The APHSA Medicaid HEDIS Database Project

Report for the Third Project Year

(Data for 1999)

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Executive Summary

This paper reports on the third year of the APHSA project, funded by the Commonwealth Fund, to gather and analyze the HEDIS® data documenting the performance of comprehensive managed care plans (MCOs) that enroll Medicaid beneficiaries. The database is maintained by the National Committee for Quality Assurance under a contract with APHSA. The data for this third year – plan performance in 1999 – comes from 167 plans in 31 states and the Commonwealth of Puerto Rico. Collectively the 167 plans had a Medicaid enrollment, as of June 30, 1999, of nearly 7 million Medicaid beneficiaries – approximately 56% of the total Medicaid beneficiaries enrolled in an MCO on that date. In contrast, in the first project year, 1997, the data came from only 110 plans, in 21 states and the Commonwealth of Puerto Rico, and represented approximately one third of total MCO enrollment at that time.

This year's report contains national benchmarks – the mean score of all plans reporting – for twelve HEDIS® measures drawn from the effectiveness of care, access, and utilization domains. Table 1 displays those scores for nine of the measures. Three of the utilization measures – inpatient average length of stay, inpatient discharges per 1,000 member months, and the number of emergency room visits per 1,000 member months – are reported separately in Table 6.

As has been true in previous years, the health plans continued to score well on the measures of child access to primary care providers – especially for children under two, where the national Medicaid mean is 82%. Unfortunately, a pattern of weak scores with respect to care of adolescents, first identified in 1997, has persisted in 1998 and 1999. A similar pattern – strong performance with respect to access for young children, poor with respect to adolescents – is also true for plans serving the commercial population. This suggests that the issue of access to health care for adolescents is a national problem.

In addition to the benchmark information, this year's report includes four special studies:

- An analysis of the composition of the Medicaid database in each of the three measurement years: 1997, 1998, and 1999. There was considerable change in both the group of plans reporting and the number of plans reporting on the selected benchmark measures. Of the 110 plans reporting in the initial year, 69 were still reporting HEDIS® data in year three. Of the 100 plans reporting for the first time in 1998, 65 also reported in 1999. Most of the change reflects the volatility of the managed care marketplace during this period as plans consolidated or, in the case of some of the major commercial insurers, withdrew from the Medicaid market. The total number of plans reporting on each of the benchmarked measures has, however, increased markedly over the three years – in some instances, more than doubled.

- A comparison, for eight measures, of the Medicaid and commercial mean scores for 1999 with those of 1998 and 1997. (Table 3) With one exception (well child visits), the scores for the Medicaid population remained reasonably constant over the three

years, despite considerable fluctuation in the make-up of the group of plans reporting in each of the years. The Medicaid means for early initiation of prenatal care and for post-partum checkups were consistently well below those for the commercial population. Closing that gap is an obvious challenge for states and health plans as they shape their quality improvement projects.

- An analysis of the performance of "repeater" plans – plans that reported HEDIS® data for both 1997 and 1999. Because of the tremendous change in the composition of the database over the three years a simple comparison of the national means for all plans is not a valid measure of plan performance over this time. Therefore, a second benchmarking calculation was done, using only data reported by plans that were in the database in both years. Those measures in which the 1999 N was more than 10% different from that of 1997 were excluded, leaving a total of five available for this comparison. (Table 5)

  The "repeater" group performance is mixed – two means went up, two stayed essentially the same, one declined. The overall performance of the "repeater" group, however, exceeded the national Medicaid means in both years. This is consistent with the hypothesis that the more experienced plans will score better than those newly entering the market because they have had more opportunity to improve their data collection and accuracy, as well as undertake improvement activities.

- A special study of the 1999 performance of nine health plans that have their roots in community health centers. (Table 8). Their performance is significantly better than that of the plans as a whole on most of the benchmarked measures. For four of the measures, their mean was more than 20% better than the national mean – childhood immunization, adolescent immunization, cervical cancer screening, and well child visits. For adolescent well care it is a stunning 47.7% better – 43.3% compared to 29.3%. Certainly other plans serving the Medicaid population also have comparable scores on some of these measures, but the achievements of these nine suggest they would be good models for further study.

