

The State of Health Care Quality

2004



Industry Trends and Analysis



NCQA

Measuring the Quality of America's Health Care

The State of Health Care Quality: 2004

NATIONAL COMMITTEE FOR QUALITY ASSURANCE
WASHINGTON, D.C.

Quality Compass® is a product developed by the National Committee for Quality Assurance (NCQA). HEDIS® is a registered trademark of NCQA. NCQA encourages and promotes the use of the performance measures that comprise HEDIS.

All HEDIS results are independently audited. To ensure the integrity of HEDIS/CAHPS® 3.0H results, NCQA requires that health plans use an NCQA-Certified, third-party survey vendor to administer the survey. CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality, which helped develop the survey.

© 2004 by the National Committee for Quality Assurance
2000 L Street, NW, Suite 500
Washington, DC 20036
All rights reserved. Printed in the U.S.A.

NCQA Customer Support: (888) 275-7585
To order NCQA publications: (888) 275-7585
www.ncqa.org

TABLE OF CONTENTS

Acknowledgments	4
Introduction	5
Executive Summary	7
Strategies for Change: Pay for Performance and Provider Recognition	15
HEDIS Measures of Care	20
Adolescent Immunization Status	21
Antidepressant Medication Management	22
Appropriate Testing for Children with Pharyngitis	24
Appropriate Treatment for Children with Upper Respiratory Infection (URI)	25
Beta-Blocker Treatment After a Heart Attack	26
Breast Cancer Screening	27
Cervical Cancer Screening	28
Childhood Immunization Status	29
Chlamydia Screening	30
Cholesterol Management After a Heart Attack	31
Colorectal Cancer Screening	32
Controlling High Blood Pressure	33
Comprehensive Diabetes Care	34
Flu Shots for Adults	36
Follow-Up After Hospitalization for Mental Illness	37
Medical Assistance with Smoking Cessation	38
Osteoporosis Management in Women Who Had a Fracture	39
Prenatal and Postpartum Care	40
Use of Appropriate Medications for People With Asthma	41
CAHPS® Member Satisfaction Measures	42
Rating of Health Plan	43
Claims Processing	44
Customer Service	45
Getting Needed Care	46
Appendices	47
Appendix 1: HEDIS Effectiveness of Care Measures: 2003 National Averages	48
Appendix 2: HEDIS Effectiveness of Care Measures: Trends, 2000-2003	49
Appendix 3: CAHPS® 3.0H Member Satisfaction Measures:	
Commercial, Medicaid and Medicare Averages	52
Appendix 4: HEDIS Effectiveness of Care Measures:	
Accredited vs. Non-Accredited Plans (Commercial, 2003)	53
Appendix 5: HEDIS Effectiveness of Care Measures:	
Accredited vs. Non-Accredited Plans (Medicaid, 2003)	54
Appendix 6: HEDIS Effectiveness of Care Measures:	
Accredited vs. Non-Accredited Plans (Medicare, 2003)	55
Appendix 7: HEDIS Effectiveness of Care Measures:	
Publicly Reporting vs. Non-Publicly Reporting Plans (Commercial, 2003)	56
Appendix 8: HEDIS Effectiveness of Care Measures:	
Publicly Reporting vs. Non-Publicly Reporting Plans (Medicaid, 2003)	57
Appendix 9: Top Ten Organizations in HEDIS Effectiveness of Care Measures and CAHPS® 3.0H Member Satisfaction Measures	58
Appendix 10: Top Five Organizations in HEDIS Effectiveness of Care Measures by Region	59

ACKNOWLEDGMENTS

■ The *State of Health Care Quality* was made possible through the contributions of many individuals, both internal and external to NCQA. In particular, we recognize the talent, effort and expertise of NCQA's Research & Analysis staff, who directed the development of this year's report, conducted the underlying analysis, and did much of the related research and writing: Greg Pawlson, M.D., M.P.H.; Russell Mardon, Ph.D.; Sarah Shih, M.P.H.; Oanh Vuong; Rich Mierzejewski, M.S.; Shaheen Halim, M.S.; Sarah Hudson Scholle, Dr.P.H.; Stacy Trent and Paul Rockswold, M.D., M.P.H.

This report is data-driven, and much time and effort go into collecting, formatting and screening the data we receive. We are grateful to Pete Frawley, Steven Potter, Anna Canlas, Adrienne James, Stephanie Kelly and Yong Li of NCQA's Information Systems Department for their contributions to the report, which grows in scope each year.

We appreciate the work of Barry Scholl, Brian Schilling, Jeff Van Ness and Lauren Funk of NCQA's Communications Department, who provided editorial direction and guidance.

Finally, we thank the participating organizations that shared—and continue to share—their performance results with NCQA. Their commitment is vital to the continuous improvement of care and service.

INTRODUCTION

■ NCQA is pleased to present its 2004 State of Health Care Quality report. This is the eighth such report NCQA has produced, and the fifth report in a row to find that performance on key measures of clinical quality has improved over the past year. The improvements this year were among the largest ever recorded. This is a promising trend and one we expect to continue. For the 69 million people enrolled in the health plans that provided their performance data to help NCQA prepare this report, this trend is very good news; they can expect better care and better health outcomes.

But what of the rest of the health care system?

What of those with little or no access to care such as the 45 million people without health insurance? What of those who receive care through health plans that do not publicly report their performance? Using conservative estimates, this report finds that the performance of the rest of the system leaves much to be desired. Huge "quality gaps" exist, costing tens of thousands of lives, millions of illnesses and billions of dollars annually.

Quality gap is a term that reflects the difference in performance between the top 10 percent of health plans and the national average. It can be applied to any industry—in the airline industry, for example, the quality gap in terms of safety between the top 10 percent performers and the national average is miniscule: far less than 1 percent. In certain manufacturing, banking and other processes, we also see uniformly high degrees of accuracy. Not so in health care, where variation in the practice of medicine is the norm; the consequence of which is wildly varying quality. The quality gap on certain measures is 20 percent or more.

This report is also about solutions. Pages 15-19 discuss the potential of two important ideas: physician- and hospital-level performance measurement; and pay for performance, to improve health care quality. These strategies are beginning to take hold, but their potential will not be realized without more support and broader acceptance among physicians, consumers, health plans and policymakers. We urge you to read these pages carefully and consider how you might promote improvement strategies in your own practice, company or region of the country.

This report is based in part on data collected for Quality Compass[®], NCQA's database of managed care information, and for NCQA's Accreditation program, which requires participating plans to publicly report their HEDIS[®] results. Quality Compass 2004 contains audited, plan-specific information on clinical performance, accreditation and member satisfaction from 262 commercial organizations that submitted their performance results to NCQA for public dissemination. Plan-specific performance data are available free of charge to members of the media.

ABOUT NCQA AND HEDIS

The National Committee for Quality Assurance is a private, not-for-profit organization dedicated to improving health care quality. NCQA is active in quality oversight and improvement initiatives at all levels of the health care system, from evaluating entire systems of care to recognizing individual providers who demonstrate excellence.

The Health Plan Employer Data and Information Set, or HEDIS, is a tool used by the majority of America's health plans to measure performance on important dimensions of care and service. HEDIS is designed to provide purchasers and consumers with the information they need to reliably compare the performance of managed health care plans. Altogether, there are more than 60 different measures in HEDIS. HEDIS results are based on a statistically valid random sample of members. Certified auditors, using a process designed by NCQA, rigorously audit all results.

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

OVERVIEW

■ The quality of health care delivered to Americans who are enrolled in health plans that measure and report on their performance improved markedly in 2003, but the health care system remains plagued by enormous "quality gaps," and the majority of Americans still receive less than optimal care. The disparity between the care most Americans receive and the care delivered through the nation's best plans results in from 42,000 to 79,000 premature deaths each year.

The fact that many Americans do not receive appropriate preventive care, and care for chronic conditions like diabetes and hypertension, also means that annually there are thousands of preventable second heart attacks, kidney failures and other conditions such as painful and debilitating fractures from osteoporosis. Several recent studies demonstrate that a handful of such conditions account for more than half of U.S. medical costs. This report demonstrates that more than \$9 billion in lost productivity and nearly \$2 billion in hospital costs could be averted through more consistent delivery of best-practice care. More than 14,000 heart attacks and strokes could be prevented each year through better diabetes management alone (HbA1c control).

Most Americans would undoubtedly agree that the goals of the health care system should be to keep healthy people healthy and to help the chronically ill manage their conditions to avoid serious and expensive complications. But as first reported last year, 1,000 Americans or more die each week because the health care system regularly fails to deliver appropriate care, and thousands more are hospitalized as a result of this failure. Yet Americans pay more and more for the care they receive and nearly 45 million Americans are uninsured. This combination of increasing costs, declining access and varying performance is entirely unacceptable.

Health plans increasingly use new tools to engage members, coordinate care and promote physician quality. NCQA's Accreditation programs are adapting to monitor these advances in order to identify innovators and drive improvement. But at a time when the national trend in health insurance is to move away from the tight networks of health maintenance organizations (HMO) toward the broader access of preferred provider organizations (PPO) and the Web-powered promise of "consumer-directed" health plans (CDHP), there is also a danger that some of the gains of the past decade—a result of a focus on plan-initiated care management and preventive care—will be lost.

Expanded performance measurement, better care coordination and broadened accountability throughout the health care system are proven methods of enhancing quality, and it is essential that they be incorporated into the new, less integrated health care delivery system of tomorrow. It is equally important that "pay for performance"—the simple idea of rewarding physicians and hospitals that deliver excellent preventive and chronic illness care—is embraced throughout health care. These are all crucial steps toward building a broader accountability framework: one that promotes quality, not quantity; a health care system that provides patients with the right care at the right time.

continued on next page >

EXECUTIVE SUMMARY

■ *continued from previous page*

SUBSTANTIAL IMPROVEMENTS FOR SOME

The performance improvements recorded last year among the 563 health plans that reported results were among the largest ever recorded (see Table 1). These commercial, Medicare and Medicaid plans cover more than 69 million people—about a quarter of all Americans—and represent a subsection of the broader health care system. On most measures, system performance as a whole did not improve significantly.

On several key measures, average health plan performance improved by 4 percentage points or more. For example, on the important Controlling High Blood Pressure measure, average performance rose from 58 percent to 62 percent. If every American with hypertension received care through one of the top health plans in the country (which control blood pressure in about 71 percent of such patients), between 15,000 and 26,000 deaths annually could be prevented and over 21 million sick days per year avoided.

For the third consecutive year, health plans serving Medicare beneficiaries demonstrated impressive gains in cholesterol management. In 2001, NCQA reported that Medicare plans controlled beneficiaries' low density lipoprotein (LDL) cholesterol to below 130 mg/dL in only about 53 percent of all cases; since then performance has improved to 67 percent. Medicaid health plans made gains as well, with cardiac care, cancer screening and diabetes care rates all steadily improving.

Measure	2000	2001	2002	2003
Adolescent Immunization Status - Combo 1	36.8	44.0	50.1	58.7
Adolescent Immunization Status - VZV (Chicken Pox)	28.5	34.1	40.5	50.9
Advising Smokers to Quit	66.3	65.7	67.7	68.6
Antidepressant Medication Management - Acute Phase	N/A	56.9	59.8	60.7
Antidepressant Medication Management - Continuation Phase	N/A	40.1	42.8	44.1
Antidepressant Medication Management - Contacts	N/A	19.8	19.2	20.3
Asthma Medication Use - All Ages Combined	62.6	65.6	67.9	71.4
Beta-Blocker Treatment After a Heart Attack	89.4	92.5	93.5	94.3
Breast Cancer Screening	74.5	75.5	74.9	75.3
Cervical Cancer Screening	78.1	80.0	80.5	81.8
Childhood Immunization Status - Combo 1	66.8	68.1	68.5	74.4
Childhood Immunization Status - VZV (Chicken Pox)	70.5	75.3	82.0	85.7
Cholesterol Management - Control (LDL < 130)	53.4	59.3	61.4	65.1
Cholesterol Management - Screening	74.2	77.1	79.4	80.3
Comprehensive Diabetes Care - HbA1c Testing	78.4	81.4	82.6	84.6
Comprehensive Diabetes Care - Lipid Control (LDL < 130)	44.3	49.8	54.8	60.4
Comprehensive Diabetes Care - Lipid Profile	76.5	81.4	85.1	88.4
Comprehensive Diabetes Care - Monitoring Nephropathy	41.4	46.3	51.8	48.2
Comprehensive Diabetes Care - Poor HbA1c Control*	42.5	36.9	33.9	32.0
Controlling High Blood Pressure	51.5	55.4	58.4	62.2
Follow-Up After Mental Illness - 7 Days	48.2	51.3	52.7	54.4
Follow-Up After Mental Illness - 30 Days	71.2	73.2	73.6	74.4

* *Lower rates are better for this measure.*

EXECUTIVE SUMMARY

■ *continued from previous page*

ENORMOUS QUALITY GAPS REMAIN

First reported in last year's State of Health Care Quality report, the quality gap refers to the disparity on a given clinical measure between national performance and the performance of the top 10 percent of health plans. The latter is used as a benchmark because it represents a realistic, achievable goal for the entire system. For example, nationwide about 66 percent of adults 65 and older receive a flu shot. But in top-performing health plans, 84 percent receive a flu shot. If the entire system performed at this level, from 3,500 to 7,300 deaths per year could be prevented.

As an example of why these quality gaps are so significant, look at the impact that improvement in the Beta-Blocker Treatment After a Heart Attack measure has made. In 1996, when NCQA first reported results for this measure, the average for health plans was only about 62 percent and the overall national baseline was estimated to be as low as 40 percent. In 2003, the average has increased to almost 95 percent, with many plans reporting that 100 percent of eligible heart attack patients receive prescriptions for beta-blockers. The 10th percentile performance has now risen to 87 percent, shrinking the gap between high and low performers dramatically—saving thousands of lives and preventing thousands of heart attacks since 1996.

For the first time, this year's report includes rates for colorectal cancer screening, quality of osteoporosis management, and two measures designed to assess antibiotic overuse—Appropriate Testing for Children With Pharyngitis, and Appropriate Treatment for Children with Upper Respiratory Infection. It is reasonable to expect that measurement and public reporting about these conditions will lead to improvements as well, as we have seen across most clinical measures.

As described above, failure to consistently apply principles of evidence-based medicine manifests most clearly in the widespread and well-documented variation in rates of care between the best performers among health plans that collect and report data and the national rate. In every clinical area studied, the gap between the top 10 percent of health plans and the national average is significant (see Table 2).

Measure	National Baseline*	90th Percentile	Spread
Advising Smokers to Quit	59.0	76.1	17.1
Beta-Blocker Treatment After a Heart Attack	86.0	100.0	14.0
Breast Cancer Screening	80.7	83.0	2.3
Cervical Cancer Screening	82.3	87.9	5.6
Cholesterol Management - Control (< 130)	51.1	76.3	25.2
Comprehensive Diabetes Care - HbA1c Control	79.8	90.3	10.5
Controlling High Blood Pressure	48.6	71.2	22.6
Timeliness of Prenatal Care	81.4	96.1	14.7

* Sources: *Journal of the American Medical Association*; *Centers for Disease Control and Prevention*; *American Heart Association*; *American Cancer Society*; *the National Center for Health Statistics*; and *mean HEDIS 2004 performance rates among unaccredited plans*.

