California Department of Health Services

Medi-Cal Managed Care Health Plans

Results of the HEDIS® 2000 Performance Measures for Medi-Cal Members

Review Period
January to December 1999

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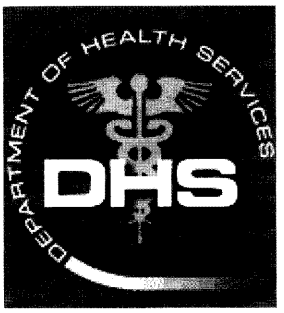

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EXECUTIVE SUMMARY

As part of the oversight responsibility to help ensure quality healthcare, the California Department of Health Services (DHS) contracted with Health Services Advisory Group, Inc. (HSAG), an External Quality Review Organization (EQRO), to perform independent quality assessments of the Medi-Cal health plans. The quality assessments were based on a set of performance measures, referred to as the DHS Accountability Set. These measures were selected by DHS with significant input by the contracted health plans and HSAG. In 1999 and again in 2000, the health plans collected and reported on these measures in accordance with the most current Health Plan Employer Data and Information Set (HEDIS) technical specifications. HEDIS is the most widely used set of performance measures in the managed care industry and is developed and maintained by the National Committee for Quality Assurance (NCQA). The HEDIS measures emphasized the areas of maternal care, pediatrics and chronic illness.

All of the HEDIS 2000 rates improved over the HEDIS 1999 rates. In addition, almost all of the HEDIS 2000 rates exceed the NCQA 2000 National Medicaid Averages and are shown in the table below. Two measures, Initiation of Prenatal Care and Prenatal Care in the First Trimester, did not have a rate for the NCQA 2000 National Medicaid Average. However, Prenatal Care in the First Trimester did have a 2000 National Medicaid 50th Percentile Benchmark, which is used in this report.

Comparison Between HEDIS 1999 and HEDIS 2000 Medi-Cal Rates

DHS Accountability Set	HEDIS 1999 Medi-Cal Rates (%)	HEDIS 2000 Medi-Cal Rates (%)	NCQA 2000 National Medicaid Average (%)
Childhood Immunization Combination 1 – 4:3:1:2:3 series	50.0	53.8	51.2
Childhood Immunization Combination 2 – 4:3:1:2:3:1 series	32.5	44.3	38.0
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	26.0	32.9	30.2
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life	51.7	56.7	49.0
Adolescent Well-Care Visits	21.2	29.9	28.0
Prenatal Care in the First Trimester	57.0	61.4	61.0*
Initiation of Prenatal Care	69.0	72.1	NA**
Check-Ups After Delivery	46.2	46.5	48.0
Eye Exams for People with Diabetes	41.3	53.1	41.0

*The NCQA National Medicaid Average was not available for this measure. The 61.0 percent listed represents the NCQA National Medicaid 50th Percentile.
**There was no NCQA National Medicaid Average or NCQA National Medicaid 50th Percentile available for this measure.

This report uses the HEDIS 2000 Technical Specifications for the combined immunization rates (i.e., Combinations 1 and 2). The HEDIS Technical Specifications for immunizations can be changed by NCQA as a result of different immunization schedules, new immunizations or removal of outdated immunizations. In 1999, Combination 1 required only two doses of

Hepatits B Vaccine (HBV) by the second birthday (series 4:3:1:2:2) while Combination 2 required three doses of HBV (series 4:3:1:2:3). The current HEDIS 2000 Combination 1 is the same as the 1999 Combination 2, and the current HEDIS Combination 2 (series 4:3:1:2:3:1) is the same as the 1999 Combination 3.

While all the HEDIS rates for measures in the DHS Accountability Set increased over 1999, continued efforts are needed. Although most of the HEDIS 2000 rates are above the NCQA 2000 National Medicaid Averages, these rates can still improve significantly. Some specific recommendations to improve health plan processes and increase HEDIS rates are as follows:

- All health plans should have documented policies and procedures in place for collecting and reporting on HEDIS data. HEDIS reporting involves the entire health plan. Efforts should be made to educate the employees as well as key personnel about HEDIS. Departments within the health plans—such as the information systems, quality improvement, member services, provider relations, and utilization management departments—should be involved with HEDIS discussions to determine the best methods to capture and report HEDIS data.

- Monitoring processes should be improved for claims and encounter data processing, provider data and credentialing data entry, medical record review, source code and vendor oversight for delegated functions. Reasonableness checks on HEDIS rates, denominators and administrative data should be performed.

- Tracking and monitoring missing medical records during medical record pursuit can lead to improvements in data collection processes and allow for targeted quality improvement, if needed (e.g., providers who do not submit medical records can be easily determined).

- Efforts should continue to be made to improve encounter data submission. Health plans should begin to monitor encounter data completeness and track submissions by provider, if necessary. This will improve the encounter data and decrease the need for medical record review.

- Health plans should consider strategies for improving HEDIS rates. Adolescent Well-Care Visits, for example, typically has low HEDIS rates and medical record review has not proven to significantly increase the rates for this measure. As supporting evidence, 75 percent of the members who received a well-care visit were identified using administrative data. It may prove beneficial to report this measure administratively and direct resources in areas that can improve results for other measures.

This aggregate report is intended as a tool to assist the Medi-Cal health plans in identifying opportunities to improve the care they provide to their members and direct their intervention efforts. The results from this HEDIS 2000 reporting year indicate health plan performance has improved. The majority of health plans have made considerable improvements in processes for data collection and reporting and have shown increases in the HEDIS rates. It is expected that these HEDIS rates will continue to improve as health plans gain experience and targeted interventions, such as provider incentives and contractual requirements, become fully effective.

OVERVIEW

Background and Purpose

The California Department of Health Services (DHS) places a high priority on the services provided to beneficiaries in the Medi-Cal Managed Care Program. The DHS specifically emphasizes the healthcare provided for maternal care, pediatrics and chronic illness. Health plans that provide early and ongoing prenatal care can help reduce the incidence of low birth-weight babies and infant mortality and can detect and treat maternal health problems early in the pregnancy. Well-Child and Adolescent Well-Care visits are one of the best and most cost effective ways to detect physical, developmental, behavioral and emotional problems so appropriate treatment can be given. As part of the oversight responsibility to help ensure quality healthcare, DHS has contracted with Health Services Advisory Group, Inc. (HSAG), an External Quality Review Organization (EQRO), to perform independent quality assessments.

In 1999 and again in 2000, the health plans collected and reported on eight selected performance measures in accordance with the most current Health Plan Employer Data and Information Set (HEDIS) technical specifications. HSAG conducted independent HEDIS Compliance Audits of the health plans to ensure compliance with the technical specifications and reliability of the results. These HEDIS Compliance Audits were conducted by HSAG using a standardized methodology as defined by the National Committee for Quality Assurance (NCQA). The eight performance measurements under audit, called the DHS Accountability Set, were selected by DHS with significant input by the contracted health plans and HSAG. All Medi-Cal health plans in existence for at least one year were required to have a HEDIS Compliance Audit on the DHS Accountability Set.

The main purpose of this report is to present a summary of the eight measures included in the 2000 DHS Accountability Set for the Medi-Cal health plans. This report uses the results of the eight measures to compare a health plan's performance in delivering quality healthcare services to Medi-Cal beneficiaries. This summary report is intended to compare quality measures among the audited health plans to identify best performance and trend improvement. A secondary goal of this report is to assist both DHS and the health plans in identifying potential areas for targeting future interventions and for providing specific recommendations for overall improvement. Although the primary focus of this report is to present the HEDIS 2000 rates for the DHS Accountability Set, the 1999 HEDIS rates, along with the most recent available NCQA Medicaid Benchmarks, are included for comparative purposes.

Quality Indicators/DHS Accountability Set

The DHS Accountability Set contained the same measures for both 1999 and 2000. These eight measures are presented in the table below.

Audited 2000 HEDIS Measures

HEDIS Domain	DHS Accountability Set
Effectiveness of Care	Childhood Immunization Status
	Check-ups After Delivery
	Prenatal Care in the First Trimester
	Eye Exams for People with Diabetes*
Access / Availability of Care	Initiation of Prenatal Care
Use of Services	Well-Child Visits in the First 15 Months of Life
	Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life*
	Adolescent Well-Care Visits

**Eye Exams for People with Diabetes* was reported only by the five County Organized Health Systems (COHS) as a substitute for the Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life measure. This was done to better reflect the large number of health plan members with chronic illness in the population served by these five health plans. See the Health Plan Profiles section for more information about COHS and other plan model types.

The HEDIS domains presented in the above table report different aspects of health plan performance. The Effectiveness of Care measures generally look at the impact of healthcare delivered to specific populations and give information about the quality of the clinical care provided. Members' ability to obtain medical care in a timely manner is the focus of the Access/Availability of Care domain. Measures in this domain assess whether or not care is available to members when needed and is provided in a timely and convenient manner. The Use of Services domain can show how efficiently health plans manage healthcare (i.e., how well health plans manage and expend their resources). It should be noted that performance measures within these domains could be affected by member characteristics such as age, gender and ethnicity. After initial comparisons between health plans are completed, additional analysis should consider the demographics within a health plan and/or geographical area.

Methodology

The Medi-Cal health plans were responsible for collecting and reporting on the DHS Accountability Set for both 1999 and 2000. HSAG's responsibility included auditing the individual health plans and producing reports based on the audit findings. The audit process followed the standardized NCQA methodology and is summarized below.

HEDIS Compliance Audit

All of the results in this report and the processes used to obtain them met rigorous review, as specified by NCQA. Only an NCQA-licensed organization may conduct a HEDIS Compliance Audit for health plans. Each HEDIS Compliance Audit must be led by a Certified HEDIS Compliance Auditor (CHCA). HSAG, an NCQA-licensed auditing firm with eight CHCAs, conducted the audits using the standardized methodology specified in the (1999 and 2000) NCQA *HEDIS Compliance Audit Standards Policies and Procedures, Volume 5*. Both the 1999 and 2000 HEDIS Compliance Audits of the Medi-Cal health plans included the following components:

- A detailed assessment of each health plan's information systems capabilities for collecting, analyzing and reporting HEDIS information.
- A review of the specific reporting methods used for HEDIS measures. This included: computer programming and query logic used to access and manipulate data and to calculate measures, databases and files used to store HEDIS information, medical record abstraction tools and abstraction procedures used, and any manual processes employed in the HEDIS data production and reporting.
- A review of any data collection and reporting processes supplied by vendors, contractors or third parties, as well as the health plans' oversight of delegated functions.

HSAG used a number of different methods and information sources to conduct the audits. A convenient mode of communication was through teleconference calls with health plan personnel and vendor representatives. These teleconferences were scheduled on an as-needed basis and served to clarify the scope of the audit as well as set time frames for the various activities. Each health plan was required to submit a completed response to the Baseline Assessment Tool (BAT) published by NCQA as *Appendix B to the HEDIS Volume 5*. The completed BAT provides detailed information regarding the systems and processes in place at a health plan.

Preparatory teleconferences and review of the BAT laid the foundation for subsequent on-site meetings in the offices of the respective health plans. Each on-site audit review extended over a period of two days and covered a wide range of activities and functions, including a detailed overview and walk-through of the various information system components (e.g., claims processing, member data processing and provider data processing). The various methods used

to assess systems and procedures included relevant staff interviews, documentation review, visual inspection and primary source verification.

While the on-site reviews were an integral part of the HEDIS Compliance Audits, it needs to be emphasized that many of the audit functions extended beyond the on-site visits. One such function was the evaluation of computer programming used to access administrative data sets, manipulate abstracted medical record information and calculate HEDIS rates for the performance measures. HSAG also performed a re-abstraction of a sample of medical records for at least two of the measures in the DHS Accountability Set for each health plan and compared the results to determine if medical record abstraction was conducted accurately and in accordance with the technical specifications.

Other important aspects of the audit process were requests for corrective actions for the HEDIS data collection, reporting processes and data samples. HSAG verified that the requested corrective actions were undertaken and that they provided final, accurate results. In addition, all final HEDIS rates were reported by the health plans using the Data Submission Tool (DST) published by NCQA. Each DST was rigorously checked for accuracy against the audit findings. Any discrepancies were discussed with the health plan and resolved.

Following the HEDIS Compliance Audits, each health plan received an audit report that provided information regarding reliability of the health plan's HEDIS results. The report also detailed findings related to each health plan's information systems capabilities, reporting methods, medical record abstraction tools and processes, and the calculation of the measures. Wherever warranted, each health plan's audit report identified areas for improvement (See Appendix).

Four Medi-Cal health plans (i.e., Blue Cross of California, Contra Costa Health Plan, Molina Medical Centers and Kaiser Foundation Health Plan) chose NCQA-licensed auditing firms other than HSAG. These four health plans had previously established a relationship with a licensed auditing firm and were allowed to maintain this continuity. Their audited results were subjected to the same NCQA standardized methodology by their auditors. The rates were provided to HSAG by the DHS and are included in this report. HSAG reviewed these rates prior to inclusion in the report. Again, any discrepancies or extreme outliers (i.e., very small denominators, or rates far above or below the average health plan) were discussed with the health plan and resolved.

University of California at San Diego (UCSD) is not included in this report. UCSD was not contractually obligated to have a HEDIS Compliance Audit in 2000, though they are required to have the audit in 2001. Although UCSD was not subjected to a HEDIS Compliance Audit, they were contractually obligated to conduct another study. The results of the UCSD study will be made available when the report is completed.

Health Net had two contracts in 1999 and three in 2000. The additional contract was the start-up for the Geographic Managed Care (GMC)-South region. (For a complete description of health plan model types, see Health Plan Profile, starting on page 15.) Due to a misunderstanding, Health Net reported both GMC areas (Sacramento and San Diego) together

as one GMC contract. They are listed in this report only in the GMC-North (Sacramento) region. The number of eligible cases from the San Diego region was very small and most of the measures would have had less than 30 cases, resulting in a Not Applicable (NA) audit measure designation. Therefore, the results of combining Health Net's GMC areas were minimal. For HEDIS 2001, Health Net will report the GMC areas separately.

Audit Measure Designations

An audit designation was assigned for each HEDIS measure in the DHS Accountability Set. The audit designations were based on the rationales defined by NCQA and are presented in the table below.

Audit Measure Designations

Notation	Audit Measure Designation	Rationales
R	Report	1. The health plan followed the specifications and produced a reportable rate for the measure. 2. The health plan followed the specifications for producing a reportable denominator, but the denominator was too small (i.e., less than 30 cases) to report a valid rate, resulting in a not applicable (NA).
NR	Not Reported	1. The health plan calculated the measure but the rate was materially biased. 2. The health plan did not calculate the measure even though a population existed for which the measure could have been calculated. 3. The health plan calculated the measure, but chose not to report the rate.

Note: As shown in the table above, an individual HEDIS measure may have less than 30 cases in the denominator, but otherwise be calculated correctly. In this case, the rate for the measure is given a Not Applicable (NA), but the Audit Measure Designation is Report (R).

Sampling

The NCQA sampling methodology was designed to assure integrity of the HEDIS data. The sample size is calculated based on a two-tailed significance test between two proportions with an alpha level of 5 percent and a power of 80 percent. A normal approximation to the binomial is used with a continuity correction. The most conservative assumption of a 50 percent expected value is also assumed.

The majority of health plans utilized the systematic sampling process for the hybrid measures as outlined by NCQA in the *HEDIS 2000 Technical Specifications, Volume 2*. This process required health plans to determine the eligible members, the minimum required sample size and an appropriate oversample. The minimum required sample size for each measure was 411. Health plans that had fewer than 411 eligible members for a measure were required to use the entire eligible member population for that measure. Members who were determined to be ineligible during medical record review were then substituted for a member in the oversample list. However, as allowed by NCQA, health plans had the option of simultaneously pursuing members on the oversample list and incorporating those members into the final sample results.

Several health plans utilized a sampling scheme other than NCQA's systematic sampling process. These health plans utilized a stratified sampling routine to ensure representation among counties or subcontractors. The methods were approved by NCQA and were determined not to introduce any bias into the results. In addition, health plans that chose to report measures based solely on administrative data were required to use the entire eligible population.

Health plans are not required to use the administrative method to report on the DHS Accountability Set, though health plans may do so for a variety of reasons. Some health plans choose to report using the administrative method because their medical record abstraction process does not pass the audit. The most practical reason, however, is that reporting measures administratively is considerably more cost effective than pursuing medical records.

Data Collection and Reporting

The Medi-Cal health plans had the option of using the administrative methodology or the hybrid methodology for data collection and reporting on each measure in the DHS Accountability Set. The hybrid methodology requires health plans to identify the denominator using administrative data and the numerator through both administrative data and medical record review. The denominator consists of an appropriate systematic sample of cases from the population of eligible members. Similarly, the administrative method requires health plans to identify the eligible member population through administrative data. The numerators, however, are derived solely from the administrative data for the entire eligible population. Health plans that contract with their providers on a fee-for-service basis usually have more complete and accurate administrative data and will prefer this method to reduce potential costs of medical record retrieval and abstraction. Although the eligible population is different for each measure, the denominators include only those members who satisfy all of the HEDIS criteria provided in the *HEDIS 2000 Technical Specifications, Volume 2*.

The health plans were responsible for data collection of medical record information for each hybrid measure. This responsibility extended to oversight of outside vendors contracted by the health plan to assist in medical record retrieval, abstraction, and reporting. The health plans themselves as well as those vendors that performed additional functions related to HEDIS reporting (e.g., source code programming and data warehousing) were subjected to the auditing process, including teleconference calls, representation by the vendor while on-site at the health plan, and on-site review of the vendor.

Each health plan was required to submit its final rates using NCQA's Data Submission Tool (DST). Only rates that received a reportable status were used in the calculation of the Medi-Cal average. In addition, rates that were derived using the administrative method were adjusted for comparative purposes. The adjustment allowed for a more accurate Medi-Cal average for each measure, rather than a skewed average based on a single health plan's total eligible population.

It should be noted that the design of the DST might cause over- or under-reporting of administrative data versus medical record review for Childhood Immunizations and Well-Child Visits In The First 15 Months Of Life. For example, a child that received three well-child visits administratively and three well-child visits by medical record review would be recorded in the six or more visits column under medical record review, and therefore, the actual occurrence of administrative data for this measure would be underestimated. Additional information that could cause over or underreporting of administrative data can be found in the limitations and caveats section of this report.

Data Validation

The NCQA audit policies and procedures require re-abstraction and comparison of the auditor's results to health plan abstraction for a selection of hybrid measures. This process completes the validation of the medical record review (MRR) process and provides an assessment of actual reviewer accuracy. In accordance with NCQA, HSAG reviewed up to 30 records identified by each health plan as meeting numerator event requirements (determined through medical record review) for measures selected for audit and MRR validation. HSAG selected a minimum of two hybrid measures for review. Cases were randomly selected from the entire population of MRR numerator positives identified by the health plan, as indicated on the MRR numerator listings submitted to the audit team. If the health plan reported exclusions based solely on MRR, a sample of the exclusions was over-read. If fewer than 30 medical records were found to meet numerator requirements, all records were reviewed.

For each of the validated hybrid measures, auditors determined the impact of the findings from the re-abstraction process on the health plan's final Audit Measure Designation for each measure. The goal of the MRR validation was to determine whether the health plan made abstraction errors that significantly biased its final reported rate. When discrepancies were discovered, a second abstractor reviewed the findings for accuracy; and, if necessary, discussions with the health plan were conducted. HSAG used a statistical spreadsheet developed by NCQA to make determinations of potential bias in the final rate.

In addition to validating the medical record abstraction process, primary source verification was conducted to ensure the source code used to determine the numerators, denominators and rates was properly executed and obtained the intended results. For each measure, this included validating member enrollment, valid exclusions (e.g., a male identifed in the denominator for Prenatal Care in the First Trimester), eligible populations, claims and encounter data, provider data and data warehouse crosswalks. Again, any issues that were discovered and determined to potentially bias the HEDIS results were discussed with the health plan. Corrective actions to eliminate the bias were implemented by the health plans whenever possible and necessary, or the health plan received an NR for the Audit Measure Designation.

CAVEATS AND LIMITATIONS

While the HEDIS Compliance Audits were conducted using a rigorous and scientifically sound methodology, the results must be interpreted with a clear understanding of certain caveats and study limitations. All aspects that may have affected the results need to be carefully considered in drawing valid conclusions. Common issues identified throughout the audit process are presented below, as well as in Table 1 on page 12, for a full perspective of Medi-Cal HEDIS results. Some issues will resolve themselves over time (e.g., health plan maturity, improved information systems), while others are unique and specific to particular health plans or health plan model types. A complete description of the health plan model types can be found in the Health Plan Profile section. The most common limitations noted throughout the audit process follow:

Limitations for Medical Record Retrieval

- Medi-Cal beneficiaries are a mobile population. Disruption in Medi-Cal eligibility, monthly open enrollment and disenrollment from health plans, and members that frequently switch Primary Care Physicians (PCPs) lead to fragmented medical records. The result is often incomplete or missing medical records rather than a lack of care.