The report also includes, for the first time, calculations of national means for antigen-specific childhood immunization measures. Because improvement in childhood immunization rates in the Medicaid population is one of the federal Government Performance and Reporting Act goals, considerable federal and state resources have been devoted to child immunization measurement over the past three years. We thought it would be useful to states to have the more detailed information in order to identify better either outstanding plan performance or areas to target.

In our pilot year report we cautioned that the initial benchmark figures should not be used to evaluate the performance of a plan or plans in a state. With three years of data in hand, however, that cautionary note can be dropped. Given the sizeable number of plans reporting on each of the benchmarked measures, and the consistency of the scores over the years, we believe the 1999 scores are a reliable indicator of average plan performance nationwide. States should expect that plans with scores significantly below the

benchmark -- especially in the areas such as access to primary care where the national performance mark is high -- have or will shortly initiate improvement projects to address their areas of deficiency.

Section 1. Introduction

In 1998 the American Public Human Services Association (APHSA), with the assistance of a grant from the Commonwealth Fund, established a database to capture the HEDIS® scores of managed care plans with state Medicaid contracts. The database is maintained by the National Committee for Quality Assurance under a contract with APHSA. The Association also established a project Steering Committee, composed of state and federal officials and other experts in the performance measurement field. That Committee sets the standards for access to the database, guides project staff in shaping analyses of the data, and selects the measures to be "benchmarked", i.e., those for which national means will be calculated and publicly reported.

Thanks to continuing financial support from the Commonwealth Fund, the database now contains HEDIS® data for three years: 1997, 1998, and 1999. This paper reports the scores on the benchmarked measures for 1999 and compares those scores with those of commercial plans for 1999 and for 1998 and 1997 as well. It charts the change in the composition of the database over the years, and broadens the scope of reported data to include antigen-specific childhood immunization rates. It also includes two special analyses, one of the performance of "repeater" plans – those that reported HEDIS® data in both 1997 and 1999, and a second which looks at the 1999 performance of nine plans whose provider base lies in community health centers. The paper concludes with some observations about what we have learned in the three years and its relevance for improving the quality of maternal and child health care.[1]

Section 2. The Data for 1999

Content of the database

The number of managed care organizations (MCOs) reporting data for 1999 is 167.[2] Collectively the 167 plans had a Medicaid enrollment, as of June 30, 1999, of nearly 7 million Medicaid beneficiaries -- approximately 56% of the 12.4 million enrolled in an MCO on that date.[3] Data from specialized managed care plans – such as dental only, or behavioral health services only – are not included in this database.

[1] For a fuller description of the project and the pilot year experience, see Lee Partridge and Carrie Szlyk, *National Medicaid HEDIS Database/Benchmark Project,* Commonwealth Fund, N.Y., N.Y., 2000. For the report of the second project year, including the benchmarks for both 1997 and 1998, see the APHSA/National Association of State Medicaid Directors Website: http://medicaid.aphsa.org.

[2] One Primary Care Case Management (PCCM) Plan also reported its results for 1999 to the database project. That information is captured in the database files but not included in the benchmark calculations.

[3] The Health Care Financing Administration's managed care report for June 30, 1999 shows a total of 12,377,894 beneficiaries enrolled in a comprehensive managed care organization, including the California comprehensive health insurance organization (HIO).non-specialty at-risk plans. See their 1999 *Medicaid Managed Care Enrollment Report, Summary Chart, Medicaid Managed Care Plan Type and National Enrollment, June 30, 1999.*

Not all plans report all the HEDIS® measures. Some states – Massachusetts, for example – permit plans to report selected measures on a rotating basis, rather than every year. Other states require annual reporting, but only of selected subset of measures -- childhood immunizations, perhaps a maternity care measure such as post-partum check-ups. Some of the plans voluntarily calculate and submit their results on all the HEDIS® measures, even if not required to do so under their contract with the state Medicaid agency. Thus the number of plans reporting on a given measure fluctuates across the database in each year and across the years.