EXECUTIVE SUMMARY

■ *continued from previous page*

Using the data above as a baseline and comparing it to the 90th percentile care offered by the best health plans, we can calculate the expected avoidable mortality and morbidity for a number of the nation's most common, costly and deadly diseases if everyone received care through one of the top plans (see Table 3).

Measure	Avoidable Deaths (Annually)
Beta-Blocker Treatment	900 - 1,900
Breast Cancer Screening	600 - 1,000
Cervical Cancer Screening	600 - 800
Cholesterol Management - Control	6,900 - 17,000
Colorectal Cancer Screening	4,200 - 6,300
Controlling High Blood Pressure	15,000 - 26,000
Diabetes Care - HbA1c Control	4,300 - 9,600
Flu Shots for Adults Over 65	3,500 - 7,300
Prenatal Care	600 - 1,400
Smoking Cessation	5,400 - 8,100
Total	42,000 - 79,400

MENTAL ILLNESS STILL A WEAK SPOT

A notable exception to the improvement trend continues to exist for those with depression and other mental health conditions. Since 1999, rates on measures related to medical management of depression and follow-up for mental health issues have remained persistently low. Appropriate treatment of people with behavioral health conditions remains a critical shortcoming of our health care system with enormous adverse impact on quality of life and workplace productivity.

IT DOESN'T HAVE TO BE THIS WAY

Research increasingly demonstrates that improving the quality of preventive care and chronic disease management will also profoundly reduce the number of other adverse health events suffered, saving government payers, such as Medicare, and American employers (in other words, all workers and taxpayers) billions of dollars in unnecessary medical costs. One recent study indicated that about 56 percent of all health spending is attributable to complications from just 15 conditions, many of which are covered by the measures in this report.

As further evidence, consider that if all Americans received care through health plans performing at the 90th percentile in this report, tens of thousands of heart attacks and strokes could be prevented among patients diagnosed with coronary artery disease and those who have already suffered heart attacks. In addition, many thousands of fractures due to osteoporosis could be avoided (see Table 4).

EXECUTIVE SUMMARY

■ *continued from previous page*

MEASURE	AVOIDABLE (NON-FATAL) EVENTS EACH YEAR	AVOIDABLE COSTS FOR HOSPITALIZATION, ETC.
Beta-Blocker Treatment	600 heart attacks	\$6.1 million
Breast Cancer Screening	7,600 breast cancer cases treated in Stage IV due to late diagnosis	\$48 million
Cholesterol Management—Control	14,600 major coronary events	\$87 million
Colorectal Cancer Screening	20,000 cases of colorectal cancer diagnosed/treated at a later stage	\$191 million
Controlling High Blood Pressure	7,600 strokes 15,900 major cardiovascular events such as heart attacks	\$463 million
Diabetes Care—HbA1c Control	14,000 heart attacks, strokes, or amputations	\$573 million
Smoking Cessation	smoking-attributable health care expenses for 272,000 smokers	\$441 million
Osteoporosis Treatment	2,100 subsequent fractures	\$7.2 million
Total Health Costs		\$1.8 billion

As we have reported previously, suboptimal health care results in the loss of millions of days of productive labor. This year, for just five health care conditions, we found that that loss totals more than 66 million days (see Table 5)—the equivalent productivity of 293,000 workers lost from the economy each year—at a cost to employers of more than \$9.6 billion dollars. It is important to note that this is for only a subset of the clinical areas we could choose to examine.

Condition	Sick Days
Asthma	22.6 million
Depression	10 million
Diabetes	6.8 million
Heart Disease	5.7 million
Hypertension	21.4 million
Total	66.5 million

* includes 'presenteeism' experienced when sick employees report to work but work at a reduced capacity.

EXECUTIVE SUMMARY

■ *continued from previous page*

We can also look at regional performance across a range of clinical measures to see how often specific treatments and services are rendered in different parts of the country (see Table 6). Clearly, health plans and physicians in certain areas of the country—New England and Wisconsin, for example—consistently perform better than other areas in delivering needed care. In fact, 9 of the top 10 health plans in this report are from those two regions. Some difference in results may be due to socioeconomic, geographic or other factors that are beyond our control to change, but this factors cannot explain the variations completely and it is hard to understand why patients in a few states receive such vastly better care than those in the majority of the country.

Measure	New England	Middle Atlantic	South Atlantic	East North Central	South Central	West North Central	Mountain	Pacific
Advising Smokers to Quit	73.4	70.0	68.8	69.5	64.6	66.9	66.8	67.9
Beta-Blocker Treatment After a Heart Attack	97.2	95.6	94.8	93.8	92.2	93.4	93.5	93.2
Breast Cancer Screening	80.9	74.0	76.5	76.8	72.8	76.6	72.5	74.3
Cervical Cancer Screening	86.6	81.7	83.5	81.9	77.8	83.0	80.9	81.2
Cholesterol Management - Control (LDL < 130)	69.0	71.2	65.8	63.2	58.4	60.1	64.7	65.6
Comprehensive Diabetes Care - HbA1c Testing	88.6	85.0	83.8	84.6	82.8	86.0	82.1	85.2
Comprehensive Diabetes Care - Poor HbA1c Control*	27.6	29.1	31.4	31.9	36.3	27.7	36.5	31.5
Controlling High Blood Pressure	66.6	64.4	63.3	62.0	60.7	61.0	57.3	59.9
Timeliness of Prenatal Care	94.5	92.2	91.0	88.7	86.2	90.2	85.4	90.0

* Note: Lower rates are better for this measure.

The regions above (defined by the United States Census Bureau) include the following states.

East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin.

Middle Atlantic: New Jersey, New York, Pennsylvania.

Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming.

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

Pacific: Alaska, California, Hawaii, Oregon, Washington.

South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia.

South Central: Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas.

West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

EXECUTIVE SUMMARY

■ *continued from previous page*

MEASUREMENT AND REPORTING DRIVE QUALITY

We are encouraged that the number of health plans choosing not to publicly report performance data has dropped once again this year (and some hospitals and physicians have begun publicly releasing such data). We continue to find that health plans and providers who choose to pursue NCQA Accreditation and commit to measurement and reporting deliver recommended care at much higher rates than those that do not (see Table 7). This holds true regardless of whether the population studied is enrolled in a private plan or in Medicare or Medicaid, and is essential to our calls for broader measurement and public reporting throughout the health care system (see Appendix 8).

Table 7. Publicly Reporting vs. Non-Publicly Reporting Plans:
Selected Commercial Averages, 2003

Measure	Public Reporters	Non-Public Reporters	Difference
Adolescent Immunization Status (Combo 1)	60.4	40.6	19.8
Beta-Blocker Treatment After Heart Attack	94.6	90.1	4.5
Check-Ups After Delivery	81.2	71.5	9.7
Childhood Immunization Status (Combo 1)	75.2	67.8	7.4
Cholesterol Management - Control (LDL < 130)	66.0	52.4	13.6
Cholesterol Management - Screening	80.9	73.3	7.6
Comprehensive Diabetes Care - Eye Exams	49.9	39.4	10.5
Comprehensive Diabetes Care - HbA1c Testing	84.9	81.4	3.5
Comprehensive Diabetes Care - Lipid Control (LDL < 130)	61.0	55.5	5.5
Comprehensive Diabetes Care - Lipid Profile	88.7	85.6	3.1
Timeliness of Prenatal Care	90.2	81.2	9.0

SUMMARY AND RECOMMENDATIONS

Despite evidence of promising gains in certain sectors of the health care system, once again this year NCQA documented evidence of widespread, unexplained variation in quality that results in thousands of unnecessary deaths, tens of thousands of avoidable hospitalizations and illnesses and billions of dollars in lost productivity—hobbling an economy already encumbered by the ever-growing costs of health insurance.

Even as adherence to evidence-based care has improved in many health plans, there is cause for great concern that these gains could be erased in the years ahead. The trend toward PPOs and CDHPs, while holding great promise in terms of consumer engagement and harnessing of the Internet's power, also relies more on patient decision making and less on aggressive care coordination. What must be done to ensure that the improvements we have seen over the past decade continue and expand throughout all health care?

More Measurement and Accountability

Apart from the health plan quality information that NCQA has published for the past decade, it is still exceedingly difficult for consumers to find comparative information about their health insurance options and providers. But there are encouraging signs: While little objective information about hospi-

EXECUTIVE SUMMARY

■ *continued from previous page*

tal quality was available until recently, many hospitals are beginning to report such data at the urging of employers and the federal government. Similarly, information about the quality of PPOs and CDHPs—as well as physician practices—is scarce. This accountability vacuum must be filled if forward movement on quality is to continue. Better information on physician and hospital quality and performance data from PPOs and other health plans must become more widely available if consumers are expected to make informed choices and seek out quality care in the new medical marketplace.

Systems of Care

Research increasingly demonstrates that many opportunities to deliver needed care are missed simply because doctors' offices and health plans lack the ability to identify and track patients who need it. Patient registries that monitor a practice's chronically ill patients—those with diabetes, for example—are a fairly simple method of enhancing quality of care and preventing serious downstream complications from disease. NCQA's newest physician recognition program—Physician Practice Connections (PPC)—helps consumers identify practices that have such systems in place. Several major private and public quality efforts are using PPC to recognize and reward these physician offices that have or establish such systems (see pages 16 and 17).

Paying for Quality, Not Quantity

Finally, as NCQA and others have noted for the past few years, we must reform current systems of reimbursement for providers; systems that are not simply neutral on the issue of bad quality, but which actually—often inadvertently—pay *more* for it. Recognizing and rewarding physicians and hospitals that invest in quality improvement and demonstrate positive results for patients is vitally important. The next section of this report focuses on a number of initiatives across the country seeking to promote this concept, as well as the other two recommendations outlined here.

STRATEGIES FOR CHANGE: PAY FOR PERFORMANCE AND PROVIDER RECOGNITION

■ It is *not* coincidental that the impressive performance gains discussed here were recorded in a year that saw broad acceptance of two important and complementary improvement strategies: paying for quality and physician- and hospital-level performance measurement. In 2003, more than in any past year, these two strategies were incorporated into mainstream efforts to improve care. Dozens of such efforts were launched and, among the more mature efforts, substantial bonuses were paid (in 2004), in some cases for the first time.

These efforts are diverse; they range from national, government-sponsored efforts to health-plan-specific initiatives. Some involve hundreds of millions of dollars in incentives; others, simply the promise of added recognition in a provider directory. Many are based on existing or newly established Physician Recognition Programs developed by NCQA and its partners, the American Diabetes Association and the American Heart Association/American Stroke Association.

It is important to understand why these strategies work. With respect to measuring physician performance, the explanation is perhaps intuitive: Feedback helps doctors improve their performance or distinguish themselves in particular areas. For those unfamiliar with health care financing, the importance of the pay-for-performance strategy may be less obvious or there may be an assumption that physicians and hospitals are already compensated based on quality. They are not.

Under current reimbursement rules and strategies, thousands of times every day doctors and hospitals are paid more when they make mistakes. In fact, unintentionally rewarding mistakes is actually built into the codes used by Medicare, Medicaid and others. This is not to suggest that doctors and hospitals deliberately overlook quality issues to make more money; they do not. In fact, many physicians, hospitals and health plans do just the opposite, even though it may not be in their best interests financially. But how much more rigorous might these efforts be if they were financially rewarded for doing so instead of punished? Shouldn't a hospital that invests in systems to prevent infections be paid more than one that doesn't? This is the pay-for-performance approach to compensation.

NCQA and its partners currently offer three physician recognition programs designed to help identify exemplary physicians and medical groups—practices that develop and implement systems to improve delivery of appropriate care and avoid costly errors. Many physicians participate in these programs not because they hope to qualify for special financial rewards or incentives, but because they value the feedback and want to distinguish themselves in the marketplace. Dozens of employers, business coalitions, health plans and others have recognized the value of these programs and have incorporated them into local, regional and national pay-for-performance efforts. Following is a brief summary of NCQA's Recognition Programs and several leading pay-for-performance efforts making headlines across the country.

RECOGNITION PROGRAMS

The Diabetes Physician Recognition Program (DPRP)

More than 18 million Americans suffer from diabetes. It is one of the nation's leading causes of death, contributing to over 200,000 deaths annually. In 1997, NCQA and the American Diabetes Association developed and launched the Diabetes Physician Recognition Program (DPRP) to help identify physicians to whom they might refer persons with diabetes. Recognition is contingent upon a physician or medical group demonstrating provision of care consistent with consensus-based guidelines for managing diabetes.

STRATEGIES FOR CHANGE

■ *continued from previous page*

Since the program was launched, more than 1,800 doctors from across the country have earned recognition. Performance of physicians participating in the program has improved dramatically over time. Two things about this improvement are notable: First, much of it predates any financial incentives tied to earning recognition. That is, physicians improved their performance without any direct reward, and they acted on the program's feedback to fine-tune their practices and target their improvement efforts.

Second, improvement often continues even after required thresholds for recognition have been met. For example, even though most physicians met the threshold for nephropathy screening in 1998, screening rates continued to improve 13 percentage points since then. And despite meeting lipid profile rates (LDL <130 mg/dL) in 2001, average rates in that area improved 12 percentage points over the next two years.

The Heart/Stroke Recognition Program (HSRP)

Each year, heart disease and stroke are responsible for more than a million deaths in the United States. In part, this is because many heart and stroke patients do not receive care consistent with what science tells us is appropriate for these conditions. Nationally, 51 percent of heart attack patients had their LDL cholesterol appropriately controlled (below 130 mg/dL); only 49 percent of people diagnosed with hypertension had their blood pressure controlled (below 140/90 mmHg).

In 2003, NCQA and the American Heart Association/American Stroke Association launched the Heart/Stroke Recognition Program. To earn recognition, individual physicians or medical groups submit performance data related to treatment of patients with cardiovascular disease or who have suffered a stroke. These data are evaluated against certain thresholds based on our understanding of effective cardiac/stroke care; physicians and groups who meet or exceed the thresholds are recognized. The program sets a high bar—physicians must register treatment rates that far exceed national averages in four of the five measures of cardiac/stroke care below:

- Controls blood pressure below 140/90 mmHg in at least 75 percent of patients
- Performs a lipid profile on at least 80 percent of patients
- Helps control cholesterol below 100 mg/dL in at least 50 percent of patients
- Prescribes aspirin or antithrombotic therapy for at least 80 percent of patients
- Provides advice and support to quit smoking for 80 percent of patients who smoke

More than 100 physicians have been recognized to date and many more are expected to earn recognition in the years ahead as pay-for-performance initiatives mature.

Physician Practice Connections (PPC)

It is frequently observed that the U.S. health care system is among the least "systemized" sectors of the economy. This is a reference to the fact that most medical records are still kept on paper in file cabinets, and most physicians still do not regularly rely on registries or computerized aid and support to care for patients. The introduction of computers and other automated systems in other industries has helped reduce variation (high variation is usually an indication of low quality) and realize efficiencies that would otherwise have been impossible. But variation and inefficiency are still very much a part of health care. Except among the Veterans Administration and a few other select medical groups, U.S. health care is fragmented—each hospital or doctor operates differently, delivering dissimilar treatments in a dissimilar manner to similar patients with similar illnesses. This is a root cause of the "quality gaps" discussed throughout this report.

