



UTILIZATION IN CHILDREN'S HEALTH INITIATIVES IN CALIFORNIA: RESULTS FROM 2006

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EXECUTIVE SUMMARY

As debates on health care reform at the state and national levels carry on, the Children's Health Initiatives (CHIs) continue to provide coverage to uninsured children in California, primarily through Healthy Kids. As of December, 2006, Healthy Kids programs were in operation in 22 of California's most populous counties, and they have collectively covered more than 84,000 children.

Presented here are the results for 2006 from the continuing statewide evaluation comparing utilization and quality outcomes between Healthy Kids and the more established Medi-Cal and Healthy Families Programs. Additionally, this report provides feedback to the CHIs regarding their relative performance on access, utilization, and quality through an analysis of performance improvement and achievement scores across counties. Overall, results show that health plans serving Healthy Kids are demonstrating gains in performance scores over time.

Comparing Healthy Kids to Medi-Cal and Healthy Families

Well-Child and Well-Adolescent Visits

- Santa Clara, San Mateo, and Inland Empire were the highest performing plans for Well-Child Visits, Well-Adolescent Visits and Access to Primary Care, for all age groups in 2006. These three counties along with San Francisco, are home to the oldest CHIs (with start dates between 2001 and 2003).
- Six plans met or exceeded state Healthy Families (65%) or Medi-Cal (73%) benchmarks for 2006 for the rate of Healthy Kids Well-Child visits (Santa Clara 68%, Santa Barbara 69%, San Mateo 69%, San Francisco 79%, Inland Empire 74%, Central Coast 78%).
- Four plans did considerably better than Healthy Families (36%) or Medi-Cal (38%) for the rate of Well-Adolescent visits for Healthy Kids members (Santa Clara 36%, San Mateo 42%, San Francisco 38%, Inland Empire 49%, Central Coast 48%).

Primary Care and Immunizations

- Over 84% of Healthy Kids members ages 12 to 24 months had a primary care visit in 2006 compared to nearly 100% of children in Medi-Cal and Healthy Families members in the same counties. On average, 75% of children ages 2 to 6 years, including 77% of children ages 7 to 11 years, and 71% of children ages 12-19 years had a primary care visit in Healthy Kids. These were lower than percentages for Medi-Cal and Healthy Families in the same counties, yet higher than 2005 rates for these counties and state Healthy Families averages for each age group.
- Healthy Kids average rate of immunizations (62%) was lower than Medi-Cal and Healthy Families with only two plans (Santa Clara and Inland Empire) exceeding the Medi-Cal and Health Families' rates.

Dental Care

- CHIs are providing access to dental care and achieving better utilization than comparative benchmarks for Medi-Cal and Healthy Families. Most reporting

counties surpassed the 2006 Medicaid rates for dental visits by a third, for all age levels. Four plans exceeded the Medicaid benchmark for children ages 2 to 3 years (Partnership Health Plan, Los Angeles, Central Coast, and Alameda), eleven plans exceeded the benchmark for 4 to 6 year olds, twelve plans exceeded the benchmark for 7 to 10 and 11 to 14 year olds, and nine plans exceeded the benchmark for 15 to 18 year olds.

Emergency Department Visits

- In all age groups, Healthy Kids Emergency Department (ED) use rates were considerably lower than the same aged children in Medi-Cal and Healthy Families.
- Rates of ED use in San Francisco were lower than all other counties. Similarly, the proportion of Healthy Kids members receiving Well-Child (ages 3-6 years), Well-Adolescent (ages 12-21 years), and Primary Care Visits in 2006 far surpassed the weighted CHI average. This suggests that the unique and comprehensive healthcare access program in San Francisco may contribute to the lower ED use rates.

Most Improved and Top Performing Counties

Based on 2005 and 2006 utilization rates reported, three counties/plans showed substantial improvement in performance over previous years. They include Santa Cruz (Central Coast), San Joaquin, and San Mateo. Some of the improvement demonstrated by Santa Cruz and San Joaquin might be attributed to their reporting preferred hybrid measures for 2006 (Well-Child and Well-Adolescent) whereas for 2005 administrative measures were used. Across all counties reporting data, improvements were seen between 2005 and 2006 in Well-Child and Adolescent, and access to PCPs. Immunization rates were essentially unchanged, and dental visits declined slightly.

From 2006 data, three counties/plans showed the greatest achievement in performance scores: Santa Cruz (the Central Coast), San Mateo, and the Inland Empire (Riverside and San Bernardino). With Santa Cruz and San Mateo also being the most improved from 2005 to 2006, this suggests substantial efforts are being made in these counties to increase access to care and utilization of services among Healthy Kids members.

Explanations for variation within counties from 2005 to 2006, and variations across counties are complex and can not be interpreted with data on quality measures alone. Variations (for better or worse) could represent changes in care delivery or changes in data collection, data quality, length of time the program has been in operation, the size of the CHI, provider capacity and access, as well as incentive or quality improvement programs.

Recommendations

A common intention of all participants in the Healthy Kids programs, including those that support them financially, has been to assess how the programs are improving children's health care in California. To this end, we recommend synchronizing or at least coordinating ongoing quality monitoring efforts in the Medi-Cal, Healthy Families, and Healthy Kids programs through a public-private collaboration. Health plans that participate in our study were strongly in favor of consistency in program reporting

parameters across programs to reduce the administrative burden associated with responding to multiple quality monitoring efforts.

An explanation of variations across counties and within counties over time could provide a roadmap for improving quality in all Healthy Kids programs. This report provides some basic exploration of these variations; however, a more detailed comparative case study would be needed to better understand changes in the Healthy Kids programs across the state and over time.

While this study examines measures of health care utilization and quality of care in Healthy Kids programs, these are primarily process measures that assess how people are using the system. They are, at best, proxy measures of the effects of these programs on the health of members. As part of the larger Healthy Kids evaluation that is being conducted by the Center for Community Health Studies, a statewide survey of Healthy Kids members is launching in July 2008 to assess the impacts of insurance coverage on health care experiences and changes in health status and health related quality of life. Pairing the results of this report on utilization with more outcomes focused data from the survey will provide a more complete understanding of the strengths and limitations of Healthy Kids programs as a strategy to improving the health of children.

INTRODUCTION

As debates on health care reform at the state and national levels carry on, the Children's Health Initiatives (CHIs) continue to provide coverage to uninsured children in California, primarily through Healthy Kids. As of December, 2006, Healthy Kids programs were in operation in 22 of California's most populous counties, and they have collectively enrolled more than 84,000 children.¹

Presented here are the results for 2006 from the continuing statewide evaluation comparing utilization and quality outcomes between Healthy Kids and the more established Medi-Cal and Healthy Families Programs. Additionally, this report provides feedback to the CHIs regarding their relative performance on access, utilization, and quality through an analysis of performance improvement and achievement scores across counties. Overall, results show that health plans serving Healthy Kids are demonstrating gains in performance scores over time.

Table 1. Healthy Kids Enrollees in Sixteen Counties as of December, 2006

County	CHI / Health Plan abbreviation	Enrollment Start Date (Quarter/Year)	Total Enrolled Children
Alameda	AAH	Q4, 2005	1,045
Kern	K-HN	Q1, 2005	1,442
Los Angeles	LAC	Q3, 2003	39,968
Napa	PHP	Q4, 2005	479
Riverside	IEHP	Q3, 2002	6,945
San Bernardino	IEHP	Q3, 2003	2,821
San Francisco	SFHP	Q1, 2002	3,880
San Joaquin	HPSJ	Q4, 2003	2,568
San Luis Obispo	SLO	Q3, 2005	593
San Mateo	HPSM	Q1, 2003	6,449
Santa Barbara	SBRHA	Q4, 2005	528
Santa Clara	SCFHP	Q1, 2001	13,127
Santa Cruz	CCAH	Q3, 2004	2,038
Solano	PHP	Q4, 2005	1,189
Sonoma	PHP	Q3, 2005	1,013
Yolo	PHP	Q1, 2006	323
TOTAL	--	--	84,408

METHODS

CHIs were asked to provide data on eight indicators for three programs: Healthy Kids, Medi-Cal and Healthy Families. This enabled researchers to develop tables for each county or health plan (some plans represent more than one county) that compares Healthy Kids with Medi-Cal and Healthy Families HEDIS measures in that county (Appendix A: Tables A1-A11). The eight required indicators selected for inclusion in the 2006 year-end report (Table 2), emulated measures from the Health Employer Data and Information Set (HEDIS®).¹ Averages for each indicator were weighted by county Healthy Kids enrollment size and were derived for the three programs (Table 4). In addition, for this year's report, researchers obtained electronic dental utilization data directly from Delta Dental of California for the CHIs served through Delta's Community Partnership Programs. Electronic utilization data was then imported and analyzed for these CHIs using SAS 9.1.2 to calculate rates. CHIs served through either SafeGuard Dental or Western Dental reported their own dental utilization rates on the data reporting form. A more detailed description of data collection and indicator selection is explained in depth in Appendix B.

Table 2. Evaluation Indicators

UTILIZATION INDICATORS	Eligible Population	Measurement
WELL-CHILD VISIT IN PAST YEAR: CHILDREN AGES 3-6 YEARS	Children 3-6 years of age as of December 31, 2006, enrolled as of December 31, 2006, who have been enrolled in the health plan for 1 year with no more than a 45 day gap.	Follow the HEDIS 2006 hybrid specification* for <i>Well Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life</i> .
WELL-BABY VISITS IN FIRST 15 MONTHS OF LIFE	Children 15 months of age as of December 31, 2006, enrolled on the day they turn 15 months old*, and who have been enrolled in the health plan from age 31 days through 15 months of age with no more than a 45 day gap. *day turning 15 months old is equal to 1 st birthday plus 90 days	Follow the HEDIS 2006 hybrid specification for <i>Well Child Visits in the First 15 Months of Life</i> . *but report only two categories: all (6+ visits) and none (0)
WELL-ADOLESCENT VISIT IN PAST YEAR: ADOLESCENTS AGES 12-21 YEARS	Adolescents 12-21 years of age as of December 31, 2006, enrolled as of December 31, 2006, who have been enrolled in the health plan for 1 year	Follow the HEDIS 2006 hybrid specification for <i>Adolescent Well-Care Visits</i> .

¹ HEDIS is a registered trademark of the National Committee for Quality Assurance (NCQA). HEDIS measures used by Medi-Cal Managed Care are audited by certified NCQA auditors. There was no audit for this Healthy Kids evaluation.

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	with no more than a 45 day gap.	
EMERGENCY DEPARTMENT VISITS PER MEMBER MONTH: AGES 0-19 YEARS	Children <1, 1-9, 10-19 years of age as of December 31, 2006, enrolled as of December 31, 2006, who have been enrolled in the health plan for 1 year with no more than a 45 day gap.	Follow the HEDIS 2006 Medicaid specification for Ambulatory Care (AMB) -- <i>Emergency department visits per member month</i> . Count once each visit to an ED that does not result in an inpatient stay, regardless of the intensity of care required during the stay or the length of stay. Count only one ED visit per date of service.

ACCESS INDICATORS	Eligible Population	Measurement
PRIMARY CARE PHYSICIAN VISIT	Children 1-6 years of age as of December 31, 2006, enrolled as of December 31, 2006, who have been enrolled in the health plan for 1 year with no more than a 45 day gap, and children 7-19 years of age as of December 31, 2006, enrolled on December 31, 2006, who have been enrolled in the health plan for 2 years with no more than a 45 day gap in each year of enrollment.	Follow the HEDIS 2006 administrative specification for <i>Children and Adolescents' Access to Primary Care Practitioners</i> .
DENTAL VISIT IN PAST YEAR: CHILDREN AGES 2-18 YEARS	Children 2-18 years of age as of December 31, 2006, enrolled as of December 31, 2006, who have been enrolled in the dental health plan for 1 year with no more than a 45 day gap	Follow the HEDIS 2006 administrative specification for <i>Annual Dental Visit</i> .

QUALITY INDICATORS	Eligible Population	Measurement
IMMUNIZATIONS, COMBINATION 2	Children 2 years of age as of December 31, 2006, enrolled as of December 31, 2006, who have been enrolled in the health plan for 1 year prior to second birthday with no more than a 45 day gap in that period.	Follow the HEDIS 2006 hybrid specification for <i>Childhood Immunization Status, Combination 2</i> .
ASTHMA MEDICATION: CHILDREN AGES 5-17 YEARS	Children 5-9 and 10-17 years of age as of December 31, 2006, enrolled in the health plan as of December 31, 2006.	Follow the HEDIS 2006 hybrid specification for <i>Use of Appropriate Medications for People with Asthma</i> .

CHIs with active enrollment in 2006, the data reporting year, were asked to report access, utilization and quality indicators. Most of the indicators specified a continuous enrollment eligibility requirement ranging from six months to two years enrollment before a particular date or event. Depending on start dates and the pace of member enrollment, CHIs may not have met eligibility requirements for all of the measures and were asked to explain this with respect to criteria outlined in the data tables. Of the 26 CHIs in California, only 11 met the criteria for at least one of the indicators in 2006 (See

Table 3). The others CHIs were excluded because they did not meet the continuous enrollment criteria.

To provide comparisons, the Healthy Kids indicator results are charted alongside lines representing at least two of the following four benchmarks: 1) the 2006 averages for all reporting CHIs, 2) 2006 averages for Medicaid nationally, 3) 2006 averages for Medi-Cal statewide, or 4) 2005 averages for Healthy Families statewide, depending upon availability of benchmark data.^{2,3,4}

To further compare achievement levels by county, a Top Performer analysis was conducted, modeled after the Healthy Families Quality Improvement Project, created by the Managed Risk Medical Insurance Board (MRMIB).⁵ The Quality Measurement Scores used here were adjusted to include five HEDIS® measures: childhood immunizations, well-child visits, well-adolescent visits, access to primary care providers, and dental visits, whereas the MRMIB methodology includes only the first four measures listed. Another difference is this report calculates separately improvement (Most Improved = the greatest relative increase in scores from 2005 to 2006) and achievement (Best Achievement = highest scores on the sum of measures) (Tables 6).

