 3

Keystone Health Plan Central
89 | 9 | 2

Keystone Health Plan East
86 | 10 | 4

Keystone Health Plan West
95 | 4 | 1

UPMC Health Plan
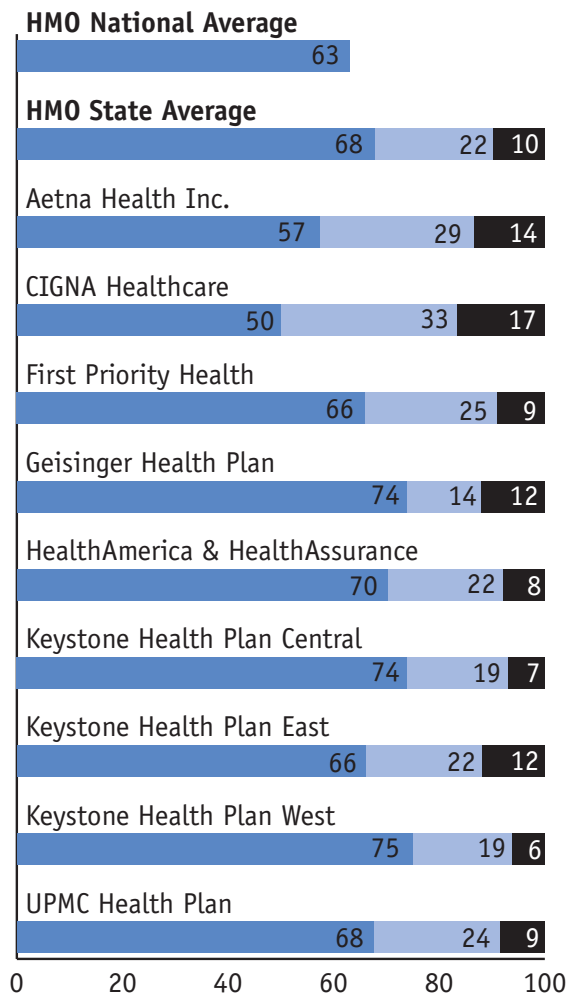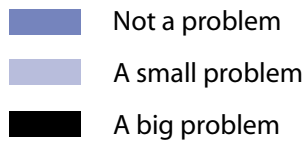96 | 3 | 1

0 20 40 60 80 100

Member Satisfaction

Getting Help from Customer Service

In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?
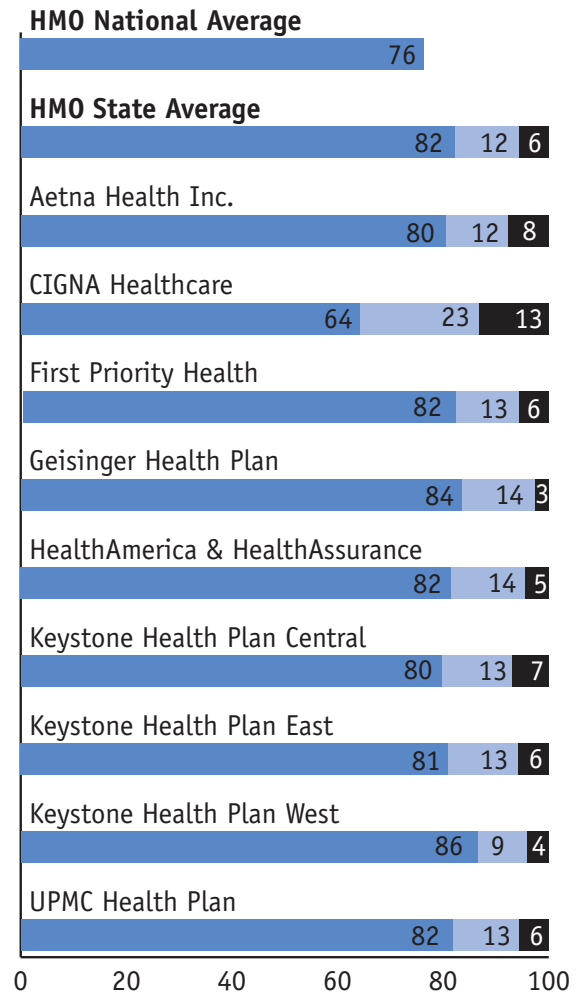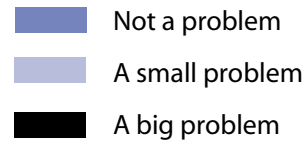
Percent who answered:

- � Not a problem
- ▢ A small problem
- ■ A big problem

HMO National Average
63

HMO State Average
68 22 10

Aetna Health Inc.
57 29 14

CIGNA Healthcare
50 33 17

First Priority Health
66 25 9

Geisinger Health Plan
74 14 12

HealthAmerica & HealthAssurance
70 22 8

Keystone Health Plan Central
74 19 7

Keystone Health Plan East
66 22 12

Keystone Health Plan West
75 19 6

UPMC Health Plan
68 24 9

0   20   40   60   80   100

Seeing a Specialist

In the last 12 months, how much of a problem, if any, was it to see a specialist you needed to see?