STRATEGIES FOR CHANGE

■ *continued from previous page*

NCQA's newest Physician Recognition Program, Physician Practice Connections (PPC), launched earlier this year, is designed to help correct this situation by recognizing physicians and medical groups who invest in systems to help them deliver better care. ("System" is a deliberately broad term and is not specific to computerized support, although promoting the use of electronic health information is a major aim of the program.) The PPC program is designed to identify practices that take an active approach to managing patient information and using it to help improve care. As medicine has grown more complex, information system support has become more important. It is impossible for physicians today to commit to memory everything they need to know—about every patient, every illness, every treatment option—in order to deliver high-quality care. Fortunately, advances in information technology now make available:

- Tracking systems to remind doctors and patients when patients need to come in for a checkup or refill a prescription
- Error checking to ensure that physicians do not write contraindicated prescriptions
- Practice-wide performance measurement to help analyze a practice's population, identify and monitor common chronic conditions and screen for risk factors.

The PPC program recognizes doctors and medical groups who invest in systems to make these activities possible. Additionally, it recognizes physicians who provide their patients with educational resources and support services for chronic illness to help patients better manage their conditions.

RECOGNITION AND PAY FOR PERFORMANCE IN ACTION: PROFILES OF LEADING INITIATIVES

Below are descriptions of some of the many initiatives across the country involving NCQA's Recognition programs or pay for performance.

Centers for Medicare & Medicaid Services (National)

One of the nation's most committed and aggressive advocates of pay for performance is the Centers for Medicare & Medicaid Services (CMS), whose leadership in this area is vital: The Medicare program touches nearly every health care system in the nation. A successful CMS demonstration of the merits of pay for performance could spark interest in more private sector efforts. The major CMS pay-for-performance effort requires hospitals participating in the Medicare program to report selected performance data to qualify for full payment for various services. Those that do not report face a .4 percent penalty.

The effort has been a success thus far. As of the reporting deadline of August 15, 98 percent of the 3,900 hospitals that participate in Medicare had reported data. Hospitals are expected to use their own data, as well as national and regional averages, to identify strengths and weaknesses and help target improvement efforts. The Medicare program will use the data to develop report cards to help inform beneficiaries' health care choices.

CMS is involved in several other such efforts, including a pay-for-quality demonstration project with Premier, Inc., a nationwide network of not-for-profit hospitals. Hospitals participating in this three-year pilot project can earn up to 2 percent bonuses above normal reimbursement for treating several key illnesses and conditions. Only hospitals with the highest demonstrated clinical quality (top 10 percent) will earn the top bonus in the program's first year. In subsequent years, bonuses will also be tied to demonstrating year over year improvement.

Mark McClellan, M.D., Ph.D., Administrator, Centers for Medicare & Medicaid, is a strong pay-for-quality advocate and additional efforts will likely be announced in the near future.

STRATEGIES FOR CHANGE

■ *continued from previous page*

The Integrated Healthcare Association's P4P Initiative (California)

Three years ago, the Integrated Healthcare Association (IHA), a California health care policy leadership group, launched the statewide Pay for Performance (P4P) program. P4P is the nation's largest private performance-based rewards initiative, involving 6 major California health plans and over 200 physician groups serving 7 million commercial HMO enrollees. The initiative involves collecting standardized performance data from participating health plans and physician groups and using it to produce reports and public scorecards that will be used by individual health plans to determine incentives.

Under the program, physician groups will be compared in three key areas: clinical quality, patient experience, and investment in information technology. NCQA adapted existing HEDIS measures for the clinical quality domain. In partnership with the State of California Office of the Patient Advocate (OPA), IHA will use the aggregated data to produce a public scorecard comparing physician group performance. The scorecard will be widely disseminated in printed form and on the OPA Web site sometime later this year.

Some medical groups expect to receive incentives in excess of \$1 million, and the total amount to be paid out is estimated at between \$40 million and \$100 million.

The Bridges to Excellence Initiative (Louisville, Cincinnati, Albany & Massachusetts)

Bridges to Excellence is a one-year-old, employer-backed coalition that is designed to help employees and family members of participating companies identify physicians who provide high quality care for selected illnesses and/or who have invested in their practices' information management systems. The effort is built around NCQA's Recognition programs. Physicians who earn recognition via an NCQA program are eligible for annual incentive payments ranging from \$50 to \$100 a year for each employee or family member of a participating employer, which in some cases could amount to several or even tens of thousands of dollars annually. These payments will not only promote quality, they will make it possible for physicians to justify investments in information technology and other systems that promote quality.

The Bridges effort also emphasizes education and information. Recognized physicians are highlighted in many employers' provider directories, helping employees and their families identify top doctors. In addition, many Bridges employers offer extensive educational materials to support employees with diabetes or heart disease. Some even offer employees rewards for selecting recognized physicians. Participating employers expect to see a quantifiable return on their investment: Employees with poorly managed diabetes or heart disease tend to miss substantially more work than employees whose conditions are well-managed.

Among the sponsoring employers involved in the Bridges effort are: General Electric, Procter & Gamble, Raytheon, Verizon, United Parcel Service and Ford. Thus far, the Bridges effort has been introduced in four areas heavily populated by employees of these companies: Cincinnati, Louisville, Albany/Schenectady and statewide in Massachusetts. To date, dozens of physicians and medical groups have earned more than \$170,000 in incentive payments through the Bridges program.

Aetna (National)

While provider directories have long been useful tools for selecting a doctor, they are fast becoming tools for selecting the right doctor as more and more organizations are opting to highlight Recognized physicians in their provider directories. Aetna was the first national health plan chain to do so.

STRATEGIES FOR CHANGE

■ *continued from previous page*

CIGNA (National)

CIGNA, which covers more than 10 million Americans, highlights Recognized physicians in its online network directories. Nationwide, more than 25 million people now have easy access to Recognition information through their health plan physician directory.

UnitedHealth Group (National)

UnitedHealth Group is also among the list of plans that highlight Recognized doctors, but goes one step further and actively encourages its doctors to earn recognition by offering technical support with the data collection and chart reviews necessary to apply for the programs. United is also working with the Bridges to Excellence coalition to encourage its employer clients to participate in Bridges' physician reward programs.

Oxford Health Plan (New York)

Oxford Health Plan of New York, which provides care for approximately a million state residents, recently established a program to encourage its doctors to apply for recognition under the DPRP. Oxford not only reimburses doctors for associated application costs and provides data collection support, the plan also offers DPRP-Recognized physicians on its panel a \$100 per patient annual reward.

Blue Care Network (Michigan)

To help improve the quality of diabetes care in the state of Michigan, Blue Care Network (BCN) is actively encouraging selected endocrinologists and primary care providers in its network to pursue Recognition through the DPRP. BCN, which serves nearly half a million members throughout the state, targeted more than 700 network physicians with a mailing that solicited their participation in the program. As incentive, BCN offers to reimburse application fees, provide data abstracting assistance and pay a substantial financial incentive to physicians who earn recognition. Expectations for the program are high: BCN expects that up to 500 physicians will apply.

ProHealth Physicians (Connecticut)

ProHealth Physicians, a group practice of over 200 physicians with offices throughout the state of Connecticut, provides care to nearly 10,000 diabetic patients statewide. Records of all ProHealth patients are kept in a patient registry that allows the practice to deliver to each physician a quarterly report listing his or her diabetic patients and treatment information. The report shows several key indicators, including patient glycohemoglobin and LDL level and the date on which patients were last seen.

The group's effort to earn DPRP Recognition paid dividends for ProHealth doctors and patients: The percentage of patients with an HbA1c of 7 or less rose from 56 percent to 66 percent over two years.

The list of initiatives involving NCQA's recognition programs and/or pay-for-performance elements is extensive. Nearly 80 active pay-for-performance efforts have been catalogued and others are being developed. For more information about these or other programs, contact NCQA's Communications department at 202-955-5104.

HEDIS® MEASURES

■ HEDIS is a set of standardized performance measures designed to ensure that purchasers and consumers have the information they need to reliably compare the performance of managed health care plans. The performance measures in HEDIS are related to many significant public health issues such as cancer, heart disease, smoking, asthma and diabetes. HEDIS also includes a standardized survey of consumers' experiences that evaluates plan performance in areas such as customer service, access to care and claims processing. HEDIS is sponsored, supported and maintained by NCQA.

ADOLESCENT IMMUNIZATION STATUS

■ Many adolescents continue to be affected by preventable diseases such as measles, mumps, rubella, hepatitis B and varicella (chicken pox). Safe and effective vaccines are available, and immunizations successfully and inexpensively reduce the incidence of these dangerous and costly diseases.

ABOUT ADOLESCENT IMMUNIZATION

- Children are usually immunized against measles, mumps and rubella during early childhood, but an immunization MMR booster shot during adolescence is required to ensure continued protection.
- Before implementation of the varicella vaccination program, an estimated 4 million cases, 11,000 hospitalizations, and 100 deaths were attributable to varicella disease each year in the United States.

MEASURE DEFINITION

The HEDIS Adolescent Immunization Status (Combo 1) measure estimates the percentage of enrolled adolescents who turn 13 years old during the measurement year and had a second dose of MMR and three hepatitis B vaccinations by their 13th birthday. The varicella vaccination is also reported.

For the second straight year, adolescent immunization rates rose dramatically, yet national rates remain below 60 percent.

RESULTS AND ANALYSIS

Commercial

- In 2003, the average immunization rates for commercial plans for various vaccinations increased 6.0 - 10.4 percentage points over the previous year, continuing a trend.
- The average gap between the 90th and 10th percentile health plans for the various vaccinations is 47.9 percentage points.
- Average immunization rates vary significantly across regions. The New England region boasts the highest average immunization rate with 76.0 percent; the South Central region has the lowest average immunization rate with 43.8 percent.

Medicaid

- In 2003, the average immunization rates for Medicaid for various vaccinations increased 6.9 - 10.9 percentage points over the previous year, continuing an upward trend.
- Medicaid immunization rates for various vaccinations are 3 - 8 percentage points lower than their commercial counterparts.
- Average Medicaid immunization rates vary significantly across regions as well. The New England region is highest with 67.3 percent. The Mountain region has the lowest average performance: 37.9 percent.

Year	Commercial	Medicaid
2003	58.7	51.9
2002	50.1	43.1
2001	44.0	37.3
2000	36.8	28.5

THE CASE FOR IMPROVEMENT

Financial Benefits

- Immunizations are one of the most cost-effective health intervention strategies available, saving society more than \$5 for each dollar spent.
- A recent study estimated that the chicken pox vaccine has saved \$100 million per year in hospitalization costs alone.

The MMR vaccine saves \$16.34 in direct medical costs for every dollar spent.

ANTIDEPRESSANT MEDICATION MANAGEMENT

■ An estimated 32 million to 35 million adults in the United States will suffer from major depressive disorder in their lifetime. In a given year, about 19 million American adults suffer from a depressive disorder or depression. The annual direct cost of depression care is estimated at \$26 billion.

ABOUT DEPRESSION

- A depressive disorder is an illness that disrupts a person's mood, behavior, physical health and thoughts. There are three main depressive disorders: major depression, dysthymia (chronic/mild depression) and bipolar disorder.

Since NCQA began tracking antidepressant medication management, rates have remained largely unchanged--and the gap between high performers and low has remained significant.

MEASURE DEFINITION

This measure looks at different facets of successful pharmacological management of depression. The three components of the measure estimate:

- **Acute Phase:** the percentage of members who received antidepressant medication and had at least three follow-up visits during the 12-week acute phase after initial diagnosis.
- **Continuation Phase:** the percentage of eligible members who remained on antidepressant medication continuously the six months after the initial diagnosis.
- **Contacts:** the percentage of members who received at least three follow-up office visits in the 12-week acute treatment phase after a new diagnosis of depression.

These HEDIS measures reflect guidelines developed by the Agency for Healthcare Research and Quality and medical specialty groups.

RESULTS AND ANALYSIS

Commercial

- In 2003, performance scores for the Antidepressant Medication Management measures showed no significant change from the previous year.
- The Contacts component continues to have the lowest rate of all measures at 20.3 percent, while the mean rates for Acute Phase Treatment and Continuation Phase Treatment were 60.7 and 44.1, respectively.

Medicaid

- In 2003, Medicaid average performance for the Antidepressant Medication Management measures also showed no significant change from the previous year and were lower than commercial rates.

Medicare

- In 2003, Medicare results for the Antidepressant Medication Management measures also showed no significant change from the previous year. Average scores were lower than their commercial counterparts by 5 to 10 points.

continued on next page >

Depressive disorders are estimated to affect nearly 19 million Americans, or nearly 1 in 10 Americans over age 18.

ANTIDEPRESSANT MEDICATION MANAGEMENT

■ *continued from previous page*

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Nearly 1 in 6 people with severe, untreated depression commits suicide.
- Depression affects people of all ages but the illness often first occurs during a person's late twenties. Elderly people also suffer from high rates of depression.

Financial Benefits

- Major depressive disorder is the leading cause of disability in the United States.
- Depression has the highest medical costs of all behavioral conditions and results in more days of disability than chronic medical conditions such as heart disease, hypertension, diabetes and lower back pain.
- Workers with depression cost employers in excess of \$30 billion per year in lost productivity.
- The overall health bills of employees with depression are 70 percent higher than those of employees without depression.
- An estimated 2.5 million depression-related sick days could be prevented if everyone were enrolled in a health plan that performed at the 90th percentile on this measure.

Antidepressant Medication Management Commercial Rates, 2001 - 2003			
Year	Acute Phase	Continuation Phase	Contacts
2003	60.7	44.1	20.3
2002	59.8	42.8	19.2
2001	56.9	40.1	19.8

Antidepressant Medication Management Medicare Rates, 2001 - 2003			
Year	Acute Phase	Continuation Phase	Contacts
2003	53.3	39.2	10.5
2002	52.1	37.7	10.8
2001	51.3	36.8	11.9

Antidepressant Medication Management Medicaid Rates, 2001 - 2003			
Year	Acute Phase	Continuation Phase	Contacts
2003	46.2	29.3	18.0
2002	47.4	32.3	18.2
2001	45.5	30.0	19.0

NEW MEASURE

APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS

■ An estimated 10 percent of all children who see a medical care provider within a given year will be evaluated for pharyngitis, or sore throat.

Antibiotics are needed to treat *bacterial* pharyngitis, but are not useful for treating *viral* pharyngitis. Before antibiotics are prescribed, a diagnostic test needs to be run to validate bacterial origin. Unfortunately, a diagnostic test is not always completed before antibiotics are prescribed.

Excessive use of antibiotics for pharyngitis is common and contributes to antibiotic resistance. The CDC estimated that of the 8.7 million antibiotic prescriptions used to treat pharyngitis in 1998, approximately 35 percent were unnecessary.

ABOUT PHARYNGITIS TESTING

- Pharyngitis is caused by a variety of microorganisms. While most cases of pharyngitis are caused by viruses, approximately 35 percent of pharyngitis cases in children are caused by bacteria, predominantly Group A streptococcus (GAS), which causes strep throat, among other conditions.
- In a study done at Yale New-Haven Hospital Primary Care Center pediatric clinic, a GAS test was completed in 73 percent of pharyngitis cases. In 81 percent of cases where antibiotics were prescribed a diagnostic test for GAS was completed—but the test came back *negative* in 36 percent of those cases.

Unnecessary treatment of viral pharyngitis with antibiotics contributes to antibiotic resistance—which means that when antibiotics are really needed in severe infections, they may not work.