Top Performance scores were calculated by 1) creating average achievement scores for each of the five indicators for 2006, 2) creating a total achievement score for 2006, 3) creating average achievement scores for each of the five indicators for 2005, 4) calculating improvement scores by subtracting 2005 achievement scores from 2006 achievement scores for each indicator, and 5) calculating Quality Measurement Scores by summing improvement for each county where at least 3 indicators were available for each reporting year. Three of the collected indicators were not included in the performance analysis: Emergency Department Visits were reported on a "visits per 1000 member month" scale, not a simple rate calculation as for the other HEDIS measures, and the number eligible children for asthma medications and well-baby visits measures were too small to allow rate calculation (number eligible < 30).

RESULTS

All CHIs that were in operation for the entire 2006 reporting year reported data. Eleven reports were submitted representing 16 CHIs. Inland Empire Health Plan (IEHP)

provided one report that combined the data for both the San Bernardino and Riverside CHIs. Partnership Health Plan (PHP), serving Napa, Solano, Sonoma, and Yolo similarly provided one report that combined the data for the four counties. Central Coast Alliance for Health (CCA) submitted one report for Santa Clara, with its reported Medi-Cal and Healthy Families data incorporating Monterey, even though Monterey does not have a Healthy Kids program. Although Santa Barbara and San Luis Obispo submitted separate reports for Healthy Kids, their Medi-Cal and Healthy Families data were combined for submission by the Santa Barbara Regional Health Authority (SBRHA). Data for Alameda County will be included in a report supplement at a later date.

Organization of Results

- **Section 1:** Results by Indicator, including charts for each of the required indicators comparing Healthy Kids results for the eleven CHIs (reporting tables for each individual CHI are provided in Appendix A), along with the national Medicaid and Healthy Families benchmarks. Both 2005 and 2006 data are included to illustrate changes in performance in the two years. Also included in this section is an aggregated comparison of the Healthy Kids data with Medi-Cal and Healthy Families using a weighted mean for all CHIs that reported 2006 data.
- **Section 2:** Results by Highest Performing CHIs, which includes recognition of the three Most Improved CHIs, demonstrating the greatest gains in performance from 2005 to 2006.
- **Section 3:** Results for CHIs that reported data for the first time for 2006.
- **Section 4:** Discussion & Recommendations.

Results by Indicator: Comparison of CHI Outcomes for Healthy Kids

The following table identifies each CHI that is represented in this report along with the name used to represent the CHI and its counties in the following charts.

Table 3. CHIs Operational in 2006: Names Used for Results Charts

ACRONYM	NAME	CHIs REPRESENTED
AAH	Alameda Alliance for Health	Alameda
CCAH	Central Coast Alliance for Health	Santa Cruz (Monterrey is included in Medi-Cal and Healthy Families data)
IEHP	Inland Empire Health Plan	San Bernardino, Riverside
K-HN	Kern	Kern (data provided by Health Net)
LAC	Los Angeles Care	Los Angeles
PHP	Partnership Health Plan	Napa, Solano, Sonoma, Yolo
SBRHA	Santa Barbara Regional Health Authority	Santa Barbara (Santa Luis Obispo is included in Medi-Cal and Healthy Families data)
SCFHP	Santa Clara Family Health Plan	Santa Clara
SFHP	San Francisco Health Plan	San Francisco
HPSJ	Health Plan of San Joaquin	San Joaquin
SLO	San Luis Obispo	San Luis Obispo (Santa Barbara is included in Healthy Families data; data is reported by the Santa Barbara Regional Health Authority)
HPSM	Health Plan of San Mateo	San Mateo

Table 4 presents summary statistics of the performance of the eleven CHIs that were operational in 2006. Reported figures include Healthy Kids, Medi-Cal and Healthy Families. These figures represent weighted averages and are derived from the nine CHIs participating in this year's data collection program although not all CHIs provided data for all indicators or for all programs.

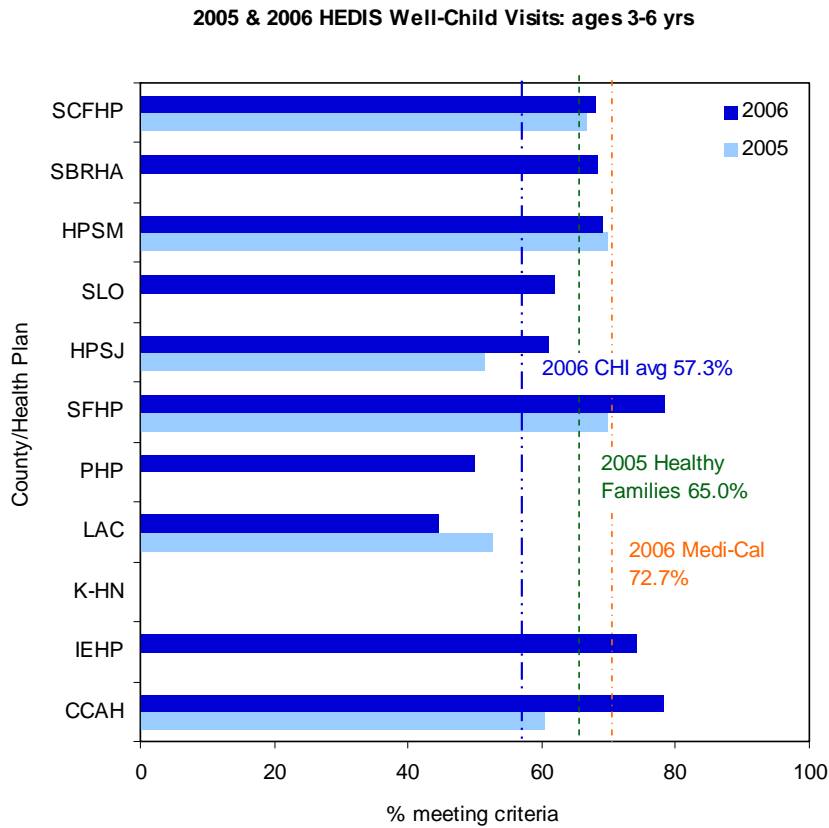
Table 4. Comparison of Programs with 2006 data* (by weighted averages)

	Healthy Kids		Medi-Cal		Healthy Families	
	rate*	# CHIs	rate	# CHIs	rate	# CHIs
1. well-child visit in past year: children ages 3-6 years	57.3%	10	74.5%	11	77.5%	10
2. well-adolescent visit in past year: adolescents ages 12-21 years	34.5%	10	34.2%	11	50.1%	10
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	77.29	10	70.32	10	83.09	8
ages 1-9 years	21.02	11	31.62	10	40.31	8
ages 10-19 years	15.87	11	19.85	10	24.29	8
4. primary care physician visit						
ages 12-24 mo	84.26%	5	98.56%	10	99.49%	9
ages 25 mo-6 yrs	74.78%	10	85.30%	10	88.48%	10
ages 7-11 years	77.41%	7	87.86%	10	86.58%	10
ages 12-19 years	70.94%	7	77.52%	10	84.26%	10
5. dental visit in past year: children						
ages 2-3 years	55.30%	11	NC		NC	
ages 4-6 years	52.00%	11	NC		NC	
ages 7-10 years	65.20%	11	NC		NC	
ages 11-14 years	65.30%	11	NC		NC	
ages 15-18 years	67.40%	11	NC		NC	
6. immunizations combination 2	61.5%	5	76.4%	11	83.1%	9
7. asthma medication: children						
ages 0-5 years	100	1				
ages 5-9 years	93.75	1	90.79%	9	66.01%	3
ages 10-17 years	NC	0	87.70%	9	61.22%	3
8. well-baby visits in first 15 months of life						
0 visits	NC		2.24%	10	2.27%	3
6+ visits	NC		53.53%	10	64.45%	5

*Only CHIs that reported ≥ 30 beneficiaries in their eligible population were included in this analysis

NC = Not Calculated because insufficient eligibility or data was not reported

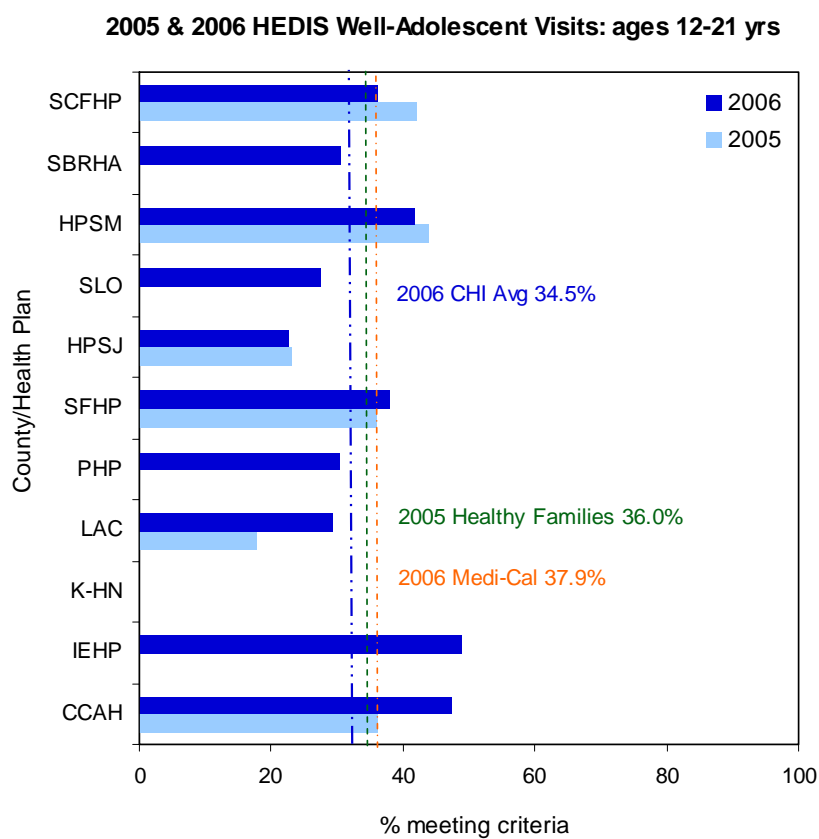
MM=Member Months



	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	60.51	NR	NR	52.6	DNP	69.9	51.5	DNP	69.9	DNP	66.7
2006	78.1	74.3	NR	44.53	50	78.54	61.13	62	69.1	68.29	68.05

NR = Not Reported; DNP=Did Not Participate

Figure 1. Healthy Kids, Well-Child Visits, by County: Ages 3-6 years



	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	36.3	NR	0	17.8	DNP	35.9	23.1	DNP	43.8	DNP	42.1
2006	47.5	49.1	NR	29.4	30.4	38.1	22.7	27.6	41.8	30.6	36.1

NR = Not Reported; DNP=Did Not Participate

Figure 2. Healthy Kids, Well-Adolescent Visit, by County: Ages 12-21 years

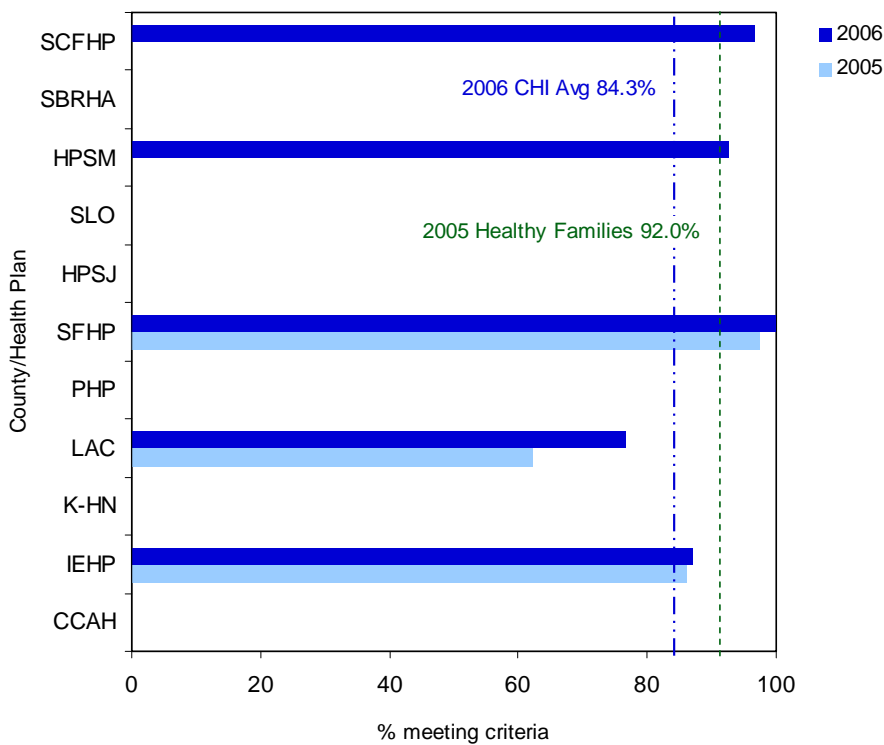
1. Well-Child and Adolescent Visits

Well-Child Visits (children ages 3-6 years). The weighted average for well child visits for 3-6 year olds in Healthy Kids programs is 57.3%, lower than the weighted average for Medi-Cal (72.7%) and Healthy Families (77.5%) in the participating counties (see Table 4). Disaggregated by CHI however, shows that well-child visits for children ages 3-6 met or exceeded State Healthy Families and Medi-Cal benchmarks in the six CHIs reporting on this indicator. Three counties, Los Angeles, San Joaquin, and San Luis Obispo, reported rates below the state program thresholds. The highest performing plan was San Francisco, where 80% of children are receiving these exams, while only about half of the children in Los Angeles and PHP counties are reported as receiving these exams. Among counties reporting both 2005 and 2006 data, four counties improved the proportion of children receiving well child visits in 2006 over 2005 levels including

Central Coast, San Francisco, San Joaquin, and Santa Clara. Los Angeles and San Mateo declined slightly from 2005 levels.

Well Adolescent Visits (adolescents ages 12-21). The percentage of adolescents receiving well visits among the 5 reporting counties was lower than for younger children in all programs. The weighted average for the CHIs was close to 34% for both Healthy Kids and Medi-Cal, but 50% in Healthy Families (Table 4). Disaggregated, four plans did considerably better than the State Medi-Cal program benchmark while five were below. In one plan, Inland Empire, nearly half of the Healthy Kids enrollees received this service. All other counties reported between 23% and 47% compliance. Three counties, Central Coast, Los Angeles, and San Francisco improved over last year, while San Joaquin, San Mateo, and Santa Clara declined slightly. Three plans, Inland Empire, Partnership, and Santa Barbara, did not report 2005 data.