- Services may have been provided in the physician's office, but not documented in the medical record.

- Care may have been rendered outside of the health plan's provider network and not recorded at the physician's office (i.e., health fairs, local health departments, schools, and other sites).

- The period of time allotted to health plans and practitioners for medical record retrieval may limit the quality and quantity of data collected.

Administrative Data Limitations

- Some health plans were unable or chose not to use their administrative data due to issues related to data capture and accuracy.

- Providers who are not paid on a fee-for-service basis (e.g., capitated providers) may render services, but may neglect to submit the encounter to the health plan.

- The DST was limited in its ability to separate the lack of services provided from lack of documented care (i.e., missing medical records).

- Incorrect provider files or the inability to link sample cases with their appropriate providers may have precluded the location of the required medical record documentation.

The Medi-Cal health plans had the option of using the administrative methodology or the hybrid methodology for data collection and reporting on each measure in the DHS Accountability Set. The hybrid methodology requires health plans to identify the denominator using administrative data and the numerator through both administrative data and medical record review. Similarly, the administrative method requires health plans to identify the eligible member population through administrative data. The numerators, however, are derived solely from the administrative data for the entire eligible population. While the majority of health plans used the hybrid method, some health plans chose to use the administrative method. As indicated in the limitations above, administrative data are generally less complete, but are less resource intensive for obtaining numerator positive cases. For example, a well-child visit requires extensive medical record documentation to count toward HEDIS criteria, but may be captured in administrative data with one International Classification of Diseases-9th Revision-Clinical Modifications (ICD-9) code.

In general, the lack of administrative data may indicate: 1) the health plan chose to perform 100 percent medical record review; 2) the health plan was unable to perform a system integration with medical record review; or 3) the health plan's administrative data were incomplete and would have produced a biased result. Similarly, the lack of medical record review indicates: 1) the health plan did not pursue medical records; 2) the medical record review was biased, so the health plan could not use the results obtained from medical record review; or, 3) the health plan could not locate the medical record or the relevant pieces of the medical record.

Other Considerations

- The HEDIS definition of a provided service for some measures (e.g., well-child visit, prenatal care visit) requires more documentation for medical record review than for administrative data.

- The *HEDIS 2000 Technical Specifications* changed slightly from 1999. This included adding or deleting specific ICD-9 or Current Procedural Terminology (CPT) codes. The changes for the DHS Accountability Set were minimal.

- HEDIS 2000 criteria did not allow health plans to exclude certain members from samples. These are members with certain eligibility issues or lack of information on out-of-network services (e.g., retro-eligibility, dual eligibility in Medicare and Medicaid). Health plans are unable to either influence the care of these members or to capture information about their care.

Table 1. Summary of Common NCQA HEDIS Compliance Audit Issues for Medi-Cal Health Plans

Audit Issue	Impact On HEDIS Reporting
Policies and Procedures	Many of the processes used to collect and report HEDIS data were not documented, nor was a formal policy and procedure in place. Auditors evaluate health plans on a documentation trail of evidence to assess compliance with NCQA Standards for HEDIS report production.
Health Plan HEDIS Team	Since collecting and reporting HEDIS data is relatively new to most Medi-Cal health plans, the audit process discovered the following common issues: ♦ Staff inexperienced with HEDIS ♦ Lack of resources necessary to adequately complete all required tasks ♦ Lack of communication between Information Systems (IS) staff and Quality Improvement (QI) coordinators ♦ Lack of oversight of vendors used to collect and report HEDIS data
Provider Data	A common practice among health plans was maintaining two separate provider databases; one for credentialing and one for provider data, requiring double data entry. The databases were not compared to one another for accuracy, and validation of provider data entry was seldom performed. These practices potentially cause a health plan to be out of compliance with NCQA Standards for provider data.
Difficulty Tracking Members Across Payers	Some Medi-Cal health plans did not track members who were enrolled through different payers (Commercial, Medicaid or Medicare) at different times during the reporting year. HEDIS technical specifications state that members who change payers are continuously enrolled and are reported in the payer group to which they belonged at the end of the continuous enrollment period. Health plans that did not track these members were out of compliance with technical specifications.
Retro-Eligible Members	Retro-eligibility refers to members whose eligibility for Medi-Cal becomes effective at an earlier point in time (retroactive). Health plans are held responsible for services rendered (or not rendered) during the time the member was retro-eligible. This issue is particularly troublesome for the County Organized Health System (COHS) health plans, since retro-eligibility can range up to 24 months. The health plans are then held responsible for providing services to members before the health plan is aware the person is a member.
Identifying Eligible Members for the Well-Child Visits in the First Fifteen Months of Life	Within the Medi-Cal system, newborns are covered under their mothers' ID numbers for the first two months of life. Many health plans experienced difficulty in linking the first two months of enrollment with the newly established ID once a child was eligible and enrolled in the health plan. This caused health plans to underreport the denominator.
Encounter Data Completeness in a Capitated Environment	Health plans that have a capitated reimbursement arrangement with providers commonly identify encounter data completeness as an issue. On average, health plans estimate that they receive approximately 50 percent of their estimated encounter submissions. This issue affects a health plan's capability of reporting any rates administratively and forces the health plan to rely heavily on medical record review to report hybrid measures.

Table 1. Summary of Common NCQA HEDIS Compliance Audit Issues for Medi-Cal Health Plans (Continued)

Audit Issue	Impact On HEDIS Reporting
Obstetrical (OB) Global Billing	OB global billing occurs when a provider submits one bill that encompasses all services rendered throughout the pregnancy, including postpartum visits. Global billing processes lead to difficulty determining the date of delivery, when and what services were provided, and which maternity measure(s) the member is eligible for due to continuous enrollment criteria. The end result is increased reliance on medical record review.
Live Birth Identification	In general, health plans encountered difficulty in identifying their live births during the review year due to incompleteness of encounter data submission and, in some cases, members' self referral to OB providers. Some health plans were able to overcome this difficulty by relying on utilization review data to confirm live births.
Provider Manual (PM)-160 Data	When processing State of California Child Health and Disability Prevention (CHDP) program forms, namely the PM-160 forms, health plans frequently captured only the diagnosis and procedure codes of services rendered, rather than capturing the individual components of a visit (e.g., history/physical, anticipatory guidance/health education). Claims processors were instructed to automatically prefill the diagnosis code with a V20.2 (routine infant and child health check) if the PM-160 was submitted without a diagnosis code, regardless of the services rendered during the visit. By using the V20.2 code as a "catch-all" for any service rendered—such as a single immunization—health plans were unable to utilize their PM-160 data, unless all components of services rendered were captured. Plans, therefore, had to rely more heavily on medical record review. CHDP providers also used V20.2 for any service provided, including a single immunization, for any age group.
Use of Dummy Codes or Secondary Diagnosis Codes	During claims/encounter processing, it was a somewhat common practice to use a dummy code if a diagnosis code was not included on a claim form or a diagnosis code was not accepted by the health plan's claims-processing system. Occasionally, the dummy code used was a valid code, making tracking of the issue impossible. Data completeness and accuracy are compromised by this practice; and, in terms of HEDIS reporting capabilities, measures that rely on a medical event marker or diagnosis to determine the eligible denominator population are affected. Another practice was to substitute the secondary diagnosis code if the primary code was not accepted. HEDIS measures that require a diagnosis to be primary in order to qualify for the denominator are compromised by this practice.

Table 1. Summary of Common NCQA HEDIS Compliance Audit Issues for Medi-Cal Health Plans (Continued)

Audit Issue	Impact On HEDIS Reporting
Medical Record Review Processes	Internal processes for development of medical record review tools, inter-rater reliability, combining administrative data with medical record review and retrieving records for the over-read process were found to be below industry standards. Interpretation of HEDIS specifications and the hybrid methodology varied across health plans, resulting in critical errors. The impact on the measures took into account the administrative positive cases reported by the health plan; and, therefore, decreased the bias on a particular measure. Additionally, the over-read process had to be expanded to assure that health plans accurately abstracted medical record data and no bias to the measure existed.
Source Code Challenges	The following issues were found to be common among Medi-Cal health plans: ♦ Using outdated technical specifications ♦ Not checking the NCQA Web site for updates to specifications ♦ Incorrect code logic ♦ Not using available data (leaving out a subcontractor's data) ♦ Not checking for reasonableness of counts and rates ♦ Poor oversight of source code vendors ♦ Programmers inexperienced with HEDIS

HEALTH PLAN PROFILE

This HEDIS 2000 report summarizes 28 health plan contract specific reports, representing 22 health plans, 21 counties and over 2.2 million Medi-Cal managed care beneficiaries. The Medi-Cal health plans are categorized under three health plan model types: Geographic Managed Care (GMC), County Organized Health System (COHS), and the Two-Plan Model—which includes Local Initiatives (LI) and Commercial Plans (CP). A brief description of each health plan model type is essential to a correct understanding of the results of the reviews as they relate to the different health plan model types.

County Organized Health System (COHS)

A COHS is an agency organized and operated by the county with representation from providers, beneficiaries, local government and other interested parties. It contracts with the Medi-Cal Program to cover virtually all the Medicaid beneficiaries within the county. Beneficiaries have a wide choice of managed care providers but do not have the option of obtaining services under the fee-for-service system unless authorized by the COHS. Currently there are five COHS operating in seven counties: San Mateo, Santa Barbara, Orange, Santa Cruz, Monterey, Solano and Napa.

County Organized Health System (COHS)

Start of Operation	Medi-Cal Health Plan	Counties Covered
10/95	CalOPTIMA	Orange
01/96	Central Coast Alliance for Health	Santa Cruz, Monterey
12/87	Health Plan of San Mateo	San Mateo
05/94	Partnership Health Plan of California	Napa, Solano
09/83	Santa Barbara Regional Health Authority	Santa Barbara

Two-Plan Model (CP & LI)

This is the principal model for the expansion of Medi-Cal managed care in California. In each county designated for this model, two health plans cover the entire Temporary Assistance to Needy Families (TANF)-linked population in the county on a mandatory enrollment basis. DHS contracts with one locally developed comprehensive managed care system called a Local Initiative (LI) and one Commercial Plan (CP). The LI is a Knox-Keene licensed health plan developed by the local stakeholders who had flexibility in designing a health plan that would best meet the needs of the community it serves. The CP is also a Knox-Keene licensed health

plan selected through a competitive bidding process. The presence of the CP is to ensure that the beneficiaries are able to select a health plan that also provides care to privately insured individuals. This is consistent with the expressed intent of the California Legislature.

Two-Plan Models (CP & LI)

Start of Operation	Medi-Cal Health Plan	Model Type	Counties Covered
02/96	Blue Cross of California	CP	Alameda, Contra Costa, Fresno, Kern, San Francisco, Santa Clara, San Joaquin
07/97	Health Net	CP	Los Angeles, Fresno, Tulare
03/99	Molina Medical Centers	CP	Riverside, San Bernardino
01/96	Alameda Alliance for Health	LI	Alameda
10/97	Blue Cross of California	LI	Stanislaus
02/97	Contra Costa Health Plan	LI	Contra Costa
03/99	Blue Cross of California	LI	Tulare
02/96	Health Plan of San Joaquin	LI	San Joaquin
09/96	Inland Empire Health Plan	LI	Riverside, San Bernardino
07/96	Kern Family Health Care	LI	Kern
04/97	L.A. Care Health Plan	LI	Los Angeles
01/97	San Francisco Health Plan	LI	San Francisco
02/97	Santa Clara Family Health Plan	LI	Santa Clara

Geographic Managed Care (GMC)

Under this system, DHS contracts with Geographic Managed Care (GMC) health plans to cover the entire TANF-linked population in the county on a mandatory enrollment basis. The beneficiaries are given the option of choosing from among multiple commercial managed care health plans for healthcare services. The initial GMC program was implemented in Sacramento County in 1994 and includes five health plans. The second GMC program was implemented in San Diego County in 1998 and includes six participating health plans.

For the purposes of this report, the GMC health plan model type is separated by GMC-North and GMC-South. Hence, the Sacramento GMCs are referred to as the GMC-North, while the health plans in the San Diego GMC are classified as the GMC-South. This is necessary for appropriate comparisons between regions and measurement years. The health plans in the GMC-South did not participate in the HEDIS 1999 audit process. The results from the health plans in the GMC-South, aggregated with the other health plans, may produce results that are not directly comparable to the 1999 Medi-Cal results. Therefore, aggregate results have been computed including and excluding the GMC-South region. When comparing the 2000 HEDIS rates to the 1999 HEDIS rates, aggregate results excluding the GMC-South region should be used. The results including the GMC-South health plans should be used as a basis for future analysis (e.g., HEDIS 2001 results).

Geographic Managed Care (GMC)

Start of Operation	Medi-Cal Health Plan	Model Type	Counties Covered
04/94	Blue Cross of California	GMC - North	Sacramento
04/96	Health Net	GMC - North	Sacramento
04/94	Kaiser Foundation Health Plan	GMC - North	Sacramento
04/94	Maxicare	GMC - North	Sacramento
05/97	Western Health Advantage	GMC - North	Sacramento
08/98	Blue Cross of California	GMC - South	San Diego
08/98	Community Health Group	GMC - South	San Diego
08/98	Health Net*	GMC - South	San Diego
08/98	Kaiser Foundation Health Plan, Inc.	GMC - South	San Diego
08/98	Sharp Health Plan	GMC - South	San Diego
08/98	UCSD Health Plan*	GMC - South	San Diego
08/98	Universal Care	GMC - South	San Diego

***Note:** UCSD is not included in this report. UCSD was not contractually obligated to have a HEDIS Compliance Audit in 2000, though they are required to have the audit in 2001. Although UCSD was not subjected to a HEDIS Compliance Audit, they were contractually obligated to conduct another study. The results of UCSD study will be made available when the report is completed. Health Net had two contracts in 1999 and three in 2000. The additional contract was the start-up for the GMC-South region. Due to a misunderstanding, Health Net reported both GMC areas (Sacramento and San Diego) together as one GMC contract. They are listed in this report only in the GMC-North (Sacramento) region. The number of eligible cases from the San Diego region was very small and most of the measures would have had less than 30 cases, resulting in a NA audit measure designation. Therefore, the results of combining Health Net's GMC areas were minimal. For HEDIS 2001, Health Net will report the GMC areas separately.

HEALTH PLAN RESULTS

The results for HEDIS 2000 are presented graphically in Tables 3 through 21 (beginning on page 22). Beginning with Table 4, the tables are presented in pairs, with the first table in each set displaying the current HEDIS 2000 rates, and the following table displaying the percent change between 1999 and 2000, allowing for easy comparison of best performing and most improving health plans. The raw, unweighted 1999 and 2000 Medi-Cal rates are also presented in the graphs. These rates are calculated by adding the numerators for each health plan and dividing by the total denominators across the health plans. So as not to skew any of the results, health plans that reported using administrative data and that had a denominator larger than 432 cases were adjusted. Weighted rates for 2000 are presented in Table 2 (page 19) to produce a rate that more accurately reflects the total Medi-Cal population.

Wherever available, the NCQA 2000 National Medicaid Average has been displayed in the graphs to allow for meaningful comparisons of results by health plan. The NCQA 2000 National Averages for Medicaid HEDIS Measures were calculated using audited data voluntarily submitted to NCQA from Medicaid health plans across the country. Initiation of Prenatal Care did not have any available comparative averages.

A summary of the HEDIS 2000 rates for the Medi-Cal health plans is presented in Table 2, on page 19. All of the HEDIS 2000 rates have increased over 1999. This may be the result of a variety of factors. Some of the potential factors and interventions instituted by DHS and the health plans that have promoted change within the Medi-Cal system are as follows:

- Selection of the DHS Accountability Set has served to focus health plan efforts in specific areas of care.
- Collaborative action between health plans and the DHS has come about through the establishment of an ongoing Quality Improvement Work Group and an Encounter Data Work Group.
- Health plans have instituted various incentives for providers. Some incentives were implemented to encourage more submission of encounter data from providers, while others were implemented to encourage more provision of preventive care.
- Some health plans provide incentives for members who seek preventive care services. One example of these incentives includes provisions (e.g., baby formula or gift certificates) to expectant mothers after completing a scheduled number of prenatal care visits and a follow-up visit after delivery of their newborns.
- Various studies and projects have been initiated by DHS and the health plans. These include a standardized Consumer Assessment of Health Plans Survey (CAHPS® 2.0H), an Access-to-Care Study across all Medi-Cal health plans, Internal Quality Improvement Projects, a collaborative initiative project focusing on chlamydia screening, a pilot study addressing initial health assessments within 120 days of enrollment and a statewide Medi-Cal Immunization Improvement Project.
- Health plans' HEDIS rates are being submitted to a national Medicaid HEDIS database for benchmarking.

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- Health plans are seeking NCQA Accreditation for their Medicaid product line.
- There has been a maturation of Medi-Cal health plans with significantly more experience in data collection and commitment to quality improvement.
- Improved information systems and automated data are being used.

Table 2. Summary of HEDIS Rates for Medi-Cal Health Plans

DHS Accountability Set	Medi-Cal Rates		2000 Medi-Cal Weighted Rates	NCQA 2000 National Average
	1999	2000		
Childhood Immunizations Combined 4:3:1:2:3	50.0	53.8	52.3	51.2
Childhood Immunizations Combined 4:3:1:2:3:1	32.5	44.3	44.3	38.0
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	26.0	32.9	30.2	30.2
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life	51.7	56.7	50.8	49.0
Adolescent Well-Care Visits	21.2	29.9	26.7	28.0
Prenatal Care in the First Trimester	57.0	61.4	60.2	61.0*
Initiation of Prenatal Care	69.0	72.1	70.8	NA**
Check-ups After Delivery	46.2	46.5	46.7	48.0
Eye Exams for People with Diabetes	41.3	53.1	52.2	41.0

*The NCQA National Medicaid Average was not available for this measure. The 61.0 percent listed represents the NCQA National Medicaid 50th Percentile.
**There was no NCQA National Medicaid Average or NCQA National Medicaid 50th Percentile available for this measure.

Although all of the HEDIS 2000 rates improved over 1999, some health plans, individually, actually recorded HEDIS 2000 rates that were lower than in 1999. In some cases, this may have been due to the nature of random sampling. In other cases, the reasons were more significant—such as changing from the hybrid method to the administrative method to reduce costs. Some health plans implementing interventions may have experienced a temporary decline in their rates, but most likely they will show improvement in 2001 and will operate more efficiently. Reasons for any significant decreases in the rates for individual health plans were discussed when necessary to provide a better understanding of the dynamics of quality improvement.

Pediatric Preventive Care

Childhood Immunization Status

Description of Measure

A simple method for the prevention of serious illness in children is immunization. Childhood immunizations can help prevent serious diseases such as polio, hepatitis, tetanus and measles. Prevention of these and other diseases along with associated complications may prevent lost work and school days and save millions of dollars annually. According to the 2000 NCQA State of Managed Care Report, an "...estimated 1 million children in the U.S. do not receive the necessary vaccinations by age two." Both DHS and the health plans are interested in the immunization status of children and have committed to improve rates of immunization in the Medicaid population.

The Centers for Disease Control and Prevention (CDC) recommends immunizing children for ten preventable diseases. The *HEDIS 2000 Technical Specifications* recommends immunizing children for ten preventable diseases. Specific recommended immunizations discussed in this report are: Diphtheria, Tetanus, and Pertussis (DTP); Oral Polio Vaccine (OPV); Mumps, Measles, and Rubella (MMR); Haemophilus Influenza type B (HIB); Hepatitis B Vaccine (HBV); and the Varicella Zoster Virus (VZV). Derivatives of the primary vaccines—such as Inactivated Poliovirus Vaccine (IPV) and Diphtheria and Tetanus toxoids and Acellular Pertussis (DTaP)—were also acceptable and included in the results.

Since the health plans were required to follow the HEDIS 2000 criteria that assess the immunization status of children at 24 months of age, any antigens administered after 24 months of age were not included in the numerator. HEDIS also restricts the time frame for the doses of MMR, HIB, HBV and VZV. Consequently, children who receive their last dose of MMR, HIB or VZV vaccines before 12 months of age were not included in the numerator. The time restriction for HBV was more liberal, requiring at least one dose administered after six months of age.

Definitions of the current *HEDIS 2000 Technical Specifications* are listed below, followed by a description of the numerator, or those children that received the recommended immunization(s).

Denominator:

Children who reached 24 months of age in the study period and were continuously enrolled with the health plan between 12 and 24 months of age with no more than one break in enrollment of up to 30 days.