MEASURE DEFINITION

The Appropriate Testing for Children with Pharyngitis is a new HEDIS measure reported for the first time in 2003. The measure estimates the percentage of children 2 - 18 years of age who were diagnosed with pharyngitis, prescribed an antibiotic and who received a Group A streptococcus test.

Appropriate Testing for Children With Pharyngitis
Commercial and Medicaid Rates, 2003

Year	Commercial	Medicaid
2003	70.7	53.8

RESULTS AND ANALYSIS

Commercial

- Commercial plans reported a mean rate of 70.7 percent for this new measure.

Medicaid

- The Medicaid national mean score was 53.8 percentage points for this new measure.

THE CASE FOR IMPROVEMENT

Financial Benefits

- The Office of Technology Assessment estimated the cost of antibiotic resistance to hospitals to be \$1.3 billion in 1992 dollars or \$2.1 billion in 2003 dollars. These numbers do not include the cost of research and development for new antibiotics for resistant strains.
- The estimated cost of treating the 8.7 million people given antibiotics for pharyngitis in 1998 was \$251 million. Since 35 percent of these antibiotic treatments were in excess, approximately \$87.8 million could have been saved.

Broader use of GAS testing and correct interpretation of negative results would help stem the overprescription of antibiotics.

NEW MEASURE

APPROPRIATE TREATMENT FOR CHILDREN WITH UPPER RESPIRATORY INFECTION (URI)

■ Americans suffer an estimated 1 billion upper respiratory infections, or colds, annually. Colds are most prevalent among children, due to their relative lack of resistance to infection and to their high contact with other children. Consequently, children have an estimated 6-10 colds a year. With approximately 74 million children under the age of 18 in the United States, children account for 444 to 740 million colds annually. URIs are almost always viral, therefore antibiotics are ineffective.

ABOUT APPROPRIATE TREATMENT FOR UPPER RESPIRATORY INFECTION

- An estimated 7.4 million antibiotics were inappropriately prescribed to treat URIs in the U.S. in 1998.
- Inappropriate treatment of colds with antibiotics increases antibiotic resistance, which decreases the effectiveness of currently available drugs to combat bacterial pathogens.

MEASURE DEFINITION

This new HEDIS measure estimates the percentage of children 3 months to 18 years of age who were given a diagnosis of upper respiratory infection (URI) and who *did not* receive an antibiotic prescription for that episode of care within 3 days of the visit. A higher rate is better for this measure.

While existing clinical guidelines do not support the use of antibiotics for the common cold, physicians often prescribe them.

RESULTS AND ANALYSIS

Commercial

- The average rate for commercial plans for this new measure is 80.8 percentage points.
- While all regions scored high on this measure, some variability exists across regions. The Pacific has the highest regional average (85.2) while the lowest regional average is in South Central (74.2).

Medicaid

- Medicaid plans had a mean score of 80.1 percentage points, which is about the same as the commercial plan average.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Appropriate treatment for URI will decrease the number of individuals who are at risk for complications arising from the side effects of antibiotics ranging from fevers and rashes to drug allergies, prolonged hospital stays and even death.
- At the community level, appropriate antibiotic use will help lessen the spread of antibiotic resistance, which will prolong the effectiveness of current antibiotic drugs for those infections that respond to antibiotics.

Financial Benefits

- Inappropriate antibiotic treatment for URIs increases total pharmacy costs to health plans, subsequently raising the health care costs to purchasers.
- An estimated \$227 million was spent in 1998 for inappropriate treatment for upper respiratory infections in 7.4 million patients.

Appropriate Treatment of Children With URI Commercial and Medicaid Rates, 2003		
Year	Commercial	Medicaid
2003	80.8	80.1

Studies have found as many as 221 antibiotic prescriptions per 1,000 office visits for upper respiratory infections in children under 15.

BETA-BLOCKER TREATMENT AFTER A HEART ATTACK

■ An estimated 7.8 million Americans age 20 and older have a history of myocardial infarction (MI). The American Heart Association and the American College of Cardiology recommend treatment using beta-blockers following MI to reduce mortality during acute and long-term treatment. Beta-blocker treatment rates have risen dramatically--more than 30 percentage points since the measure was introduced in 1996.

ABOUT BETA-BLOCKER TREATMENT

- More than a million heart attacks occur in the United States each year, resulting in about 515,000 deaths.
- Cardiovascular diseases are the nation's leading cause of death.
- If all heart attack survivors received timely beta-blocker therapy, an estimated 1,500 deaths could be averted each year.

Since NCQA began measuring beta-blocker treatment rates, the percentage of untreated patients has been reduced by nearly 85 percent — saving tens of thousands of lives.

MEASURE DEFINITION

The HEDIS Beta-Blocker Treatment After a Heart Attack measure estimates the percentage of members 35 years of age and older who were hospitalized and discharged from the hospital after surviving a heart attack and who received a prescription for a beta-blocker. The specification for this measure changed in 2003 so that certain patients with complicating conditions are now included in the denominator. This may be responsible for the drop in some plans' reported rates since these patients have historically been less likely to receive beta-blockers.

RESULTS AND ANALYSIS

Commercial

- Performance scores for the Beta-Blocker Treatment After a Heart Attack measure were slightly higher than last year's score; the mean score increased to 94.3 percent.
- The 90th percentile of commercial plans report that 100 percent of eligible patients receive beta-blockers following a heart attack.

Year	Commercial	Medicare	Medicaid
2003	94.3	92.9	83.5
2002	93.5	93.0	90.1
2001	92.5	92.9	87.9
2000	89.4	89.3	82.9

Medicaid

- The average Medicaid performance score dropped by over 6 percentage points from the previous year.

Medicare

- The average Medicare performance score showed no significant change from the previous year at 92.9 percent, just 1.4 percentage points lower than the commercial mean.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- A number of trials have demonstrated that beta-blockers decrease the incidence of recurrent infarctions and lower cardiovascular mortality while increasing the probability of long-term survival by up to 40 percent.

Financial Benefits

- In 1999, Medicare paid \$10.7 billion to treat beneficiaries for heart disease (\$10,336 per discharge for acute MI; \$11,270 per discharge for coronary atherosclerosis; \$3,472 per discharge for other heart disease).
- The estimated direct and indirect economic cost associated with heart disease in 2004 is \$238.6 billion. Of this, \$108 billion is in indirect costs.
- Treating a patient with heart failure with beta-blockers reduces direct hospitalization costs by almost \$4,000 per patient over a 5-year period.

A study estimated that extending long-term beta-blocker treatment to all MI survivors would result in a net savings of \$18 million over 20 years.

BREAST CANCER SCREENING

■ There will be an estimated 217,000 new diagnoses of breast cancer and 40,000 deaths from the disease in 2004. More than 70 percent of women diagnosed with breast cancer have no identifiable risk factors, such as a family history of breast cancer.

There is considerable debate on the issue of mammography, however. In February 2002, the United States Preventive Services Task Force and the National Cancer Institute lowered the recommended age for routine mammography from 50 to 40. This decision came in the face of a 2001 Danish study that claimed that the trials used as the basis for recommending regular mammography screening were flawed, rendering the benefits of mammography inconclusive.

NCQA currently measures mammography rates in women ages 52 - 69, and this will remain unchanged for the time being. However, NCQA will monitor developments and will revise the Breast Cancer Screening measure as scientific and clinical consensus is achieved.

ABOUT BREAST CANCER SCREENING

- A woman living in the United States has a 1 in 7 lifetime risk of developing breast cancer.
- A mammogram can detect breast cancer one to three years before a woman can feel a lump.

MEASURE DEFINITION

The Breast Cancer Screening rate estimates the percentage of women aged 52–69 years who had at least one mammogram in the past two years.

Commercial breast cancer screening rates have remained steady since 1996, rising less than 5 percent over the past eight years. This may be attributable to the uncertainty among both the public and the scientific community about the benefits of mammography.

RESULTS AND ANALYSIS

Commercial

- The rate of breast cancer screening for commercial plans was consistent with the previous year, with the mean score being 75.3 percent.

Medicaid

- The rate of breast cancer screening among Medicaid plans improved less than half a percentage point over the previous year and remains lower than the commercial average.

Year	Commercial	Medicare	Medicaid
2003	75.3	74.0	55.9
2002	74.9	74.5	55.8
2001	75.5	75.3	55.1
2000	74.5	73.9	54.9

Medicare

- The rate of breast cancer screening among Medicare plans dropped by half a percentage point compared to last year.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Breast cancer is more likely to be completely cured when it is detected early.
- Women whose breast cancer is detected early are more likely to be eligible for less invasive therapy.

Financial Benefits

- The estimated direct and indirect costs associated with breast cancer in the U.S. total between \$2.4 and \$3.1 billion. Almost \$2 billion is for late stage breast cancer treatment.
- A mammography costs about \$100.

Mammography can detect an estimated 85 percent of breast cancers.

CERVICAL CANCER SCREENING

■ When detected early, cervical cancer is one of the most successfully treated cancers. Increased screening has resulted in a major overall decline in mortality from cervical cancer over the past several decades. Unfortunately, an estimated 10,500 new cases of cervical cancer and 3,900 deaths from the disease are still expected in 2004. Many of these deaths could be eliminated with more timely and effective screening.

ABOUT CERVICAL CANCER SCREENING

- With screening, a woman's lifetime risk of cervical cancer is estimated to be only 0.7 percent.
- Cancer rates are higher in older women; however, the precursor lesion to cervical cancer most often occurs in younger women.

A consensus recommendation that all women who are sexually active or who have reached age 18 should have Pap tests has been adopted by the American Cancer Society, the National Cancer Institute, the American Medical Association, and many others.

MEASURE DEFINITION

The Cervical Cancer Screening rate estimates the percentage of women aged 21–64 who were enrolled in a health plan and who had at least one Papanicolaou (Pap) test in the past three years.

RESULTS AND ANALYSIS

Commercial

- The rate of cervical cancer screening for commercial plans increased slightly from the past year, with an increase of 1.3 percentage points to 81.8 percent.
- The gap between the 90th percentile and the national baseline is 5.6 percentage points.

Year	Commercial	Medicaid
2003	81.8	64.0
2002	80.5	62.4
2001	80.0	61.1
2000	78.1	59.9

Medicaid

- The rate of cervical cancer screening in Medicaid plans increased slightly from the previous year to 64 percent.
- Rates on this measure were 18 percentage points lower than commercial rates, suggesting an opportunity for improvement.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Early detection is critical. Cervical cancer is a silent cancer—it rarely causes pain or noticeable symptoms until it is so advanced that it is usually unresponsive to treatment.
- The cervical cancer cure rate approaches 100 percent if the patient is treated when the cancer is in an early stage.

Financial Benefits

- Screening is very low-cost and extremely effective. A Pap test costs \$25–\$60, depending on the brand of test, and Pap tests alone detect more than 90 percent of significant cervical lesions.

It is estimated that between 60 and 80 percent of women diagnosed with cervical cancer did not have a Pap test in the 5 years prior to diagnosis.

CHILDHOOD IMMUNIZATION STATUS

■ Immunizations are one of the safest and most effective ways to protect children from serious diseases. Immunization coverage among children in the United States is high. Nevertheless, more than 20 percent of 2-year-olds within the United States are still missing one or more recommended immunizations.

ABOUT CHILDHOOD IMMUNIZATION

- Measles is one of the most infectious diseases in the world and is frequently imported into the United States. Ninety percent of unimmunized people exposed to measles will contract the virus.
- Hepatitis B virus infection becomes chronic in 90 percent of those infected as infants, and 25 percent of those infected will die of related chronic liver disease as adults.

MEASURE DEFINITION

The HEDIS Childhood Immunization Status (Combo 1) measure estimates the percentage of children enrolled in managed care plans who turned 2 years old during the measurement year, and who have received all of the following vaccinations: four doses of DTP or DTaP (diphtheria-tetanus); three doses of OPV or IPV (polio); one dose MMR (measles-mumps-rubella); three doses of Hib (Haemophilus influenzae type b); three doses of hepatitis B. The varicella vaccination is also reported.

RESULTS AND ANALYSIS

Commercial

- In 2003, the average rates for commercial plans for the various components of this measure increased 1.4 – 7.3 percentage points after being relatively stable for the past three years.
- The gap between the top performing commercial plans and the bottom performing commercial plans for the various vaccinations rates ranged from 8.8 percentage points for MMR to 19.8 percentage points for Combo 1.

The strong increase in rates for this measure will prevent tens of thousands of serious illnesses this year alone.

Medicaid

- The rates of immunization for the various vaccinations covered in the Childhood Immunization Status measure all showed significant increase except for DTP, Hepatitis B and IPV rates.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Three of 10 people who get tetanus die from the disease.
- In the average household, a child with chicken pox misses 5–6 days of school, and adult caretakers lose up to 3–4 days of work.

Financial Benefits

- Every dollar spent on Hib vaccine saves \$1.40 in direct medical savings and \$2 in indirect costs. Every dollar spent on hepatitis B vaccine saves 50 cents in direct medical savings and \$3.10 in indirect costs. Every dollar spent on varicella vaccine saves 90 cents in direct medical savings and \$5.40 in indirect costs.

Childhood Immunization Status (Combination 1)
Commercial and Medicaid Rates, 2000 - 2003

Year	Commercial	Medicaid
2003	74.4	62.0
2002	68.5	57.7
2001	68.1	58.9
2000	66.8	56.4

If the measles vaccine were to be discontinued today, 3-4 million measles cases would occur annually, resulting in over 1,800 deaths, 1,000 cases of encephalitis, and 80,000 cases of pneumonia.

CHLAMYDIA SCREENING

■ Chlamydia, a treatable sexually transmitted disease (STD), is the most commonly reported STD in the United States, with approximately 3 million new cases each year. Untreated chlamydia infection increases a woman's risk for pelvic inflammatory disease (PID), infertility, ectopic pregnancy and HIV infection. Chlamydia screening is important because most infected women have no discernible symptoms, chlamydia often coexists with other STDs, and the disease is easily treatable with antibiotics.

ABOUT CHLAMYDIA SCREENING

- About 40 percent of women with untreated chlamydia infections develop PID; 20 percent of those who develop PID become infertile.
- A woman with chlamydia is 3–5 times more likely to acquire HIV if exposed.

Although chlamydia screening rates have continuously improved since 1999, commercial rates continue to lag behind those for Medicaid by about 15 percent.

MEASURE DEFINITION

The HEDIS Chlamydia Screening in Women measure estimates the percentage of sexually active female plan members who had at least one test for chlamydia during the previous year. The measure is collected separately for women ages 16–20 and 21–25.

There was a change in the specification for this measure in 2003 that allowed additional codes to count as evidence of a chlamydia test. The upper age limit was lowered from 26 years of age to 25. These changes may be responsible for some of the increase in the measure rates.

RESULTS AND ANALYSIS

Commercial

- Commercial plans continue to score low on the Chlamydia Screening measure; the average rate was 29.8 percent.

Medicaid

- Medicaid showed continued improvement from the previous year's screening rate.
- Medicaid continues to show better scores for this measure than commercial plans with an average rate of 46 percent for women 21 - 25.