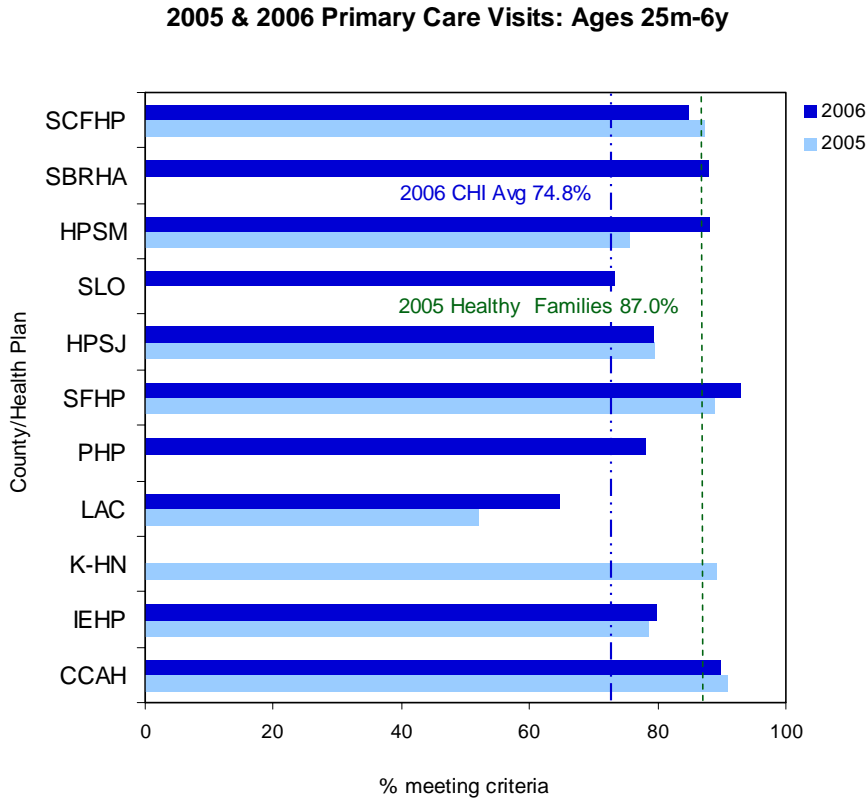
2005 & 2006 Primary Care Visits: Ages 12-24 months



	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	IE	86.1	IE	62.3	DNP	97.5	IE	DNP	IE	DNP	IE
2006	IE	87.1	NR	76.5	IE	100.0	IE	IE	92.6	IE	96.7

IE = Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

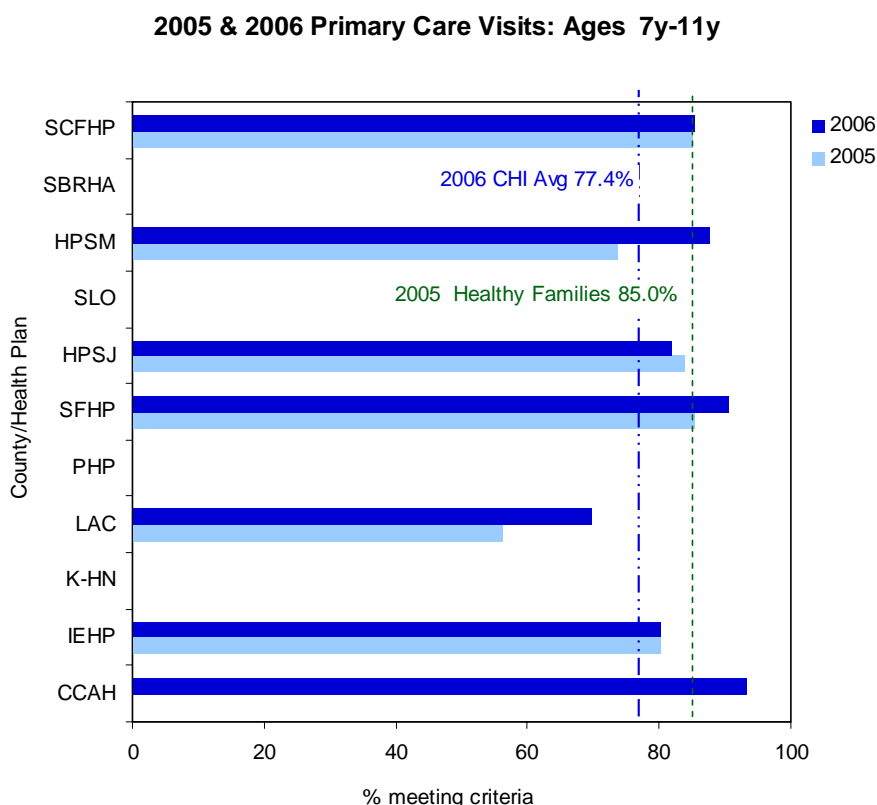
Figure 3a. Healthy Kids, Primary Care Visit, by County: Ages 12-24 months



	CAAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	91.0	78.7	89.2	52.1	DNP	88.8	79.5	DNP	75.5	DNP	87.5
2006	89.9	79.9	NR	64.7	78.2	93.0	79.4	73.3	88.1	87.8	84.9

NR=Not Reported; DNP=Did Not Participate

Figure 3b. Healthy Kids, Primary Care Visit, by County: Ages 25 months-6 years



	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	IE	80.3	IE	56.3	DNP	85.3	84.0	DNP	73.8	DNP	85.2
2006	93.4	80.1	NR	69.8	IE	90.6	82.0	IE	87.5	IE	85.5

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

Figure 3c. Healthy Kids, Primary Care Visit, by County: Ages 7-11 years

2. Primary care Visits

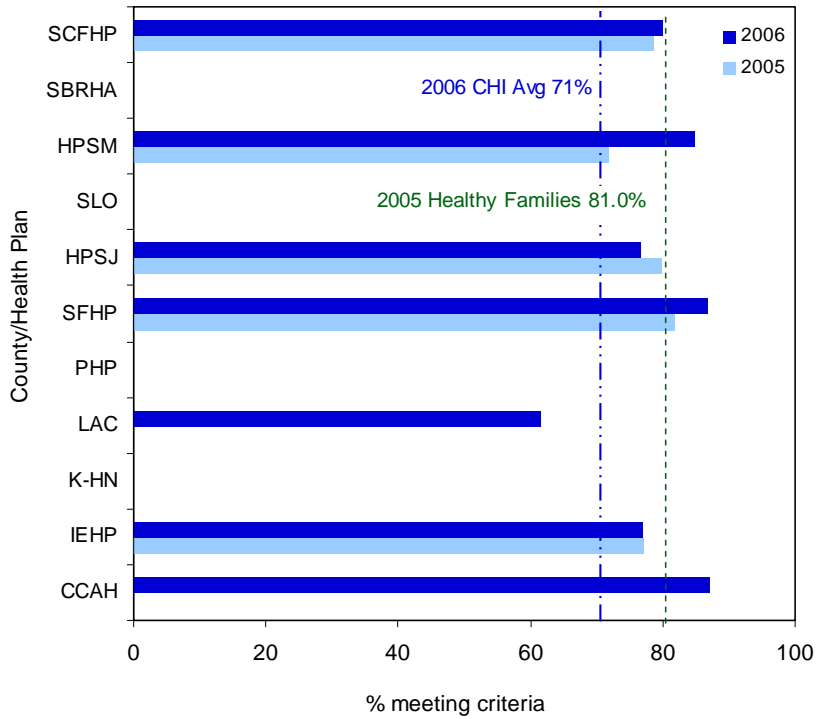
Ages 12-24 months. Among the Healthy Kids enrollees, the weighted average **among the 9 counties** was generally lower than for Healthy Families and Medi-Cal for all age groups. Among Healthy Kids members ages 12 to 24 months, over 84% had a primary care visit compared to nearly all children in Medi-Cal and Healthy Families. Disaggregated, only five plans reported data on primary health care visits for children ages 12 to 24 months, and three of these reported for both 2005 and 2006. Three counties, Santa Clara, San Mateo and San Francisco, met or exceeded the 90% Healthy Families benchmarks. While Los Angeles and Inland Empire were below, at least three-quarters of children are receiving these services in these two counties exceeding their performance from 2005 levels. Five plans, Central Coast, Kern, Partnership, San Joaquin, San Luis Obispo and Santa Barbara, did not report 2005 or 2006 data either because they were not active for all of the reporting year or there was insufficient eligibility to allow a rate calculation for this measure.

Ages 2-6 years. On average, children ages 2 to 6 years reported high rates of primary care visits, averaging 75% for Healthy Kids but lower than the 85% average for Medi-Cal and 88% for Healthy Families. Among the CHIs, the percentage receiving these services range from 65% to well over 90%. Four plans met or exceeded the Healthy Families threshold of 87%, including Santa Barbara, San Mateo, San Francisco, and Central Coast. While five were below (San Luis Obispo, Inland Empire, Los Angeles, Partnership, San Joaquin, and Santa Clara), two counties, Inland Empire and Santa Clara, were very close and both reported 80% compliance. Five counties improved over last year's levels including San Mateo, San Francisco, Los Angeles, San Joaquin and Inland Empire, and only two, Central Coast and Santa Clara, declined slightly, although both were still above 80% compliance.

Ages 7 to 11 years. School-age children similarly reported high rates of primary care visits. On average, over 77% of Healthy Kids enrollees made a primary care visit at a lower rate than the weighted average of 88% in Medi-Cal and 87% in Healthy Families in those same counties. Disaggregated, the percentage of children making a visit ranges from a low of 70% in Los Angeles) to over 90% in San Francisco. Four plans met or exceeded the Healthy Families threshold of 87%, including Santa Clara, San Mateo, San Francisco, and Central Coast, while three were below (Inland Empire, Los Angeles, and San Joaquin). Among the counties reporting both 2005 and 2006 data, five remained the same or improved over last year's levels including San Mateo, San Francisco, Los Angeles, and Inland Empire, and only one, San Joaquin, declined slightly.

Ages 12-19 years. Adolescent primary care visits were reported by seven counties and the weighted average was a lower for Healthy Kids enrollees (71%), than for both Medi-cal (78%) and Healthy Families (84%). Disaggregated, rates of ranging from a low of 62% in Los Angeles to 86% in San Francisco. Four of the plans Santa Clara, San Mateo, San Francisco, and Central Coast, exceeded the Healthy Families benchmark of 81%, while 3 counties, Inland Empire, Los Angeles, and San Joaquin were below. Among the reporting counties, three plans improved over last year and one, San Joaquin, declined slightly. Six counties did not report 2005 data either because they were not actively enrolling Healthy Kids members for the full calendar year or they did not have sufficient eligibility in this age range to calculate a rate.

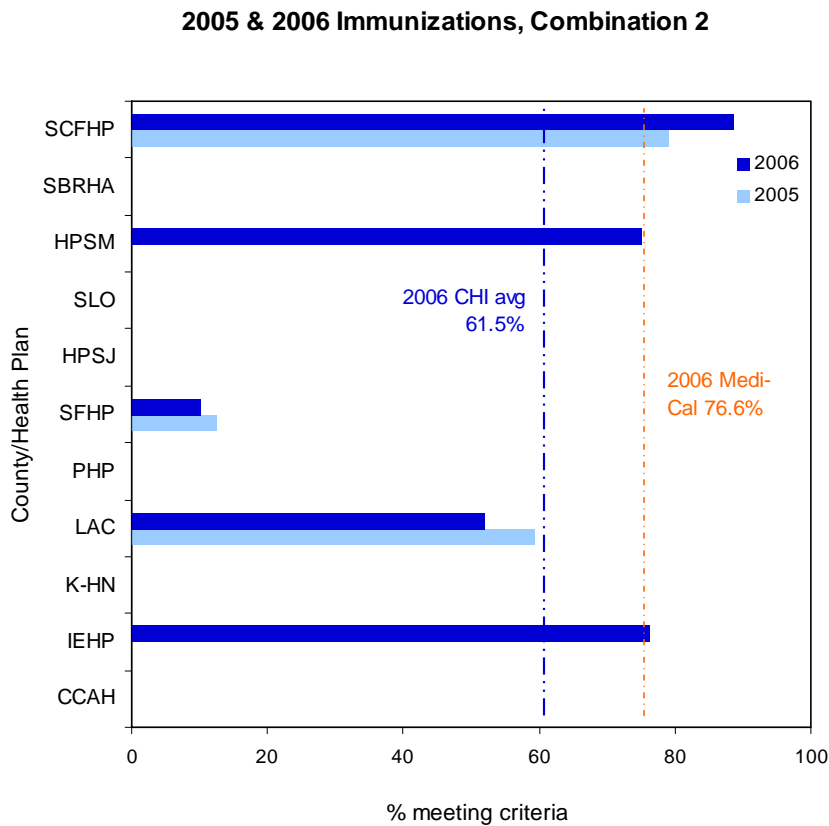
2005 & 2006 Primary Care Visits: Ages 12y-19y



	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	IE	77.1	IE	IE	DNP	81.8	79.8	DNP	71.9	DNP	78.7
2006	87.0	77.0	NR	61.5	IE	86.8	76.7	IE	84.9	IE	79.9

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

Figure 3d. Healthy Kids, Primary Care Visit, by County: Ages 12-19 years



	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	IE	NR	IE	59.3	DNP	12.5	IE	DNP	IE	DNP	79.1
2006	IE	76.3	NR	52.0	IE	10.3	IE	IE	75.0	IE	88.7