Numerators:

- **DTP Immunization Rate at Two Years of Age**
  Numerator: At least four DTP doses by the child's second birthday.

- **OPV Immunization Rate at Two Years of Age**
  Numerator: At least three OPV or IPV doses by the child's second birthday.

- **MMR Immunization Rate at Two Years of Age**
  Numerator: One MMR dose between the child's first and second birthdays.

- **HIB Immunization Rate at Two Years of Age**
  Numerator: Two Haemophilus influenza type B (HIB) with different dates of service by the child=s second birthday, with at least one of them falling on or between the child=s first and second birthdays.

- **HBV Immunization Rate at Two Years of Age (Three Doses)**
  Numerator: At least three HBV doses by the child's second birthday, with at least one of them falling on or between the child=s sixth month and second birthday.

- **VZV Immunization Rate at Two Years of Age**
  Numerator: At least one chicken pox vaccine (VZV) with a date of service falling on or between the child's first and second birthdays.

- **HEDIS 2000 Combination 1 (4:3:1:2:3)**
  Numerator: The number of children who received the appropriate doses of DTP, OPV, MMR, HIB, and three doses of HBV by their second birthday.

- **HEDIS 2000 Combination 2 (4:3:1:2:3:1)**
  Numerator: The number of children who received the appropriate doses of DTP, OPV, MMR, HIB, HBV and VZV by their second birthday.

Results

The HEDIS 2000 rates by health plan for individual antigens are presented in Table 3 (page 22). Twenty-six health plans were able to report a rate for this measure, while two health plans—Blue Cross of California (GMC-South) and Blue Cross of California (Tulare)—had less than 30 cases for their denominators. Following HEDIS methodology, those two health plans are not presented.

This report uses the *HEDIS 2000 Technical Specifications* for the combined immunization rates (i.e., Combinations 1 and 2). The *HEDIS Technical Specifications* for immunizations can be changed by NCQA as a result of different immunization schedules, new immunizations or removal of outdated immunizations. In 1999, Combination 1 required only two doses of HBV

by the second birthday (series 4:3:1:2:2), while Combination 2 required three doses of HBV (series 4:3:1:2:3). The current HEDIS 2000 Combination 1 is the same as the 1999 Combination 2, and the current HEDIS 2000 Combination 2 (4:3:1:2:3:1) is the same as the 1999 Combination 3.

Table 3. HEDIS 2000 Childhood Immunization Status for Individual Antigens

Health Plan	N	DTP %	OPV %	MMR %	HIB %	HBV %	VZV %
Alameda Alliance for Health	432	67.4	79.2	82.4	73.8	75.0	61.8
Blue Cross of California (CP)	431	78.2	88.2	89.6	83.3	83.5	71.0
Blue Cross of California (GMC-North)	431	75.2	82.6	85.9	80.5	81.4	69.6
Blue Cross of California (LI)	432	72.2	86.1	87.5	75.0	81.7	31.7
CalOPTIMA	430	68.6	77.7	83.3	71.9	73.5	73.3
Central Coast Alliance for Health	402	67.4	78.6	88.8	82.8	73.9	64.7
Community Health Group	411	61.6	62.8	78.8	68.6	56.7	70.8
Contra Costa Health Plan	411	72.0	84.9	84.7	78.1	83.2	65.9
Health Net (CP)	431	64.0	63.3	71.5	67.5	67.8	65.9
Health Net (GMC-North)	431	77.3	80.1	78.2	78.4	73.3	68.5
Health Plan of San Joaquin	432	63.9	78.0	85.7	61.1	74.5	59.0
Health Plan of San Mateo	431	73.8	78.4	83.1	79.8	76.1	67.8
Inland Empire Health Plan	432	63.2	76.2	81.0	84.0	84.5	58.3
Kaiser (GMC-North)	432	73.9	79.7	86.9	82.4	70.0	78.2
Kaiser (GMC-South)	147	75.5	85.0	93.9	87.8	80.3	87.8
Kern Family Health Care	432	66.0	79.6	85.9	75.2	77.3	71.5
L.A. Care Health Plan	414	66.4	77.1	77.8	66.7	64.0	62.3
Maxicare Health Plan	333	56.5	68.8	68.8	59.8	65.8	52.6
Molina Medical Centers	411	49.4	58.6	69.8	59.6	56.0	55.7
Partnership Health Plan of California	430	68.4	74.2	81.6	74.7	62.1	70.7
San Francisco Health Plan	430	75.1	80.9	78.1	75.4	77.0	64.9
Santa Barbara Regional Health Authority	430	85.6	91.4	93.7	88.6	89.3	78.4
Santa Clara Family Health Plan	432	71.1	77.1	81.5	74.1	66.7	67.4
Sharp Health Plan	421	42.5	49.4	52.5	48.5	43.7	47.5
Universal Care	94	52.1	63.8	71.3	72.3	62.8	55.3
Western Health Advantage	367	59.7	78.5	79.8	58.3	74.7	61.9
2000 Medi-Cal Average		**67.7%**	**76.4%**	**81.0%**	**73.3%**	**72.3%**	**64.5%**
NCQA 2000 National Medicaid Average		**65.5%**	**74.0%**	**78.5%**	**71.1%**	**69.1%**	**55.3%**

DTP

For DTP, 17 health plans exceeded the NCQA 2000 National Medicaid Average (65.5 percent). Six health plans (i.e., Blue Cross of California-CP, Blue Cross of California GMC-North, Health Net GMC-North, Kaiser GMC-South, San Francisco Health Plan and Santa Barbara Regional Health Authority) reached an immunization rate above 75 percent. The range for DTP extended from 42.5 percent for Sharp Health Plan to 85.6 percent for the Santa Barbara Regional Health Authority. The 2000 Medi-Cal rate for DTP was 67.7 percent.

OPV

Twenty health plans were at or above the NCQA 2000 National Medicaid Average (74.0 percent) for OPV. Eight health plans reported rates above 80 percent, while Santa Barbara Regional Health Authority boasted an OPV immunization rate above 90 percent. The OPV rate ranged from a low of 49.4 percent to a high of 91.4 percent, with a 76.4 percent overall Medi-Cal rate.

MMR

The NCQA 2000 National Medicaid Average of 78.5 percent for MMR was exceeded by 18 health plans. Two health plans, Kaiser GMC-South and Santa Barbara Regional Health Authority, had rates above 90 percent (93.9 percent and 93.7 percent, respectively). The MMR rate ranged from a low of 52.5 percent to a high of 93.9 percent. The 2000 Medi-Cal rate was nearly three percentage points higher than the NCQA 2000 National Medicaid Average of 78.5 percent.

HIB

For HIB, 18 health plans exceeded the NCQA 2000 National Medicaid Average (71.1 percent) and seven health plans had rates above the 80 percent mark. The 2000 Medi-Cal rate was 73.3 percent. Individually, HIB rates ranged from a low of 48.5 percent to a high of 88.6 percent. It is unclear why HIB, with a two-dose requirement, has a lower rate than OPV. One possibility is the added HEDIS restriction that at least one of the HIB shots must be given between 12 and 24 months of age, while the three OPV doses may be given anytime prior to 24 months of age.

HBV

HBV also has an added HEDIS restriction requiring at least one of the three doses be completed after six months of age and prior to the child's second birthday. Regardless, 17 health plans still reported rates at or above the NCQA 2000 National Medicaid Average (69.1 percent). Seven health plans exceeded 80 percent, while the 2000 Medi-Cal average was 72.3 percent. The HBV rate ranged from a low of 43.7 percent to a high of 89.3 percent.

VZV

The VZV immunization is relatively new and has not seen widespread use at this time. This immunization is often refused by parents who are unaware of the potential complications that may arise from chicken pox—such as scarring and, in rare cases, meningitis, and even death. The NCQA 2000 National Medicaid Average of 55.3 percent reflects this low usage and indicates a need for public education. Although 23 health plans were at or above the NCQA 2000 National Medicaid Average for VZV, this antigen had the lowest overall Medi-Cal rate (64.5 percent) and the greatest impact on the combined (4:3:1:2:3:1 series) rate. The rates by health plan ranged from a low of 31.7 percent to a high of 87.8 percent, with eight health plans above 70 percent.

Combined Childhood Immunization Rates

The combined childhood immunization status rates can never be higher than the lowest single antigen rate. As an example, consider the immunization status of the single antigens and assume all are above 75 percent except DTP, which has a 67.7 percent immunization rate. The combined rate includes DTP. Therefore, the rate can be only 67.7 percent at best, assuming

every child that was immunized for DTP received their other immunizations as well. The importance of analyzing single antigen rates can be readily seen, as these rates provide health plans with a specific target for future interventions.

Tables 4 through 7, on pages 25 through 28, display the combined childhood immunization rates by health plan. Eighteen health plans exceeded the 1999 Medi-Cal average of 50.0 percent for the combined 4:3:1:2:3 series (Table 4, page 25). The 2000 Medi-Cal weighted average was 52.3 percent, or about 1.5 percentage points lower than the unadjusted Medi-Cal rate. Overall, the combined rate improved 7.6 percent over 1999 (Table 5, page 26). The 2000 Medi-Cal Average, excluding the GMC-South, was 54.5 percent, or 9.0 percent higher than the 1999 Medi-Cal rate. Ten health plans reported increases of 10 percent or higher and four health plans had increases greater than 20 percent.

Four health plans (i.e., Inland Empire Health Plan, Health Plan of San Joaquin, Partnership Health Plan of California and Maxicare) reported a significant decline in the combined 4:3:1:2:3 rate (Table 5, page 26), while two other health plans had a small decline. Inland Empire Health Plan was affected most by their low DTP rate, while the Health Plan of San Joaquin and Maxicare were negatively affected by both DTP and HIB. Partnership Health Plan of California had rates above the NCQA 2000 National Medicaid Means for each antigen, except HBV. (See Table 3 on page 22.)

The combined 4:3:1:2:3:1 rate of 44.3 percent (Table 6, page 27) is 9.5 percentage points lower than the rate for the combined 4:3:1:2:3 series, which is 53.8 percent. Again, this is due in large part to the VZV immunization. This combined rate, however, saw a 36.3 percent increase over 1999 (Table 7, page 28), with 15 health plans achieving an increase of 20 percent or higher. Five health plans (i.e., Central Coast Alliance for Health, Health Plan of San Mateo, Alameda Alliance for Health, Health Net GMC-North, and Contra Coast Health Plan) increased their combined 4:3:1:2:3:1 rate by more than 60 percent, while only Maxicare noted a decline of nearly 25 percent for this measure. (See Table 3 on page 22.)

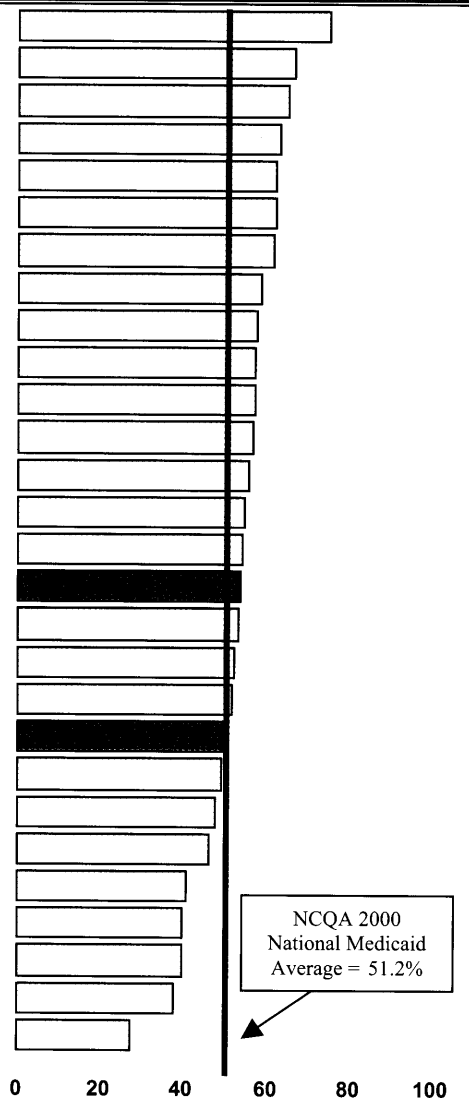
Data Collection Methods

Among the 26 health plans reporting on the childhood immunization status measure, only Kaiser GMC-South chose the administrative method. Analysis of the total number of children found completely immunized for the combined 4:3:1:2:3 series indicated only 15 percent were determined solely through administrative data. Conversely, approximately 85 percent of the cases required medical record abstraction in order to determine that the children were completely immunized.

Table 4. Childhood Immunizations Combined Rate #1 (Series 4:3:1:2:3)

Description: The percentage of Medicaid enrolled members who turned two years old during the 12-month study period, who were continuously enrolled in the Plan for 12 months immediately preceding their second birthday (with no more than a one-month gap in coverage), and who received the following immunizations by their second birthday: 4 doses of DTP, 3 doses of OPV, 1 dose of MMR, 2 doses of HIB and 3 doses of HBV.

Health Plan	Percent	N	%
Santa Barbara Regional Health Authority		430	75.1
Kaiser (GMC-South)		147	66.7
Blue Cross of California (CP)		431	65.4
Health Net (GMC-North)		431	63.3
Contra Costa Health Plan		411	62.3
Blue Cross of California (GMC-North)		431	62.2
Health Plan of San Mateo		431	61.7
Kaiser (GMC-North)		432	58.9
CalOPTIMA		430	57.9
Blue Cross of California (LI)		432	57.4
Alameda Alliance for Health		432	57.2
Central Coast Alliance for Health		402	56.5
San Francisco Health Plan		430	55.6
Kern Family Health Care		432	54.9
Community Health Group		411	54.0
2000 Medi-Cal Average		**10,310**	**53.8**
Health Net (CP)		431	53.6
Santa Clara Family Health Plan		432	52.1
Inland Empire Health Plan		432	51.9
1999 Medi-Cal Average		**9,321**	**50.0**
Partnership Health Plan of California		430	49.5
Universal Care		94	47.9
L.A. Care Health Plan		414	46.4
Health Plan of San Joaquin		432	41.0
Western Health Advantage		367	39.8
Molina Medical Centers		411	39.7
Maxicare Health Plan		333	37.8
Sharp Health Plan		421	27.6



2000 Medi-Cal Weighted Average **52.3%**
2000 Medi-Cal Average Excluding GMC-South **54.5%**

Table 5. Comparison Between HEDIS 1999 and 2000 Rates – Childhood Immunizations Combined Rate #1 (Series 4:3:1:2:3)

Health Plan	1999	2000	% Change
Health Net (GMC-North)	38.5	63.3	64.4
Central Coast Alliance for Health	38.7	56.5	46.0
Alameda Alliance for Health	45.7	57.2	25.2
Health Net (CP)	44.2	53.6	21.3
Health Plan of San Mateo	51.9	61.7	18.9
Blue Cross of California (CP)	56.4	65.4	16.0
Santa Clara Family Health Plan	46.7	52.1	11.6
Western Health Advantage	35.8	39.8	11.2
CalOPTIMA	52.6	57.9	10.1
L.A. Care Health Plan	42.2	46.4	10.0
San Francisco Health Plan	50.8	55.6	9.4
Santa Barbara Regional Health Authority	68.8	75.1	9.2
Medi-Cal Average	**50.0**	**53.8**	**7.6**
Blue Cross of California (GMC-North)	58.5	62.2	6.3
Contra Costa Health Plan	58.9	62.3	5.8
Blue Cross of California (LI)	55.6	57.4	3.2
Molina Medical Centers	39.9	39.7	-0.5
Kern Family Health Care	55.9	54.9	-1.8
Inland Empire Health Plan	55.7	51.9	-6.8
Health Plan of San Joaquin	45.8	41.0	-10.5
Partnership Health Plan of California	59.8	49.5	-17.2
Maxicare Health Plan	53.6	37.8	-29.5
Kaiser (GMC-South)	NA	66.7	NA
Kaiser (GMC-North)	NR	58.9	NA
Community Health Group	NA	54.0	NA
Universal Care	NA	47.9	NA
Sharp Health Plan	NA	27.6	NA

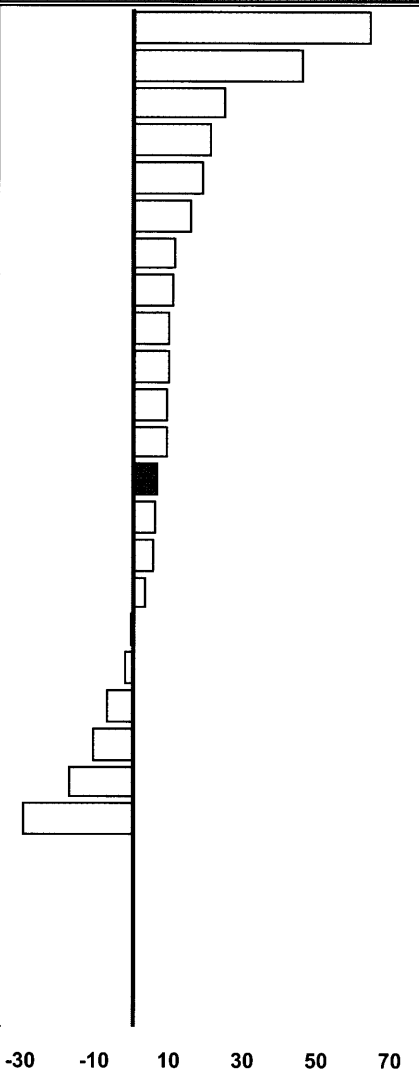
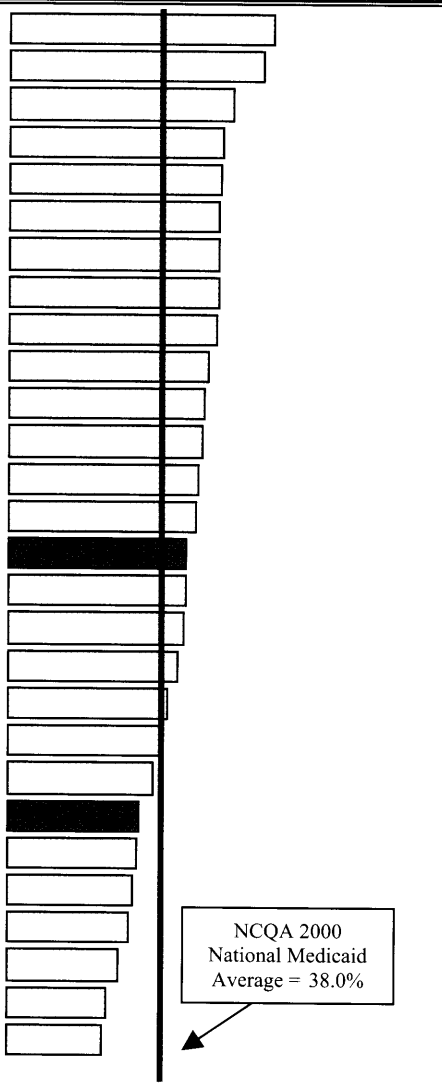


Table 6. Childhood Immunizations Combined Rate #2 (Series 4:3:1:2:3:1)

Description: The percentage of Medicaid enrolled members who turned two years old during the 12-month study period, who were continuously enrolled in the Plan for 12 months immediately preceding their second birthday (with no more than a one-month gap in coverage), and who received the following immunizations by their second birthday: 4 doses of DTP, 3 doses of OPV, 1 dose of MMR, 2 doses of HIB, 3 doses of HBV, and 1 dose of VZV.