Year	16 - 20 Years	21 - 25 Years
2003	30.4	29.1
2002	26.7	24.5
2001	24.5	22.1
2000	23.6	20.7

Year	16 - 20 Years	21 - 25 Years
2003	44.3	46.0
2002	41.3	41.9
2001	39.6	41.1
2000	37.4	37.9

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Chlamydia screening programs have successfully decreased the incidence of pelvic inflammatory disease in young women by 60 percent.
- Successful detection and treatment of chlamydia would avoid the eye infections and pneumonia that occur in the more than 60 percent of newborn babies exposed to their mother's chlamydia infection at birth.

Financial Benefits

- Health care costs attributable to chlamydia and its consequences exceed \$3.5 billion per year in the United States.
- High cure rates can be achieved at a very low cost (\$2 - \$8).

Universal screening among sexually active women ages 18-24 would prevent an estimated 140,000 cases of pelvic inflammatory disease each year.

CHOLESTEROL MANAGEMENT AFTER A HEART ATTACK

■ Cardiovascular diseases are the leading cause of death in the United States. Some 15 million Americans suffer from coronary artery disease, the most common form of heart disease. High cholesterol is one of the principal modifiable risk factors for heart disease. Screening and management of cholesterol, especially low-density lipoprotein (LDL-C), is an important and effective way to reduce the suffering and disability caused by coronary heart disease, especially in high-risk patients.

ABOUT CHOLESTEROL MANAGEMENT

- Coronary heart disease caused more than 1 of every 5 deaths in the United States in 2001.
- Over 100 million American adults have blood cholesterol levels that are higher than desirable.

90th percentile commercial plans outperform the national baseline rate by 25.2 percentage points; the commercial mean for this measure is 14 percentage points higher than the national baseline.

MEASURE DEFINITION

The Cholesterol Management measure estimates the percentage of health plan members 18–75 years of age who had evidence of an acute cardiovascular event and whose LDL-C was screened and controlled to less than 130 mg/dL in the year following the event. LDL control to less than 100 mg/dL in high-risk patients was measured for the first time this year, owing to new studies that show the benefits of stricter cholesterol control.

RESULTS AND ANALYSIS

Commercial

- Cholesterol management rates continue to trend higher for commercial plans: over 80 percent of eligible patients received screening; 65.1 percent had their LDL controlled below 130.
- LDL control <100 saw a mean score of 47.6 percent among commercial plans, showing ample room for improvement.

Medicaid

- Medicaid LDL control also trended higher, up 2.3 percentage points from the previous year to 39.0 percent for LDL control < 130.

Year	Screening	Control <130	Control <100
2003	80.3	65.1	47.6
2002	79.4	61.4	N/A
2001	77.1	59.3	
2000	74.2	53.4	

Year	Medicare		Medicaid	
	Screen Rate	Control <130 <100	Screen Rate	Control <130 <100
2003	81.0	66.7 49.6	57.7	39.0 27.4
2002	77.7	62.3	57.8	36.7
2001	75.5	58.4	N/A	50.6 34.5
2000	70.6	52.9	43.8	28.2

Medicare

- The score for screening rates in Medicare plans showed a statistically significant increase of 3.3 percentage points to an average of 81.0 percent, comparable to the commercial mean.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Statin treatment to lower LDL cholesterol levels reduces the long-term risk of ischemic heart disease events by an estimated 61 percent.
- Aggressive cholesterol control after a cardiac event can result in a 31 percent reduction in rates of fatal and nonfatal reinfarction and a 21 percent reduction in all causes of mortality.

Financial Benefits

- Effective cholesterol management can reduce the huge economic burden of cardiovascular disease in the United States, estimated to be more than \$368.4 billion in 2004, with heart disease accounting for \$238.6 billion.
- Heart disease is the leading cause of premature, permanent disability in the labor force.

Less than half of all persons who qualify for cholesterol-lowering therapy are receiving it.

NEW MEASURE

COLORECTAL CANCER SCREENING

■ Colorectal cancer is the third most common cancer among both men and women in the United States. An estimated 147,000 new cases of colorectal cancer—and 56,000 deaths from the disease—are expected in the U.S. in 2004.

Colorectal cancer develops slowly and is often asymptomatic in its early stages. Only as the cancer progresses may symptoms begin to appear. In addition, fewer than 25 percent of colorectal cancer cases are associated with a family history of the disorder. These characteristics of the disease make early detection particularly important.

ABOUT COLORECTAL CANCER SCREENING

- Currently, colorectal cancer screening rates are lower than for other common cancers such as breast or cervical cancer.

MEASURE DEFINITION

The colorectal cancer screening measure, new for HEDIS 2004, estimates the percentage of adults 50-80 years of age who have had appropriate screening for colorectal cancer. The screening criteria can be met with any one of four tests: a fecal occult blood test (FOBT) during the measurement year; a flexible sigmoidoscopy within the last four years; a double contrast barium enema within the last four years; or a colonoscopy within the last nine years.

Colon cancer is one of the few cancers that can actually be prevented altogether through screening since screening may detect precancerous polyps that can be removed before they metastasize.

RESULTS AND ANALYSIS

Commercial

- Commercial plans scored comparably to a similar national average assessed by the CDC, which showed that 21.8 percent had received a fecal occult blood test within the past year and 43.3 percent had received a sigmoidoscopy or colonoscopy within the past five years.
- The gap between the national baseline and the 90th percentile is 13.0 percentage points (48.1 to 61.1).

Year	Commercial	Medicare
2003	47.4	49.5

Medicare

- Medicare plans had a mean rate of 49.5 percent for the measure, similar to commercial plans.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- If detected early (stage 1), 85-95 percent of patients with colorectal cancer can be cured, but if detected in a later stage, the average 5-year survival rate is 50 percent or less.

According to a 2000 study, an annual FOBT plus sigmoidoscopy every 5 years can prevent 80 percent of cancer-related deaths compared with no screening.

CONTROLLING HIGH BLOOD PRESSURE

■ Almost 50 percent of Americans 45 or older have high blood pressure (hypertension), the most treatable cardiovascular disease. Untreated high blood pressure causes stroke, coronary heart disease, kidney failure and blindness.

ABOUT HIGH BLOOD PRESSURE

- 50 million people in the United States have high blood pressure, although many do not know it. The lifetime risk of developing hypertension is about 90 percent for men and women 55 - 65.
- High blood pressure was listed as a primary or contributing cause of death in approximately 251,000 deaths in the United States in 2000.

Blood pressure control rates have shown significant improvement across the board every year since 1999.

Medicare

- Medicare plans showed significant improvement with an average increase of 4.5 percentage points from the previous year to 61.4 percent, a greater improvement than the commercial average.

Year	Commercial	Medicare	Medicaid
2003	62.2	61.4	58.6
2002	58.4	56.9	53.4
2001	55.4	53.6	53.0
2000	51.5	46.7	45.4

MEASURE DEFINITION

The Controlling High Blood Pressure measure estimates whether blood pressure was controlled in adults aged 46–85 years of age who have diagnosed hypertension. Adequate control was defined as a blood pressure of 140/90 mmHg or lower. Both the systolic and diastolic pressure must have been at or under these thresholds for blood pressure to be considered controlled.

RESULTS AND ANALYSIS

Commercial

- Commercial plans showed an increase of 3.8 percentage points from the previous year, a statistically significant improvement that continues the upward trend for this measure.
- There is room for continued improvement, since the mean rate for this measure is only 62.2 percentage points.

Medicaid

- Medicaid showed significant improvement with an increase of 5.2 percentage points from the previous year.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- In clinical trials, antihypertensive therapy has been associated with a 35-40 percent mean reduction in stroke incidence, 20-25 percent reduction in myocardial infarction, and a more than 50 percent reduction in heart failure.

Financial Benefits

- Over 10 million sick days could be avoided each year in the United States if all workers with hypertension were able to control their blood pressure at rates seen in health plans at the 90th percentile.
- In 2004, the estimated aggregate cost of high blood pressure in the United States is \$55.5 billion: \$41.5 billion in direct medical expenditures and \$14 billion in indirect expenditures, such as absenteeism and lost work productivity.

Lowering blood pressure by 5 mmHg in systolic blood pressure can reduce stroke mortality by 14 percent, coronary heart disease mortality by 9 percent, and total mortality by 7 percent.

COMPREHENSIVE DIABETES CARE

■ Diabetes is the sixth leading cause of death by disease in the United States. More than 11 million Americans have diagnosed diabetes, and 5.9 million Americans suffer from undiagnosed diabetes. Diabetes can lead to long-term complications such as heart disease, blindness, kidney disease, stroke and even death.

ABOUT DIABETES

- Approximately 1 million cases of diabetes are diagnosed each year among people over 20 years of age.
- Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness annually.
- For every 1 percent reduction in blood glucose levels (A1c blood tests), the risk of developing eye, kidney and lower-extremity amputation is reduced by 40 percent.

Diabetes patients who maintain near normal blood sugar for life can gain on average an extra 5 years of life, 8 years of sight and 6 years free from kidney disease.

MEASURE DEFINITION

The HEDIS Comprehensive Diabetes Care measure includes several important features of effective management of diabetes. The measure estimates the percentage of health plan members with type 1 and type 2 diabetes who are 18 - 75 years old and, during the measurement year, had: a hemoglobin A1c (HbA1c) test; an HbA1c level greater than 9; a serum cholesterol level (LDL-C) screening; a cholesterol level (LDL-C) controlled to less than 130 mg/dl; their cholesterol level (LDL-C) controlled to less than 100 mg/dl (a new measure added due to new National Cholesterol Education Program guidelines); an eye exam; and a screening for kidney disease.

The eye exam and kidney screening measures had specification changes in 2003 requiring more frequent screening for certain patients. These changes are likely responsible for the observed decreases in the measure rates. The definition of HbA1c poor control was made more stringent in 2003, also likely responsible for smaller gains than might otherwise have been recorded.

RESULTS AND ANALYSIS

Commercial

- In 2003, two of the six rates for Comprehensive Diabetes Care declined while the other four showed improvement from the previous year.
- Performance scores fell for Eye Exams 2.9 percentage points and for Nephropathy 3.6 percentage points, likely due to changes in the definitions of these measures.
- Rates for the remaining components of the Comprehensive Diabetes Care measure increased between two and six percentage points. Of note, Poor HbA1c Control improved nearly two percentage points (lower rates are better) despite the more stringent definition of poor control.
- A new component, LDL Control <100, was added to the Comprehensive Diabetes Care measure this year. Commercial plans reported a mean score of only 34.7 percent, showing significant room for improvement.

Medicaid

- Rates for the Eye Exam, HbA1c Testing, Nephropathy and Poor HbA1c Control components of the Comprehensive Diabetes Care measure showed no significant change from the previous year and were consistently lower than commercial plan performance.

Medicare

- Rates for the HbA1c Testing, LDL Screening, and LDL Control (< 130) components of the Comprehensive Diabetes Care measure showed statistically significant improvements from the previous year and were 3 – 7 percentage points higher than commercial plan performance.

continued on next page ➤

COMPREHENSIVE DIABETES CARE

■ continued from previous page

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Nearly 72,000 Americans die every year from diabetes.
- Individuals with diabetes have a two- to tenfold increased risk of coronary events compared to those without diabetes.

Financial Benefits

- In 2002, economic costs associated with diabetes totaled \$132 billion. Indirect costs (work loss, premature mortality and disability) totaled \$40 billion.
- Per capita medical expenditures incurred by people with diabetes were \$13,243 in 2002, compared with \$2,560 for people without diabetes.

Comprehensive Diabetes Care Commercial Rates, 2000 - 2003							
Year	Eye Exams	HbA1c Testing	Poor HbA1c Control*	Lipid Profile	Lipid Control LDL < 130	Lipid Control LDL < 100	Monitoring Diabetic Nephropathy
2003	48.8	84.6	32.0	88.4	60.4	34.7	48.2
2002	51.7	82.6	33.9	85.1	54.8	N/A	51.8
2001	52.1	81.4	36.9	81.4	49.8	N/A	46.3
2000	48.1	78.4	42.5	76.5	44.3	N/A	41.4

Comprehensive Diabetes Care Medicaid Rates, 2000 - 2003							
Year	Eye Exams	HbA1c Testing	Poor HbA1c Control*	Lipid Profile	Lipid Control LDL < 130	Lipid Control LDL < 100	Monitoring Diabetic Nephropathy
2003	45.0	74.8	48.6	75.9	47.8	27.8	43.7
2002	47.1	74.0	48.2	71.7	43.9	N/A	47.8
2001	46.4	71.7	48.3	66.6	38.9	N/A	42.3
2000	43.1	68.5	54.9	59.6	32.0	N/A	38.9

Comprehensive Diabetes Care Medicare Rates, 2000 - 2003							
Year	Eye Exams	HbA1c Testing	Poor HbA1c Control*	Lipid Profile	Lipid Control LDL < 130	Lipid Control LDL < 100	Monitoring Diabetic Nephropathy
2003	64.9	87.9	23.4	91.1	67.7	41.9	53.6
2002	68.4	85.0	24.5	87.9	62.6	N/A	57.3
2001	66.0	85.7	26.8	85.7	57.5	N/A	51.9
2000	62.8	82.5	33.4	80.5	50.9	N/A	45.0

* Note: Lower rates are better for this measure.

More than 5 million sick days could be averted nationally each year if workers with diabetes achieved HbA1c control at the rates found in plans at the 90th percentile.

NEW MEASURE

FLU SHOTS FOR ADULTS

■ An estimated 10-20 percent of the US population--30-55 million people--will get influenza each year. While rates of infection are highest among children, rates of serious illness and death are highest among adults aged over 65 years and persons of any age who have chronic medical conditions or other risk factors.

During the 1990-1999 influenza seasons, an average of 36,000 Americans died from flu-related complications each year, an estimated 90 percent of whom were elderly.

ABOUT FLU SHOTS FOR ADULTS

- National data indicate that prevalence of influenza vaccinations vary substantially by race. For respondents ages 50-64, non-Hispanic whites (37.9 percent) were more likely than non-Hispanic blacks (29.8 percent) and more likely than Hispanics (29.7 percent) to have received an influenza vaccination.

People aged 50 and over are more likely to receive a flu shot if they have a regular source of health care, have diabetes or asthma, self-report their health at a level below "very good", or have a post-secondary education.

MEASURE DEFINITION

The Flu Shots for Adults measure estimates the percentage of members 50 years of age and older who received an influenza vaccination during the most recent flu season. The commercial measure is reported as a two-year rolling average. The reported results for commercial MCOs represent adults ages 50-64 while the reported results for Medicare represent adults ages 65 and older.

RESULTS AND ANALYSIS

Commercial

- The rate of influenza vaccination among adults ages 50-64 in commercial plans averaged 48.0 percent, which is higher than the national prevalence rate—36.4 percent—measured by the CDC.

Year	Commercial	Medicare
2003	48.0	74.5

Medicare

- The national average influenza vaccination rate for Medicare plans was 74.5 percent.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Influenza vaccines can prevent up to 50 – 60 percent of hospitalizations and 80 percent of deaths from influenza-related complications among the elderly.

Financial Benefits

- The annual direct medical costs (hospitalization, doctors office visits, medications, etc.) of influenza are estimated at up to \$4.6 billion.
- Influenza vaccine is cost effective. Cost of treatment for influenza-like illnesses including health care provider visits, tests, procedures and medications was estimated to be \$145 per case. The cost of delivering the influenza vaccine is about \$16.70 per vaccination.
- Influenza vaccination among healthy working adults under age 65 resulted in 30.5 percent fewer workdays lost due to influenza.