Following the criteria NCQA established for its commercial plan database, certain reported data are excluded from the Medicaid master file. Examples of excluded data are calculated rates that are not accompanied by the underlying numerator and denominator information, and rates in which the denominator was reported as zero. Reported rates that fall outside the range of expected results – for example, an effectiveness of care rate greater than 100 – are also excluded.

The benchmarking criteria

The HEDIS® specifications for the third project year (data reported in 2000) contain 56 measures across eight domains of care. In making its selections for calculating national Medicaid benchmarks for that year, the Steering Committee was guided by four criteria:

- Is the measure reported by a high percentage of plans (reflects state priority)
- Was the measure selected for benchmarking in prior years (allows trending)
- Does the measure complement another measure and present a more rounded picture of plan performance (for example, child immunization rates and well-child visits)
- Is the measure widely recognized by consumers, as well as the health care community, as a "marker" for quality performance (for example, initiation of prenatal care)

Twelve measures were selected for the 1999 benchmarks – six from the effectiveness of care domain, one from the access domain, and five from the utilization domain.

The 1999 scores

Table 1 displays the national mean scores for nine of the measures the Steering Committee selected for benchmarking. A more detailed description of each measure is included in the Appendix to this report. Three of the utilization measures – inpatient average length of stay, inpatient discharges per 1,000 member months, and the number of emergency room visits per 1,000 member months – are reported separately, in Table 6.

Table l

Medicaid Benchmark Data, 1999 (Reported in 2000)

Measure	Description	# plans	Benchmark (mean)	Median
Childhood immunization, combination 1	Percentage of children who reached age two in the year who received 13 recommended immunizations*	150	52.2%	54.4%
Adolescent immunization	Percentage of children who turned 13 in the year who received the recommended second MMR immunization	105	51.0%	54.9%
Adolescent well care visits	The percentage of members ages 12 through 21 as of December 31 who had at least one comprehensive well-care visit	129	29.3%	29.4%
Cervical cancer screening	Percentage of women ages 21 through 64 who received one or more Pap tests during the reporting year or the two preceding years	123	59.1%	59.9%
Prenatal care in the first trimester	Percentage of women ages 21 through 64 who gave birth during the measurement year and who had a prenatal care visit(s) in the first trimester	122	59.2%	59.1%
Check-ups after delivery	Percentage of women who had a postpartum visit three to eight weeks after delivery	131	47.9%	50.0%
Eye exams for diabetics	Percentage of members age 31 or older with diabetes (Types I and II) who had a retinal examination during the year	115	40.4%	41.9%
Children's access to primary care providers	Percentage of children, reported in three age groupings, who had a visit with a health plan primary care provider during the year			
12-24 months		107	82.1%	88.5%
25 mos.-6 yrs		108	71.9%	76.5%
7-11 years		106	72.3%	78.2%
Well child visits, 3-6 yrs	Percentage of children who were 3, 4,5, or 6 years old who received one or more well-child visits during the year	130	51.2%	52.6%

* 4 DTP or DTAP, 3 OPV or IPV, l MMR, 2 HiB and 3 Hepatitis B vaccinations

As has been true in the previous years, the health plans continued to score well on the measures of child access to primary care providers – especially for children under two, where the mean is 82.1%. Unfortunately, a pattern of weak scores with respect to care of adolescents, first identified in 1997, has persisted into 1999.

Comparison of Medicaid and Commercial Plan Performance

As has been done in previous years, the Steering Committee asked NCQA to furnish us with information comparing the 1999 Medicaid performance data with that of all the commercial plans that reported HEDIS® data to NCQA. That comparison is shown in Table 2.