Percent who answered:

- ▢ Not a problem
- ▢ A small problem
- ■ A big problem

HMO National Average
76

HMO State Average
82 12 6

Aetna Health Inc.
80 12 8

CIGNA Healthcare
64 23 13

First Priority Health
82 13 6

Geisinger Health Plan
84 14 3

HealthAmerica & HealthAssurance
82 14 5

Keystone Health Plan Central
80 13 7

Keystone Health Plan East
81 13 6

Keystone Health Plan West
86 9 4

UPMC Health Plan
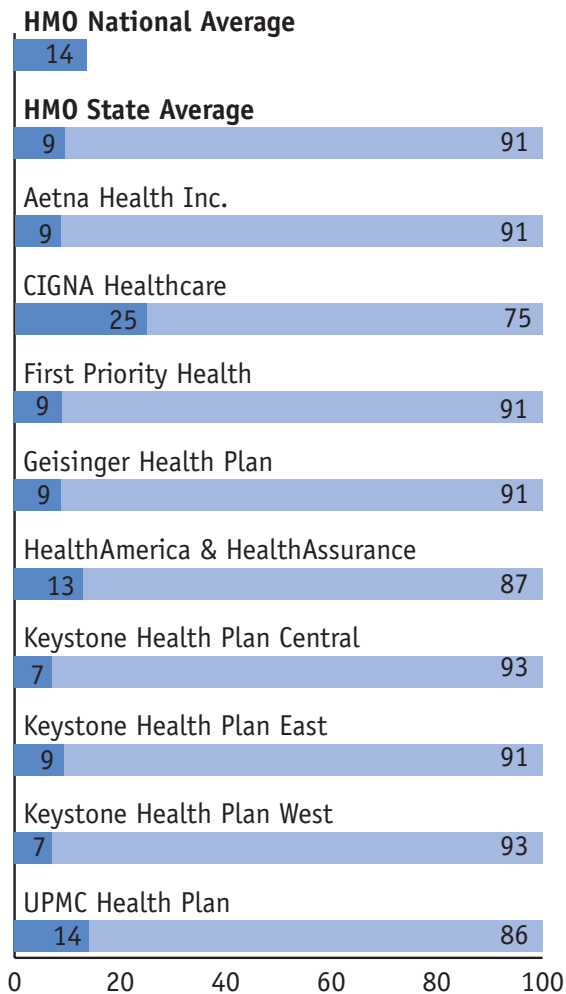82 13 6

0   20   40   60   80   100

Member Satisfaction

Complaints or Problems

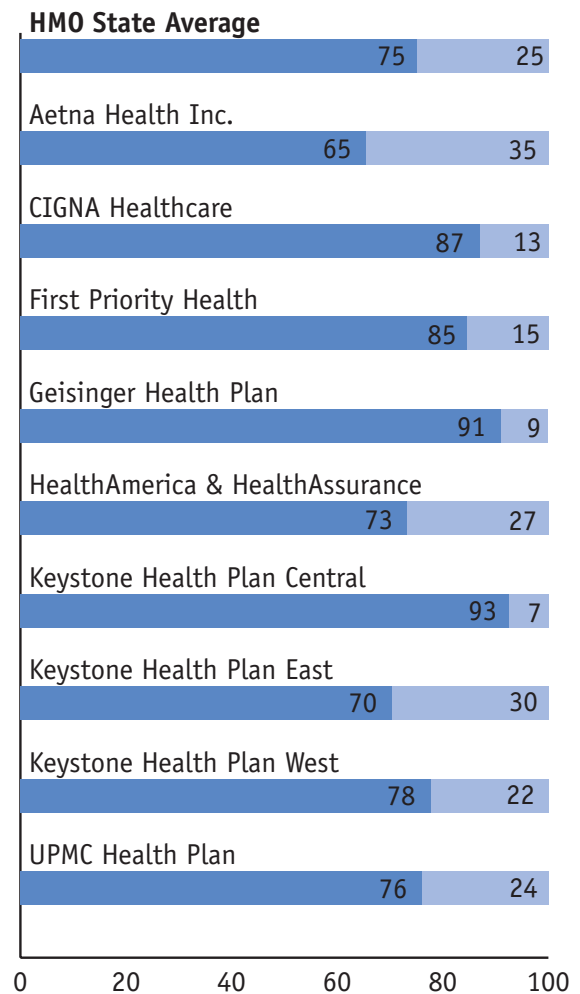In the last 12 months, have you called or written your health plan with a complaint or problem?