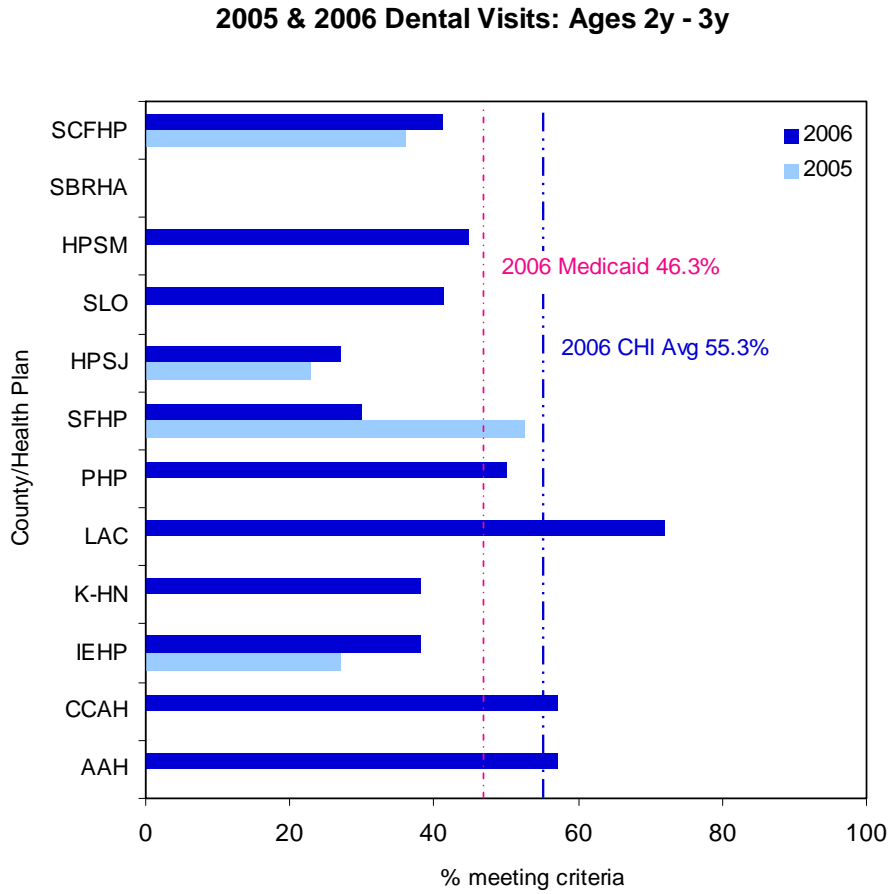
IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

Figure 5. Healthy Kids, Immunizations, Combination 2, by County

3. Immunizations, Combination 2.

Among the five CHIs participating, nearly 62% (weighted average) of members were receiving the combination 2 immunization but this was lower than the 76% in Medi-Cal and 81% in Healthy Families reported in the CHI countries. The Medicaid benchmark of 77% was exceeded by two plans, Santa Clara and Inland Empire, while San Francisco, San Mateo and Los Angeles were below the benchmark. Santa Clara improved over last year's levels while San Francisco and Los Angeles dropped somewhat.

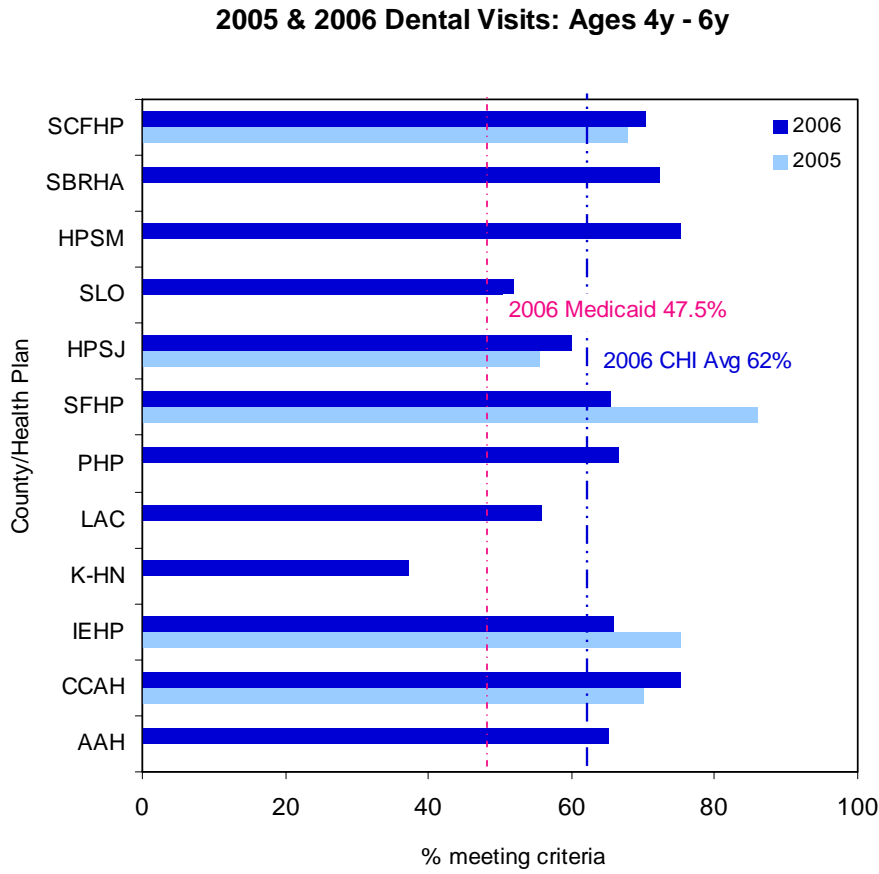
Rates for immunizations may not accurately reflect the actual number of children in Healthy Kids programs who received immunizations. One reason maybe that children are able to get vaccinations through other means (i.e., school, free clinics, Children's Health and Disability Prevention gateway or CHDP) and hence there is no documentation of their receiving immunizations from a Healthy Kids provider.



	AAH	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	DNP	IE	26.9	IE	NR	DNP	52.6	23.0	DNP	NR	DNP	36.0
2006	57.1	57.1	38.2	38.3	72.1	50.0	29.9	26.9	41.4	44.7	0.0	41.1

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

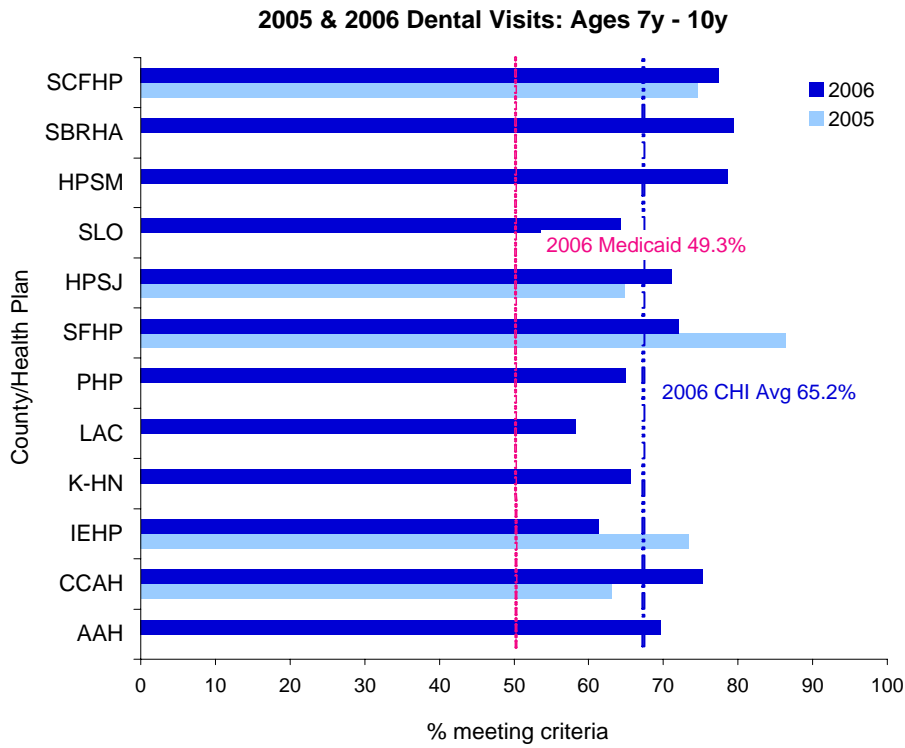
Figure 4a. Healthy Kids, Dental Visit in the Past Year, by County: Ages 2-3 years



	AAH	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	DNP	70.0	75.3	IE	NR	DNP	86.2	55.6	DNP	NR	DNP	68.0
2006	65.2	75.3	65.9	37.2	55.9	66.7	65.5	60.1	52.0	75.3	72.2	70.3

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

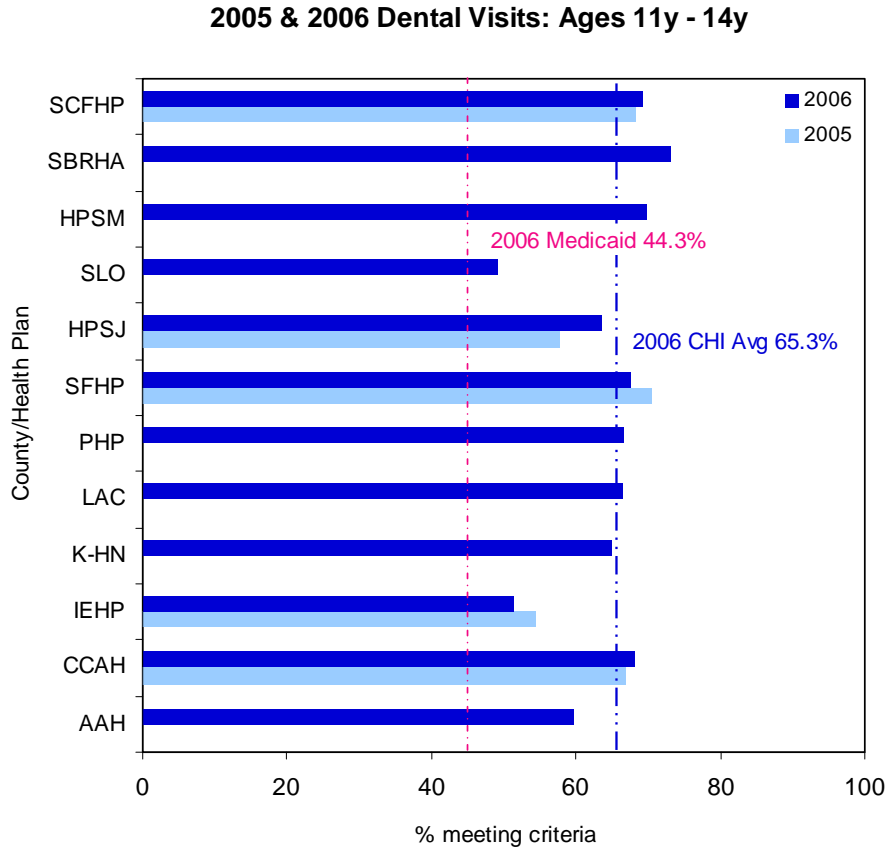
Figure 4b. Healthy Kids, Dental Visit in the Past Year, by County: Ages 4-6 years



	AAH	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	DNP	63.0	73.4	IE	NR	DNP	86.4	64.9	DNP	NR	DNP	74.5
2006	69.7	75.2	61.3	65.7	58.2	65.0	72.1	71.2	64.3	78.6	79.4	77.5

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

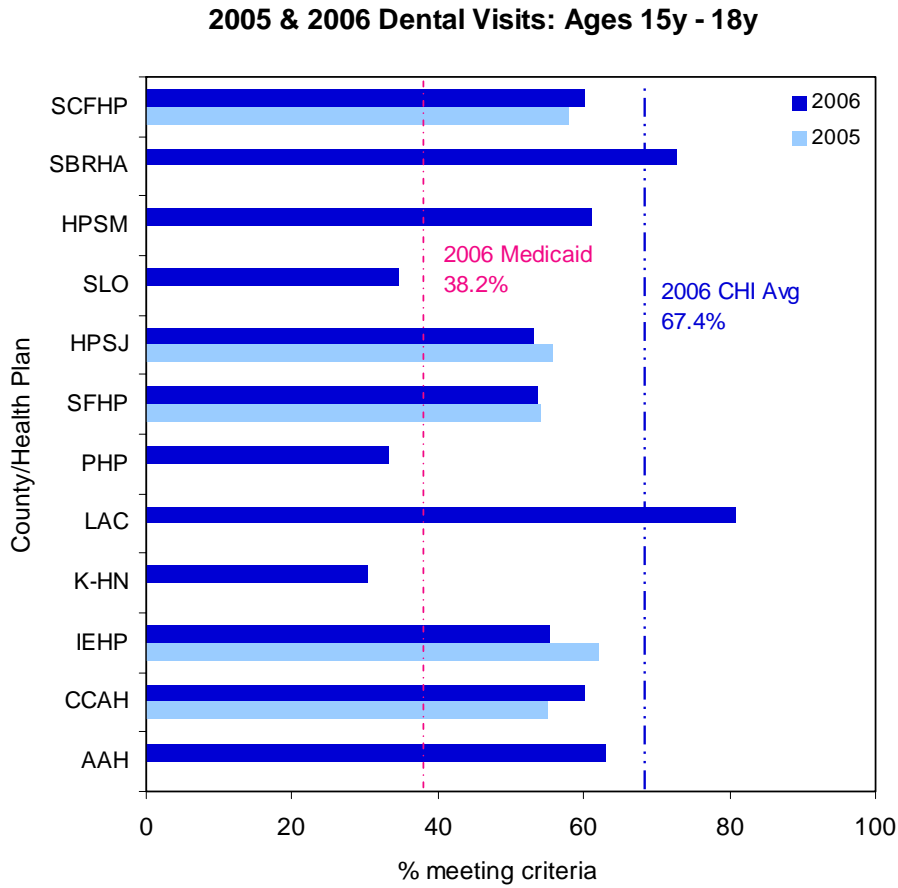
Figure 4c. Healthy Kids, Dental Visit in the Past Year, by County: Ages 7-10 years



	AAH	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	DNP	67.0	54.4	IE	NR	DNP	70.6	57.7	DNP	NR	DNP	68.4
2006	59.8	68.0	51.2	65.0	66.5	66.7	67.6	63.5	49.1	69.7	73.1	69.2

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

Figure 4d. Healthy Kids, Dental Visit in the Past Year, by County: Ages 11-14 years



	AAH	CCAH	IEHP	K-HN	LAC	PHP	SFHP	HPSJ	SLO	HPSM	SBRHA	SCFHP
2005	DNP	55.0	62.0	IE	NR	DNP	54.1	55.8	DNP	NR	DNP	58.1
2006	63.1	60.1	55.3	30.4	80.8	33.3	53.6	53.2	34.8	61.1	72.7	60.2

IE= Insufficient Eligibility for rate calculation; NR=Not Reported; DNP=Did Not Participate

Figure 4e. Healthy Kids, Dental Visit in the Past Year, by County: Ages 15-18 years

4. Dental Visits.

Ages 2-3 years. On average, 56% of the children ages 2-3, were receiving a dental visit with plans ranging from a low of 27% in San Joaquin to over 70% in Los Angeles County. Medi-Cal and Healthy Families data are not available for these counties. Four counties exceeded the Statewide Medicaid benchmark of 46% including Partnership, Los Angeles, Central Coast and Alameda, and six were below. Among the counties reporting 2005 data, three counties improved (Santa Clara, San Joaquin, and Inland Empire) over the previous year's levels and one, San Francisco, declined slightly.