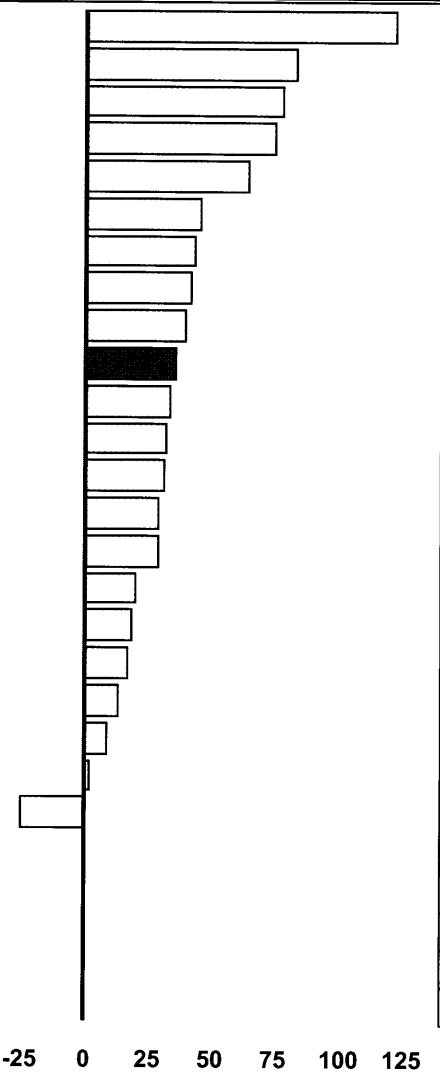
Health Plan	Percent	N	%
Kaiser (GMC-South)		147	66.0
Santa Barbara Regional Health Authority		430	63.3
Health Net (GMC-North)		431	55.9
Health Plan of San Mateo		431	53.4
Blue Cross of California (CP)		431	52.7
Kaiser (GMC-North)		432	52.4
CalOPTIMA		430	52.3
Blue Cross of California (GMC-North)		431	52.2
Contra Costa Health Plan		411	51.8
Community Health Group		411	49.6
Health Net (CP)		431	48.5
Kern Family Health Care		432	48.4
San Francisco Health Plan		430	47.2
Alameda Alliance for Health		432	46.5
2000 Medi-Cal Average		**10,310**	**44.3**
Partnership Health Plan of California		430	44.2
Central Coast Alliance for Health		402	43.8
Santa Clara Family Health Plan		432	42.4
Inland Empire Health Plan		432	39.8
L.A. Care Health Plan		414	38.7
Universal Care		94	36.2
1999 Medi-Cal Average		**9,321**	**32.5**
Western Health Advantage		367	32.4
Molina Medical Centers		411	31.1
Health Plan of San Joaquin		432	29.9
Maxicare Health Plan		333	27.6
Sharp Health Plan		421	24.7
Blue Cross of California (LI)		432	23.8



2000 Medi-Cal Weighted Average **44.3%**
2000 Medi-Cal Average Excluding GMC-South **44.7%**

Table 7. Comparison Between HEDIS 1999 and 2000 Rates – Childhood Immunizations Combined Rate #2 (Series 4:3:1:2:3:1)

Health Plan	1999	2000	% Change
Central Coast Alliance for Health	19.7	43.8	122.3
Health Plan of San Mateo	29.2	53.4	82.9
Alameda Alliance for Health	26.2	46.5	77.5
Health Net (GMC-North)	32.0	55.9	74.7
Contra Costa Health Plan	31.6	51.8	63.9
Santa Clara Family Health Plan	29.2	42.4	45.2
San Francisco Health Plan	32.9	47.2	43.5
Molina Medical Centers	21.9	31.1	42.0
Blue Cross of California (CP)	37.8	52.7	39.4
Medi-Cal Average	**32.5**	**44.3**	**36.3**
Blue Cross of California (GMC-North)	39.2	52.2	33.2
Health Net (CP)	36.7	48.5	32.2
CalOPTIMA	39.8	52.3	31.4
Western Health Advantage	25.1	32.4	29.1
Santa Barbara Regional Health Authority	49.1	63.3	28.9
Blue Cross of California (LI)	19.8	23.8	20.2
Kern Family Health Care	40.8	48.4	18.6
L.A. Care Health Plan	33.0	38.7	17.3
Health Plan of San Joaquin	26.4	29.9	13.3
Partnership Health Plan of California	40.7	44.2	8.6
Inland Empire Health Plan	38.9	39.8	2.3
Maxicare Health Plan	36.7	27.6	-24.8
Kaiser (GMC-South)	NA	66.0	NA
Kaiser (GMC-North)	NR	52.4	NA
Community Health Group	NA	49.6	NA
Universal Care	NA	36.2	NA
Sharp Health Plan	NA	24.7	NA



Well-Child Visits in the First 15 Months of Life (Six or More Visits)

Description of Measure

This measure determines the percentage of continuously enrolled members who turned 15 months old during 1999 and had at least six well-child visits with a primary care practitioner prior to the date they turned 15 months old. Continuous enrollment was defined as being enrolled between 31 days of life through 15 months of age, with a one-month gap of enrollment allowed. Twenty-four health plans were able to produce this measure. Four health plans (i.e., Kaiser GMC-South, Blue Cross of California–Tulare, Blue Cross of California GMC-South, and Universal Care) had less than 30 cases for their denominator and, following HEDIS methodology, are not presented.

Results

The results for this measure are presented in Tables 8 and 9, on pages 30-31. The rates for this measure ranged from a low of 0.0 percent to high of 67.4 percent (Table 8). The NCQA 2000 National Medicaid Average of 30.2 percent was exceeded by 13 health plans. The 2000 Medi-Cal Average was 32.9 percent, while the weighted average was the same as the national average (30.2 percent). The 2000 Medi-Cal Average—excluding the GMC-South—was 34.8 percent, or 33.8 percent higher than the 1999 Medi-Cal rate.

As shown in Table 9 (page 31), this performance measure had a 26.5 percent increase over 1999. Every health plan that had a positive change increased their rate by more than 10 percent. Five health plans increased their rates by more than 100 percent, while six others had increases ranging from 35.4 percent to 67.9 percent. For the two highest health plans—Blue Cross of California-CP and Blue Cross of California GMC-North—the increase was most likely a direct result of using the hybrid method to report on this measure for 2000.

Due to an internal electronic problem, Sharp Health Plan received a NR designation for this measure. The cause of their NR designation has been corrected for the upcoming HEDIS 2001 Compliance Audit. Table 9 also demonstrates that only two health plans showed a decrease for 2000 for this performance measure: Santa Clara Family Health Plan (-29.1 percent) and Partnership Health Plan of California (-58.5 percent). Partnership Health Plan of California chose to report this rate administratively, and their rates plummeted to somewhat mirror the 1999 rates from Blue Cross of California-CP and Blue Cross of California GMC-North, two plans that had also chosen to use solely administrative data for reporting in 1999. Although Table 9 is useful to compare the change within a health plan over time, some caution should be used. Molina Medical Centers, for example, had only an 8.2 percent rate for this 2000 measure and finished fourth from the bottom (Table 8, page 30). However, this change represented an increase of nearly 450 percent in their 1999 rate, putting them third from the top in terms of percentage of improvement over last year. (Table 9, page 31).

Data Collection Methods

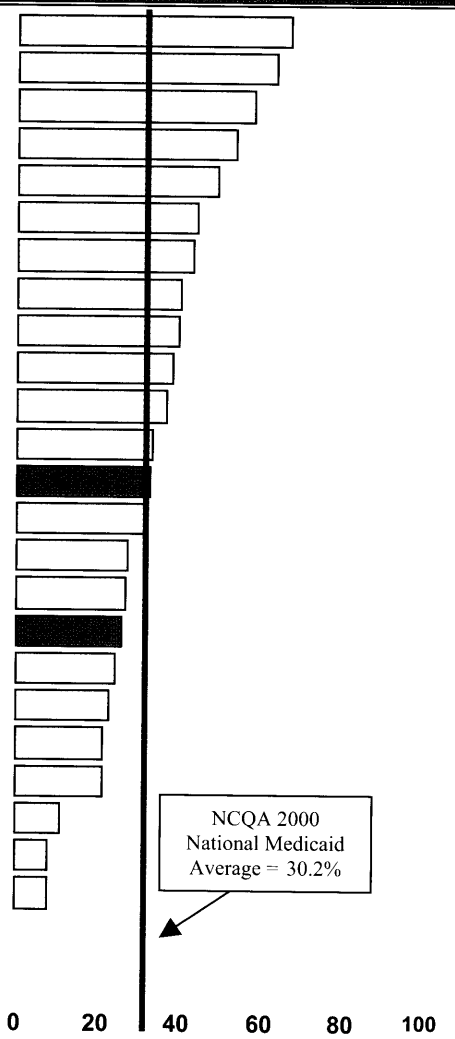
Approximately 25 percent of the children found to have six or more well-child visits within the first 15 months of life were determined using administrative data only, while for the remaining 75 percent medical record review was required in order to account for all six well-child visits. Only three health plans reported this rate using the administrative method. This indicates that a significant amount of encounter data is underreported. Health plans that can improve encounter

data submission from their providers should require considerably less medical record pursuit. This will provide a cost benefit to the health plan and allow potential tracking of well-child visits throughout the year to increase rates and improve care provided to the Medi-Cal beneficiaries.

Table 8. Well-Child Visits in the First 15 Months of Life (Six or More Visits)

Description: The percentage of Medicaid enrolled members who turned 15 months old during the 12-month study period, who were continuously enrolled in the plan from 31 days of age (with no more than a one-month gap in coverage), and who received 0-2, 3-5, or six or more well-child visits with a primary care practitioner during their first 15 months of life.

Health Plan	N	%
San Francisco Health Plan	92	67.4
Kaiser (GMC-North)	133	63.9
Santa Barbara Regional Health Authority	430	58.1
Blue Cross of California (GMC-North)	265	53.6
Central Coast Alliance for Health	390	49.5
Health Plan of San Mateo	423	44.2
Health Net (GMC-North)	332	43.4
Blue Cross of California (CP)	432	40.5
Western Health Advantage	55	40.0
Kern Family Health Care	190	38.4
CalOPTIMA	432	36.8
Health Plan of San Joaquin	248	33.5
2000 Medi-Cal Average	**6,189**	**32.9**
Alameda Alliance for Health	193	31.1
Health Net (CP)	431	27.2
Santa Clara Family Health Plan	170	27.1
1999 Medi-Cal Average	**5,562**	**26.0**
Inland Empire Health Plan	144	24.3
Blue Cross of California (LI)	52	23.1
Partnership Health Plan of California	432	21.6
Contra Costa Health Plan	103	21.4
Maxicare Health Plan	83	10.8
Molina Medical Centers	404	8.2
L.A. Care Health Plan	415	8.2
Community Health Group	340	0.0
Sharp Health Plan	NR	NR



2000 Medi-Cal Weighted Average **30.2%**
2000 Medi-Cal Average Excluding GMC-South **34.8%**

Table 9. Comparison Between the HEDIS 1999 and 2000 Rates Well-Child Visits in the First 15 Months of Life (Six or More Visits)

Health Plan	Percent Change	1999	2000	% Change
Blue Cross of California (GMC-North)		6.5	53.6	724.6
Blue Cross of California (CP)		6.7	40.5	504.5
Molina Medical Centers		1.5	8.2	446.7
Western Health Advantage		12.9	40.0	210.1
Central Coast Alliance for Health		19.9	49.5	148.7
Health Net (CP)		16.2	27.2	67.9
CalOPTIMA		23.8	36.8	54.6
Inland Empire Health Plan		16.3	24.3	49.1
Health Net (GMC-North)		30.0	43.4	44.7
San Francisco Health Plan		48.7	67.4	38.4
Santa Barbara Regional Health Authority		42.9	58.1	35.4
Medi-Cal Average		**26.0**	**32.9**	**26.5**
Kern Family Health Care		30.6	38.4	25.5
Alameda Alliance for Health		26.1	31.1	19.2
Health Plan of San Mateo		40.0	44.2	10.5
Santa Clara Family Health Plan		38.2	27.1	-29.1
Partnership Health Plan of California		52.0	21.6	-58.5
Kaiser (GMC-North)		**NR**	63.9	**NA**
Health Plan of San Joaquin		**NR**	33.5	**NA**
Blue Cross of California (LI)		**NA**	23.1	**NA**
Contra Costa Health Plan		**NA**	21.4	**NA**
Maxicare Health Plan		**NA**	10.8	**NA**
L.A. Care Health Plan		**NR**	8.2	**NA**
Community Health Group		**NA**	0.0	**NA**
Sharp Health Plan		**NA**	**NR**	**NR**

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Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

Description of Measure

This measure determines the percentage of continuously enrolled members who were between three and six years of age as of December 31, 1999, and who had at least one well-child visit with a primary care practitioner during 1999. Continuous enrollment was defined as being enrolled January 1999 through December 1999, with a one-month gap of enrollment allowed.

Results

Results for Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life are presented in Tables 10 and 11, on pages 33-34. The DHS Accountability Set for the five COHS health plans (CalOPTIMA, Central Coast Alliance for Health, Health Plan of San Mateo, Partnership Health Plan of California and Santa Barbara Regional Health Authority) did not include this measure. Blue Cross of California (Tulare) had less than 30 denominator cases and is not presented following HEDIS methodology. The remaining 22 health plans had reportable rates for this measure.

The results in Table 10 show the rates for health plans ranged from a low of 40.5 percent to a high of 78.9 percent, with an overall 2000 Medi-Cal average of 56.7 percent and a weighted average of 50.8 percent, or six percentage points lower. The NCQA 2000 National Medicaid Average (49.0 percent) was exceeded by 18 of the 22 health plans (Table 10, page 33). The top two performing health plans for this measure, Kaiser GMC-South and Contra Costa Health Plan, had rates above 70 percent and reported this measure using the administrative method. Five other health plans (i.e., Blue Cross of California-CP, Kern Family Health Care, Health Plan of San Joaquin, Health Net–GMC, and Santa Clara Family Health Plan) had rates at or above 60 percent for 2000.

Overall, the Medi-Cal rate increased nearly 10 percent over 1999 (Table 11, page 34). The 2000 Medi-Cal Average—excluding the GMC-South—was 56.6 percent, or 9.5 percent higher than the 1999 Medi-Cal rate. Western Health Alliance and L.A. Care Health Plan increased 62.7 percent and 41.6 percent, respectively. Four other health plans showed improvements of between 10 percent and 20 percent. Three health plans had a decline of 10 percent or more, though all three exceeded the NCQA 2000 National Medicaid Average, and two of the three were above the 2000 Medi-Cal Average.

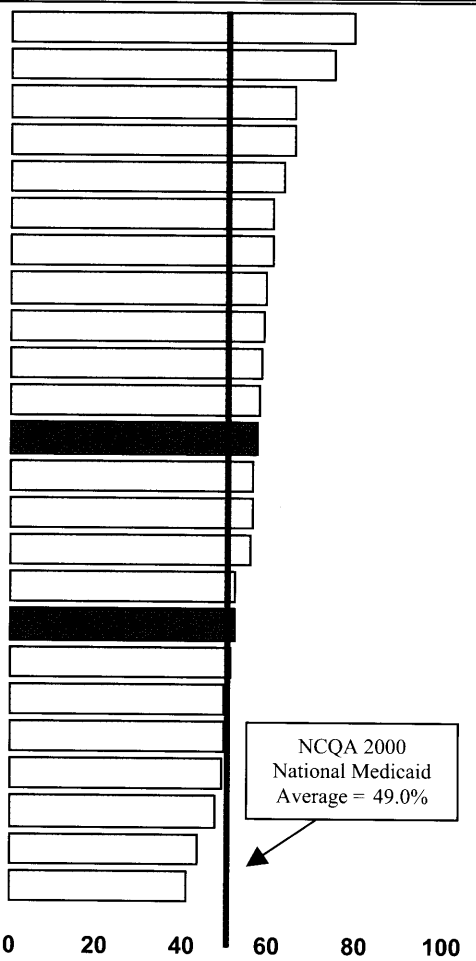
Data Collection Methods

Only four health plans (Kaiser GMC-North, Kaiser GMC-South, Contra Costa Health Plan and Western Health Advantage) chose to use the administrative method. Nearly 80 percent of all the well-child visits (for all of the health plans) were found in the administrative data. Since only one well-child visit is required, this measure is ideal for utilizing the administrative data. A practical approach health plans could employ would be to first calculate their rate on the entire eligible population using the administrative method; and, then, revert to the hybrid method if the rate appears low. The reduced burden and associated costs from medical record pursuit could then be utilized more efficiently in tracking well-child visits for members.

Table 10. Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

Description: The percentage of Medicaid enrolled members who were three, four, five or six years old during the 12-month study period who were continuously enrolled during that period (with no more than a one month gap in coverage) and who received one or more well-child visit(s) with a primary care practitioner during the study year.

Health Plan	Percent	N	%
Kaiser (GMC-South)		432	78.9
Contra Costa Health Plan		432	74.3
Blue Cross of California (CP)		432	65.5
Kern Family Health Care		412	65.3
Health Plan of San Joaquin		432	62.7
Health Net (GMC-North)		337	60.2
Santa Clara Family Health Plan		432	60.2
Community Health Group		411	58.6
Alameda Alliance for Health		432	58.3
Molina Medical Centers		411	57.7
San Francisco Health Plan		404	57.4
2000 Medi-Cal Average		**9,337**	**56.7**
Blue Cross of California (GMC-North)		431	56.6
Western Health Advantage		432	55.8
Sharp Health Plan		494	55.1
Inland Empire Health Plan		433	52.0
1999 Medi-Cal Average		**7,503**	**51.7**
Maxicare Health Plan		431	51.0
Health Net (CP)		427	49.2
Blue Cross of California (GMC-South)		432	49.1
Kaiser (GMC-North)		432	48.5
Blue Cross of California (LI)		432	47.2
Universal Care		411	43.1
L.A. Care Health Plan		415	40.5



2000 Medi-Cal Weighted Average **50.8%**

2000 Medi-Cal Average Excluding GMC-South **56.6%**

Table 11. Comparison Between the HEDIS 1999 and 2000 Rates - Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

Health Plan	Percent Change	1999	2000	% Change
Western Health Advantage		34.3	55.8	62.7
L.A. Care Health Plan		28.6	40.5	41.6
Health Plan of San Joaquin		52.4	62.7	19.7
Alameda Alliance for Health		48.8	58.3	19.5
Molina Medical Centers		48.4	57.7	19.2
Inland Empire Health Plan		45.5	52.0	14.3
Medi-Cal Average		**51.7**	**56.7**	**9.7**
Blue Cross of California (CP)		59.8	65.5	9.5
Maxicare Health Plan		46.7	51.0	9.2
Santa Clara Family Health Plan		55.5	60.2	8.5
Kern Family Health Care		61.0	65.3	7.0
Blue Cross of California (GMC-North)		55.7	56.6	1.6
Contra Costa Health Plan		74.0	74.3	0.4
Blue Cross of California (LI)		47.7	47.2	-1.0
San Francisco Health Plan		63.8	57.4	-10.0
Health Net (CP)		55.3	49.2	-11.0
Health Net (GMC-North)		74.0	60.2	-18.6
Kaiser (GMC-South)		NA	78.9	NA
Community Health Group		NA	58.6	NA
Sharp Health Plan		NA	55.1	NA
Blue Cross of California (GMC-South)		NA	49.1	NA
Kaiser (GMC-North)		NR	48.5	NA
Universal Care		NA	43.1	NA

-20 0 20 40 60 80

Adolescent Well-Care Visits

Description of Measure

This measure determines the percentage of continuously enrolled members who were between 12 and 21 years of age as of December 31, 1999, and who had at least one comprehensive adolescent well-care visit with a primary care practitioner or an OB/GYN during 1999. Continuous enrollment was defined as being enrolled January 1999 through December 1999, with a one-month gap of enrollment allowed.

Results

Almost all of the health plans (27 out of 28) were able to produce this measure. Blue Cross of California (Tulare) had less than 30 cases for their denominator and is not presented, following HEDIS methodology.

For 2000, three health plans—Kaiser GMC-South (50.2 percent), Health Net GMC-North (40.4 percent) and the Health Plan of San Joaquin (40.3 percent)—achieved rates above 40 percent (Table 12, page 36). These rates were significantly higher than the NCQA 2000 National Average (28.0 percent) and the 29.9 percent 2000 Medi-Cal average. The Medi-Cal weighted average of 26.7 percent was slightly below the NCQA 2000 National Medicaid Average, while the 2000 Medi-Cal Average—excluding the GMC-South—was 30.2 percent, or 42.5 percent higher than the Medi-Cal rate for 1999. Individually, 16 health plans were above the NCQA 2000 National Average, and the rates for health plans ranged from a low of 17.4 percent to a high of 50.2 percent. Four health plans remained below the 1999 Medi-Cal Average.

Overall, the Medi-Cal rate increased 41.0 percent over 1999 (Table 13, page 37). Four health plans (Health Plan of San Joaquin, Western Health Advantage, L.A. Care Health Plan and Maxicare) more than doubled their rates for this measure. Only two health plans reported a decline for this measure: Santa Barbara Regional Health Authority (-8.3 percent) and Partnership Health Plan of California (-8.7 percent). These declines were not statistically significant from their HEDIS 1999 results of 28.8 percent and 29.9 percent, respectively.

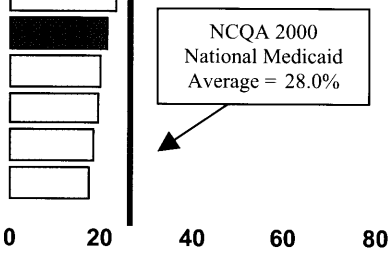
Data Collection Methods

Seven health plans chose to use the administrative method for this measure. Clearly, this was a strategic choice, since this measure typically has low rates and medical record abstraction has not proven to greatly benefit the rates for this performance measure. As supporting evidence, more than 75 percent of the members who received a well-care visit were identified using the administrative data. Health plans should evaluate the cost/benefit ratio of medical record pursuit for this measure and effectively direct resources in areas that can improve results.