Percent who answered:

- ■ Yes
- ■ No

HMO National Average
14

HMO State Average
9 | 91

Aetna Health Inc.
9 | 91

CIGNA Healthcare
25 | 75

First Priority Health
9 | 91

Geisinger Health Plan
9 | 91

HealthAmerica & HealthAssurance
13 | 87

Keystone Health Plan Central
7 | 93

Keystone Health Plan East
9 | 91

Keystone Health Plan West
7 | 93

UPMC Health Plan
14 | 86

0 — 20 — 40 — 60 — 80 — 100

Complaints Settled to Satisfaction

Was your complaint or problem settled to your satisfaction?

Percent who answered:

- ■ Yes
- ■ No

HMO State Average
75 | 25

Aetna Health Inc.
65 | 35

CIGNA Healthcare
87 | 13

First Priority Health
85 | 15

Geisinger Health Plan
91 | 9

HealthAmerica & HealthAssurance
73 | 27

Keystone Health Plan Central
93 | 7

Keystone Health Plan East
70 | 30

Keystone Health Plan West
78 | 22

UPMC Health Plan
76 | 24

0 — 20 — 40 — 60 — 80 — 100

Counties of Operation

County	Aetna Health	CIGNA Healthcare	First Priority Health	Geisinger Health Plan	HealthAmerica & HealthAssurance	Highmark Blue Shield	Keystone Health Plan Central	Keystone Health Plan East	Keystone Health Plan West	UPMC Health Plan
Adams	✓				✓	✓	✓			
Allegheny	✓				✓				✓	✓
Armstrong	✓				✓				✓	✓
Beaver	✓				✓				✓	✓
Bedford				*					✓	✓
Berks	✓			✓	✓	✓	✓			
Blair	✓			✓	✓				✓	✓
Bradford	□		✓	✓	✓					
Bucks	✓	✓			✓			✓		
Butler	✓				✓				✓	✓
Cambria	✓			✓	✓				✓	✓
Cameron				✓	✓				✓	✓
Carbon	✓		✓	✓	✓					
Centre				✓	✓	✓	✓		✓	
Chester	✓	✓			✓			✓		
Clarion	✓				✓				✓	✓
Clearfield				✓	✓				✓	✓
Clinton	□		✓	✓	✓					
Columbia	□			✓	✓	✓	✓			
Crawford					✓				✓	✓
Cumberland	✓			*	✓	✓	✓			
Dauphin	✓			✓	✓	✓	✓			
Delaware	✓	✓			✓			✓		
Elk				*	✓				✓	✓
Erie	✓				✓				✓	✓
Fayette	✓				✓				✓	✓
Forest				*	✓				✓	✓
Franklin	✓				✓	✓	✓			
Fulton	✓					✓	✓			
Greene	✓				✓				✓	✓
Huntingdon				✓	✓				✓	
Indiana	□				✓				✓	✓
Jefferson	✓			✓	✓				✓	✓

□   Only Self-Insured and Managed Care Plans are offered in these counties.

*   Partial Coverage is offered in these counties.

Counties of Operation

County	Aetna Health	CIGNA Healthcare	First Priority Health	Geisinger Health Plan	HealthAmerica and HealthAssurance	Highmark Blue Shield	Keystone Health Plan Central	Keystone Health Plan East	Keystone Health Plan West	UPMC Health Plan
Juniata				✓	✓	✓	✓			
Lackawanna	□		✓	✓	✓					
Lancaster	✓			✓	✓	✓	✓			
Lawrence	✓				✓				✓	✓
Lebanon	✓			✓	✓	✓	✓			
Lehigh	✓			✓	✓	✓	✓			
Luzerne	□		✓	✓	✓					
Lycoming	□		✓	✓	✓					
McKean					✓				✓	✓
Mercer	✓				✓				✓	✓
Mifflin				✓	✓	✓	✓			
Monroe	✓		✓	✓	✓					
Montgomery	✓	✓			✓			✓		
Montour				✓	✓	✓	✓			
Northampton	✓			✓	✓	✓	✓			
Northumberland	□			✓	✓	✓	✓			
Perry	✓			*	✓	✓	✓			
Philadelphia	✓	✓			✓			✓		
Pike	□		✓	✓	✓					
Potter				*					✓	✓
Schuylkill	✓			✓	✓	✓	✓			
Snyder	□			✓	✓	✓	✓			
Somerset	✓				✓				✓	✓
Sullivan	□		✓	✓						
Susquehanna	□		✓	✓	✓					
Tioga			✓	✓						
Union				✓	✓	✓	✓			
Venango					✓				✓	✓
Warren					✓				✓	✓
Washington	✓				✓				✓	✓
Wayne	□		✓	✓	✓					
Westmoreland	✓				✓				✓	✓
Wyoming	□		✓	✓	✓					
York	✓			✓	✓	✓	✓			