The total direct and indirect costs of a severe flu epidemic are estimated to be over \$12 billion.

FOLLOW-UP AFTER HOSPITALIZATION FOR MENTAL ILLNESS: 7 DAYS AND 30 DAYS

■ Mental disorders affect approximately 57.6 million Americans 18 years of age and older. Mental illnesses such as depression, bipolar disorder and schizophrenia are significant causes of disability in the United States. Appropriate treatment and follow-up of mental illness can reduce the duration of disability from mental illness and the likelihood of recurrence.

ABOUT MENTAL ILLNESS

■ Mood disorders such as major depression and bipolar disorder affect an estimated 20.9 million Americans 18 years of age and older. Schizophrenia affects 2 million Americans per year, with 300,000 new cases occurring each year.

MEASURE DEFINITION

The HEDIS Follow-Up After Hospitalization for Mental Illness measure estimates the percentage of health plan members who had a follow-up visit after being discharged for an inpatient mental health stay. The measure includes hospitalizations for depression, schizophrenia, attention deficit disorder and personality disorders. The measure looks at both 7-day and 30-day follow-up rates.

Improvements in follow-up rates have been only incremental over the past five years.

RESULTS AND ANALYSIS

Commercial

■ Neither of the components of the Follow-up for Mental Illness measure showed significant improvement, although both trended slightly higher, increasing to 74.4 percent for 30-day follow-up and 54.4 percent for 7-day follow-up.

Medicaid

■ Medicaid plans showed no significant improvement in this measure from the previous year. Rates of follow-up are nearly 20 points lower than in commercial plans.

Year	7 Days	30 Days
2003	54.4	74.4
2002	52.7	73.6
2001	51.3	73.2
2000	48.2	71.2

Year	Medicare		Medicaid	
	7 Days	30 Days	7 Days	30 Days
2003	38.8	60.3	37.7	56.4
2002	38.7	60.6	36.9	56.3
2001	37.2	60.6	33.2	52.2
2000	37.5	59.3	34.6	54.9

Medicare

■ Medicare plans showed no significant improvement in this measure from the previous year at 60.3 percent for 30-day follow up and 38.8 percent for 7-day follow up. Rates of follow-up are considerably lower than in commercial plans.

THE CASE FOR IMPROVEMENT

Financial Benefits

- Mental illness and substance abuse cost Americans an estimated \$77.2 billion in lost income.
- Patients with mental disorders are heavy users of medical services and average twice as many visits to their primary care physicians as patients without mental disorders.
- Individuals with major depression were found to be more than four times more likely to take disability days than non-depressed employees.

The direct and indirect costs of mental illness are greater than those associated with all forms of cancer.

MEDICAL ASSISTANCE WITH SMOKING CESSATION

■ An estimated 45.8 million adults 18 and older are current smokers. It has been shown that smoking has a detrimental effect on every organ in the body. Approximately 440,000 premature deaths occur annually in the United States as a result of smoking. On average, men and women in the United States who smoke have their lives cut short by 13.2 and 14.5 years, respectively.

ABOUT MEDICAL ASSISTANCE WITH SMOKING CESSATION

- Smokers quit more frequently when a physician provides advice and/or help. Advice from doctors has been shown to increase the average quit rate by as much as six percentage points over baseline.
- When pharmacotherapy (such as “the patch”) is included, counseling increases the quit rate by up to 16 percentage points.

MEASURE DEFINITION

The HEDIS Medical Assistance with Smoking Cessation measure evaluates three components. These are 1) the percentage of smokers or recent quitters who received advice to quit smoking from their practitioner 2) the percentage whose practitioner discussed smoking cessation *medications* and 3) the percentage whose practitioner discussed smoking cessation *strategies*.

A 17.4 percent gap separates the rate of Medical Assistance with Smoking Cessation in the top performing commercial plans from the national baseline.

RESULTS AND ANALYSIS

Commercial

- Commercial plans report that 68.6 percent of current smokers or recent quitters received advice from the practitioners to quit smoking.
- However, only 37.6 percent of current smokers or recent quitters in commercial plans discussed smoking cessation medication with their practitioner, and only 36 percent of current smokers or recent quitters in commercial plans discussed smoking cessation strategies.

Year	Commercial	Medicare	Medicaid
2003	68.6	63.3	65.8
2002	67.7	61.5	63.6
2001	N/A	60.8	N/A
2000	66.3	59.7	64.2

Medicaid

- Medicaid plans report that 65.8 percent of current smokers or recent quitters received advice from their practitioner to quit smoking, which is similar to the rate reported by commercial plans.

Medicare

- Medicare plans report that 63.3 percent of current smokers or recent quitters received advice from their practitioner to quit smoking.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- After 10 to 15 years, a previous tobacco user’s risk of premature death approaches that of a person who has never smoked.
- According to a study in the American Journal of Public Health, the life extension from smoking cessation at age 35 is 8.5 years for men and 7.7 years for women.

Financial Benefits

- The economic toll (direct and indirect costs) for smoking exceeds \$157 billion or \$3,443 per smoker per year.
- Current smokers incur 18 percent higher health care costs over an 18-month period than those who never smoked.

Savings from California's Tobacco Cessation Program between 1990 and 1998 amounted to an estimated \$8.4 billion in smoking-attributable direct and indirect costs.

OSTEOPOROSIS MANAGEMENT IN WOMEN WHO HAD A FRACTURE

■ 10 million Americans are estimated to have osteoporosis and almost 34 million more are estimated to have low bone mass, placing them at increased risk for osteoporosis. Of the 10 million Americans with osteoporosis, 8 million are women. Osteoporosis is responsible for more than 1.5 million fractures annually. A woman over the age of 50 has a 50 percent chance of having an osteoporosis-related fracture in her lifetime.

ABOUT OSTEOPOROSIS MANAGEMENT

- In a large population-based study of post-menopausal women, only 11.6 percent of women 65 and older with a symptomatic fracture, who were not being treated for osteoporosis prior to fracture, were dispensed potentially effective treatment for osteoporosis in the year following the fracture.
- Increasing age and level of comorbidity have been shown to be risk factors for inadequate treatment of osteoporotic fractures.

MEASURE DEFINITION

Reported for the first time in 2004, the HEDIS Osteoporosis Management in Women Who Had a Fracture measure estimates the percentage of women 67 years of age and older who suffered a fracture, and who had either a bone mineral density test or prescription for a drug to treat or prevent osteoporosis in the six months after the date of fracture. This measure only applies to Medicare plans.

Consistent with expectations for a new measure, the 90th percentile score for this new measure was 26.4 percent, indicating substantial room for improvement.

RESULTS AND ANALYSIS

Medicare

- The plan mean rate for the new HEDIS Osteoporosis Management measure was 18 percent. This low rate is consistent with prior published results and NCQA field test data. It indicates much room for improvement.
- While the 90th percentile score for this new measure is only 26.4 percent, it is over double the national average.

Osteoporosis Management After a Fracture
Medicare Rates, 2003

Year	Medicare
2003	18.0

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Treatment of osteoporosis has been shown to reduce the risk of subsequent fractures 40-60 percent.

Financial Benefits

- The estimated national direct expenditures for osteoporotic fractures were \$17 billion (\$47 million each day) in 2001 and the cost is rising due to the aging U.S. population.

An estimated 10 percent of women over 65 become functionally dependent after hip fracture; less than half return to their pre-fracture status with respect to daily activities.

PRENATAL AND POSTPARTUM CARE (TIMELINESS OF PRENATAL CARE, CHECKUPS AFTER DELIVERY)

■ Each year, there are 4 million births in the United States. Early and adequate prenatal care can identify mothers at risk of delivering a preterm or growth-retarded infant and provide an array of medical, nutritional and educational interventions. Poor pregnancy outcomes can be costly, though many are preventable with early intervention.

ABOUT PRENATAL AND POSTPARTUM CARE

- More than 309,000 low-birth-weight infants are born in the United States each year. Low-birth-weight infants are more likely to suffer from neuro-developmental handicaps, congenital anomalies and respiratory illnesses than infants with a normal birth weight.
- The rate of deaths related to complications from pregnancy is three to four times higher among women who received no prenatal care compared to women who received prenatal care.

The substantial improvement in performance on this measure in the Medicaid program has the potential to reduce related costs and substantially improve beneficiaries' health outcomes.

MEASURE DEFINITION

There are two components to the HEDIS Prenatal and Postpartum Care measure: 1) the percentage of women beginning their prenatal care during their first trimester and 2) the percentage of women who had a visit to a health care provider between 21 and 56 days after delivery.

RESULTS AND ANALYSIS

Commercial

- In 2003, the commercial rates for Prenatal and Postpartum Care improved 2.7 and 3.3 percentage points respectively.

Medicaid

- In 2003, the Medicaid rates for prenatal and postpartum care improved 6.4 and 2.4 percentage points respectively.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- In 2001, infants of mothers who had received no prenatal care had an infant mortality rate of 34.8 per 1,000 live births, compared to an infant mortality rate of only 6.2 per 1,000 when prenatal care was initiated in the first trimester of pregnancy.
- The infant mortality rate for low-birth-weight infants was 58.6/1,000 live births, nearly 25 times the rate for infants born at term.

Financial Benefits

- Every dollar of prenatal care results in expected savings of \$3.33 for postnatal care and \$4.63 in long-term morbidity costs.
- Hospitalizations for pregnancy complications cost more than \$1 billion annually and account for more than 2 million hospital days of care.

Prenatal and Postpartum Care Commercial Rates, 2000 - 2003		
Year	Timeliness of Prenatal Care	Check-Ups After Delivery
2003	89.4	80.3
2002	86.7	77.0
2001	85.1	77.0
2000	83.3	74.1

Prenatal and Postpartum Care Medicaid Rates, 2000 - 2003		
Year	Timeliness of Prenatal Care	Check-Ups After Delivery
2003	76.5	55.3
2002	70.1	52.9
2001	72.9	53.0
2000	72.6	49.8

25.6 percent of women who did not receive prenatal care delivered preterm infants—nearly three times the rate of women who received even a minimum amount of prenatal care.

USE OF APPROPRIATE MEDICATIONS FOR PEOPLE WITH ASTHMA

■ Asthma is one of the nation's most common and costly diseases. It affects an estimated 20.3 million Americans, including 6.3 million children. Asthma is the most common chronic disease in children. Many asthma-related hospitalizations, emergency room visits and missed work and school days can be avoided if patients have appropriate medications and medical management.

ABOUT ASTHMA

- Nearly 5,000 people die from asthma each year. Many of these deaths are preventable.
- Asthma is the leading cause of school absenteeism attributed to chronic conditions.

MEASURE DEFINITION

The HEDIS Use of Appropriate Medications for People with Asthma measure estimates the percentage of enrolled members 5-56 years of age who were identified as having persistent asthma and who were prescribed appropriate medication. The specification for this measure changed in 2003 to exclude certain patients who may not have asthma from the denominator. This change may be responsible for some of the increase in the measure rates.

The measure is collected separately for children (ages 5-9), adolescents (ages 10-17), and adults (ages 18-56). A combined rate is also reported.

The rise in asthma medication use rates was statistically significant among commercial plans, but modest among Medicaid plans.

RESULTS AND ANALYSIS

Commercial

- In 2003, the rates of the three elements of the use of appropriate medication for people with asthma measure increased 2.8 – 3.6 percentage points from the previous year, although some of this increase may be due to the change in the measure specifications.
- The gap between 90th percentile and the 10th percentile for the Combined Rate is 13.6 percentage points.

Year	Commercial	Medicaid
2003	71.4	64.1
2002	67.9	62.8
2001	65.6	60.1
2000	62.6	57.4

Medicaid

- In 2003, there was only a modest improvement in the Use of Appropriate Medications for People with Asthma measure from the previous year.
- The Medicaid Combined Rate is 7.3 percentage points lower than the commercial rate.

THE CASE FOR IMPROVEMENT

Quality of Life Improvement

- Children miss an estimated 14 million school days annually because of asthma.

Financial Benefits

- Asthma accounts for an estimated 14.5 million lost workdays for adults.
- The economic cost of asthma is \$14 billion annually, including \$4.6 billion in lost productivity.
- During 2000, there were 9.3 million physician office visits, 1 million hospital outpatient department visits, and 1.8 million emergency room visits related to asthma.

The estimated annual cost of asthma-related inpatient hospital services is over \$4 billion.

CAHPS® MEMBER SATISFACTION MEASURES

■ CAHPS® 3.0H measures members' satisfaction with their commercial and Medicaid organizations. It addresses areas such as the ability to obtain information from a health plan, the timeliness of services and the speed and accuracy by which health plans process claims. Taken together, the CAHPS results offer an indication of how well health care organizations are meeting their members' expectations. The CAHPS 3.0H surveys were developed with the Agency for Healthcare Research and Quality (AHRQ), which began the CAHPS initiative.

Medicare members' experiences are measured through the Medicare CAHPS survey, which is administered by the Centers for Medicare & Medicaid Services (CMS).

RATING OF HEALTH PLAN

■ For the Rating of Health Plan measure, respondents were asked to rate their health plan overall, with 0 equaling "worst health plan possible" and 10 equaling "best health plan possible." The tables below represent the percentage of respondents who rated their health plans with an 8, 9 or 10.

In 2003, the national average for Rating of Health Plan increased by .5 percentage points in the Commercial product line and by .1 percentage points in the Medicaid product line. A large 6.2 percentage point decrease is observed this year in the Medicare national average. However, the Medicare average is still highest among the three product lines. For this rating, the Medicaid product line outperforms the Commercial product line.

Rating of Health Plan Commercial, Medicaid and Medicare Averages, 1999-2003			
Year	Commercial	Medicaid	Medicare
2003	61.8	69.9	72.0
2002	61.3	69.7	78.2*
2001	61.8	69.3	79.2*
2000	59.3	67.0	78.8
1999	56.7	N/A	N/A

**Note: The State of Health Care Quality 2003 report included incorrect Medicare data for Overall Rating of Health Plan for the years 2002 and 2001. This report features the corrected rates.*

CLAIMS PROCESSING

■ The Claims Processing composite measures managed care members' experiences with sending in claims to their health plans in the last 12 months. Commercial rates indicate the percentage of members who responded "Always" or "Usually." Claims Processing rates do not apply to Medicaid or Medicare.

Topics measured include:

- How often the health plan handled claims in a reasonable time frame
- How often the health plan handled claims correctly

Responses include:

- Never
- Sometimes
- Usually
- Always

In 2003, the Claims Processing national average increased by 1.3 percentage points to an all time high of 86.7 percent. The measure has increased 8.8 percentage points since 1999.

Claims Processing Commercial Averages, 1999 - 2003	
Year	Commercial
2003	86.7
2002	85.4
2001	83.8
2000	80.8
1999	77.9

Rates for Individual Questions - Commercial, 2003*				
Questions Asked	Percentage of members responding			
	Never	Sometimes	Usually	Always
How often did your health plan handle your claims in a reasonable time?	3.1	10.4	36.2	50.3
How often did your health plan handle your claims correctly?	2.0	9.5	32.7	55.7

* Note: The percentage of members responding "Never", "Sometimes", "Usually" or "Always" may not add to 100 percent due to rounding.