Table 12. Adolescent Well-Care Visits

Description: The percentage of Medicaid enrolled members between the age of 12 and 21 years, who were continuously enrolled in the plan for the 12-month study period, (with no more than a one-month gap in coverage) and who received one or more well-care visit(s) with a primary care practitioner during the study period.

Health Plan	Percent	N	%
Kaiser (GMC-South)		432	50.2
Health Net (GMC-North)		411	40.4
Health Plan of San Joaquin		432	40.3
Inland Empire Health Plan		432	35.9
CalOPTIMA		432	35.2
Western Health Advantage		411	34.8
Alameda Alliance for Health		432	34.5
Contra Costa Health Plan		432	34.2
Central Coast Alliance for Health		411	33.8
Kern Family Health Care		432	32.4
Santa Clara Family Health Plan		432	31.5
Molina Medical Centers		411	31.4
San Francisco Health Plan		431	30.4
Maxicare Health Plan		432	29.9
2000 Medi-Cal Average		**11,604**	**29.9**
Community Health Group		411	29.4
Health Net (CP)		432	28.7
Health Plan of San Mateo		454	27.3
Partnership Health Plan of California		432	27.3
Blue Cross of California (GMC-North)		432	26.9
Santa Barbara Regional Health Authority		432	26.4
Sharp Health Plan		494	24.9
Kaiser (GMC-North)		432	24.3
Blue Cross of California (CP)		432	23.5
1999 Medi-Cal Average		**9,713**	**21.2**
Universal Care		411	19.7
Blue Cross of California (GMC-South)		432	19.3
Blue Cross of California (LI)		432	18.3
L.A. Care Health Plan		415	17.4



0 20 40 60 80 100

2000 Medi-Cal Weighted Average **26.7%**

2000 Medi-Cal Average Excluding GMC-South **30.2%**

Table 13. Comparison Between the HEDIS 1999 and 2000 Rates – Adolescent Well-Care Visits

Health Plan	1999	2000	% Change
Health Plan of San Joaquin	12.9	40.3	212.4
Western Health Advantage	12.7	34.8	174.0
L.A. Care Health Plan	8.2	17.4	112.2
Maxicare Health Plan	14.4	29.9	107.6
Central Coast Alliance for Health	19.0	33.8	77.9
Health Net (CP)	16.9	28.7	69.8
Kern Family Health Care	19.2	32.4	68.8
Contra Costa Health Plan	21.5	34.2	59.1
Santa Clara Family Health Plan	20.0	31.5	57.5
Molina Medical Centers	20.2	31.4	55.4
Inland Empire Health Plan	23.1	35.9	55.4
CalOPTIMA	22.7	35.2	55.1
Blue Cross of California (GMC-North)	17.8	26.9	51.1
Alameda Alliance for Health	23.6	34.5	46.2
Medi-Cal Average	**21.2**	**29.9**	**41.0**
Health Net (GMC-North)	32.4	40.4	24.7
Blue Cross of California (CP)	20.1	23.5	16.9
Health Plan of San Mateo	26.0	27.3	5.0
Blue Cross of California (LI)	17.5	18.3	4.6
San Francisco Health Plan	29.7	30.4	2.4
Santa Barbara Regional Health Authority	28.8	26.4	-8.3
Partnership Health Plan of California	29.9	27.3	-8.7
Kaiser (GMC-South)	**NA**	50.2	**NA**
Community Health Group	**NA**	29.4	**NA**
Sharp Health Plan	**NA**	24.9	**NA**
Kaiser (GMC-North)	**NR**	24.3	**NA**
Universal Care	**NA**	19.7	**NA**
Blue Cross of California (GMC-South)	**NA**	19.3	**NA**

Percent Change: -20, 0, 20, 40, 60, 80, 100

Perinatal Care

Prenatal Care in the First Trimester

Description of Measure

Recent studies indicate Medicaid recipients are more than twice as likely as those not enrolled in Medicaid to receive late or no prenatal care (36 percent versus 14 percent), according to *The Medicaid Letter, April 2000.* The care provided to pregnant women before, during and after delivery is critical to the health of both the mother and child. Early entry into prenatal care may reduce the incidence of low birth weight babies as well as the costs and complications associated with high risk pregnancies.

This measure determines the percentage of women who delivered a live birth during 1999, who were continuously enrolled in the health plan for 280 days prior to delivery, and who had a prenatal care visit between 176 days to 280 days prior to delivery. The intent of this measure is to determine those women who were enrolled in a health plan and, then, became pregnant and had a prenatal care visit within the first trimester of pregnancy.

Results

Almost all of the health plans (26 out of 28) were able to produce this measure. Blue Cross of California (Tulare) and Blue Cross of California (GMC-South) had less than 30 cases for their denominator and are not presented, following HEDIS methodology.

The variance in rates among health plans for this measure was large, ranging from a low of 25.2 percent to a high of 80.6 percent (Table 14, page 39). The NCQA 2000 National Medicaid Average was not available for this measure, though the National Medicaid 50th Percentile was available. The 2000 Medi-Cal Average (61.4 percent) was nearly identical to the NCQA 2000 National Medicaid 50th Percentile (61.0 percent). Fifteen health plans exceeded the NCQA 2000 National 50th Percentile, while nine were at or above 70 percent and one health plan, Kaiser GMC-South, was above 80 percent.

Six health plans were below the 1999 Medi-Cal Average of 57.0 percent, and two others (i.e., Sharp Health Plan and Maxicare) received NR Audit Measure Designations. Both of these health plans had difficulty in identifying the eligible population of women who delivered a live birth. This issue has been corrected at Sharp Health Plan, and they are expected to report this measure for HEDIS 2001.

Table 15, on page 40, shows the percent change between the HEDIS 1999 and 2000 rates for each health plan. Overall, the 2000 Medi-Cal rate improved by 7.8 percent. Individual health plan performance ranged from a decline of almost 18 percent for Molina Medical Centers to an increase of 130 percent for Contra Costa Health Plan. Seven health plans had increases of more than 10 percent, while two health plans had declines of more than 15 percent.

Data Collection Methods

The *HEDIS 2000 Technical Specifications* for this measure are somewhat challenging, and only three health plans reported using the administrative method. Approximately 60 percent of the women who received prenatal care during the first trimester were determined to have met the criteria using administrative data. However, rates for this measure usually increased

Perinatal Care

Prenatal Care in the First Trimester

Description of Measure

Recent studies indicate Medicaid recipients are more than twice as likely as those not enrolled in Medicaid to receive late or no prenatal care (36 percent versus 14 percent), according to *The Medicaid Letter, April 2000.* The care provided to pregnant women before, during and after delivery is critical to the health of both the mother and child. Early entry into prenatal care may reduce the incidence of low birth weight babies as well as the costs and complications associated with high risk pregnancies.

This measure determines the percentage of women who delivered a live birth during 1999, who were continuously enrolled in the health plan for 280 days prior to delivery, and who had a prenatal care visit between 176 days to 280 days prior to delivery. The intent of this measure is to determine those women who were enrolled in a health plan and, then, became pregnant and had a prenatal care visit within the first trimester of pregnancy.

Results

Almost all of the health plans (26 out of 28) were able to produce this measure. Blue Cross of California (Tulare) and Blue Cross of California (GMC-South) had less than 30 cases for their denominator and are not presented, following HEDIS methodology.

The variance in rates among health plans for this measure was large, ranging from a low of 25.2 percent to a high of 80.6 percent (Table 14, page 39). The NCQA 2000 National Medicaid Average was not available for this measure, though the National Medicaid 50th Percentile was available. The 2000 Medi-Cal Average (61.4 percent) was nearly identical to the NCQA 2000 National Medicaid 50th Percentile (61.0 percent). Fifteen health plans exceeded the NCQA 2000 National 50th Percentile, while nine were at or above 70 percent and one health plan, Kaiser GMC-South, was above 80 percent.

Six health plans were below the 1999 Medi-Cal Average of 57.0 percent, and two others (i.e., Sharp Health Plan and Maxicare) received NR Audit Measure Designations. Both of these health plans had difficulty in identifying the eligible population of women who delivered a live birth. This issue has been corrected at Sharp Health Plan, and they are expected to report this measure for HEDIS 2001.

Table 15, on page 40, shows the percent change between the HEDIS 1999 and 2000 rates for each health plan. Overall, the 2000 Medi-Cal rate improved by 7.8 percent. Individual health plan performance ranged from a decline of almost 18 percent for Molina Medical Centers to an increase of 130 percent for Contra Costa Health Plan. Seven health plans had increases of more than 10 percent, while two health plans had declines of more than 15 percent.

Data Collection Methods

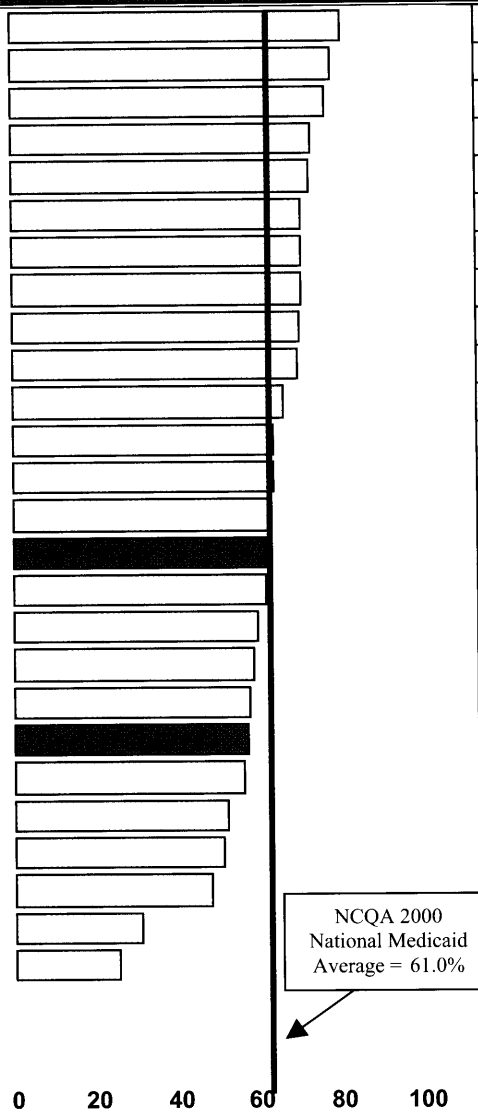
The *HEDIS 2000 Technical Specifications* for this measure are somewhat challenging, and only three health plans reported using the administrative method. Approximately 60 percent of the women who received prenatal care during the first trimester were determined to have met the criteria using administrative data. However, rates for this measure usually increased

significantly with medical chart abstraction. Many of the health plans have implemented programs to improve their rates. The results of these efforts may be realized in the HEDIS 2001 measurement year.

Table 14. Prenatal Care in the First Trimester

Description: The percentage of Medicaid enrolled women who delivered a live birth during the 12-month study period, who were continuously enrolled for 280 days prior to delivery and who had a prenatal care visit(s) on or between 176 to 280 days prior to delivery. Members who have had no more than one gap in enrollment of up to 45 days anytime on or between the day of delivery and 175 days prior to delivery were included in this measure.

Health Plan	N	%
Kaiser (GMC-South)	72	80.6
Santa Barbara Regional Health Authority	327	78.0
Contra Costa Health Plan	432	76.2
Central Coast Alliance for Health	151	72.9
Health Plan of San Mateo	289	72.3
Alameda Alliance for Health	396	70.4
Blue Cross of California (GMC-North)	429	70.4
Blue Cross of California (LI)	262	70.2
Blue Cross of California (CP)	430	70.0
Kaiser (GMC-North)	348	69.5
CalOPTIMA	450	65.8
San Francisco Health Plan	260	63.5
Health Net (GMC-North)	229	63.3
Health Plan of San Joaquin	399	62.4
2000 Medi-Cal Average	**7,882**	**61.4**
Partnership Health Plan of California	411	61.1
Santa Clara Family Health Plan	318	59.1
Inland Empire Health Plan	432	58.3
Western Health Advantage	197	57.4
1999 Medi-Cal Average	**7,099**	**57.0**
Health Net (CP)	429	55.9
L.A. Care Health Plan	411	51.6
Kern Family Health Care	350	50.9
Universal Care	69	47.8
Community Health Group	411	30.9
Molina Medical Centers	329	25.2
Maxicare Health Plan	NR	NR
Sharp Health Plan	NR	NR

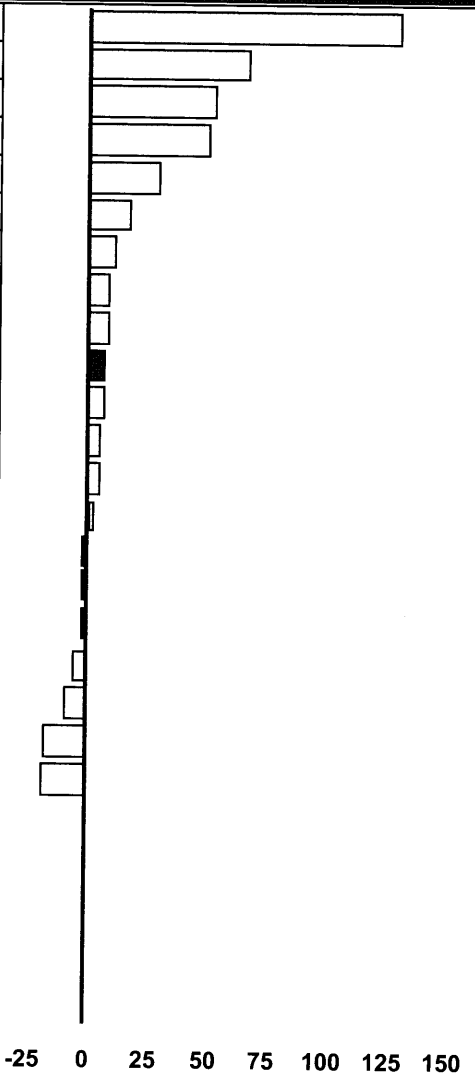


2000 Medi-Cal Weighted Average **60.2%**
2000 Medi-Cal Average Excluding GMC-South **63.1%**

*The NCQA National Medicaid Average was not available for this measure.

Table 15. Comparison Between HEDIS 1999 and 2000 Rates – Prenatal Care in the First Trimester

Health Plan	1999	2000	% Change
Contra Costa Health Plan	33.1	76.2	130.2
Kern Family Health Care	30.5	50.9	66.9
Western Health Advantage	37.5	57.4	53.1
Inland Empire Health Plan	38.7	58.3	50.6
Health Net (GMC-North)	48.9	63.3	29.4
San Francisco Health Plan	54.2	63.5	17.2
Health Plan of San Mateo	64.7	72.3	11.7
CalOPTIMA	60.4	65.8	8.9
Health Plan of San Joaquin	57.4	62.4	8.7
Medi-Cal Average	**57.0**	**61.4**	**7.8**
Partnership Health Plan of California	56.9	61.1	7.4
Health Net (CP)	53.0	55.9	5.5
Santa Barbara Regional Health Authority	74.2	78.0	5.1
Central Coast Alliance for Health	71.5	72.9	2.0
Santa Clara Family Health Plan	59.5	59.1	-0.7
Alameda Alliance for Health	70.9	70.4	-0.7
Blue Cross of California (CP)	70.6	70.0	-0.8
Blue Cross of California (GMC-North)	74.0	70.4	-4.9
Blue Cross of California (LI)	76.7	70.2	-8.5
L.A. Care Health Plan	62.0	51.6	-16.8
Molina Medical Centers	30.6	25.2	-17.6
Community Health Group	NA	30.9	NA
Kaiser (GMC-North)	NR	69.5	NA
Kaiser (GMC-South)	NA	80.6	NA
Universal Care	NA	47.8	NA
Maxicare Health Plan	NR	NR	NR
Sharp Health Plan	NA	NR	NR



Initiation of Prenatal Care

Description of Measure

This measure determines the percentage of women who delivered a live birth during 1999, who were continuously enrolled in the health plan for no more than 279 days but at least 43 days prior to delivery, and who had a prenatal care visit within 42 days after enrollment in the health plan. This criteria covers women who became pregnant prior to being enrolled in a health plan and, then, had a prenatal care visit within six weeks of enrollment. The intent of this measure is to determine if access to care is available in a timely manner, when needed.

Results

Almost all of the health plans (27 out of 28) were able to produce this measure. Kaiser GMC-South had less than 30 cases for their denominator and is not presented, following HEDIS methodology.

Results for Initiation of Prenatal Care are presented in Tables 16 and 17, on pages 42-43. The rates for health plans ranged from a low of 30.0 percent to a high of 90.8 percent (Table 16), with an overall Medi-Cal average of 72.1 percent and a weighted average of 70.8 percent, or one percentage point lower. There was no NCQA 2000 National Medicaid Average or National Medicaid 50th Percentile available for this measure. Fifteen health plans had rates above the 2000 Medi-Cal Average, with nine health plans above 80 percent, and one (Kern Family Health Care) that reached the 90 percent mark.

Overall, the Medi-Cal rate increased nearly 5 percent over 1999 (Table 17, page 43). The 2000 Medi-Cal Average, excluding the GMC-South, was 77.9 percent, or 13.4 percent higher than the 1999 Medi-Cal rate. Central Coast Alliance for Health and Santa Clara Family Health Plan increased 63.4 percent and 60.1 percent, respectively. Seven other health plans showed improvements of over 10 percent.

Western Health Advantage's rate decreased 23.7 percent from 1999. The reason for this decline is unclear at this time. Maxicare and Sharp Health Plan received NR Audit Measure Designations. As mentioned previously, both of these health plans had difficulty in identifying the eligible population of women who delivered a live birth. This issue has been corrected at Sharp Health Plan, and they are expected to report on this measure for HEDIS 2001.

Data Collection Methods

The administrative method was chosen by seven health plans. This measure is similar to the Prenatal Care in the First Trimester measure and, again, approximately 60 percent of the women who met the HEDIS criteria were identified through administrative data. For HEDIS 2001, the three maternity-related measures in the DHS Accountability Set have been combined into one measure, reporting two rates; one for timeliness of care and the other for check-ups after delivery. Due to the other components of the new measure, it is likely that more health plans will use the hybrid method, rather than the administrative method.

Table 16. Initiation of Prenatal Care

Description: The percentage of Medicaid enrolled women who had (a) live birth(s) during the 12-month study period, who were enrolled in the plan no more than 279 days but at least 43 days prior to delivery with no gaps in enrollment, and who had their first prenatal visit within 42 days of enrollment or by the end of the first trimester for those women who enroll in a health plan during the early stage of pregnancy. Women enrolled in the plan for 42 days or less prior to delivery were not included in this measure.

Health Plan	Percent	N	%
Kern Family Health Care		229	90.8
Alameda Alliance for Health		248	87.1
Health Plan of San Joaquin		432	87.0
Santa Clara Family Health Plan		366	86.3
Santa Barbara Regional Health Authority		290	84.8
Blue Cross of California (GMC-North)		347	84.7
Blue Cross of California (LI)		181	84.0
Health Net (GMC-North)		236	82.6
Health Net (CP)		411	81.5
Central Coast Alliance for Health		375	78.9
San Francisco Health Plan		119	77.3
Blue Cross of California (CP)		432	75.7
Partnership Health Plan of California		370	73.5
Blue Cross of California (GMC-South)		85	72.9
CalOPTIMA		390	72.6
2000 Medi-Cal Average		**6,958**	**72.1**
Health Plan of San Mateo		367	71.4
1999 Medi-Cal Average		**6,933**	**69.0**
Inland Empire Health Plan		432	68.3
L.A. Care Health Plan		411	61.3
Universal Care		138	60.9
Blue Cross of California (Tulare)		202	55.9
Kaiser (GMC-North)		104	46.2
Contra Costa Health Plan		182	41.8
Community Health Group		332	40.4
Western Health Advantage		79	32.9
Molina Medical Centers		200	30.0
Maxicare Health Plan		NR	NR
Sharp Health Plan		NR	NR

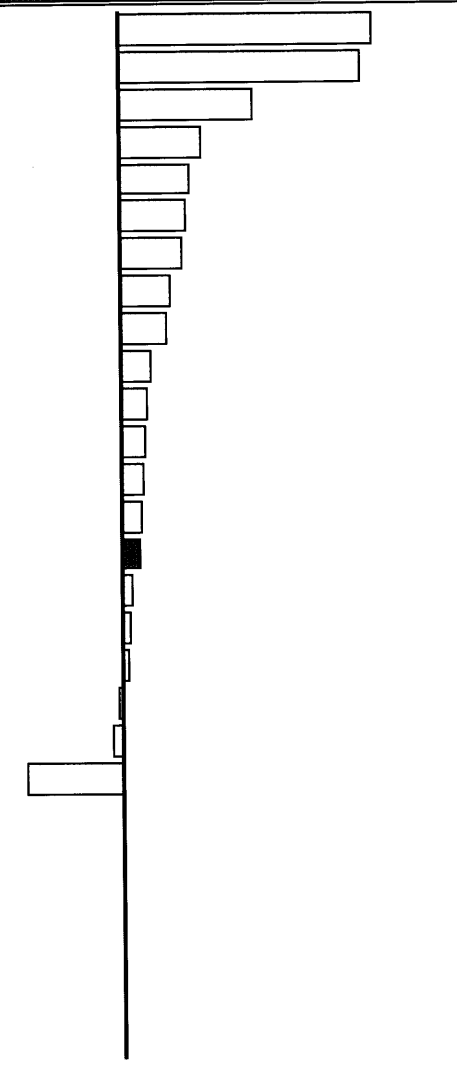
0 20 40 60 80 100

NCQA 2000 National Medicaid Average*	**NA**
2000 Medi-Cal Weighted Average	**70.8%**
2000 Medi-Cal Average Excluding GMC-South	**77.9%**

*There was no NCQA National Medicaid Average or NCQA National Medicaid 50th Percentile available for this measure.