Ages 4-6 years. Weighted average increased for children ages 4-6 with rates ranging from a low of 37% in Kern County to over 75% in Central Coast. All but Kern reported rates that exceed statewide Medicaid benchmark of 48%. Eight plans reported that over 60% of children ages 4-6 received dental visits in 2006. Among the five counties reporting data for 2005 and 2006, use of dental care improved for children ages 4-6 in Central Coast, San Joaquin, and Santa Clara. Rates declined in San Francisco and Inland Empire however, both were considerably higher than the Medicaid threshold.

Ages 7-10 Years. Similar results were reported for school-age children ages 7-10 increasing on average across the counties to 62% ranging from a low of 58% in Los Angeles to 79% in San Mateo; all counties exceeded the 50% Medicaid benchmark and two reaching nearly 80% compliance. Among the counties reporting both 2005 and 2006 data, three, Santa Clara, San Joaquin and Central Coast, improved over last year's rate; two, San Joaquin and Inland Empire, declined, although both of these counties exceeded the Medicaid benchmarks.

Ages 11 to 14 Years. The weighted average for older children was a bit lower (52.5%) than the rates reported for younger children reported above. Among the CHIs, percentages receiving dental visits ranged from a low of 50% in San Luis Obispo to over 73% in Santa Barbara. Yet in all plans, the percentage of children receiving dental care exceeded the Medicaid benchmark of 44%. Among counties reporting 2005 and 2006 data, three improved over last year's levels including Santa Clara, San Joaquin, and Central Coast, while two, San Francisco and Inland Empire, declined. Still, both of these counties exceeded the Medicaid benchmarks

Ages 15-18 Years. On average, the percentage of adolescents receiving dental visits is highest among the age groups (68%), although we note considerable variation in the percentage receiving dental visits ranging from a low of 30% in Kern to over 80% in Los Angeles. Nine counties exceeded the Medicaid benchmark of 38% while three were below (San Luis Obispo, Partnership and Kern). Among counties reporting 2005 and 2006 data, two improved over last year's levels and three declined although very slightly.

Table 5. 2006 Emergency Department Visits in Past Year, by County and Program

	Age Group	Healthy Kids		Medi-Cal		Healthy Families	
		visits/ 1000MM	MM	visits/ 1000MM	MM	visits/ 1000MM	MM
CCAH	<1 yr	29.70	101	88.07	66,688	43.01	279
	1-9 yrs	13.45	9,888	44.97	305,733	23.43	14,725
	10-19 yrs	10.06	12,824	31.26	198,148	15.12	11,440
IEHP	<1 yr	68.86	944	78.15	148,291	54.82	3,721
	1-9 yrs	17.04	74,570	34.58	1,162,018	19.78	231,940
	10-19 yrs	11.63	50,890	25.57	868,843	14.67	231,007
K-HN	<1 yr	52.08	96	NR	NR	NR	NR
	1-9 yrs	6.59	8,194	NR	NR	NR	NR
	10-19 yrs	3.73	5,096	NR	NR	NR	NR
LAC	<1 yr	59.10 [#]	863	71.33	370,937	15.54	193
	1-9 yrs	8.50 [#]	221,194	30.97	3,379,321	8.85	9,943
	10-19 yrs	6.02 [#]	278,019	18.52	2,661,427	6.92	8,815
PHP	<1 yr	11.76	85	43.36	36,461	NR	NR
	1-9 yrs	10.14	8,187	21.79	247,233	NR	NR
	10-19 yrs	7.73	6,340	18.78	211,088	NR	NR
SFHP	<1 yr	35.48	310	34.17	14,222	17.49	343
	1-9 yrs	8.93	19,258	19.99	123,003	10.81	26,000
	10-19 yrs	6.83	35,160	13.00	95,417	5.34	40,824
HPSJ	<1 yr	100.00	60	55.67	23,981	NR	NR
	1-9 yrs	60.23	2,474	22.91	205,384	NR	NR
	10-19 yrs	61.58	1,900	16.51	184,168	NR	NR
SLO	<1 yr	106.38	47	*	*	*	*
	1-9 yrs	16.84	3,741	*	*	*	*
	10-19 yrs	12.17	2,712	*	*	*	*
HPSM	<1 yr	42.31	260	76.01	24,418	73.73	217
	1-9 yrs	17.13	28,844	40.19	141,531	21.21	19,236
	10-19 yrs	12.82	44,628	27.67	88,867	13.61	16,747
SBRHA	<1 yr	0.00	7	75.98	38,758	31.15	899
	1-9 yrs	18.63	2,684	35.42	193,320	15.34	10,494
	10-19 yrs	9.31	2,041	26.73	126,118	13.23	10,658
SCFHP	<1 yr	35.42	734	57.35	50,513	30.65	1,566
	1-9 yrs	12.43	66,614	31.12	333,067	17.45	80,807
	10-19 yrs	8.99	92,199	20.65	207,945	8.60	66,745
(weighted) CHI	<1 yr	visits/1000MM (# CHIs)		visits/1000MM (# CHIs)		visits/1000MM (# CHIs)	
	1-9 yrs	51.61 (10)	4,282,920	70.99 (10)	30,775,474	72.69 (8)	1,894,732
	10-19 yrs	17.26 (11)	1,441,773	31.83 (10)	13,800,480	32.98 (8)	859,644
Comparison	<1 yr			2006 National Medicaid			
	1-9 yrs			visits/1000MM	MM		
	10-19 yrs			37.10	NR		

NR = Not Reported or data was not submitted in a comparable format

*Medi-Cal and Healthy Families numbers for San Luis Obispo were combined with Santa Barbara

#Data was incomplete at the time of reporting

5. Emergency Department Visits

Weighted rates per 1000 MM by program. Table 5 shows Emergency Department (ED) use rates per member months among Healthy Kids programs, Medi-Cal and Healthy Families for children ages 0-19 years. For one year olds, the weighted average of ED visits per 1000 member months (MM), is 51.6 in Healthy Kids, considerably lower than 71 per 1000 MM for Medi-Cal enrollees and 73 for Healthy Families. For older children (ages 1-9) ER use dropped for all payer groups, but declined the most for Healthy Kids (17.3 visits for 1000 MM), nearly half of the rate for Medi-Cal and Healthy Families. Rates dropped further for adolescents (ages 10-19 years) – declining to 13.3 for Healthy Kids, 20 and 21 per 1000 MM for Medi-Cal and Healthy Families respectively.

While we note differences across programs, we also note considerable differences in ED use among the CHIs. For infants (ages 0-1) in the Healthy Kids program, rates range from a low of 11.8 in Partnership Health Plans to over 106 in San Luis Obispo. In comparison, ED rates per 1000 MM for infants (ages 0-1) in Medi-Cal ranges from a high of 88 in Central Coast to a low of 34 in San Francisco. The range for Healthy Families shows a high of 74 in San Mateo and a low of 15.5 in Los Angeles. For children ages 1-9, in Healthy Kids, ED rates per 1000 MM range from a low of 6.6 in Kern to over 60 in San Joaquin. By comparison, rates range in Medi-Cal from a low of 22 in Partnership Health Plan to nearly 45 in Central Coast. For Healthy Families, Central Coast had the highest rate of 15.1 ED visits per 1000 mm, and San Francisco, the lowest rate of 5.3. Similar patterns were noted for adolescents (ages 10-19). For Healthy Kids, ED use rates per 1000 MM range from a low of 3.7 in Kern to 61.6 in San Joaquin. By comparison, rates in Medi-Cal range from a low of 21.8 in Partnership Health Plan to 31.3 in Central Coast. And for Healthy Families, San Francisco reported the lowest rate of 5.3 visits per 1000 MM compared to 15.1 in Central Coast.

Multivariate analysis. Because we noted differences in age, health insurance program and CHI county, we performed a multivariate regression analysis using age, health insurance program type and CHI county. Because the rate (ED visits per 1000 member months) is not normally distributed, we took the log transformation of the outcome variable (rate) which enabled us to perform a regression analysis. The analysis confirmed a statistically significant difference in ED use by age ($p < 0.05$), and Health Insurance Program ($p < 0.01$). However after controlling for age and health plan type, only two counties, San Francisco which was lower ($t = -2.05$, $p = 0.04$) and San Joaquin which was higher ($t = 2.96$, $p = 0.004$), were significantly different than the other counties.

Results by Highest Performing CHIs: analyses of improvement from 2005 to 2006 and achievement in 2006

Table 6. CHI Performance Achievement and Improvement Scores from 2005 to 2006, by Plan and Measurement Type

Plan	Step 1 2006 Achievement					Step 2 2006 Total Achievement	Step 3 2005 Achievement					Step 4 Improvement 2005 to 2006					Step 5 Quality Measurement Score
	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP	Dental Visit	Total Achievement Score 2006	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP	Dental Visit	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP	Dental Visit	Total Improvement Score 2005 to 2006
CCAH	IE	78.1	47.5	90.1	68.8	284.5	IE	60.5	36.3	91.0	63.8	NA	17.6	11.2	-0.9	5.1	8.2
IEHP	76.3	74.3	49.1	81.0	54.4	335.1	NR	NR	NR	80.6	58.4	NA	NA	NA	0.5	-4.0	NA
K-HH	NR	NR	NR	NR	47.3	47.3	IE	NR	0.0	89.2	IE	NA	NA	NA	NA	NA	NA
LAC	52.0	44.5	29.4	68.1	66.7	260.7	59.3	52.6	17.8	56.9	NR	-7.3	-8.1	11.6	11.2	NA	1.9
SFHP	10.3	78.5	38.1	92.6	57.7	277.5	12.5	69.9	35.9	88.4	70.0	-2.2	8.6	2.2	4.2	-12.3	0.1
HPSJ	IE	61.1	22.7	79.4	62.5	225.7	IE	51.5	23.1	81.1	51.4	NA	9.6	-0.4	-1.7	11.1	4.7
HPSM	75.0	69.1	41.8	88.3	69.5	343.7	IE	69.9	43.8	73.7	NR	NA	-0.8	-2.0	14.5	NA	3.9
SCFHP	88.7	68.1	36.1	86.8	68.3	348.0	79.1	66.7	42.1	83.8	61.0	9.6	1.3	-6.0	3.0	7.3	3.0
Total												-0.03	28.3	16.6	30.8	7.1	

IE = Insufficient Eligibility due to small group size

NR = Data Not Reported

NA = Data Not Available due to insufficient eligibility or data not reported for individual indicators

Purple numbers denote hybrid measures reported, as requested for the evaluation

Method for Calculation

Step #1: Average 2006 Achievement Scores for each of the five indicators (collapsing age groups into one Score for Access to PCP and Dental Visits)

Note: MRMIB methodology differs by using a sum of Achievement across indicators versus using the average

Step #2: Sum 2006 Achievement Scores by county to get Total Achievement Score

Step #3: Average Achievement 2005 Scores for each of the five indicators (collapsing age groups into one Score for Access to PCP and Dental Visits)

Step #4: Calculate Improvement 2005 to 2006 Scores by Subtracting 2005 Achievement Scores from 2006 Achievement Scores

Step #5: Calculate Quality Measurement Score by averaging Improvement 2005 to 2006 Scores for each county where at least 3 indicators were available for each reporting year

Recognition of the Top Performing Plans

Based on the 2006 Achievement Scores listed in Table 6, the Best Achievement CHIs are **Santa Clara** (Family Health Plan), **San Mateo**, and **Inland Empire Health Plan** (representing San Bernardino, Riverside) followed by Santa Cruz (represented by CC, or the Central Coast Alliance for Health) San Francisco, and Los Angeles.

Achievement scores range from 47.3 to 348.0. All but one of the top six reported data for

all measures. Despite having no data for Child Immunizations, Santa Cruz was the fourth highest scoring CHI.

Recognition of the Most Improved Plans

Based on the 2006 CHI Quality Measurement Scores listed in Table 6, the Most Improved CHIs are **Santa Cruz** (represented by CC, or the Central Coast Alliance for Health), **San Joaquin**, and **Santa Mateo**, followed by Santa Clara, Los Angeles, and San Francisco. An overall quality measurement score could not be calculated for the Inland Empire (representing San Bernardino and Riverside) or Kern since they were not able to report comparable measures for either year to incorporate into this analysis. Some of the improvement demonstrated by Santa Cruz and San Joaquin are attributed to their reporting the preferred hybrid measures for 2006 (Well-Child and Well-Adolescent) whereas for 2005 administrative measures were used. In contrast, Los Angeles reported hybrid rates for 2005 (Immunizations and Well-Child visits) but reported administrative rates for 2006, which may have resulted in a lower overall quality measurement score. However, Los Angeles demonstrated marked improvements in Well-Adolescent and Access to PCP visits, 11.6 and 11.2 points, respectively. Santa Clara showed the most improvement for Immunizations with 9.6 points over the year.

Only Santa Clara showed improvement for Immunization rates and across all age groups for Dental visits (see Table 7). San Francisco's Dental visit rates declined across all age groups. Santa Cruz demonstrated improvement across 4 of 5 age groups, as did San Joaquin. San Joaquin showed most improvement with 11.1 points. The Inland Empire showed the opposite, a decline in rates across 4 of 5 age groups for Dental Visits, although the rate for 2-3 year olds increased markedly (11.3 points) over the year. Overall, all CHIs showed a 7.1 point improvement over the year for total Dental visits.

San Francisco is the only plan showing improvement across all five age groups for Access to PCPs. Los Angeles and San Mateo showed improvement across 3 of 4 age groups for Access to PCPs; Inland Empire and Santa Clara showed improvement across 2 of 4 age groups. No improvement rates could be calculated for Kern due to small group sizes or because HEDIS rates were not reported.