CUSTOMER SERVICE

The Customer Service composite measures how much of a problem it was for members to get information and to fill out paperwork in the last 12 months. The score represents the average percentage of members who responded "Not a problem."

Topics measured include:

- How problematic it was to find information in the health plan's written materials, or on the Internet
- How problematic it was getting information from the health plan's customer service line
- How problematic it was understanding and completing health plan paperwork

Responses include:

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

In 2003, the Customer Service composite experienced its largest increase in the Medicaid product line. The Commercial product line experienced a slight increase as well. The Medicare product line experienced a slight and insignificant decrease in the Customer Service composite.

Customer Service Commercial, Medicaid and Medicare Averages 1999-2003			
Year	Commercial	Medicaid	Medicare
2003	70.8	69.7	79.9
2002	70.4	67.4	80.3
2001	67.2	67.5	80.9
2000	66.6	70.3	80.3
1999	64.5	N/A	N/A

Rates for Individual Questions - Commercial, 2003*			
Questions Asked	Percentage of members responding		
	A big problem	A small problem	Not a problem
How much of a problem was it to find information about how your health plan works in written materials or on the Internet?	9.1	34.9	56.0
How much of a problem was it to get the help you needed when you called your health plan's customer service?	12.1	24.9	63.0
How much of a problem did you have with paperwork for your health plan?	5.8	22.0	72.3

* Note: The percentage of members responding "A big problem", "A small problem" or "Not a problem" may not add to 100 percent due to rounding.

GETTING NEEDED CARE

■ The Getting Needed Care composite measures the experiences consumers had in the last 12 months when attempting to get care from doctors and specialists. Rates represent the national health plan average percentage of members who responded "Not a problem."

Topics measured include:

- Obtaining a satisfactory doctor/provider
- Getting to see a specialist when needed
- Obtaining the care, tests, or treatment believed necessary
- Delays in health care while waiting for approval from the health plan

Responses include:

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

In 2003, the Getting Needed Care national average increased by 1.5 percentage points, reaching an all-time high among commercial plans. The Medicare national average is highest among the three product lines.

Year	Commercial	Medicaid	Medicare
2003	78.4	72.1	84.1
2002	76.9	72.4	83.6
2001	76.7	75.5	83.4
2000	75.4	74.2	85.0
1999	74.0	N/A	N/A

Questions Asked	Percentage of members responding		
	A big problem	A small problem	Not a problem
How much of a problem, if any, was it to get a personal doctor or nurse you are happy with?	9.6	22.0	68.5
How much of a problem, if any, was it to see a specialist that you needed to see?	8.4	16.3	75.3
How much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?	4.1	12.5	83.4
How much of a problem, if any, were delays in health care while you waited for approval from you health plan?	10.4	23.1	66.5

* Note: The percentage of members responding "A big problem", "A small problem" or "Not a problem" may not add to 100 percent due to rounding.

APPENDICES

APPENDIX 1

HEDIS Effectiveness of Care Measures: 2003 National Averages

MEASURE	COMMERCIAL	MEDICAID	MEDICARE
Adolescent Immunization Status (Combo 1)	58.7	51.9	N/A
Adolescent Immunization Status (Combo 2)	41.6	33.9	N/A
Adolescent Immunization Status (Hepatitis B)	62.7	56.3	N/A
Adolescent Immunization Status (MMR)	73.9	71.2	N/A
Adolescent Immunization Status (VZV)	50.9	44.1	N/A
Antidepressant Medication Management (Acute Phase)	60.7	46.2	53.3
Antidepressant Medication Management (Continuation Phase)	44.1	29.3	39.2
Antidepressant Medication Management (Contacts)	20.3	18.0	10.5
Appropriate Testing for Children with Pharyngitis	70.7	53.8	N/A
Appropriate Treatment for Children with a URI	80.8	80.1	N/A
Asthma Medication Use (Combined)	71.4	64.1	N/A
Asthma Medication Use (age 10 - 17)	68.1	62.1	N/A
Asthma Medication Use (age 18 - 56)	72.3	66.0	N/A
Asthma Medication Use (age 5 - 9)	72.3	62.0	N/A
Beta-Blocker Treatment After a Heart Attack	94.3	83.5	92.9
Breast Cancer Screening	75.3	55.9	74.0
Cervical Cancer Screening	81.8	64.0	N/A
Chlamydia Screening (age 16 to 20)	30.4	44.3	N/A
Chlamydia Screening (age 21 to 25)	29.1	46.0	N/A
Cholesterol Management After Acute Events (Screening)	80.3	57.7	81.0
Cholesterol Management After Acute Events (LDL < 100)	47.6	27.4	49.6
Cholesterol Management After Acute Events (LDL < 130)	65.1	39.0	66.7
Childhood Immunization Status (Combo 1)	74.4	62.0	N/A
Childhood Immunization Status (Combo 2)	69.8	58.5	N/A
Childhood Immunization Status (DTP)	84.3	72.6	N/A
Childhood Immunization Status (HIB)	86.1	77.7	N/A
Childhood Immunization Status (Hepatitis B)	85.8	79.5	N/A
Childhood Immunization Status (IPV)	88.7	83.1	N/A
Childhood Immunization Status (MMR)	91.5	87.4	N/A
Childhood Immunization Status (VZV)	85.7	81.8	N/A
Colorectal Cancer Screening	47.4	N/A	49.5
Comprehensive Diabetes Care (Eye Exams)	48.8	45.0	64.9
Comprehensive Diabetes Care (HbA1c Testing)	84.6	74.8	87.9
Comprehensive Diabetes Care (LDL-C Screening)	88.4	75.9	91.1
Comprehensive Diabetes Care (Nephropathy)	48.2	43.7	53.6
Comprehensive Diabetes Care (Poor HbA1c Control)*	32.0	48.6	23.4
Comprehensive Diabetes Care (LDL < 100)	34.7	27.8	41.9
Comprehensive Diabetes Care (LDL < 130)	60.4	47.8	67.7
Controlling High Blood Pressure	62.2	58.6	61.4
Follow-up After Hospitalization for Mental Illness (30 Days)	74.4	56.4	60.3
Follow-up After Hospitalization for Mental Illness (7 Days)	54.4	37.7	38.8
Osteoporosis Management in Women w/Fracture	N/A	N/A	18.0
Prenatal and Postpartum Care (Postpartum Care)	80.3	55.3	N/A
Prenatal and Postpartum Care (Timeliness)	89.4	76.5	N/A

APPENDIX 2 HEDIS Effectiveness of Care Measures: Trends, 2000-2003

Adolescent Immunization Status: Commercial Rates, 2000-2003				
Measure	2000	2001	2002	2003
Adolescent Immunizations — Hepatitis B	41.1	48.3	54.6	62.7
Adolescent Immunizations — MMR	62.3	65.4	67.9	73.9
Adolescent Immunizations — VZV	28.5	34.1	40.5	50.9

Adolescent Immunization Status: Medicaid Rates, 2000-2003				
Measure	2000	2001	2002	2003
Adolescent Immunizations — Hepatitis B	33.0	40.8	46.8	56.3
Adolescent Immunizations — MMR	54.2	61.2	64.3	71.2
Adolescent Immunizations — VZV	21.6	27.8	33.2	44.1

Antidepressant Medication Management: Commercial Rates, 2000-2003				
Measure	2000	2001	2002	2003
Antidepressant Medication Management — Acute Phase	Data	56.9	59.8	60.7
Antidepressant Medication Management — Continuation Phase	Not	40.1	42.8	44.1
Antidepressant Medication Management — Contacts	Available	19.8	19.2	20.3

Antidepressant Medication Management: Medicaid & Medicare Rates, 2001-2003						
Measure	Medicaid			Medicare		
	2001	2002	2003	2001	2002	2003
Antidepressant Medication Management — Acute Phase	45.5	47.4	46.2	51.3	52.1	53.3
Antidepressant Medication Management — Continuation Phase	30.0	32.3	29.3	36.8	37.7	39.2
Antidepressant Medication Management — Contacts	19.0	18.2	18.0	11.9	10.8	10.5

APPENDIX 2

■ *continued from previous page*

Asthma Medication Use: Commercial Rates, 2000-2003				
Measure	2000	2001	2002	2003
Asthma Medication Use — Ages 5 - 9	61.4	65.7	69.5	72.5
Asthma Medication Use — Ages 10 - 17	59.5	62.3	65.2	68.1
Asthma Medication Use — Ages 18 - 56	64.4	67.3	68.7	72.3

Asthma Medication Use: Medicaid Rates, 2000-2003				
Measure	2000	2001	2002	2003
Asthma Medication Use — Ages 5 - 9	52.5	55.0	59.7	62.0
Asthma Medication Use — Ages 10 - 17	56.0	58.0	61.7	62.1
Asthma Medication Use — Ages 18 - 56	60.8	63.5	65.1	66.0

Childhood Immunization Status: Commercial Rates, 2000-2003				
Measure	2000	2001	2002	2003
Childhood Immunization — DTP	80.4	81.5	80.1	84.3
Childhood Immunization — Hepatitis B	77.9	79.9	81.9	85.8
Childhood Immunization — Hib	82.7	83.4	83.2	86.1
Childhood Immunization — MMR	88.4	89.4	90.1	91.5
Childhood Immunization — OPV	84.2	85.4	86.0	88.7
Childhood Immunization — VZV	70.5	75.3	82.0	85.7

Childhood Immunization Status: Medicaid Rates, 2000-2003				
Measure	2000	2001	2002	2003
Childhood Immunization — DTP	70.1	71.2	69.5	72.6
Childhood Immunization — Hepatitis B	73.3	75.4	76.7	79.5
Childhood Immunization — Hib	74.8	75.0	74.7	77.7
Childhood Immunization — MMR	82.1	83.7	84.6	87.4
Childhood Immunization — OPV	77.8	79.1	80.6	83.1
Childhood Immunization — VZV	67.4	73.6	76.5	81.8

APPENDIX 2

■ *continued from previous page*

Medical Assistance With Smoking Cessation: Commercial Rates, 2000-2003				
Measure	2000	2001	2002	2003
Advising Smokers To Quit	66.3	N/A	67.7	68.6
Discussing Smoking Cessation Medications	N/A	N/A	N/A	37.6
Discussing Smoking Cessation Strategies	N/A	N/A	N/A	36.0

Medical Assistance With Smoking Cessation: Medicaid Rates, 2000-2003				
Measure	2000	2001	2002	2003
Advising Smokers To Quit	64.2	N/A	63.6	65.8
Discussing Smoking Cessation Medications	N/A	N/A	N/A	31.5
Discussing Smoking Cessation Strategies	N/A	N/A	N/A	32.3

APPENDIX 3

CAHPS® 3.0H Member Satisfaction Measures: Commercial, Medicaid and Medicare Averages

TABLE 1. COMMERCIAL AND MEDICAID AVERAGES

MEASURE	COMMERCIAL	MEDICAID
Rating of Health Plan	61.8	69.9
Claims Processing*	86.7	N/A
Courteousness of Office Staff	92.4	87.5
Customer Service	70.8	69.7
Getting Care Quickly	78.6	70.9
Getting Needed Care	78.4	72.1
How Well Doctors Communicate	91.5	85.7
Rating of Health Care	76.3	72.1
Rating of Personal Doctor or Nurse	76.2	76.9
Rating of Specialist	77.1	75.1

TABLE 2. MEDICARE AVERAGES**

MEASURE	MEDICARE
Rating of Health Plan	53.3
Claims Processing*	N/A
Courteousness of Office Staff	78.3
Customer Service	79.9
Getting Care Quickly	57.2
Getting Needed Care	84.1
How Well Doctors Communicate	68.6
Rating of Health Care	67.5
Rating of Personal Doctor or Nurse	66.4
Rating of Specialist	67.6

* Claims Processing Rates are not measured for Medicaid or Medicare.

** Medicare CAHPS® averages are listed separately because they are calculated differently than commercial and Medicaid rates as follows:

MEASURE	COMMERCIAL, MEDICAID RATING	MEDICARE RATING
"Rating Of" measures	Percentage of members who rated their health plan an "8", "9" or "10"	Percentage of members who rated their health plan a "9" or "10"
Measures which call for answers of "Always," "Usually," "Sometimes" or "Never"	Percentage of members who answer "Always" or "Usually"	Percentage of members who answer "Always"

APPENDIX 4

HEDIS Effectiveness of Care Measures: Accredited vs. Non-Accredited Plans (Commercial, 2003)

MEASURE	ACCREDITED	NON-ACCREDITED	DIFFERENCE
Adolescent Immunization Status - Combo 1	62.0	51.3	10.7
Antidepressant Medication Management - Acute Phase	61.2	59.4	1.8
Antidepressant Medication Management - Continuation Phase	44.7	42.6	2.1
Antidepressant Medication Management - Contacts	21.5	17.5	4.0
Appropriate Testing for Children With Pharyngitis	72.0	67.5	4.5
Appropriate Treatment for Children with a URI	81.3	79.6	1.7
Asthma Medication Use - Ages 5 - 9	73.0	70.4	2.6
Asthma Medication Use - Ages 10 - 17	68.6	66.9	1.7
Asthma Medication Use - Ages 18 - 56	73.2	70.2	3.0
Beta-Blocker Treatment After a Heart Attack	95.4	90.4	5.0
Breast Cancer Screening	76.4	73.1	3.3
Cervical Cancer Screening	83.2	78.9	4.3
Check-Ups After Delivery	82.7	74.9	7.8
Childhood Immunization Status - Combo 1	76.2	70.5	5.7
Chlamydia Screening - Ages 16 - 20	31.5	27.8	3.7
Chlamydia Screening - Ages 21 - 25	30.3	26.0	4.3
Cholesterol Management - Screening	81.2	78.1	3.1
Cholesterol Management - Control (LDL < 100)	49.8	41.8	8.0
Cholesterol Management - Control (LDL < 130)	67.3	59.1	8.2
Comprehensive Diabetes Care - Eye Exams	51.3	43.6	7.7
Comprehensive Diabetes Care - HbA1c Testing	85.8	82.1	3.7
Comprehensive Diabetes Care - LDL-C Screening	89.5	86.1	3.4
Comprehensive Diabetes Care - Nephropathy	50.0	44.7	5.3
Comprehensive Diabetes Care - Poor HbA1c Control*	29.9	36.0	-6.1
Comprehensive Diabetes Care - LDL Control (< 100)	36.1	31.9	4.2
Comprehensive Diabetes Care - LDL Control (< 130)	62.6	56.1	6.5
Controlling High Blood Pressure	64.2	57.5	6.7
Follow-Up After Mental Illness - 7 Days	56.4	49.4	7.0
Follow-Up After Mental Illness - 30 Days	76.2	69.8	6.4
Timeliness of Prenatal Care	91.8	84.1	7.7

* Lower rates are better than higher rates for this measure; the negative difference signifies that NCQA-Accredited plans perform at a higher level on this measure.