Table 17. Comparison Between HEDIS 1999 and 2000 Rates — Initiation of Prenatal Care

Health Plan	1999	2000	% Change
Central Coast Alliance for Health	48.3	78.9	63.4
Santa Clara Family Health Plan	53.9	86.3	60.1
Health Net (CP)	61.1	81.5	33.4
Health Net (GMC-North)	68.6	82.6	20.4
Molina Medical Centers	25.5	30.0	17.6
Inland Empire Health Plan	58.6	68.3	16.6
Contra Costa Health Plan	36.1	41.8	15.8
San Francisco Health Plan	68.6	77.3	12.7
Blue Cross of California (LI)	75.4	84.0	11.4
Partnership Health Plan of California	68.4	73.5	7.5
CalOPTIMA	68.0	72.6	6.8
Santa Barbara Regional Health Authority	79.7	84.8	6.4
Kern Family Health Care	85.8	90.8	5.8
Health Plan of San Joaquin	82.8	87.0	5.1
Medi-Cal Average	**69.0**	**72.1**	**4.8**
Blue Cross of California (CP)	73.6	75.7	2.9
L.A. Care Health Plan	60.1	61.3	2.0
Alameda Alliance for Health	85.8	87.1	1.5
Blue Cross of California (GMC-North)	85.5	84.7	-0.9
Health Plan of San Mateo	72.9	71.4	-2.1
Western Health Advantage	43.1	32.9	-23.7
Blue Cross of California (GMC-South)	NA	72.9	NA
Universal Care	NA	60.9	NA
Blue Cross of California (Tulare)	NA	55.9	NA
Kaiser (GMC-North)	NR	46.2	NA
Community Health Group	NA	40.4	NA
Maxicare Health Plan	NR	NR	NR
Sharp Health Plan	NA	NR	NR



Check-ups After Delivery

Description of Measure

According to the NCQA *State of Managed Care Quality Report* (2000), "The eight weeks after giving birth are a period of physical, emotional and social changes for the mother, during a time when she is also adjusting to caring for her new baby. The American College of Obstetricians recommends that women see their healthcare provider at least once between 4 and 6 weeks after giving birth."

This measure determines the percentage of women who delivered a live birth during 1999, who were continuously enrolled in the health plan for at least 56 days after delivery with no breaks in enrollment, and who had a postpartum visit on or between 21 days and 56 days after delivery.

Results

All of the health plans were able to produce this measure. Their rates ranged from 15.3 percent to 71.4 percent, with the Medi-Cal average at 46.5 percent for 2000 (Table 18, page 45). This was the only measure for which the Medi-Cal Average was lower than the NCQA 2000 National Medicaid Average. However, excluding the GMC-South region, which has new plans, the 2000 Medi-Cal average was 49.0 percent, or one percentage point above the NCQA 2000 National Medicaid Average.

Twelve health plans were above both the 2000 Medi-Cal Average and the NCQA 2000 National Medicaid Average (48.0 percent). The top three health plans—Santa Barbara Regional Health Authority (71.4 percent), Kaiser GMC-South (67.3 percent), and Health Plan of San Mateo (63.7 percent)—were all above 60 percent. Central Coast Alliance for Health increased from 39.0 percent in 1999 to 57.8 percent in 2000 to record the largest percentage increase (48.2 percent) and a rate that exceeded both the 2000 Medi-Cal Average and the NCQA 2000 National Medicaid Average (Table 19, page 46). Three other health plans had increases of more than 25 percent, and another three showed between 10 percent and 20 percent increases in their rates. San Francisco Health Plan had a significant decrease in their rate, falling from 61.4 percent to 44.5 percent, which represents a 27.5 percent decrease. The reason for this decline was not immediately known, though internal staff turnover and the inability to link some members to the claims and encounter data may have been the most likely cause. These issues have been addressed and the health plan is expected to perform better for the HEDIS 2001 audit.

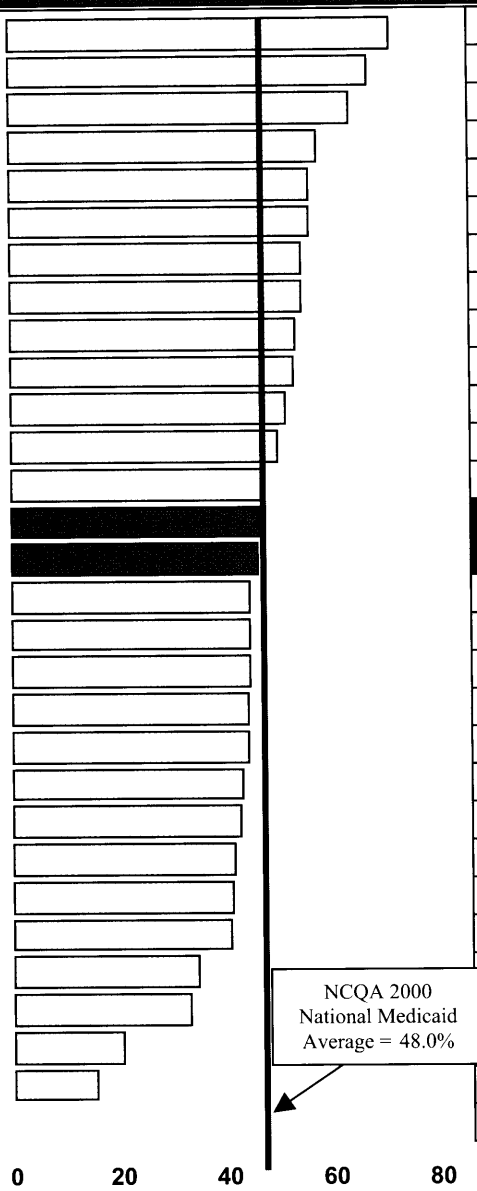
Data Collection Methods

Only three health plans (i.e., Kaiser GMC-South, Kaiser GMC-North and Contra Costa Health Plan) chose to use the administrative method for this measure. As seen with the other maternity-related measures, approximately 60 percent of the women who had their postpartum visit following the HEDIS 2000 criteria were identified through administrative data. However, rates for this measure usually increased significantly with medical chart abstraction. Many of the health plans have implemented programs to improve their rates, including providing incentives for members and sending out reminder postcards. These health plans generally reported the highest rates for this measure.

Table 18. Check-ups After Delivery

Description: The percentage of Medicaid enrolled women who delivered (a) live birth(s) during the 12-month study period, who were continuously enrolled at least 56 days after delivery with no breaks in enrollment, and who had a postpartum visit on or between 21 and 56 days after delivery.

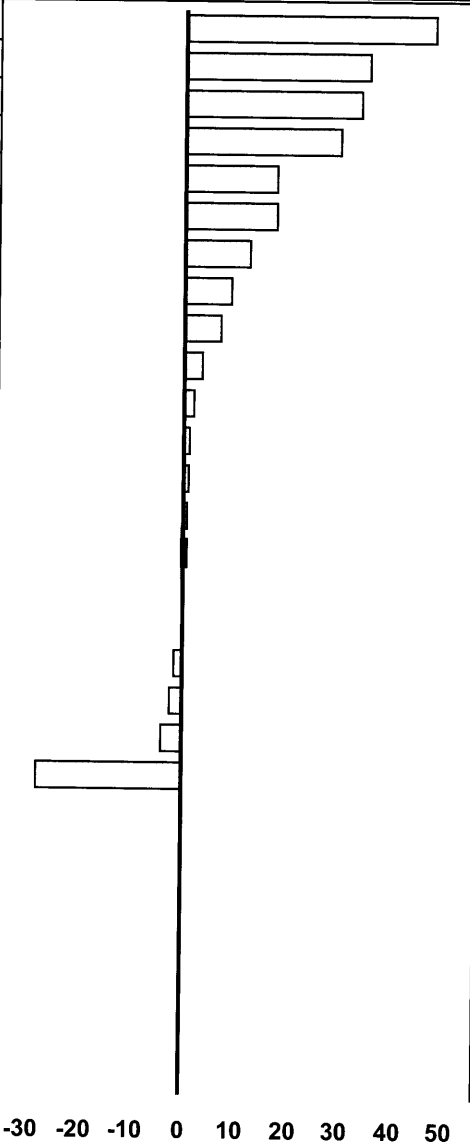
Health Plan	Percent	N	%
Santa Barbara Regional Health Authority		346	71.4
Kaiser (GMC-South)		104	67.3
Health Plan of San Mateo		430	63.7
Central Coast Alliance for Health		403	57.8
Blue Cross of California (GMC-North)		430	56.3
Santa Clara Family Health Plan		430	56.3
Blue Cross of California (CP)		431	54.8
Kern Family Health Care		426	54.5
Kaiser (GMC-North)		405	53.6
Partnership Health Plan of California		425	53.2
Blue Cross of California (LI)		432	51.4
Blue Cross of California (Tulare)		331	49.9
Health Net (GMC-North)		365	46.6
2000 Medi-Cal Average		**10,266**	**46.5**
1999 Medi-Cal Average		**8,256**	**46.2**
Universal Care		224	44.6
CalOPTIMA		452	44.5
San Francisco Health Plan		398	44.5
Western Health Advantage		240	44.2
Health Plan of San Joaquin		431	44.1
Alameda Alliance for Health		427	42.9
Health Net (CP)		430	42.6
Blue Cross of California (GMC-South)		174	41.4
L.A. Care Health Plan		413	41.2
Inland Empire Health Plan		433	40.7
Community Health Group		411	34.8
Contra Costa Health Plan		432	33.0
Sharp Health Plan		432	20.2
Molina Medical Centers		411	15.3
Maxicare Health Plan		NR	NR



2000 Medi-Cal Weighted Average **46.7%**
2000 Medi-Cal Average Excluding GMC-South **49.0%**

Table 19. Comparison Between HEDIS 1999 and 2000 Rates Check-Ups After Delivery

Health Plan	1999	2000	% Change
Central Coast Alliance for Health	39.0	57.8	48.2
Santa Clara Family Health Plan	41.5	56.3	35.7
Western Health Advantage	33.0	44.2	33.9
Health Net (GMC-North)	35.9	46.6	29.8
Health Plan of San Mateo	54.0	63.7	18.0
Alameda Alliance for Health	36.4	42.9	17.9
Health Net (CP)	37.8	42.6	12.7
Molina Medical Centers	14.0	15.3	9.3
L.A. Care Health Plan	38.4	41.2	7.3
Health Plan of San Joaquin	42.5	44.1	3.8
Santa Barbara Regional Health Authority	69.9	71.4	2.1
Contra Costa Health Plan	32.6	33.0	1.2
Blue Cross of California (LI)	50.9	51.4	1.0
Inland Empire Health Plan	40.4	40.7	0.7
Medi-Cal Average	**46.2**	**46.5**	**0.6**
CalOPTIMA	44.4	44.5	0.2
Partnership Health Plan of California	53.5	53.2	-0.6
Blue Cross of California (CP)	55.6	54.8	-1.4
Blue Cross of California (GMC-North)	57.6	56.3	-2.3
Kern Family Health Care	56.5	54.5	-3.5
San Francisco Health Plan	61.4	44.5	-27.5
Kaiser (GMC-South)	NA	67.3	NA
Kaiser (GMC-North)	NR	53.6	NA
Blue Cross of California (Tulare)	NA	49.9	NA
Universal Care	NA	44.6	NA
Blue Cross of California (GMC-South)	NA	41.4	NA
Community Health Group	NA	34.8	NA
Sharp Health Plan	NA	20.2	NA
Maxicare Health Plan	NR	NR	NR



Chronic Disease Management

Eye Exams for People with Diabetes (COHS Only)

Description

Diabetes is the seventh leading cause of death in the United States. However, when associated conditions are also included (e.g., congestive heart failure, myocardial infarction, stroke, etc.), diabetes can be considered the third leading cause of death in the United States. Blindness, kidney disease, and lower extremity amputations are debilitating complications of diabetes. According to the CDC, 798,000 new cases of diabetes are diagnosed each year in the United States. The disease and its complications cost the United States approximately $98 billion annually in medical care and lost wages. It is one of the more common chronic diseases afflicting adults.

Diabetic retinopathy is one of the most common complications associated with diabetes and the leading cause of blindness among working-age Americans. Studies such as the Diabetes Control and Complications Trial (DCCT) have established that intensive diabetes management in the early stages can prevent and delay the progression of diabetic retinopathy. Regular screening has also been proven to dramatically decrease the costs associated with the complications of diabetes.

Unlike the other health plan model types, the five COHS have a greater proportion of members with chronic illness. Consequently, DHS and the COHS agreed to collect and report a HEDIS measure that better represented this segment of their Medi-Cal membership. The HEDIS measure Eye Exams for People with Diabetes was chosen to replace Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life for the COHS.

This measure determines the percentage of continuously enrolled members with diabetes (Type I and Type II) between 18 and 75 years of age as of December 31, 1999, who had at least one dilated eye exam performed during 1999. Continuous enrollment was defined as being enrolled January 1999 through December 1999, with a one-month gap of enrollment allowed. Health plans used both pharmacy data and claims/encounters to identify the eligible population of diabetic members.

The DHS Accountability Set for the five COHS health plans (CalOPTIMA, Central Coast Alliance for Health, Health Plan of San Mateo, Partnership Health Plan of California and Santa Barbara Regional Health Authority) included this measure. The other 23 health plans were not required to report on this measure.

Results

The rates for this measure ranged from a low of 29.4 percent to a high of 68.7 percent (Table 20, page 48). Four of the five health plans were above the NCQA 2000 National Medicaid Average of 41.0 percent for this measure. The overall 2000 Medi-Cal Average (COHS Only) was 53.1 percent, with a weighted average of 52.2 percent. None of the health plans had a decline for this rate, and the Medi-Cal rate increased by nearly a third (28.6 percent) over 1999 (Table 21, page 48).

Data Collection Methods

All five health plans used the hybrid method for this measure. Sixty percent of the numerator qualifying events were found in the administrative data, while 40 percent resulted from medical record review. It should be noted, however, that this measure is actually the third numerator out of six measurements in the HEDIS 2000 Comprehensive Diabetes measure (see *HEDIS 2000 Technical Specifications*). Several health plans collected additional information on the other numerators for internal purposes. This additional information required information typically not found in administrative data (i.e., actual laboratory results); and, therefore, may be one reason the health plans did not choose to use the administrative method. As a secondary note, the additional non-required information gathered on diabetics shows a continued effort on the part of the health plans to provide quality care to their members.

Table 20. Eye Exams for People with Diabetes

Description: The percentage of Medicaid members with diabetes (Type I and Type II), age 18-75 years of age, who were continually enrolled during the 12-month study period and who received a retinal examination during that period.

Health Plan	Percent	N	%
Santa Barbara Regional Health Authority		421	68.7
Health Plan of San Mateo		465	61.9
Partnership Health Plan of California		412	56.6
2000 Medi-Cal Average (COHS Only)		**2,137**	**53.1**
CalOPTIMA		428	47.6
1999 Medi-Cal Average (COHS Only)		**2,210**	**41.3**
Central Coast Alliance for Health		411	29.4
Medi-Cal Weighted Average (COHS Only)	**52.2%**		

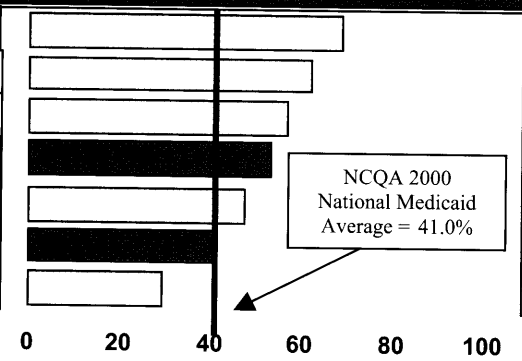
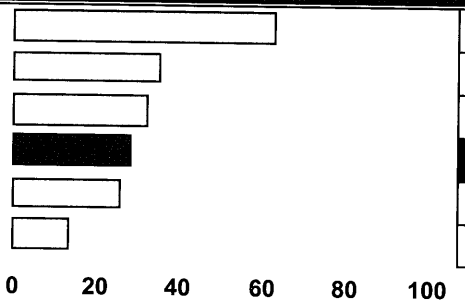


Table 21. Comparison Between HEDIS 1999 and 2000 Rates — Eye Exams for People with Diabetes

Health Plan	Percent Change	1999	2000	% Change
Central Coast Alliance for Health		18.0	29.4	63.3
CalOPTIMA		35.2	47.6	35.2
Santa Barbara Regional Health Authority		52.0	68.7	32.1
Medi-Cal Average (COHS Only)		**41.3**	**53.1**	**28.6** °
Health Plan of San Mateo		49.2	61.9	25.8
Partnership Health Plan of California		49.9	56.6	13.4



RESULTS BY HEALTH PLAN MODEL TYPE

In addition to providing health plan comparisons, the results were analyzed by the health plan model type. These results are summarized below and presented graphically within this section. Regardless of the health plan model type, it is imperative that all health plans provide the same high quality care to their Medi-Cal enrollees.

The GMC health plan model type is separated by GMC-North and GMC-South (see the Health Plan Profile section for a complete description of health plan model types). This is necessary for appropriate comparisons between regions and measurement years. The health plans in the GMC-South did not participate in the HEDIS 1999 audit process. Therefore, aggregate results have been computed including and excluding the GMC-South region. Aggregate results excluding the GMC-South region are useful when comparing the 1999 and 2000 rates. The results including the GMC-South health plans should be used as a basis for future analysis (e.g., HEDIS 2001 results) and improvement.

Wherever available, the NCQA 2000 National Medicaid Averages have been displayed in the graph to allow for meaningful comparisons of results. The NCQA 2000 National Averages for Medicaid HEDIS Measures were calculated using data from the 1999 measurement year. Initiation of Prenatal Care did not have any available comparative averages.

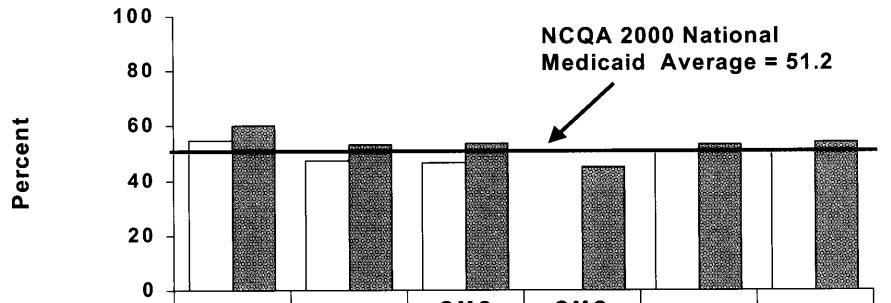
Pediatric Preventive Care

Childhood Immunization Status

Assessment of the Childhood Immunization Status - Combination 1 (4:3:1:2:3 series) is displayed in the graph below (Figure 1).

Figure 1

Childhood Immunization Status - Combination 1 (4:3:1:2:3 series)



	COHS	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	54.5	47.1	46.6	NA	50.4	50.0
HEDIS 2000	60.2	53.1	53.5	44.8	53.2	53.8

Note: This series requires 4 DTP, 3 OPV, 1 MMR, 2 HIB and 3 HBV by the second birthday.