Table 7. CHI Quality Performance Improvement Scores from 2005 to 2006, by Plan, Measurement Type, and Age Groups

		2006 Plan Achievement													
2006 Individual Plans	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP: 12-24 mos	Access to PCP: 25mos-6yrs	Access to PCP: 7-11yrs	Access to PCP: 12-19yrs	Access to PCP: all	Dental Visit: 2-3 yrs	Dental Visit: 4-6 yrs	Dental Visit: 7-10 yrs	Dental Visit: 11-14 yrs	Dental Visit: 15-18 yrs	Dental Visit: all ages	
	CCAH	IE	78.1	47.5	IE	89.9	93.4	87.0	90.1	57.1	75.3	75.2	68.0	60.1	68.8
IEHP	76.3	74.3	49.1	87.1	79.9	80.1	77.0	81.0	38.2	65.9	31.3	51.2	55.3	54.4	
K-HN	NR	NR	NR	NR	NR	NR	NR	NR	38.3	37.2	65.7	65.0	30.4	47.3	
LAC	52.0	44.5	29.4	76.5	64.7	69.8	61.5	68.1	72.0	55.9	58.2	66.5	80.8	66.7	
SFHP	10.3	78.5	38.1	100.0	93.0	90.6	86.8	92.6	29.9	65.5	72.1	67.6	53.6	57.7	
HPSJ	IE	61.1	22.7	IE	79.4	82.0	76.7	79.4	26.9	60.1	71.2	63.5	53.2	62.5	
HPSM	75.0	69.1	41.8	82.6	88.1	87.5	84.9	88.3	44.7	75.3	78.6	69.7	61.1	69.5	
SCFHP	88.7	68.1	36.1	96.7	84.9	85.5	79.9	86.8	41.1	70.3	77.5	69.2	60.2	68.3	

		2005 Plan Achievement													
2005 Individual Plans	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP: 12-24 mos	Access to PCP: 25mos-6yrs	Access to PCP: 7-11yrs	Access to PCP: 12-19yrs	Access to PCP: all	Dental Visit: 2-3 yrs	Dental Visit: 4-6 yrs	Dental Visit: 7-10 yrs	Dental Visit: 11-14 yrs	Dental Visit: 15-18 yrs	Dental Visit: all ages	
	CCAH	IE	60.5	36.3	IE	91.0	IE	IE	91.0	IE	70.0	63.0	67.0	55.0	63.8
IEHP	NR	NR	NR	86.1	78.7	80.3	77.1	80.6	26.9	75.3	73.4	54.4	62.0	58.4	
K-HN	IE	NR	0.0	IE	89.2	IE	IE	89.2	IE	IE	IE	IE	IE	IE	
LAC	59.3	52.6	17.8	62.3	52.1	56.3	IE	56.9	NR	NR	NR	NR	NR	NR	
SFHP	12.5	69.9	35.9	97.5	88.8	85.3	81.8	88.4	52.6	86.2	86.4	70.6	54.1	70.0	
HPSJ	IE	51.5	23.1	IE	79.5	84.0	79.8	81.1	23.0	55.6	64.9	57.7	55.8	51.4	
HPSM	IE	69.9	43.8	IE	75.5	73.8	71.9	73.7	NR	NR	NR	NR	NR	NR	
SCFHP	79.1	66.7	42.1	IE	87.5	85.2	78.7	83.8	36.0	68.0	74.5	68.4	58.1	61.0	

		2005 to 2006 Improvement													
2005 to 2006 Individual Plans	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP: 12-24 mos	Access to PCP: 25mos-6yrs	Access to PCP: 7-11yrs	Access to PCP: 12-19yrs	Access to PCP: all	Dental Visit: 2-3 yrs	Dental Visit: 4-6 yrs	Dental Visit: 7-10 yrs	Dental Visit: 11-14 yrs	Dental Visit: 15-18 yrs	Dental Visit: all ages	
	CCAH	NA	17.6	11.2	NA	-1.1	NA	NA	-0.9	NA	5.3	12.2	1.0	5.1	5.1
IEHP	NA	NA	NA	1.0	1.2	-0.2	-0.1	0.5	11.3	-9.4	-42.1	-3.2	-6.7	-4.0	
K-HN	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
LAC	-7.3	-8.1	11.6	14.2	12.6	13.5	NA	11.2	NA	NA	NA	NA	NA	NA	
SFHP	-2.2	8.6	2.2	2.5	4.2	5.3	5.0	4.2	-22.7	-20.7	-14.3	-3.0	-0.5	-12.2	
HPSJ	NA	9.6	-0.4	NA	-0.1	-2.0	-3.1	-1.7	3.9	4.5	6.3	5.8	-2.6	11.1	
HPSM	NA	-0.8	-2.0	NA	12.6	13.7	13.0	14.5	NA	NA	NA	NA	NA	NA	
SCFHP	9.6	1.3	-6.0	NA	-2.6	0.3	1.2	3.0	5.1	2.3	3.0	0.8	2.1	7.3	
Total	-0.03	28.3	16.6					30.8						-6.6	

IE=Insufficient Eligibility due to small group size; NR=Not Reported; NA=Not available for calculation
 Pink highlighted cells indicate improvement from 2005 to 2006

Method for Calculation

Step 1: Subtract 2005 rates from 2006 rates, for each Indicator to get 2005 to 2006 Improvement

Step 2: Add total improvement rates for all plans combined

While quality of care seems relatively good among the CHIs, we report differences in several indicators when comparing health plans or counties. Some differences remain however, when comparing the higher performance on these measures

for Healthy Kids versus state programs may be due to the extensive member education and outreach efforts counties and plans expend to ensure children and adolescents receive a well check within the first 120 days of enrollment in the program. Further evaluation of these efforts by county may better elucidate effective strategies implemented for Healthy Kids members.

Results for CHIs that reported their first full year of data in 2006

Table 8. CHI Quality Performance Achievement and Measurement Scores, by Plan, Indicator and Age Group: CHIs that were fully operational for a full year starting in 2006

2006	2006 Achievement			2006 Achievement					2006 Achievement					
	Child Immunization	Well Child Visit	Well Adolescent Visit	Access to PCP: 12-24 mos	Access to PCP: 25mos-6yrs	Access to PCP: 7-11yrs	Access to PCP: 12-19yrs	Access to PCP: all	Dental Visit: 2-3 yrs	Dental Visit: 4-6 yrs	Dental Visit: 7-10 yrs	Dental Visit: 11-14 yrs	Dental Visit: 15-18 yrs	Dental Visit: all ages
PHP: Healthy Kids	IE	50.0	30.6	IE	78.2	IE	IE	78.2	50.0	66.7	65.0	66.7	33.3	56.3
SLO: Healthy Kids	IE	62.0	27.6	IE	73.3	IE	IE	73.3	41.4	52.0	64.3	49.1	34.8	48.3
SBRHA: Healthy Kids	IE	68.3	30.4	IE	87.8	IE	IE	87.8	IE	72.2	79.4	73.1	72.7	74.4
CHI county average: Healthy Kids	61.5	57.3	34.5	84.3	74.8	77.4	70.9	76.9	55.3	62.0	65.2	65.3	67.4	63.0

IE=Insufficient Eligibility due to small group size

Three plans submitted 2006 data only because with the continuous enrollment requirement in HEDIS reporting, they did not have data reportable measures for 2005. Immunizations could not be calculated for 2006 because too few members (n<30) met the eligibility criteria. For Well-Child visits, San Luis Obispo (62.0) and Santa Barbara (68.3) demonstrated rates that exceeded the CHI average for 2006 (57.3). Partnership Health Plan (representing Napa, Solano, Sonoma, and Yolo), at 50.0, was slightly below the CHI average. These counties all reported rates for Access to PCPs close to or exceeding the CHI average of 74.8 for the 25 month to 6 year age group only. There was insufficient eligibility to calculate rates for any of the other age groups for PCP visits. For Dental visits, Santa Barbara demonstrated rates far above the CHI average (63.0) for all reportable age groups, averaging 74.4. Partnership Health Plan (56.3) and San Luis Obispo (48.3) reported Dental visits below the CHI average, although this can be expected from counties with newer Healthy Kids programs.

DISCUSSION

Overall, CHIs throughout California are making important strides in providing access to needed health care services and assuring quality care for the children enrolled in their programs. This finding is consistent with the goals of the CHIs which have recognized the importance of health insurance for improving children's health care access and health outcomes.⁶ Rates of compliance in the Healthy Kids program, for many indicators are similar to and in some cases better than rates reported for Medi-Cal and Healthy Families; in other cases, they are slightly lower. On average children enrolled in Healthy Kids use Emergency Departments (ED) less often than same aged children in Medi-Cal and Healthy Families. Six of the reporting plans met or exceeded state Healthy Families or Medi-Cal benchmarks for 2006 for Well-Child visits while four plans did considerably better than benchmarks for Well-Adolescent visits. On the other hand, Healthy Kids enrollees were less likely to have had a physician visit in the past year compared to the other programs, and Healthy Kids enrollees rates of immunizations (62%) was lower than the Medi-Cal and Healthy Families with the exception of two plans. Although, six plans were not able to report immunizations due to an insufficient number of eligible children to calculate a rate. A comprehensive system of documentation across programs, by county would be needed to more accurately assess immunizations for these children. Widespread adoption of immunization registries such as LINK would help with this effort. Health plans could assist by incentivizing adoption of these by providers.

While these findings are encouraging, more investigation is needed to understand why there are differences across counties. Specifically further investigation would help elucidate where member incentive programs are in place, who has implemented education on use of preventive care and what impact could these be having on use of care, how do differences reflect member demographics, what is the contracting structure with primary care providers, what is the availability of and incentives for providers, and what are the overall experiences of Healthy Kids members compared to Medi-Cal and Healthy Families members.

CHIs are providing access to dental care and achieving better utilization than comparative benchmarks for Medi-Cal and Healthy Families. Most reporting counties

surpassed the level of 2006 Medicaid rates for dental visits by a third, for all age levels. Overall, dental visits were greatest in the 15 to 18 year old age group and lowest in the 2 to 3 year olds. The high rate of utilization suggests a greater need for dental care in the Healthy Kids population. This finding is important since several studies show that delaying dental visits result in cumulative higher costs for dental related visits later in life.^{7,8} A more in depth study of dental visits, and type of visits made (e.g., preventive, restorative) among Healthy Kids members is available in the accompanying report, "Dental Utilization in California's Children's Health Initiatives' Healthy Kids Programs."⁹

We especially note the performance of San Francisco. After controlling for age and health plan type, rates of ED use in San Francisco specifically were lower than all other counties. Similarly, the proportion of Healthy Kids members in San Francisco that received Well-Child (ages 3-6 years), Well-Adolescent (ages 12-21 years), and Primary Care Visits in 2006 far surpassed the weighted CHI average as well as their previous year of reporting. This suggests that the unique and comprehensive healthcare access program in San Francisco may contribute to the lower ED use. Santa Clara, San Mateo, and the Inland Empire similarly performed considerably better than the weighted CHI average on Well-Child Visits, Well-Adolescent Visits and Access to Primary Care, for all age groups in 2006. These three counties along with San Francisco have had the longest running CHIs in operation (with start dates between 2001 and 2003).

Overall, health plan performance appears to be improving for many of these indicators and in most counties. Among the plans reporting both 2005 and 2006 utilization, four plans showed improvement for Well-Child visits while three counties showed improvement for Well-Adolescent visits. Higher performing plans tend to be those that have either been in operation the longest, or have a larger Healthy Kids membership (greater than 2,000). Based on the 2006 utilization rates reported, three counties/plans showed substantial improvement in performance compared to their previous year's rates: Santa Cruz (the Central Coast), San Joaquin, and San Mateo. Some of the improvement demonstrated by Santa Cruz and San Joaquin can be attributed to their reporting the preferred hybrid measures for 2006 (Well-Child and Well-Adolescent) whereas for 2005 administrative measures were used. In contrast, Los Angeles reported

hybrid rates for 2005 (Immunizations and Well-Child visits) but reported administrative rates for 2006, which may have resulted in a lower overall quality measurement score.

From 2006 data, three counties/plans showed the greatest achievement in performance scores: Santa Cruz (the Central Coast), San Mateo, and the Inland Empire (Riverside and San Bernardino). Two of these counties also achieved Most Improved status. Further evaluation of the efforts and program changes by county may help us better understand the effective strategies being implemented for Healthy Kids members.

One measure not included in the assessment for most improved was ED use. In the evaluation, we would be concerned to find a county with higher than average ED use and lower than average primary care and well child visit rates. San Joaquin had the highest ED rates for all age groups, but scored above average compared to other CHIs for all age groups for Access to Primary Care and for Well-Child Visits. The one corresponding area of concern was their low rate on Well Adolescent Visits. Additional investigation of this county may help elucidate why ED use remains high. Collecting information on the number of inpatient hospital days may also provide a clearer picture of the level of overall care needed by Healthy Kids members in each county.

There are some limitations of this report. First, we are unable to account for the differences attributed to population demographics, hospital contracts, provider resources, and environments across counties and programs that may also influence utilization. Gaps in the completeness and accuracy of data reporting across counties may lead to reported rates that misrepresent the actual performance. We also urge some caution in interpreting differences reported here. Small variations are expected in data collected at different points in time, so slight increases or decreases in rates should not be interpreted as improvements or declines. The larger changes (for better or worse) could represent changes in care delivery or changes in data collection or data quality. It is unclear whether differences in performance is attributable to length of time the program has been in operation, the size of the CHI, provider capacity, or incentive or quality improvement programs. A more detailed comparative case study would be needed to tease out explanations for significant improvements or declines.

RECOMMENDATIONS

In order to improve the state's ability to assess the contribution of the Healthy Kids programs to improving children's health care access, utilization, and outcomes, our global recommendation is to synchronize ongoing quality monitoring efforts in the Medi-Cal, Healthy Families, and Healthy Kids programs through a public-private collaboration. Health plans that participated in our study were indeed strongly in favor of consistency in program reporting parameters across programs in order to reduce the administrative burden associated with responding to multiple quality monitoring efforts.