APPENDIX 5

HEDIS Effectiveness of Care Measures: Accredited vs. Non-Accredited Plans (Medicaid, 2003)

MEASURE	ACCREDITED	NON-ACCREDITED	DIFFERENCE
Adolescent Immunization Status - Combo 1	57.0	48.2	8.8
Antidepressant Medication Management - Acute Phase	47.4	44.5	2.9
Antidepressant Medication Management - Continuation Phase	30.6	27.5	3.1
Antidepressant Medication Management - Contacts	20.4	14.6	5.8
Appropriate Testing for Children with Pharyngitis	55.4	51.8	3.6
Appropriate Treatment for Children with URI	79.8	80.4	-0.6
Asthma Medication Use - Ages 5 - 9	66.2	59.7	6.5
Asthma Medication Use - Ages 10 - 17	66.1	59.9	6.2
Asthma Medication Use - Ages 18 - 56	70.0	63.8	6.2
Beta-Blocker Treatment After a Heart Attack	92.3	71.6	20.7
Breast Cancer Screening	58.3	54.6	3.7
Cervical Cancer Screening	69.6	61.3	8.3
Check-Ups After Delivery	59.3	53.5	5.8
Childhood Immunization Status - Combo 1	66.1	60.2	5.9
Chlamydia Screening - Ages 16 - 20	44.7	44.2	0.5
Chlamydia Screening - Ages 21 - 25	46.8	45.6	1.2
Cholesterol Management - Screening	59.6	55.3	4.3
Cholesterol Management - Control (LDL < 100)	31.9	22.0	9.9
Cholesterol Management - Control (LDL < 130)	43.1	33.8	9.3
Comprehensive Diabetes Care - Eye Exams	49.2	42.3	6.9
Comprehensive Diabetes Care - HbA1c Testing	78.0	72.7	5.3
Comprehensive Diabetes Care - LDL- C Screening	80.5	72.8	7.7
Comprehensive Diabetes Care - Nephropathy	47.1	41.4	5.7
Comprehensive Diabetes Care - Poor HbA1c Control*	43.8	52.0	-8.2
Comprehensive Diabetes Care - LDL Control (< 100)	31.1	25.5	5.6
Comprehensive Diabetes Care - LDL Control (< 130)	52.7	44.4	8.3
Controlling High Blood Pressure	60.8	54.8	6.0
Follow-Up After Mental Illness - 7 Days	44.9	30.1	14.8
Follow-Up After Mental Illness - 30 Days	65.3	46.7	18.6
Timeliness of Prenatal Care	81.5	74.2	7.3

* Lower rates are better than higher rates for this measure; the negative difference signifies that NCQA-Accredited plans perform at a higher level on this measure.

APPENDIX 6

HEDIS Effectiveness of Care Measures: Accredited vs. Non-Accredited Plans (Medicare, 2003)

MEASURE	ACCREDITED	NON-ACCREDITED	DIFFERENCE
Antidepressant Medication Management - Acute Phase	56.6	48.8	7.8
Antidepressant Medication Management - Continuation Phase	41.5	35.9	5.6
Antidepressant Medication Management - Contacts	10.8	9.8	1.0
Beta-Blocker Treatment After a Heart Attack	95.3	90.2	5.1
Breast Cancer Screening	76.7	71.5	5.2
Cholesterol Management - Screening	83.4	78.6	4.8
Cholesterol Management - Control (LDL < 100)	55.6	43.6	12.0
Cholesterol Management - Control (LDL < 130)	72.5	61.0	11.5
Colorectal Cancer Screening	54.4	44.6	9.8
Comprehensive Diabetes Care - Eye Exams	70.3	60.4	9.9
Comprehensive Diabetes Care - HbA1c Testing	90.0	86.2	3.8
Comprehensive Diabetes Care - LDL-C Screening	93.2	89.3	3.9
Comprehensive Diabetes Care - Nephropathy	57.2	50.4	6.8
Comprehensive Diabetes Care - Poor HbA1c Control*	19.6	26.6	-7.0
Comprehensive Diabetes Care - LDL Control (< 100)	45.1	39.1	6.0
Comprehensive Diabetes Care - LDL Control (< 130)	71.6	64.3	7.3
Controlling High Blood Pressure	62.9	59.9	3.0
Follow-Up After Mental Illness - 7 Days	44.0	32.4	11.6
Follow-Up After Mental Illness - 30 Days	65.0	54.5	10.5
Osteoporosis Management	19.4	16.5	2.9

* Lower rates are better than higher rates for this measure; the negative difference signifies that NCQA-Accredited plans perform at a higher level on this measure.

APPENDIX 7

HEDIS Effectiveness of Care Measures: Publicly Reporting vs. Non-Publicly Reporting Plans (Commercial, 2003)

MEASURE	PUBLICLY REPORTING	NON-PUBLICLY REPORTING	DIFFERENCE
Adolescent Immunization Status - Combo 1	60.4	40.6	19.8
Antidepressant Medication Management - Acute Phase	61.2	55.1	6.1
Antidepressant Medication Management - Continuation Phase	44.7	37.8	6.9
Antidepressant Medication Management - Contacts	20.6	17.5	3.1
Appropriate Testing for Children with Pharyngitis	71.1	66.5	4.6
Appropriate Treatment for Children with a URI	81.0	78.9	2.0
Asthma Medication Use - Ages 5 - 9	72.7	68.1	4.6
Asthma Medication Use - Ages 10 - 17	68.4	64.9	3.5
Asthma Medication Use - Ages 18 - 56	72.7	67.7	5.0
Beta-Blocker Treatment After a Heart Attack	94.6	90.1	4.5
Breast Cancer Screening	75.9	70.8	5.1
Cervical Cancer Screening	82.3	77.8	4.5
Check-Ups After Delivery	81.2	71.5	9.7
Childhood Immunization Status - Combo 1	75.2	67.8	7.4
Chlamydia Screening - Ages 16 - 20	30.9	25.8	5.1
Chlamydia Screening - Ages 21 - 25	29.5	24.7	4.8
Cholesterol Management - Screening	80.9	73.3	7.6
Cholesterol Management - Control (LDL < 100)	48.5	35.6	12.9
Cholesterol Management - Control (LDL < 130)	66.0	52.4	13.6
Colorectal Cancer Screening	48.0	41.2	6.8
Comprehensive Diabetes Care - Eye Exams	49.9	39.4	10.5
Comprehensive Diabetes Care - HbA1c Testing	84.9	81.4	3.5
Comprehensive Diabetes Care - LDL-C Screening	88.7	85.6	3.1
Comprehensive Diabetes Care - Nephropathy	48.9	42.6	6.3
Comprehensive Diabetes Care - Poor HbA1c Control*	31.3	37.8	-6.5
Comprehensive Diabetes Care - LDL Control (< 100)	35.3	29.9	5.4
Comprehensive Diabetes Care - LDL Control (< 130)	61.0	55.5	5.5
Controlling High Blood Pressure	62.6	58.2	4.4
Follow-Up After Mental Illness - 7 Days	55.0	47.2	7.8
Follow-Up After Mental Illness - 30 Days	75.1	66.5	8.6
Timeliness of Prenatal Care	90.2	81.2	9.0

* Lower rates are better than higher rates for this measure; the negative difference signifies that publicly reporting plans perform at a higher level on this measure.

APPENDIX 8

HEDIS Effectiveness of Care Measures: Publicly Reporting vs. Non-Publicly Reporting Plans (Medicaid, 2003)

MEASURE	PUBLICLY REPORTING	NON-PUBLICLY REPORTING	DIFFERENCE
Adolescent Immunization Status - Combo 1	51.5	52.5	-1.0
Antidepressant Medication Management - Acute Phase	47.0	44.5	2.5
Antidepressant Medication Management - Continuation Phase	30.7	26.2	4.5
Antidepressant Medication Management - Contacts	19.1	15.8	3.3
Appropriate Testing for Children with Pharyngitis	54.5	51.4	3.1
Appropriate Treatment for Children with a URI	79.9	80.5	-0.6
Asthma Medication Use - Ages 5 - 9	62.4	61.1	1.3
Asthma Medication Use - Ages 10 - 17	62.3	61.6	0.7
Asthma Medication Use - Ages 18 - 56	66.2	65.7	0.5
Beta-Blocker Treatment After a Heart Attack	88.4	72.6	15.8
Breast Cancer Screening	56.8	53.7	3.1
Cervical Cancer Screening	64.8	62.5	2.3
Check-Ups After Delivery	56.1	53.6	2.5
Childhood Immunization Status - Combo 1	63.8	58.7	5.1
Chlamydia Screening - Ages 16 - 20	45.0	42.8	2.2
Chlamydia Screening - Ages 21 - 25	46.3	45.3	1.0
Cholesterol Management - Screening	59.4	52.8	6.6
Cholesterol Management - Control (< 100)	29.8	20.9	8.9
Cholesterol Management - Control (< 130)	41.8	30.2	11.6
Comprehensive Diabetes Care - Eye Exams	46.2	42.5	3.7
Comprehensive Diabetes Care - HbA1c Testing	76.6	71.3	5.3
Comprehensive Diabetes Care - LDL-C Screening	78.5	70.8	7.7
Comprehensive Diabetes Care - Nephropathy	45.6	39.8	5.8
Comprehensive Diabetes Care - Poor HbA1c Control*	46.7	52.6	-5.9
Comprehensive Diabetes Care - LDL Control (< 100)	29.3	24.9	4.4
Comprehensive Diabetes Care - LDL Control (< 130)	50.5	42.3	8.2
Controlling High Blood Pressure	58.8	57.1	1.7
Follow-Up After Mental Illness - 7 Days	43.1	26.4	16.7
Follow-Up After Mental Illness - 30 Days	62.3	43.3	19.0
Timeliness of Prenatal Care	77.4	74.7	2.7

* Lower rates are better than higher rates for this measure; the negative difference signifies that publicly reporting plans perform at a higher level on this measure.

APPENDIX 9

Top Ten Organizations in HEDIS® Effectiveness of Care Measures and CAHPS® 3.0H Member Satisfaction Measures*

Top Ten National HEDIS® Effectiveness of Care Measures	
Organization (Listed Alphabetically)	State
Blue Cross and Blue Shield of Massachusetts, Inc. (HMO/POS)	Massachusetts
ConnectiCare, Inc. (HMO/POS)	Connecticut
Fallon Community Health Plan (HMO/POS)	Massachusetts
Group Health Cooperative of South Central Wisconsin (HMO)	Wisconsin
Harvard Pilgrim Health Care of New England (NH) (HMO/POS)	Massachusetts
Harvard Pilgrim Health Care, Inc. (HMO/POS)	Massachusetts
Health New England, Inc. (HMO/POS)	Massachusetts
Kaiser Foundation Health Plan of Colorado (HMO)	Colorado
Touchpoint Health Plan (HMO)	Wisconsin
Tufts Associated Health Maintenance Organization, Inc. d/b/a Tufts Health Plan (HMO/POS)	Massachusetts

Top Ten National CAHPS® Member Satisfaction Measures	
Organization (Listed Alphabetically)	State
Capital District Physicians Health Plan, Inc. (HMO)	New York
Capital Health Plan, Inc., d/b/a Capital Health Plan (HMO)	Florida
Harvard Pilgrim Health Care of New England (NH) (HMO/POS)	Massachusetts
Harvard Pilgrim Health Care, Inc. (HMO/POS)	Massachusetts
Independent Health Association, Inc. (HMO)	New York
Keystone Health Plan West, Inc. (HMO/POS)	Pennsylvania
OSF Health Plans, Inc. (HMO/POS)	Illinois
Priority Health (HMO)	Michigan
Rochester Area Health Maintenance Organization d/b/a Preferred Care (HMO/POS)	New York
Scott and White Health Plan (HMO)	Texas

* **Note:** Only organizations holding NCQA Excellent Accreditation at the time of the report were eligible for the Top 10 lists.

APPENDIX 10

Top Five Organizations in HEDIS® Effectiveness of Care Measures by Region

The regions (defined by the United States Census Bureau) include the following states.

East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin

Middle Atlantic: New Jersey, New York, Pennsylvania

Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Pacific: Alaska, California, Hawaii, Oregon, Washington

South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia

South Central: Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

East North Central	
Organization (listed alphabetically)	State
Care Choices HMO (HMO)	Michigan
Group Health Cooperative of South Central Wisconsin (HMO)	Wisconsin
Network Health Plan (HMO)	Wisconsin
Security Health Plan of Wisconsin, Inc. (HMO)	Wisconsin
Touchpoint Health Plan (HMO)	Wisconsin

Middle Atlantic	
Organization (listed alphabetically)	State
Excellus BlueCross BlueShield, Rochester Region (HMO/POS)	New York
Horizon Healthcare of New Jersey, Inc. d/b/a Horizon HMO (HMO)	New Jersey
Keystone Health Plan Central (HMO)	Pennsylvania
Rochester Area Health Maintenance Organization d/b/a Preferred Care (HMO/POS)	New York
UPMC Health Plan, Inc. (HMO/POS)	Pennsylvania

Mountain	
Organization (listed alphabetically)	State
CIGNA HealthCare of Arizona, Inc. (HMO/POS)	Arizona
CIGNA HealthCare of Colorado (HMO/POS)	Colorado
Kaiser Foundation Health Plan of Colorado (HMO)	Colorado
PacifiCare of Colorado, Inc. (HMO/POS)	Colorado
United HealthCare of Colorado, Inc. (HMO/POS)	Colorado

APPENDIX 10

■ continued from previous page

New England*	
Organization (listed alphabetically)	State
Blue Cross and Blue Shield of Massachusetts, Inc. (HMO/POS)	Massachusetts
ConnectiCare, Inc. (HMO/POS)	Connecticut
Fallon Community Health Plan (HMO/POS)	Massachusetts
Harvard Pilgrim Health Care of New England (NH) (HMO/POS)	Massachusetts
Harvard Pilgrim Health Care, Inc. (HMO/POS)	Massachusetts
Health New England, Inc. (HMO/POS)	Massachusetts
Tufts Associated Health Maintenance Organization, Inc. d/b/a Tufts Health Plan (HMO/POS)	Massachusetts

* The New England list is comprised of seven health plans rather than five because all seven plans listed appear in the national Top 10.

Pacific	
Organization (listed alphabetically)	State
Health Plan Hawaii (HMO)	Hawaii
Kaiser Foundation Health Plan Inc. — Southern CA (HMO)	California
Kaiser Foundation Health Plan of Hawaii, Inc. (HMO)	Hawaii
Kaiser Foundation Health Plan of the Northwest (HMO)	Oregon
Kaiser Foundation Health Plan, Inc. — Northern CA (HMO)	California

South Atlantic	
Organization (listed alphabetically)	State
Aetna Health of the Carolinas Inc. (HMO/POS)	North Carolina
Blue Cross Blue Shield of Delaware (HMO/POS)	Delaware
Capital Health Plan, Inc d/b/a Capital Health Plan (HMO)	Florida
Kaiser Foundation Health Plan of Georgia, Inc. (HMO)	Georgia
Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc. (HMO)	Maryland

South Central	
Organization (listed alphabetically)	State
Anthem Health Plans Kentucky, Inc. d/b/a Anthem (HMO/POS)	Kentucky
Ochsner Health Plan (HMO)	Louisiana
PacifiCare of Texas, Inc. (HMO)	Texas
Scott and White Health Plan (HMO)	Texas
UnitedHealthcare of Texas, Inc. (HMO/POS)	Texas

West North Central	
Organization (listed alphabetically)	State
CIGNA HealthCare of St. Louis, Inc. (HMO/POS)	Missouri
Coventry Health Care of Iowa, Inc. (HMO/POS)	Iowa
HealthPartners, Inc. (HMO/POS)	Minnesota
Medical Associates Health Plan, Inc. (HMO/POS)	Iowa
Wellmark Health Plan of Iowa, Inc. (HMO/POS)	Iowa