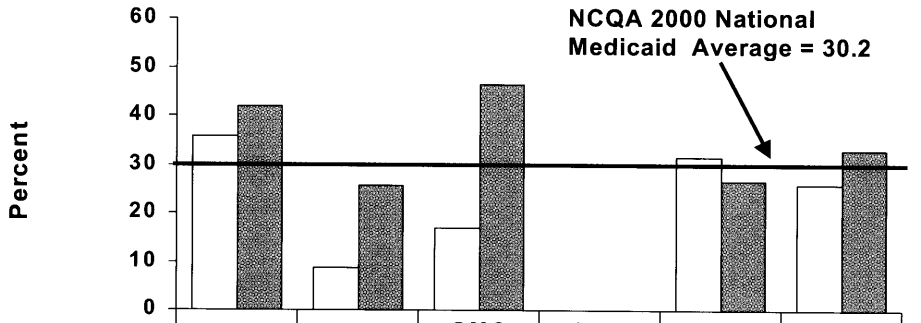
All health plan model types improved over the HEDIS 1999 rate and, with the exception of the GMC-South, exceeded the NCQA 2000 National Average of 51.2 percent. Both the COHS and CP health plan model types increased by more than 10 percent in their rates. The COHS had the highest rate (60.2 percent), while the GMC-South, at 44.8 percent, had the lowest rate. Similar results were noted for the Combination 2 (4:3:1:2:3:1 series), where the COHS had a rate of 51.5 percent, followed by GMC-North (45.8 percent), CP (44.3 percent), LIs and GMC-South (both at 40.9 percent).

Well-Child Visits in the First 15 Months of Life (Six or More Visits)

The number of children who received six or more well-child visits in their first 15 months of life increased by 26.5 percent over 1999. (Figure 2, below.) The COHS (41.9 percent) reported rates above the 30.2 percent NCQA 2000 National Medicaid Average. The CPs—though still below the NCQA 2000 National Average—showed the greatest improvement (192 percent), increasing from 8.8 percent in 1999 to 25.7 percent in 2000. The GMC-North increased nearly 175 percent over 1999, to 46.3 percent, a rate well above the NCQA 2000 National Medicaid Average. Only the LIs had a decline from 31.6 percent to 26.5 percent in this measure. This was largely due to six health plans that received NA or NR for the rates in 1999, but had a low reportable rate in 2000. Only one health plan had a reportable rate for the GMC-South, and none of the 340 children in the denominator had six or more well-child visits. This is similar to the low rates reported by the CPs and GMC-North health plans during their first year of HEDIS reporting.

Figure 2

Well-Child Visits in the First 15 Months of Life (Six or More Visits)



	COHS	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	35.7	8.8	16.9	NA	31.6	26.0
HEDIS 2000	41.9	25.7	46.3	0	26.5	32.9

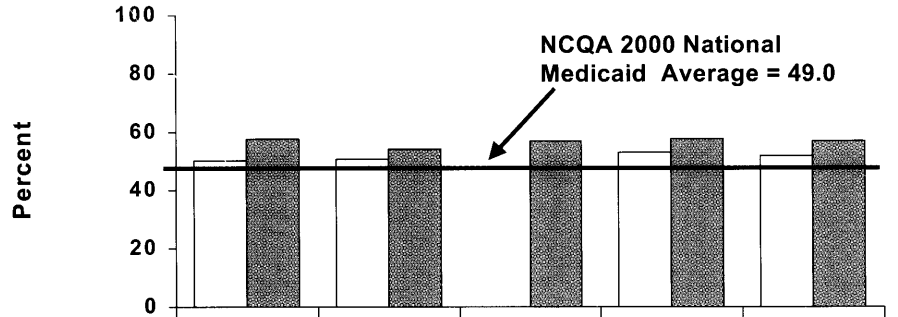
Note: Only one health plan had a reportable rate for the GMC-South.

Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life

The overall results in the three-to-six-year age group showed no statistical difference between the various health plan model types. All improved over 1999 and exceeded the NCQA 2000 National Medicaid Average of 49.0 percent. (Figure 3, below.) Both the LIs (57.6 percent) and the CPs (57.5 percent) reported the highest rates, or about eight percentage points higher than the NCQA 2000 National Medicaid Average. The GMC-South (57.0 percent) and GMC-North (54.1 percent) had also relatively high rates. The CPs had a nearly 15 percent change in their rate. Again, it should be noted that the COHS did not report on the performance measure for Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life. Instead, the DHS Accountability Set for the COHS included Eye Exams for People with Diabetes.

Figure 3

Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life



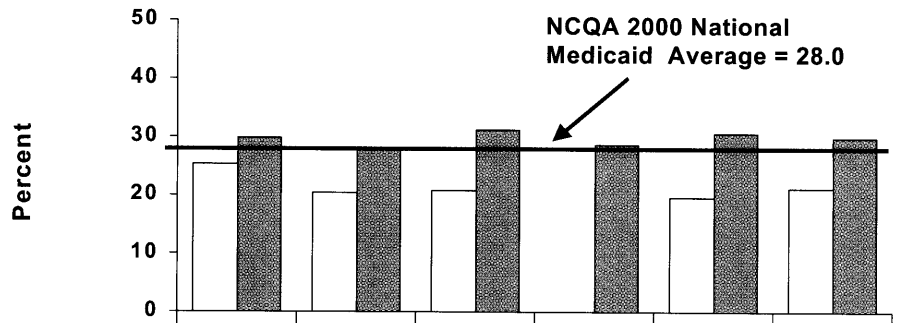
	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	50.1	50.4	NA	53.1	51.7
HEDIS 2000	57.5	54.1	57.0	57.6	56.7

Adolescent Well-Care Visits

Adolescent Well-Care Visits had the highest increase in rates across the health plan model types. (Figure 4, below.) The overall rate improved 41.0 percent—from 21.2 percent in 1999, to 29.9 percent in 2000. In 1999, the overall rate was below the 1999 NCQA Medicaid 50th Percentile (26 percent), but this year's improvement exceeded even the new NCQA 2000 National Medicaid Average of 28.0 percent for almost all of the health plan model types. The CPs, with the lowest rate (27.8 percent), were two-tenths of a percentage point below the NCQA 2000 National Medicaid Average. The LIs showed the largest improvement, with a 56.1 percent increase (i.e., from 19.6 percent to 30.6 percent) over 1999.

Figure 4

Adolescent Well-Care Visits



	COHS	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	25.3	20.4	20.8	NA	19.6	21.2
HEDIS 2000	29.9	27.8	31.1	28.7	30.6	29.9

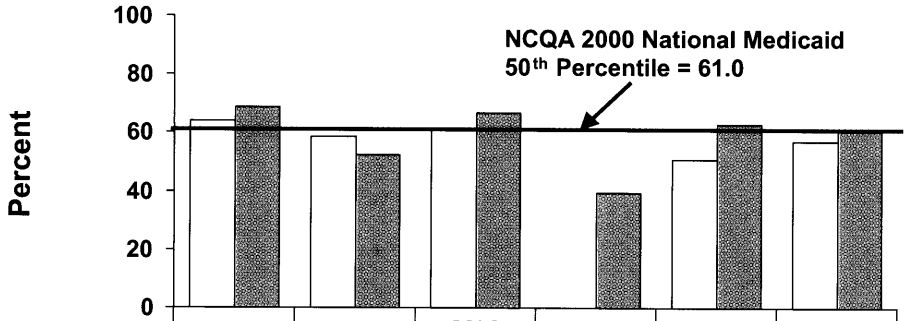
Perinatal Care

Prenatal Care in the First Trimester

Most of the health plan model types showed an increase for the Prenatal Care in the First Trimester performance measure. (Figure 5, below.) The overall rate increased from 57.0 percent to 61.4 percent, a 7.7 percent improvement over 1999. While the COHS boasted the highest rate (68.9 percent), the LIs showed the most improvement by increasing their rate 23.6 percent, from 50.7 percent in 1999 to 62.7 percent in 2000. The NCQA 2000 National Medicaid 50th Percentile of 61.0 percent was exceeded by the COHS, GMC-North and LI health plan model types. The GMC-South had the lowest rate (39.5 percent) for Prenatal Care in the First Trimester. The overall 2000 Medi-Cal rate, excluding the GMC-South, was 63.1 percent, or an increase of 10.7 percent over 1999.

Figure 5

Prenatal Care in the First Trimester



	COHS	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	64.1	58.7	61.0	NA	50.7	57.0
HEDIS 2000	68.9	52.5	66.7	39.5	62.7	61.4

The NCQA National Medicaid Average was not available for this measure. The 61.0 percent rate displayed above represents the NCQA 2000 National Medicaid 50th Percentile.

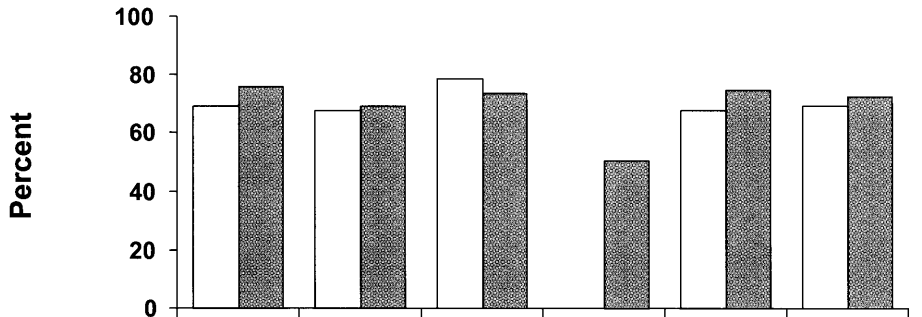
The CPs went from 58.7 percent in 1999 to 52.5 percent in 2000, or a 10.6 percent decline in the rate for Prenatal Care in the First Trimester. This overall decline appears to be the result of two health plans, Molina Medical Centers and OMNI Healthcare. Molina Medical Centers had a 17.6 percent decrease in their rate. (See Table 15 on page 40.) The reason for this decline is unknown at this time. OMNI Healthcare had a high rate (66.2 percent) for 1999, but closed the health plan in 2000 and did not participate in the HEDIS 2000 audit. Because OMNI performed well in 1999, the CP rates were higher. Adjusting the 1999 rate to exclude OMNI Healthcare would have resulted in a 56.7 percent rate in 1999, or an 8 percent decline for the CPs in 2000.

Initiation of Prenatal Care

There is no NCQA 2000 National Medicaid Average or National Medicaid 50th Percentile available for the Initiation of Prenatal Care measure. Clearly, this measure had the highest reported rates, with several health plan model types at or above 70 percent. (Figure 6, below.) The overall Medi-Cal rate increased nearly three percentage points from 69.0 percent in 1999 to 72.1 percent in 2000. The GMC-North had a five percentage point drop to 73.5 percent. The COHS (75.8 percent) reported the highest rate followed by the LIs (74.8 percent). The GMC-South had the lowest rate (50.5 percent). The overall 2000 Medi-Cal rate excluding the GMC-South was 77.9 percent, or an increase of 12.9 percent over 1999.

Figure 6

Initiation of Prenatal Care



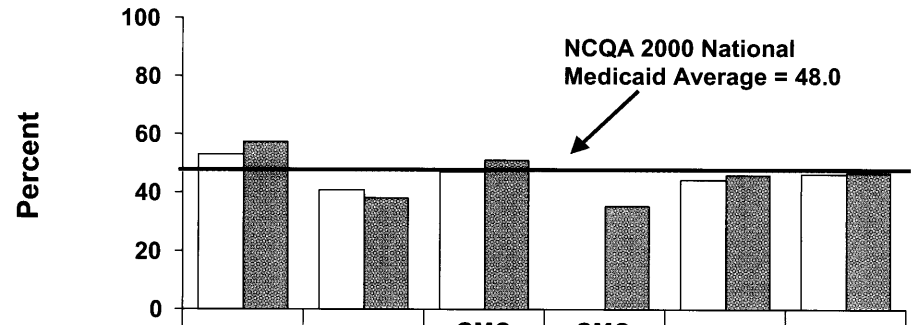
	COHS	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	69.1	67.6	78.7	NA	67.4	69.0
HEDIS 2000	75.8	69.2	73.5	50.5	74.8	72.1

Check-Ups After Delivery

The rate for Check-ups After Delivery remained relatively stable between 1999 and 2000. (Figure 7, below.) The 2000 Medi-Cal rate only increased from 46.2 percent to 46.5 percent. The 2000 Medi-Cal Average—excluding the GMC-South—was 49.0 percent, or an increase of about 3 percentage points. The NCQA 2000 National Medicaid Average of 48.0 percent was exceeded only by the COHS (57.4 percent) and the GMC-North (51.0 percent). The CPs had a small decline in their rate, while the LIs had a small increase. The rate for the GMC-South was 35.1 percent.

Figure 7

Check-ups After Delivery



	COHS	CP	GMC North	GMC South	LI	Medi-Cal
HEDIS 1999	52.9	40.6	47.2	NA	44.5	46.2
HEDIS 2000	57.4	37.9	51.0	35.1	45.8	46.5

Chronic Disease Management

Eye Exams for People with Diabetes

Eye Exams for People with Diabetes was part of the DHS Accountability Set for the COHS only. None of the other health plan model types reported on this measure. Therefore, comparison by health plan model type is not applicable.

Summary and Discussion

The following table ranks the performance among the health plan model types for the common measures that were reported by all health plan model types. It is intended to be used only as a catalyst for analysis and future quality improvement. It is hoped that health plans that are performing the best within the specific health plan model types will share ideas with other health plans.

Performance Among Health Plan Model Types for the Common Measures

Health Plan Model Type	Ranking in Order of Overall Rate for Selected Performance Measures						Total Score	Final Rank
	WI	WA	PC	IPC	CAD	CI		
COHS	2	3	1	2	1	1	10	1
GMC-North	1	1	2	1	3	2	10	1
LI	3	2	3	3	2	3	16	3
CP	4	5	4	4	4	4	25	4
GMC-South	5*	4	5	5	5	5	29	5

*** GMC-South had a reportable rate from only one health plan.**

Key to Table Abbreviations:
WI - Well-Child Visits 1st 15 Months of Life
WA - Adolescent Well-Care Visits
PC - Prenatal Care in the 1st Trimester
IPC - Initiation of Prenatal Care
CAD - Check-ups After Delivery
CI - Childhood Immunizations

In general, the COHS and GMC-North health plans appear to have performed the best overall, while the GMC-South and CPs had the lowest ranking. It should be noted, however, that the CPs consist of only three health plans; and, therefore, are subject to more variability with the rates. This was the first year of HEDIS reporting for the GMC-South health plans. Their rates are similar to the first-year reporting rates from the other health plan model types.

The goal of any quality initiative is to ensure consistent, high quality care to all Medi-Cal beneficiaries, regardless of the type of health plan. It is encouraging to note that all health plan model types have considerably improved their results in the HEDIS 2000 audits. Through sharing of best practices and collaborative efforts, it is possible to further reduce the inconsistencies in the quality of care provided across the various health plan model types.

CONCLUSIONS AND RECOMMENDATIONS

Overall, all of the HEDIS 2000 rates improved over the HEDIS 1999 rates. In addition, seven out of nine HEDIS 2000 rates now exceed the NCQA 2000 National Medicaid Averages and are shown in the table below. Two measures, Initiation of Prenatal Care and Prenatal Care in the First Trimester, did not have a rate for the NCQA 2000 National Medicaid Average. However, Prenatal Care in the First Trimester did have a 2000 National Medicaid 50th Percentile Benchmark, which is used in this report.

Table 22. Differences in Percentage Points Between the HEDIS 2000 Medi-Cal Rates and the NCQA 2000 National Medicaid Averages

DHS Accountability Set	HEDIS 2000 Medi-Cal Rates (%)	NCQA 2000 National Medicaid Average (%)	Difference in Percentage Points (%)
Childhood Immunizations Combined 4:3:1:2:3 Series	53.8	51.2	+2.6
Childhood Immunizations Combined 4:3:1:2:3:1 Series	44.3	38.0	+6.3
Well-Child Visits in the First 15 Months of Life (Six or More Visits)	32.9	30.2	+2.7
Well-Child Visits in the Third, Fourth, Fifth and Sixth Year of Life	56.7	49.0	+7.7
Adolescent Well-Care Visits	29.9	28.0	+1.9
Prenatal Care in the First Trimester	61.4	61.0*	+0.4
Initiation of Prenatal Care	72.1	NA**	NA
Check-Ups After Delivery	46.5	48.0	-1.5
Eye Exams for People with Diabetes	53.1	41.0	+12.1

*The NCQA National Medicaid Average was not available for this measure. The 61.0 percent listed represents the NCQA National Medicaid 50th Percentile.
**There was no NCQA National Medicaid Average or NCQA National Medicaid 50th Percentile available for this measure.

These improvements in HEDIS rates are most likely the results of a variety of factors. Some of the potential factors that may be responsible for improvements in the rates are as follows:

- The selection of the DHS Accountability Set has served to focus health plan efforts in specific areas of care.

- Collaborative action between the health plans and DHS through the establishment of an ongoing Quality Improvement Work Group (QIWG) and an Encounter Data Work Group (EDWG) has fostered the sharing of ideas among health plans.

- The health plans have instituted various incentives for providers to increase submission of encounter data and encourage more provision of preventive care services. An example includes paying bonuses to providers based on their submission of encounter data. The costs of immunizations may be reimbursed, with a bonus if the child receives all of his or her required immunizations.

- Some health plans provide incentives for members who seek preventive care services. One example of these incentives includes provisions (e.g., baby formula or gift certificates) to expectant mothers after completing a scheduled number of prenatal care visits and a follow-up after delivery of her newborn.

- Public reporting of the HEDIS rates for each health plan has also increased the need within the health plans to continually evaluate and improve processes; and, ultimately, the HEDIS rates.

- Improvements in automated data and information systems have helped health plans to gather data and report more efficiently. These improvements allow health plans to rely more on their administrative data and reduce the burden associated with medical record pursuit.

- Better tracking of members and their claims or encounters across product lines has increased. This allows a claim for a service provided while the member was in another product line to count toward the rate, once that the member has switched to Medi-Cal.

- There has been improved medical record retrieval using a "Most Likely Provider" routine to determine where the most pertinent information of the medical record is located. This reduces costs and allows health plans to complete the medical record review in a shorter amount of time or continue to search for additional information, if needed. The health plans that monitor and reduce the number of missing medical records typically have better results.

- Several health plans have begun to use commercial software to report their HEDIS rates. This significantly reduced their source code issues and allowed more time for medical record retrieval.

- Health plans that have decided to obtain NCQA Accreditation for their Medicaid product line place additional emphasis on HEDIS reporting because the accreditation scores are greatly affected by the HEDIS rates.

These health plan improvements have helped to reduce the number of Not Reported (NR) audit measure designations given, even though more health plans are reporting for the first time this year. The table below shows that only one health plan received an NR audit measure

designation for Well-Child Visits in the First 15 Months of Life, down from three health plans that received an NR for this measure in 1999. All of the other pediatric preventive measures received reportable audit measure designations. Only the perinatal care services remained constant (two NR designations given each year), and this was due to the new GMC-South health plans having their first HEDIS Compliance Audit. This reduction in NR audit measure designations is significant because, in general, it is an indication of how the health plan operates. HEDIS measures that receive an NR audit measure designation usually do so because of a process (or lack of process) resulting in a biased rate.

Number of Health Plans Receiving the Not Reported (NR)* Audit Measure Designation

HEDIS	HEDIS Measure								
Year	CI #1	CI #2	WI	WC	WA	PC 1st	IPC	CAD	DIB
1999	1	1	3	1	1	2	2	2	0
2000	0	0	1	0	0	2	2	1	0

Note: A health plan was given an NR audit designation if 1.) The health plan calculated the measure but the rate was materially biased, 2.) The health plan did not calculate the measure even though a population existed for which the measure could have been calculated, or 3.)The health plan calculated the measure, but chose not to report the rate.

When looking at the HEDIS rates by health plan model type, the COHS appear to have performed the best, followed by the LIs. For the most part, the COHS have been operating considerably longer than the other health plan model types and have well-established networks. The CPs and GMC-South HEDIS 2000 rates were the lowest; but, again, this was the first year of HEDIS reporting for those health plans in the GMC-South, and there were only three health plans that are CPs. Regardless, the CPs had increases in all of the pediatric preventive care measures.

While all of the HEDIS rates for measures in the DHS Accountability Set increased since 1999, continued efforts are needed to maintain improvements. Some specific recommendations to improve health plan processes and increase HEDIS rates are as follows:

- All health plans should have documented policies and procedures in place for collecting and reporting on HEDIS data. This will standardize the process for the health plan, allowing for better efficiency.

- HEDIS reporting involves the entire health plan. Efforts should be made to educate the employees as well as key personnel about HEDIS. Departments within the health plans, such as the information systems, quality improvement, member services, provider relations and utilization management should be involved with HEDIS discussions to determine the best methods to capture and report HEDIS data. Several health plans have discovered, for example, that member services and utilization management captured critical elements for HEDIS reporting that the information systems and quality improvement staff did not know about until the audit process. Several health plans are able to determine live births using utilization data in conjunction with their administrative data.