We further recommend the following specific next steps:

- Collect information on the number of inpatient hospital days per member per year in order to provide additional information about the benefits of the Healthy Kids program. Because the current measure for emergency department (ED) use does not include ED visits that have resulted in inpatient stay, evaluating this additional measure may provide an estimate of the level of acute care needed for Healthy Kids members.
- Study the practices and structure of health care delivery in Healthy Kids health plans and CHIs to understand the differences observed between them in quality measures, improvement over time, as well as the unique structure of each county program. Provide best practice information that others might adopt or adapt at the county and health plan levels.
- Collect qualitative information on member incentive programs, education on use of preventive care, member demographics, contracting structure with primary care providers, availability of and incentives for providers, and experiences of Healthy Kids members compared to Medi-Cal and Healthy Families members to help identify reasons for lower primary care visits among Healthy Kids enrollees.
- Suggest county-wide immunization tracking systems across programs for a better assessment on the rates of vaccinations for children.
- Consolidate reporting for small counties in order to diminish the problems of insufficient eligibility for rate calculation. Smaller counties, or those that are

contracted with a common health plan could combine data by region rather than reporting by individual counties.

- Conduct more in depth analyses of dental utilization by age group and types of visits. Because Healthy Kids members access dental care at such a high rate, assessment of visits by type may help to determine the specific needs of members, where to target outreach or educational efforts, and the balance of preventive versus vs. tertiary care.

While this study examines measures of health care utilization and quality of care in Healthy Kids programs, there is limited information on the health impacts of these programs. As part of the larger Healthy Kids evaluation that is being conducted by the Center for Community Health Studies, a statewide survey of Healthy Kids members is launching in July 2008 to assess the impacts of insurance coverage on health care experiences and changes in health status and health related quality of life. Pairing the results of this report on utilization with more outcomes focused data from the survey will provide a more complete understanding of the strengths and limitations of Healthy Kids programs as a strategy to improving the health of children.

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Appendix A

Individual CHI Results: Healthy Kids, Medi-Cal, and Healthy Families Data

Alameda Alliance for Health*
Central Coast Alliance for Health (Santa Cruz and Monterrey)
Inland Empire Health Plan (San Bernardino and Riverside)
Kern – reported by HealthNet
Los Angeles – reported by L.A. Care
Partnership Health Plan (Napa, Solano, Sonoma, Yolo)
San Francisco Health Plan
Health Plan of San Joaquin
San Luis Obispo – reported by the Santa Barbara Regional Health Authority
Health Plan of San Mateo
Santa Barbara Regional Health Authority
Santa Clara Family Health Plan

*Data from the Alameda Alliance for Health will be included in a report supplement at a later date

Table A1: Central Coast Alliance for Health (includes Santa Cruz only for Healthy Kids; Santa Cruz and Monterrey for Medi-Cal and Healthy Families data)

	Healthy Kids		Medi-Cal*		Healthy Families*	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	h: 78.1%	210	h: 77.13%	9,124	h: 76.64%	442
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 47.45% ²	578	h: 43.55%	10,929	h: 50.85%	581
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	356.44	101	88.07	66,688	516.13	279
ages 1-9 years	161.41	9,888	44.94	305,733	281.15	14,725
ages 10-19 years	120.71	12,824	31.26	198,148	181.47	11,440
4. primary care physician visit						
ages 12-24 mos	IE	3	97.76%	3,833	97.78%	45
ages 25 mos-6 yrs	89.87%	227	88.18%	11,760	90.37%	509
ages 7-11 yrs	93.36%	226	82.93%	6,346	93.52%	324
ages 12-19 yrs	86.99%	269	79.70%	7,939	88.24%	391
5. dental visit in past year: children						
ages 2-3 years	57.10%	42#	NA	NA	NA	NA
ages 4-6 years	75.30%	178#	NA	NA	NA	NA
ages 7-10 years	75.20%	355#	NA	NA	NA	NA
ages 11-14 years	68.00%	341#	NA	NA	NA	NA
ages 15-18 years	60.10%	306#	NA	NA	NA	NA
6. immunizations combination 2	IE	11	h: 85.64%	3,038	h: 91.89%	37
7. asthma medication: children						
ages 0-5 years	NR*	NR*				
ages 5-9 years	IE	4	90.05%	191	IE	10
ages 10-17 years	IE	1	88.18%	220	IE	12
8. well-baby visits in first 15 months of life						
0 visits	IE	0	h: 1.46%	3,503	IE	21
6+ visits	IE	0	h: 75.18%	3,503	IE	21

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

¹If number eligible > 411, the rate was calculated based on a sample of the eligible population

²Healthy Kids does not include 19-21 year olds, MC includes ages 12-21, Healthy Families includes ages 12-19

NA = Dental services for Medi-Cal & Healthy Families are not administered through the Alliance

NR* = Age band 0-5 not part of the HEDIS measure

Utilization data were provided by Delta Dental.

Table A2: Inland Empire Health Plan (San Bernardino & Riverside)

	Healthy Kids		Medi-Cal		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	h: 74.31%	2,186	h: 69.75%	30,575	h: 77.55%	5,707
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 49.07%	2,546	h: 38.11%	43,804	h: 52.55%	10,771
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	68.86	944	78.15	148,291	54.82	3,721
ages 1-9 years	17.04	74,570	34.58	1,162,018	19.78	231,940
ages 10-19 years	11.63	50,890	25.57	868,843	14.67	231,007
4. primary care physician visit						
ages 12-24 mos	87.13%	101	96.63%	8,900	99.13%	461
ages 25 mos-6 yrs	79.88%	2,366	87.28%	38,214	90.33%	6,565
ages 7-11 yrs	80.08%	1,868	81.28%	24,690	87.23%	5,968
ages 12-19 yrs	77.00%	1,891	78.54%	32,370	85.16%	7,657
5. dental visit in past year: children						
ages 2-3 years	38.16%	761	NR*	NR*	NR**	NR**
ages 4-6 years	65.91%	1,579	NR*	NR*	NR**	NR**
ages 7-10 years	61.29%	4,367	NR*	NR*	NR**	NR**
ages 11-14 years	51.22%	1,187	NR*	NR*	NR**	NR**
ages 15-18 years	55.25%	783	NR*	NR*	NR**	NR**
6. immunizations combination 2	h: 76.34%	93	h: 75.29%	8,445	h: 85.42%	557
7. asthma medication: children						
ages 0-5 years	0%	0				
ages 5-9 years	IE	17	91.90%	617	94.68%	94
ages 10-17 years	IE	15	88.21%	857	85.12%	121
8. well-baby visits in first 15 months of life		20		2,648		111
0 visits	IE		h: 0.69%		h: 0%	
6+ visits	IE		h: 61.34%		h: 67.57%	

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

*If number eligible > 411, the rate was calculated based on a sample of the eligible population

NR* = Not a covered benefit

NR** = Do not receive dental encounter data for our Healthy Families population

Table A3: Kern – HealthNet

	Healthy Kids		Medi-Cal		Healthy Families	
	rate	# eligible	rate	# eligible	rate	# eligible
1. well-child visit in past year: children ages 3-6 years	NR*	NR*	a: 64.23%	432	a: 58.06%	354
2. well-adolescent visit in past year: adolescents ages 12-21 years	NR*	NR*	NR	NR	a: 26.16%	432
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	52.08	96	NR	NR	NR	NR
ages 1-9 years	6.59	8,194	NR	NR	NR	NR
ages 10-19 years	3.73	5,096	NR	NR	NR	NR
4. primary care physician visit						
ages 12-24 mos	NR*	NR*	NR	NR	94.79%	1,094
ages 25 mos-6 yrs	NR*	NR*	NR	NR	86.86%	16,952
ages 7-11 yrs	NR*	NR*	NR	NR	85.21%	1,654
ages 12-19 yrs	NR*	NR*	NR	NR	81.14%	20,778
5. dental visit in past year: children						
ages 2-3 years	38.30%	47 [#]	NR	NR	NR	NR
ages 4-6 years	37.20%	172 [#]	NR	NR	NR	NR
ages 7-10 years	65.70%	35 [#]	NR	NR	NR	NR
ages 11-14 years	65.00%	20 [#]	NR	NR	NR	NR
ages 15-18 years	30.40%	23 [#]	NR	NR	NR	NR
6. immunizations combination 2	NR*	NR*	h: 25.79%	349	h: 3.89%	432
7. asthma medication: children						
ages 0-5 years	NR*	NR*				
ages 5-9 years	NR*	NR*	IE	IE	89.37%	348
ages 10-17 years	NR*	NR*	IE	IE	89.98%	409
8. well-baby visits in first 15 months of life						
0 visits	NR*	NR*	NR	NR	NR	NR
6+ visits	NR*	NR*	NR	NR	NR	NR

NR = Not Reported

NR* "The level of reporting is not currently reported to Kern CHI, in accordance with utilization report approved in 2006."

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

¹If number eligible > 411, the rate was calculated based on a sample of the eligible population

[#] Rates for dental data were calculated regardless of eligible population size. Utilization data were provided by Delta Dental.

Table A4: Los Angeles – L.A. Care

	Healthy Kids*		Medi-Cal*		Healthy Families*	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	h: 44.53%	5,838	h: 76.57%	105,719	h: 54.55%	143
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 29.44%	15,764#	h: 31.64%	155,598	h: 37.68%	207#
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	59.10	863	71.33	370,937	15.54	193
ages 1-9 years	8.50	221,194	30.97	3,379,321	8.85	9,943
ages 10-19 years	6.02	278,019	18.52	2,661,427	6.92	8,815
4. primary care physician visit						
ages 12-24 mos	76.53%	98	92.76%	28,062	IE	15
ages 25 mos-6 yrs	64.73%	6,234	84.90%	131,571	60.12%	173
ages 7-11 yrs	69.84%	8,320	83.04%	97,428	82.93%	41
ages 12-19 yrs	61.47%	10,580	77.73%	125,473	69.23%	39
5. dental visit in past year: children						
ages 2-3 years	72.05%	2,448 ²	NR	NR	NR	NR
ages 4-6 years	55.86%	6,676 ²	NR	NR	NR	NR
ages 7-10 years	58.23%	10,694 ²	NR	NR	NR	NR
ages 11-14 years	66.47%	11,301 ²	NR	NR	NR	NR
ages 15-18 years	80.81%	9,013 ²	NR	NR	NR	NR
6. immunizations combination 2	h: 51.95%	231	h: 75.18%	28,530	IE	18
7. asthma medication: children						
ages 0-5 years	100%	31				
ages 5-9 years	93.75%	32	89.83%	2,251	IE	IE
ages 10-17 years	IE	3	87.54%	2,448	IE	IE
8. well-baby visits in first 15 months of life						
0 visits	IE	21	h: 2.90%	7,171	IE	IE
6+ visits	IE		h: 46.62%		IE	IE

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

¹If number eligible > 411, the rate was calculated based on a sample of the eligible population

* used HEDIS 2007 specifications

Does not include 19-21 year olds

² based on HEDIS Annual Dental Visit using utilization data

Table A5: Partnership Health Plan (includes Napa, Solano, Sonoma, and Yolo)

	Healthy Kids		Medi-Cal [^]		Healthy Families [¥]	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	a: 50.0%	74	h: 67.5%	6,416	NR	NR
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 30.4% ²	158 ²	h: 35.42%	10,839	NR	NR
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	11.76	85	43.36	36,461	NR	NR
ages 1-9 years	10.14	8,187	21.79	247,233	NR	NR
ages 10-19 years	7.73	6,340	18.79	211,088	NR	NR
4. primary care physician visit						
ages 12-24 mos	IE	3	94.58%	2,067	NR	NR
ages 25 mos-6 yrs	78.21%	78	81.95%	7,902	NR	NR
ages 7-11 yrs	IE	IE	78.08%	4,791	NR	NR
ages 12-19 yrs	IE	IE	75.46%	7,051	NR	NR
5. dental visit in past year: children						
ages 2-3 years	50.00%	2#	NR*	NR*	NR	NR
ages 4-6 years	66.70%	9#	NR*	NR*	NR	NR
ages 7-10 years	65.00%	20#	NR*	NR*	NR	NR
ages 11-14 years	66.70%	18#	NR*	NR*	NR	NR
ages 15-18 years	33.30%	9#	NR*	NR*	NR	NR
6. immunizations combination 2	IE	1	h: 81.9%	1,768	NR	NR
7. asthma medication: children						
ages 0-5 years	IE	IE				
ages 5-9 years	IE	IE	NR£	NR£	NR	NR
ages 10-17 years	IE	IE	NR£	NR£	NR	NR
8. well-baby visits in first 15 months of life						
0 visits	IE	1	h: 2.45%	1601	NR	NR
6+ visits	IE		h: 67.9%		NR	NR

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

[^] Medi-Cal data is for Napa, Solano, and Yolo counties only

¹If number eligible > 411, the rate was calculated based on a sample of the eligible population

²Does not include 19-21 year olds

NR* = Not a Partnership Health Plan benefit

£ Medi-Cal data was not reported by Partnership Health Plan if there was not a corresponding Healthy Kids measure

¥ PHP does not offer a Healthy Families product

Rates for dental data were calculated regardless of eligible population size. Utilization data provided by Delta Dental.

Table A6: San Francisco Health Plan

	Healthy Kids		Medi-Cal		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	a: 78.54%	452	h: 77.55%	3,580	h: 88.43%	708
2. well-adolescent visit in past year: adolescents ages 12-21 years	a: 38.01%	2,723	h: 46.53%	5,240	h: 67.13%	2,293
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	425.81	310	34.17	14,222	209.91	343
ages 1-9 years	107.18	19,258	19.99	123,003	129.69	26,000
ages 10-19 years	81.91	35,160	13.00	95,417	64.08	40,824
4. primary care physician visit						
ages 12-24 mos	100.00%	34	95.56%	1,081	98.65%	74
ages 25 mos-6 yrs	93.04%	503	87.44%	4,595	96.45%	818
ages 7-11 yrs	90.55%	635	81.49%	2,863	95.15%	1,195
ages 12-19 yrs	86.76%	1,276	78.83%	3,944	94.59%	1,958
5. dental visit in past year: children						
ages 2-3 years	29.90%	107#	NR	NR	NR	NR
ages 4-6 years	65.50%	371#	NR	NR	NR	NR
ages 7-10 years	72.10%	698#	NR	NR	NR	NR
ages 11-14 years	67.60%	782#	NR	NR	NR	NR
ages 15-18 years	53.60%	733#	NR	NR	NR	NR
6. immunizations combination 2	a: 10.26%	40	h: 90.28%	1,263	h: 93.59%	78
7. asthma medication: children						
ages 0-5 years	NR*	NR*				
ages 5-9 years	IE	13	95.65%	139	IE	19
ages 10-17 years	IE	12	92.66%	111	IE	28
8. well-baby visits in first 15 months of life						
0 visits	IE	24	h: 0.46%	471	h: 0%	24
6+ visits	IE		h: 82.65%		h: 87.50%	

NR = Not Reported

NR* = Ages 0-5 was not available as a reporting option in HEDIS software used by county

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

*If number eligible > 411, the rate was calculated based on a sample of the eligible population

Utilization data were provided by Delta Dental.