About the Data

Sources of Data

Inpatient hospital and ambulatory procedure data used in the analysis of treatment measures were submitted to PHC4 by Pennsylvania hospitals. The source of data reported for pages 6 through 14, as well as for the mental health measures, is Quality Compass® and is used with permission of the National Committee for Quality Assurance (NCQA). Quality Compass® is a registered trademark of NCQA. NCQA, an independent organization that reports information about managed care plans, was also the source of the Health Plan Employer Data and Information Set® (HEDIS). The member satisfaction measures were taken from the Consumer Assessment of Health Plans Survey® (CAHPS).

Limitations of the Data

This report is not intended to be a sole source of information in making choices about HMO plans since the measures included are important, but limited, indicators of quality. Hospital admissions, complications and rehospitalizations are sometimes unavoidable consequences of a patient's medical condition. Hospitals, physicians and health insurance plans may do everything right, and still the patient may experience problems.

In addition, an HMO's success in helping members to manage health problems depends in part upon members' willingness and ability to comply with their providers' treatment decisions. While HMOs play an important role in the delivery of care, it is hospitals and doctors who ultimately provide health care for patients.

This report may not provide exact comparisons for several reasons. Benefit plan designs differ among and within HMOs. Enrollment in HMOs is constantly changing. Furthermore, since this report includes data from only one year, it is only a snapshot of what occurred during a limited period of time. Finally, PHC4's risk-adjustment model may not completely capture some groups at higher risk due to social and/or behavioral differences.

HMOs included in this report verified that they were the primary insurer for the hospitalization data analyzed in this report.

Because the methods to compare health plans continue to be developed, this report addresses a limited number of indicators that are not intended to represent an HMO's overall performance. These data should be interpreted with caution.

PHC4 would like to emphasize that this report is about helping people make more informed choices and stimulating a quality improvement process where differences in important health care measures are identified and appropriate questions are raised and answered.

Accounting for Differences in Illness Level, Age and Sex Across HMOs

PHC4 compiles "expected" rates for many of the measures in this report based on a complex mathematical formula that assesses the degree of illness or risk for patients. In other words, HMOs that have sicker members or a higher percentage of high-risk members are given "credit" in the formula; more patients can be expected to be admitted to the hospital, have longer lengths of stay, be readmitted, or have greater potential for complications because they are more seriously ill or at greater risk. Age and sex adjustments are also applied to some measures. A full description of these methods can be found in the HMO Technical Report at www.phc4.org.

HMO Information

Health Plan	Line of Business	Accreditation Status	Telephone Number	Web Site
Aetna Health Inc.	HMO and Point-of-Service	Excellent	1-800-991-9222	www.aetna.com
CIGNA Healthcare of PA	HMO and Point-of-Service	Excellent	1-800-345-9458	www.cigna.com/health
First Priority Health	HMO and Point-of-Service	Excellent	1-800-822-8753	www.bcnepa.com
Geisinger Health Plan	HMO and Point-of-Service	Excellent	1-800-631-1656	www.thehealthplan.com
HealthAmerica and HealthAssurance, Pennsylvania	HMO and Point-of-Service	Excellent	1-800-788-8445 (Central); 1-800-735-4404 (Pittsburgh)	www.healthamerica.cvty.com
Highmark, Inc. d/b/a Highmark Blue Shield	Point of Service	Scheduled	1-800-345-3806	www.highmarkblueshield.com
Keystone Health Plan Central	HMO	Excellent	1-800-547-2583	www.capbluecross.com
Keystone Health Plan East	HMO and Point-of-Service	Excellent	1-800-555-1514 (Outside Philadelphia); 1-215-636-9559 (In Philadelphia)	www.ibx.com
Keystone Health Plan West	HMO and Point-of-Service	Excellent	1-800-386-4944; 1-800-350-4130 (PEBTF)	www.highmarkbcbs.com
UPMC Health Plan	HMO and Point-of-Service	Excellent	1-888-876-2756	www.upmchealthplan.com

Pennsylvania Health Care Cost Containment Council

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