- For most health plans with more than one product line, there are relatively few members who switch from one product to Medi-Cal (i.e., change from the Commercial product to Medicaid). However, maintaining this link between product lines can improve administrative rates and reduce the need for medical record review.

- Health plans are encouraged to begin implementing processes that can determine retroactive enrollment and the number of months of retro-eligibility. This is especially important for COHS, where retro-eligibility can be up to 24 months. NCQA is considering changing the continuous enrollment criteria for Medicaid to exclude retro-eligibility.

- For the HEDIS measure, Well-Child Visits in the First 15 Months of Life, newborns are typically covered under the mother's ID for the first two months. This is not considered retro-eligibility and the health plans need to account for this enrollment period.

- Monitoring processes should be improved for claims and encounter data processing, provider data and credentialing data entry, medical record review, source code and vendor oversight for delegated functions. Reasonableness checks on HEDIS rates, denominators and administrative data should be performed.

- The practice of using dummy codes for PM-160 data should cease. (See page 13.) However, health plans should use this PM-160 data, when possible, to increase their rates. Several health plans collect the PM-160 data, including the individual components, but are unable to integrate it into their system for HEDIS reporting. Quality improvement centered on incorporating this data may significantly increase the rates for several HEDIS measures.

- Tracking and monitoring missing medical records during medical record pursuit can lead to improvements in data collection processes and allow for targeted quality improvement, if needed (e.g., providers who do not submit medical records can be easily determined). Health plans should document all efforts to improve the monitoring process.

- Efforts should continue to be made to improve encounter data submission. Health plans should begin to monitor encounter data completeness and track submissions by provider, if necessary. This will improve the encounter data and decrease the need for medical record review.

- Some health plans can still benefit from improved data abstraction tools. Using abstraction tools that are user friendly can improve on the time required for medical record review. Results may be better due to reductions in human error.

- NCQA often updates the *HEDIS Technical Specifications* throughout the year. Health plans should review the Web site for updates and change outdated source code when needed.

- Oversight of vendors for delegated functions has improved considerably. However, health plans are still responsible for outsourced functions. This includes subcontractors, such as health plans that subcontract for services to be provided by another health plan. The primary health plan is ultimately responsible for those members and the services they receive. It is the primary health plan's responsibility to obtain the administrative data from the other health plan or perform medical record review. Pursuing the medical record may become a challenge if the provider is unknown. Health plans with these types of arrangements should contractually require their subcontractors to provide the appropriate data needed for HEDIS reporting.

- Several health plans have significantly benefited from commercial HEDIS software. Using software certified by NCQA has the added advantages of knowing that the source code is correct and excluding the source code from audit review.

- Health plans should consider strategies for improving HEDIS rates. The Adolescent Well-Care Visit measure, for example, typically has low HEDIS rates and medical record review has not proven to significantly increase the rates for this measure. As supporting evidence, 75 percent of the members who received a well-care visit were identified using administrative data. It may prove beneficial to report this measure administratively and direct resources in areas that can improve results for other measures.

- Health plans should continue to conduct root cause analyses of their performance results and implement system changes and/or targeted interventions to improve care.

This aggregate report is intended as a tool to assist the Medi-Cal health plans in identifying opportunities to improve the care they provide to their members and direct their intervention efforts. The results from this HEDIS 2000 reporting year indicate that the majority of health plans have made considerable improvements in processes for care as well as data collection and reporting, and have shown increases in the HEDIS rates. It is expected that these HEDIS rates will continue to improve as health plans gain experience and as they implement effective interventions, such as provider incentives and contractual requirements.

Appendix

NCQA HEDIS® Compliance Audit™ – Sample Report

TABLE OF CONTENTS

I. Report Highlights/Summary

II. Medical Record Reabstraction Findings

III. Information Systems Capabilities Assessment

IV. Measure Designations

V. Final Audit Statement

Attachment A DST
Attachment B Attestation of Accuracy and Public Reporting

I. REPORT HIGHLIGHTS/SUMMARY

The report highlights include several sections to provide background information on the 2000 HEDIS® Compliance Audit™, including data on the:

- National Committee for Quality Assurance (NCQA)-licensed audit firm
- Statement of audit scope and auditor validation signatures
- Managed care organization undergoing the audit
- Audit team's composition and core skills
- Pre-onsite audit activity
- Onsite meetings

A. About the Audit Organization

Health Services Advisory Group, Inc.

Home Office	Branch Office
301 East Bethany Home Road, Suite B-#157 Phoenix, Arizona 85012-1265	555 Capitol Mall, Suite #725 Sacramento, California 95814
Telephone: (602) 264-6382	Telephone: (916) 325-4330
Facsimile: (602) 241-0757	Facsimile: (916) 325-4333

B. Audit Validation Signatures

Health Services Advisory Group, Inc. (HSAG) conducted an independent audit of insert health plan name's 2000 HEDIS reporting consistent with the *2000 NCQA HEDIS Compliance Audit Standards, Policies and Procedures, HEDIS Volume 5.* The audit included two main components:

1. A detailed assessment of the Health Plan's (HP) Information Systems capabilities for collecting, analyzing and reporting HEDIS information.

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NCQA HEDIS® Compliance Audit™ is a trademark of the National Committee for Quality Assurance (NCQA)

2. A review of the specific reporting methods used for HEDIS measures, including: computer programming and query logic used to access and manipulate data and to calculate measures; data bases and files used to store HEDIS information; medical record abstraction tools and abstraction procedures used; and any manual processes employed in 2000 HEDIS data production and reporting. The audit extends to include any data collection and reporting processes supplied by vendors, contractors or third parties, as well as the HP's oversight of outsourced functions.

HSAG used a number of different methods and information sources to conduct the audit, including:

1. Teleconference calls with insert health plan name personnel and vendor representatives, as necessary.

2. Detailed review of insert health plan name's completed responses to the Baseline Assessment Tool (BAT) published by NCQA as *Appendix B to HEDIS Volume 5*, and updated information communicated by NCQA to the audit team directly.

3. Onsite meetings in insert health plan name's offices, including:

   a. Staff interviews
   b. Live system and procedure documentation
   c. Documentation review and requests for additional information
   d. Primary HEDIS data source verification
   e. Programming logic review and inspection of dated job logs
   f. Computer data base and file structure review
   g. Discussion and feedback sessions

4. Detailed evaluation of computer programming used to access administrative data sets, manipulate medical record abstract information and calculate HEDIS measures.

5. Reabstraction of a sample of medical records selected by the auditors, with comparison of results to insert health plan name's review determinations for the same records.

6. Requests for corrective actions and modifications to the HP's HEDIS data collection and reporting processes and data samples, as necessary; and verification that actions were taken.

7. Accuracy checks of the final HEDIS rates as presented within the NCQA-published *Data Submission Tool-2000* completed by the HP.

8. As part of the onsite visit, auditors interviewed a variety of individuals whose department or responsibilities affected the production of HEDIS data. Typically, such individuals included the HEDIS manager, Information Systems Director, Quality Management Director, medical records staff, claims processing staff, enrollment and provider data manager, programmers, analysts and others involved in the HEDIS preparation process.

Representatives of vendors that provided or processed HEDIS 2000 (and earlier historical) data may also have been interviewed and asked to provide documentation of their work.

The preparation and provision of the Performance Report is the responsibility of insert health plan name management. The auditor's responsibility is to express an opinion on the Performance Report based on our examination, utilizing procedures NCQA and HSAG considered necessary to obtain a reasonable basis for rendering an opinion. Our examination, in accordance with *NCQA HEDIS Compliance Audit: Standards, Policies and Procedures*, included procedures to obtain reasonable assurance that the accompanying Performance Report presents fairly, in all material respects, insert health plan name's performance with respect to HEDIS 2000 Technical Specifications.

The report that follows, including detailed findings in Sections II through V, represent our findings as verified by the following signatures:

<To be signed when Final Report is issued>

Insert Lead Auditor Name Date
Lead Auditor

<To be signed when Final Report is issued>

Mary Ellen Dalton, MBA, RN, CHCA Date
HSAG Audit Director

C. Health Plan and Audit Information

HSAG conducted the type of audit described below. Basic information about the health plan also appears in the chart, including the major office locations involved in the 2000 HEDIS Compliance Audit:

Audit Scope:	
MCO:	
MCO Location(s):	**Location 2**
MCO Contact:	
Title:	
Telephone:	
Facsimile:	

D. Audit Team Composition

The HSAG team is comprised of both NCQA certified and non-certified individuals. The team is assembled based on the full complement of skills required for the audit and requirements of the particular health plan. Some team members, including the Lead Auditor, participate in the onsite meetings at the health plan office; others conduct their work in HSAG offices.

The audit team is comprised of the following members in the designated positions. Each individual's particular expertise is described in Table 1 below:

Table 1 - Audit Team

Name of Auditor	Certified Auditor (Yes/No)	Onsite (Yes/No)	Position	Skills/Expertise
Mary Ellen Dalton	Yes	Yes/No	Project Director	Medical record review advisor, contract consultant
David Mabb	Yes	Yes/No	Auditor/Information Systems Analyst, Statistician, Source Code Review Manager	Analysis and computer programming, source code review
Margaret Ketterer	Yes	Yes/No	Medical Record Review Process Manager	HEDIS knowledge, interviewing skills, medical record review advisor, clinical consultant
Terry Wilkens	No	Yes/No	Over-read Process Supervisor, Clinical Consultant	Clinical expertise, abstraction, tool development, supervision of nurse reviewers
Marilea Rose	No	Yes/No	Medical Record Reviewer (s)	Medical Record Review

E. Overview of Pre-Onsite Activity

HSAG conducted the following activities prior to meeting with health plan representatives onsite, including:

1. Written and email correspondence/Teleconference call (select one) with insert health plan name explaining the scope of the audit, methods used and time frames for major audit activities.

2. Detailed review of insert health plan name's completed responses to the Baseline Assessment Tool (BAT) published by NCQA as Appendix B to HEDIS Volume 5. The review included a methodical inventory of insert health plan name's submission, including verification that all questions and required documents were supplied. If any requested information was missing or otherwise not clear, HSAG notified insert health plan name and obtained supplemental responses.

3. Compilation of a standardized set of comprehensive working papers for the audit, including all auditor and plan correspondence, required documentation, work product, special analyses and findings, results of medical record reabstraction and source code review, corrective actions (if applicable) and audit reports. The working papers follow a consistent format used by HSAG as required by NCQA.

4. Determination of the number of sites and locations for conducting onsite meetings, demonstrations and interviews with personnel critical to HEDIS data production and reporting. Based on a review of the BAT responses and discussions with insert health plan name, the audit team decided to hold onsite meetings at the plan, where the plan houses its main production system and produces HEDIS reports.

5. Preparation of an onsite agenda sent to insert health plan name to initiate meeting scheduling and cover the scope and contents of onsite activities. The meeting consisted of a full-two day agenda of plan presentations, auditor-to-staff interviews, system demonstrations and data processing observations, computer programming review, primary source verification of data samples and planning and feedback sessions.

6. Pre-onsite teleconference call in which the lead auditor reviewed the goals/ The pre-onsite agenda was forwarded to the plan, which outlined the goals (select one), processes, timing and attendee list for the onsite meetings.

7. Review of source code, computer programming and query language used insert health plan name to calculate HEDIS measures. The review included a detailed line-by-line evaluation of the computerized logic:

   a. Used to identify population eligible for HEDIS denominators (e.g., based on member age, gender and clinical conditions)
   b. For determining if members were continuously enrolled for the required period
   c. For determining event-based HEDIS numerators (e.g., county procedure codes and comparing to dates of services)
   d. Used to calculate HEDIS statistics (e.g., ratios or rates per 1,000 observations)

8. Detailed review of a select set of seven measures defined by the California Department of Health Services (DHS) as the Accountability Set for managed Medicaid plans and an additional Effectiveness of Care measure identified as the Quality Improvement Collaborative Initiative for Medi-Cal plans, including those listed in Table 2. County Organized Health Systems substitute the Third Numerator (Eye Exams) of the Comprehensive Diabetes Care measure, as appropriate for their membership. **Note: Delete this if non-COHS.**

Table 2 - Audited HEDIS Measures

HEDIS Domain	DHS Standard Accountability Set	Modification for County Organized Health Systems
Effectiveness of Care	Childhood Immunization Status	Third Numerator (Eye Exams) of the Comprehensive Diabetes Measure
	Prenatal Care in the First Trimester	
	Check-Ups After Delivery	
Access/Availability of Care	Initiation of Prenatal Care	
Use of Services	Well-Child Visits in the First 15 Months of Life	**Note: delete this column if plan is not a COHS**
	Well-Child Visits in the Third, Fourth, Fifth, Sixth Year of Life	
	Adolescent Well-Care Visits	
Quality Improvement Collaborative Initiative for Medi-Cal plans		
Effectiveness of Care	Chlamydia Screening in Women	
Total Measures Selected		

II. MEDICAL RECORD REABSTRACTION FINDINGS

The NCQA audit policies and procedures require reabstraction and comparison of auditor's results to plan abstraction for a selection of hybrid measures. This process completes the validation of the medical record reabstraction process, and provides an assessment of actual reviewer accuracy. HSAG reviewed up to 30 records identified by insert health plan name as meeting numerator event requirements (determined through medical record review) for measures selected for audit and Medical Record Review (MRR) validation. Records were randomly selected from the entire population of MRR numerator positives identified by the plan, as indicated on the MRR numerator listings submitted to the audit team. If fewer than 30 medical records were found to meet numerator requirements, all records were reviewed. Reported discrepancies only included "critical errors", defined as an abstraction error that affected the final outcome of the numerator event (i.e. changed a positive event to a negative or vice versa).

For each of the validated measures where the hybrid methodology was used, auditors determined the impact of the findings from the reabstraction process on the health plan's Final Audit Designation for each audited measure. The goal of the MRR validation was to determine whether the health plan made abstraction errors that significantly biased its final reported rate. HSAG used the standardized protocol developed by NCQA to validate the integrity of the medical record review processes of audited health plans. The NCQA endorsed T-test was employed to test the difference between the plan's estimate of the positive rate and the audited estimate of the positive rate. If the test revealed that the difference was greater than 5%, the health plan's estimate of the positive rate was rejected and the measure was assigned a designation of "Not Report".

The table below identifies the measure name, plan product line, number of records over-read and the T-test results with corresponding pass/fail determination:

Table 3

F. Audited HEDIS Measures – Medical Record Reabstraction

HYBRID MEASURE	PRODUCT LINE	# OF RECORDS OVER-READ	T-TEST RESULTS	PASS/FAIL

There were no measures that exceeded the maximum error rate.

III. INFORMATION SYSTEMS CAPABILITIES ASSESSMENT

The audit team reviewed insert health plan name's information system capabilities for accurate HEDIS reporting. The audit team focused specifically on those aspects of insert health plan name's systems that potentially impact the HEDIS Medicaid reporting set.

Note that for the purpose of HEDIS compliance auditing, the term "information systems" is used broadly to include insert health plan name's computer and software environment, data collection procedures, and abstraction of medical records for hybrid measures. The Information Systems (IS) evaluation includes a review of manual processes that may be used for HEDIS reporting as well. In summary, the audit team determines if insert health plan name has the automated systems, information management practices, processing environment and control procedures to capture, access, translate, analyze and report each HEDIS measure.

Please note that there are certain information systems standards that address data (for example, provider data) that are required for the full HEDIS Medicaid reporting set, and not specifically for the DHS Accountability Set or Quality Improvement Collaborative Initiative measures. The auditors' evaluation of insert health plan name's IS capabilities is therefore more comprehensive than the processes required to produce the eight audited Medicaid measures.

***IS Standards' Audit Team Participants*: <AUDIT TEAM>**

SUMMARY OF KEY AUDIT FINDINGS:

IS 1.0 Sound Coding Methods for Medical Data

For each IS Standard, input in a bullet format a sentence summarizing the validation results (Column 3 from the IS grid) and the impact on HEDIS reporting (Column 4 from the IS grid) for each issue related to the standard.

IS 2.0 Data Capture, Transfer and Entry – Medical Data

Insert bulleted sentences summarizing health plan's compliance with the Standards and the impact on HEDIS reporting.

IS 3.0 Data Capture, Transfer and Entry – Membership Data

Insert bulleted sentences summarizing health plan's compliance with the Standards and the impact on HEDIS reporting.

IS 4.0 Data Capture, Transfer and Entry – Practitioner Data

Insert bulleted sentences summarizing health plan's compliance with the Standards and the impact on HEDIS reporting.

IS 5.0 Data Integration Required to Meet the Demands of Accurate HEDIS Reporting

Insert bulleted sentences summarizing health plan's compliance with the Standards and the impact on HEDIS reporting.

IS 6.0 Control Procedures That Support HEDIS Reporting Integrity

Insert bulleted sentences summarizing health plan's compliance with the Standards and the impact on HEDIS reporting.

A. Measure Designation Template

Each of the eight measures reviewed by the audit team received a reporting designation consistent with the two NCQA categories listed below. HSAG used a variety of audit methods, including analysis of computer programs, medical record abstraction results, data files, samples of data and staff interviews to make each measure-specific designation:

R = Report	Measure was fully or substantially compliant with HEDIS specifications or had only minor deviations that did not significantly bias the reported rate. In some cases, the reported rate may be N/A indicating that the Health Plan did not offer the benefit or the denominator was too small to report a valid rate.
NR = Not Report	Measure deviated from HEDIS specifications such that the reported rate was significantly biased. This designation is also assigned to DHS Accountability Set or the Quality Improvement Collaborative Initiative measures that the health plan chose not to report.

For measures reported as percentages, NCQA has defined significant bias as a deviation of more than five (5) percentage points from the true percentage. A deviation of more than 10 percent in the number of reported events has been determined to be a significant bias for other measures.

For some measures, more than one rate is required for HEDIS reporting (for example, Childhood Immunization Status and Well-Child Visits in the First 15 Months of Life). It is possible that insert health plan name prepared some of the rates required by the measure appropriately but had significant bias in others. According to NCQA guidelines, insert health plan name would receive an "R" designation for the measure as a whole, but significantly biased rates within the measure would receive an "NR" designation in the Data Submission Tool (DST), where appropriate.

Table 4 indicates the auditor's report designation for each audited measure. The "Report" designation signifies which rates are appropriate for inclusion in external reports:

Table 4
Measure Designations

Performance Measure	Partial Audit Scope*	Rotated Measure	Core Measure	Expanded Measure	Audit Findings R, N/R	Audit Result Comments
Effectiveness of Care						
Childhood Immunization Status	X					
Numerator 1 – DTP/DTaP	X					
Numerator 2 – IPV/OPV	X					
Numerator 3 - MMR	X					
Numerator 4 - HiB	X					
Numerator 5 – Hepatitis B	X					
Numerator 6 - VZV	X					
Numerator 7 – Combination #1	X					
Numerator 8 – Combination #2	X					
Chlamydia Screening in Women	X					
16 – 20 Age Group	X					
21 – 26 Age Group	X					
Prenatal Care in the First Trimester	X					
Check-Ups After Delivery	X					
Comprehensive Diabetes Care	X					
Eye Exam	X					
Access Availability of Care						
Initiation of Prenatal Care	X					
Use of Services						
Well-Child Visits in the First 15 Months of Life	X					
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Year of Life	X					
Adolescent Well-Care Visit	X					

* This column only applies to Partial Audits and identifies which measures are included in the audit scope

V. AUDIT STATEMENT

We have examined eight measures from the accompanying Performance Report of insert health plan name for conformity with the Health Plan Employer Data and Information Set (HEDIS) 2000 Technical Specifications. This audit is a Partial Audit as defined by the *NCQA 2000 HEDIS Compliance Audit: Standards, Policies and Procedures*. Our audit planning and testing was constructed to measure conformance to the HEDIS specifications for specific measures presented for review.

This report is the insert health plan name management's responsibility. Our responsibility is to examine the selected eight (8) measures, and based on our examination, express an opinion on the eight measures. Our examination included procedures to obtain reasonable assurance that the selected eight measures from the accompanying Performance Report present fairly, in all material respects, the health plan's performance with respect to the HEDIS 2000 Specifications. Our examination was made according to *NCQA 2000 HEDIS Compliance Audit™: Standards, Policies and Procedures*, and included those procedures we considered necessary to obtain a reasonable basis for rendering our opinion.

In our opinion, the selected eight (8) measures from the accompanying Performance Report of insert health plan name were prepared according to the HEDIS 2000 Specifications, and present fairly, in all material respects, the insert health plan name's performance with respect to these Guidelines.

<To be signed when Final Report is issued>
Lead Auditor, credentials

Health Services Advisory Group, Inc.
NCQA Licensed HEDIS® Compliance Audit Organization

<Date Final Report is Issued
Date