Table A7: Health Plan of San Joaquin

	Healthy Kids		Medi-Cal		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	h: 61.13%	301	h: 79.32%	6,242	h: 76.16%	1,495
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 22.74%*	634*	h: 40.15%	11,298	h: 39.17%	3,077
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	10.00	60	55.67	23,981	NR	NR
ages 1-9 years	60.22	2,474	22.91	205,384	NR	NR
ages 10-19 years	61.57	1,900	16.51	184,168	NR	NR
4. primary care physician visit						
ages 12-24 mos	IE	8	93.73%	1,849	84.34%	83
ages 25 mos-6 yrs	79.44%	321	80.61%	7,861	79.76%	1,344
ages 7-11 yrs	82.03%	423	73.64%	5,387	75.10%	1,466
ages 12-19 yrs	76.73%	391	73.49%	8,883	76.14%	1,957
5. dental visit in past year: children						
ages 2-3 years	26.90%	52#	NR	NR	NR	NR
ages 4-6 years	60.10%	268#	NR	NR	NR	NR
ages 7-10 years	71.20%	511#	NR	NR	NR	NR
ages 11-14 years	63.50%	441#	NR	NR	NR	NR
ages 15-18 years	53.20%	265#	NR	NR	NR	NR
6. immunizations combination 2	IE	12	h: 73.48%	1,793	h: 72.09%	86
7. asthma medication: children						
ages 0-5 years	0%	0				
ages 5-9 years	IE	1	89.91%	109	IE	25
ages 10-17 years	IE	4	77.65%	170	IE	27
8. well-baby visits in first 15 months of life						
0 visits	IE	1	h: 0.73%	535	IE	27
6+ visits	IE		h: 55.47%		IE	

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

*Does not include 19-21 year olds

†If number eligible > 411, the rate was calculated based on a sample of the eligible population

Utilization data were provided by Delta Dental

Table A8: San Luis Obispo – reported by the Santa Barbara Regional Health Authority

	Healthy Kids		Medi-Cal ^{&}		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	a: 62.00%	100	NR ^{&}	NR ^{&}	NR**	NR**
2. well-adolescent visit in past year: adolescents ages 12-21 years	a: 27.61%*	163*	NR ^{&}	NR ^{&}	NR**	NR**
3. emergency department visits/1000 MM:		MM				
age <1 year	106.38	47	NR ^{&}	NR ^{&}	NR**	NR**
ages 1-9 years	16.84	3,741	NR ^{&}	NR ^{&}	NR**	NR**
ages 10-19 years	12.17	2,712	NR ^{&}	NR ^{&}	NR**	NR**
4. primary care physician visit						
ages 12-24 mos	IE	5	NR ^{&}	NR ^{&}	NR**	NR**
ages 25 mos-6 yrs	73.28%	116	NR ^{&}	NR ^{&}	NR**	NR**
ages 7-11 yrs	IE	0	NR ^{&}	NR ^{&}	NR**	NR**
ages 12-19 yrs	IE	0	NR ^{&}	NR ^{&}	NR**	NR**
5. dental visit in past year: children						
ages 2-3 years	41.40%	29#	NR ^{&}	NR ^{&}	NR**	NR**
ages 4-6 years	52.00%	75#	NR ^{&}	NR ^{&}	NR**	NR**
ages 7-10 years	64.30%	126#	NR ^{&}	NR ^{&}	NR**	NR**
ages 11-14 years	49.10%	108#	NR ^{&}	NR ^{&}	NR**	NR**
ages 15-18 years	34.80%	69#	NR ^{&}	NR ^{&}	NR**	NR**
6. immunizations combination 2	IE	4	NR ^{&}	NR ^{&}	NR**	NR**
7. asthma medication: children						
ages 0-5 years	IE	0				
ages 5-9 years	IE	0	NR ^{&}	NR ^{&}	NR**	NR**
ages 10-17 years	IE	0	NR ^{&}	NR ^{&}	NR**	NR**
8. well-baby visits in first 15 months of life						
0 visits	IE	0	NR ^{&}	NR ^{&}	NR**	NR**
6+ visits	IE	0	NR ^{&}	NR ^{&}	NR**	NR**

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

[†]If number eligible > 411, the rate was calculated based on a sample of the eligible population

* Does not include 10-21 year olds

Rates for dental data were calculated regardless of eligible population size. Utilization data provided by Delta Dental.

NR[&] = Medi-Cal for San Luis Obispo did not begin until March 1, 2008

NR** = Healthy Families for San Luis Obispo was combined in the reporting for Santa Barbara County

Table A9: Health Plan of San Mateo

	Healthy Kids		Medi-Cal		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	h: 69.1%	603	h: 66.2%	3,841	h: 76.4%	484
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 41.8%	2,210	h: 33.8%	4,295	h: 48.4%	697
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	42.31	260	76.01	24,418	73.73	217
ages 1-9 years	17.13	28,844	40.19	141,531	21.21	19,236
ages 10-19 years	12.82	44,628	27.67	88,867	13.61	16,747
4. primary care physician visit						
ages 12-24 mos	92.60%	27	95.80%	1,514	100.00%	46
ages 25 mos-6 yrs	88.10%	662	90.70%	4,965	91.70%	554
ages 7-11 yrs	87.50%	903	76.40%	2,314	89.60%	433
ages 12-19 yrs	84.90%	1,410	68.70%	2,988	85.30%	476
5. dental visit in past year: children						
ages 2-3 years	44.70%	132#	*	*	*	*
ages 4-6 years	75.30%	445#	*	*	*	*
ages 7-10 years	78.60%	1128#	*	*	*	*
ages 11-14 years	69.70%	1116#	*	*	*	*
ages 15-18 years	61.70%	1165#	*	*	*	*
6. immunizations combination 2	h: 75%	36	h: 76.4%	1,175	h: 85.4%	41
7. asthma medication: children						
ages 0-5 years	IE	0				
ages 5-9 years	IE	10	93.50%	92	IE	20
ages 10-17 years	IE	9	86.20%	87	IE	12
8. well-baby visits in first 15 months of life						
0 visits	IE	5	h: 1.9%	1042	IE	16
6+ visits	IE		h: 54.0%		IE	

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

²Does not include 19-21 year olds

*Do not have access to data

Utilization numbers were provided by Delta Dental.

Table A10: Santa Barbara Regional Health Authority

	Healthy Kids		Medi-Cal		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	a: 68.29%	41	h: 67.01%	5,677	a:68.71%	294
2. well-adolescent visit in past year: adolescents ages 12-21 years	a: 30.61%*	49*	h: 33.1%	6,909	h: 49.54%	546
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	0.00	7	75.98	38,758	31.15	899
ages 1-9 years	19.63	2,684	35.42	193,320	15.34	10,494
ages 10-19 years	9.31	2,041	26.73	126,118	13.23	10,658
4. primary care physician visit						
ages 12-24 mos	0.00%	0	97.42%	2,520	100%	42
ages 25 mos-6 yrs	87.80%	41	87.02%	7,366	91.88%	345
ages 7-11 yrs	0.00%	0	81.91%	4,250	93.02%	387
ages 12-19 yrs	0	0	77.09%	5,198	89.91%	456
5. dental visit in past year: children						
ages 2-3 years	0%	2#	**	**	**	**
ages 4-6 years	72.20%	18#	**	**	**	**
ages 7-10 years	79.40%	34#	**	**	**	**
ages 11-14 years	73.10%	26#	**	**	**	**
ages 15-18 years	72.70%	11#	**	**	**	**
6. immunizations combination 2	a: 0%	IE	h: 84.88%	2,012	h: 90.63%	32
7. asthma medication: children						
ages 0-5 years	IE	IE				
ages 5-9 years	IE	IE	93.69%	111	IE	4
ages 10-17 years	IE	IE	89.94%	159	IE	7
8. well-baby visits in first 15 months of life				2373		32
0 visits	IE	IE	h: 0.72%		h: 6.25%	
6+ visits	IE	IE	h: 63.13%		h: 59.38%	

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

†If number eligible > 411, the rate was calculated based on a sample of the eligible population

*19-21 year olds have been excluded

** Dental services are not a benefit for which SBRHA receives administrative data.

Rates for dental data were calculated regardless of eligible population size. Utilization data were provided by Delta Dental.

Table A11: Santa Clara Family Health Plan

	Healthy Kids		Medi-Cal		Healthy Families	
	Rate	# eligible	Rate	# eligible	Rate	# eligible
1. well-child visit in past year: children ages 3-6 years	h: 68.05%	1,763	h: 73.84%	10,116	h: 78.70%	2,295
2. well-adolescent visit in past year: adolescents ages 12-21 years	h: 36.11%*	5,265	h: 34.95%	11,298	h: 46.99%*	3,272
3. emergency department visits/1000 MM:		MM		MM		MM
age <1 year	35.42	734	57.35	50,513	30.65	1,566
ages 1-9 years	12.43	66,614	31.12	333,067	17.45	80,807
ages 10-19 years	8.99	92,199	20.65	207,945	8.60	66,745
4. primary care physician visit						
ages 12-24 mos	96.72%	61	94.66%	3,147	95.83%	168
ages 25 mos-6 yrs	84.92%	3,110	83.22%	12,731	86.22%	2,605
ages 7-11 yrs	85.48%	2,851	81.79%	6,787	87%	2,334
ages 12-19 yrs	79.93%	4,126	76.95%	8,448	82.17%	2,540
5. dental visit in past year: children						
ages 2-3 years	41.10%	401#	NR	NR	NR	NR
ages 4-6 years	70.30%	1502#	NR	NR	NR	NR
ages 7-10 years	77.50%	2944#	NR	NR	NR	NR
ages 11-14 years	69.20%	3248#	NR	NR	NR	NR
ages 15-18 years	60.20%	2753#	NR	NR	NR	NR
6. immunizations combination 2	h: 88.66%	97	h: 84.72%	2,979	h: 87.44%	223
7. asthma medication: children						
ages 0-5 years	IE	4				
ages 5-9 years	IE	22	95.24%	147	100.00%	41
ages 10-17 years	IE	19	94.78%	134	100.00%	30
8. well-baby visits in first 15 months of life		21		1139		61
0 visits	IE		h: 1.39%		h: 1.64%	
6+ visits	IE		h: 59.40%		h: 42.62%	

NR = Not Reported

IE = Insufficient Eligibility (Rate not calculated if number eligible<30)

MM = Member Months

†If number eligible > 411, the rate was calculated based on a sample of the eligible population

*19-21 year olds excluded

Utilization data were provided by Delta Dental.

Appendix B

METHODS FOR DATA COLLECTION

The selection of indicators used to assess utilization, access and quality was based on a balance of three aims: (1) to address priorities identified by the California Endowment and First 5 California, (2) to allow for comparisons between the Healthy Kids program and others, specifically Medi-Cal and Healthy Families, and (3) to increase the response rate by maximizing the CHI programs' collective ability to report individual indicators.

Selection of Quality Indicators for the Study

An initial list of 25 indicators was compiled through investigating the literature and resources for performance evaluation, including the indicators used for Medi-Cal and Healthy Families evaluations.ⁱⁱ The proposed list was discussed with funding agencies and children's health experts, and was further refined. As encouraged by performance measure experts, we aimed for population-based process measures instead of medical outcomes because the latter are prone to reliability, validity, and bias problems.^{iii,iv} One drawback to using process measures is they still need calibration to determine what a percent change in measure means in terms of percent change in outcome. Process measures are also influenced by patient compliance, reimbursement, and access and typically should not be used when there is high likelihood of these confounders. The Healthy Kids reports will have to be interpreted in light of these limitations. The set of potential indicators included several indicators from the Health Employer Data and Information Set (HEDIS®).^v

CHIs were asked to provide input and information on the feasibility of reporting these potential indicators.

ⁱⁱ Forum for Health Care Quality Measurement & Reporting, Advisory Council on Health Care Quality, American Medical Association's Physician Performance Measurement Set, Centers for Medicare & Medicaid Services' Doctor's Office Quality Project, National Committee on Quality Assurance (HEDIS and other), Agency for Healthcare Research and Quality (child health toolboxes, national quality measures clearinghouse, pediatric prevention quality indicators), Child Health and Disability Prevention Program, Asthma Quality Improvement Projects in California, National Developmental Screening Projects, and the Medicaid literature.

ⁱⁱⁱ McAuliffe WE. Measuring the quality of medical care: process versus outcome. *Health & Society*. 1979;57(1).

^{iv} Eddy DD. Performance Measurement: Problems and Solutions. *Health Aff*. July/August 1998;July/August:7-25.

^v HEDIS is a registered trademark of the National Committee for Quality Assurance (NCQA). HEDIS measures used by Medi-Cal Managed Care are audited by certified NCQA auditors. There was no audit for this Healthy Kids evaluation.

Semi-structured interviews were completed by telephone with the health plan partners of twenty-two CHIs during May 2006. The purpose was to understand and then streamline data collection practices for health plans that service Healthy Kids, with particular emphasis on gaining a better understanding of indicators that reflect children's health care utilization, access and quality. The interviews explored the ability of the health plans to report a variety of indicators for the Healthy Kids enrollees. The interviews also investigated the plans' ability to report comparison information for Medi-Cal and Healthy Families. Information from the interviews was summarized and then reviewed by both the interviewers and respondents for accuracy (72% of respondents provided feedback). Whenever possible, additional respondents from the county were contacted to fill gaps of knowledge. The feasibility results were taken back to the funding agencies and a subset of indicators was selected for CHI reports.

Data Collection

For each indicator, there was a preferred method for reporting. For HEDIS measures, the preferred method was the hybrid specification if one exists. The report form allowed plans to report HEDIS measures using the administrative method if it was not feasible to use the hybrid specifications (most plans had completed data collection earlier in the year and would not have been able to add chart reviews if these had not already been done). Plans could also elect to report an indicator with other variations in specification (e.g., different age group cut-offs) if this was the only way they could report.