Table 2

Commercial and Medicaid Means, HEDIS® Benchmarked Measures, 1999

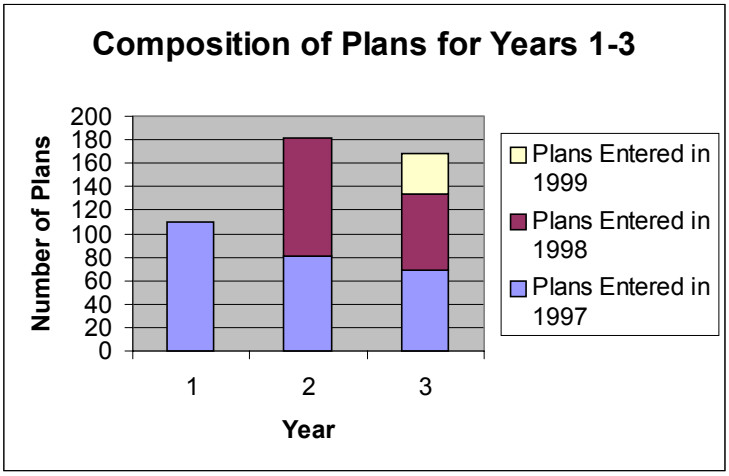
Measure	Med. N	Med. Mean	Med. Median	Comm. N	Comm. Mean	Comm. Median
Childhood immunization (combination measure #1)	150	52.2%	54.4%	357	62.8%	65.0%
Adolescent immunization (MMR rate)	105	51.0%	54.9%	354	58.8%	61.5%
Adolescent well care visits	129	29.3%	29.4%	333	28.9%	28.5%
Cervical cancer screening	123	59.1%	59.9%	369	71.8%	73%
Prenatal care first trimester	122	59.2%	59.1%	355	84.5%	88.1%
Checkup after delivery	131	47.9%	50.0%	351	72.3%	74.9%
Eye exam for diabetics	115	40.4%	41.9%	367	45.4%	43.8%
Child access to primary care						
12-24 mos.	107	82.1%	88.5%	326	90.7%	94.3%
25 mos.-6 years	108	71.9%	76.5%	328	80.5%	84.3%
7-11 years	106	72.3%	78.2%	324	82.2%	85.1%
Well child visits, 3-6 years	130	51.2%	52.6%	346	51.3%	52.8%

The adolescent well care visit score in 1999 is 29.3%. The 1999 score for commercial plans is virtually identical – 28.9%. Managed care systems traditionally emphasize

preventive care and one would expect much higher scores. The poor performance on this measure, and its consistency across both populations – Medicaid and commercial – suggests that the issue of access to health care for adolescents is a national problem.

Section 3. Trend Analyses, 1997 –1999

With three full years of data in hand it was finally possible to do some data extracts and analyses that would help answer the question about plan performance over time. First we analyzed the composition of the database in each of the three years to determine how it changed over the period. As the following figure shows, it changed considerably**.**



Of the 110 plans reporting in the initial year, 69 were still reporting HEDIS® data in year three. Of the 100 plans reporting for the first time in 1998, 65 also reported in 1999. Most of the change reflects the volatility of the managed care marketplace during this period as plans consolidated or, in the case of some of the major commercial insurers, withdrew from the Medicaid market. The total number of plans reporting on each of the benchmarked measures, however, increased markedly over the three years – in some instances, it more than doubled. (Table 3)

Tables 3 and 4 omit the childhood immunization measure shown in Table 2. The HEDIS® specifications for the childhood immunization measures changed in 1999 and dropped the 12 immunization combination measure selected for benchmarking in 1997 and 1998. The earlier combination measure required only two immunizations against Hepatitis B; all the 1999 measures require three. Therefore the scores for 1999 cannot be compared with those for 1997 and 1998.

Table 3

Medicaid Benchmarked Measures, Number of Plans Reporting, 1997-1999

Measure	1999	1998	1997
Adolescent immunization	105	88	56
Adolescent well care visits	129	142	73
Cervical cancer screening	123	122	86
Checkups after delivery	131	135	78
Prenatal care in the first trimester	122	106	46
Eye exams for diabetics	115	84	48
Children's access to primary care			
12-24 months	107	115	68
25 months-6 years	108	117	73
7-11 years	106	102	59
Well child visits, 3-6 years	130	148	79

Table 4 compares the Medicaid means and the commercial means, for each group of plans reporting that year, on the benchmarked measures.

Table 4

Medicaid mean scores and commercial mean scores on benchmarked measures, 1997, 1998 and 1999

Measure	Med. 1999	Comm. 1999	Med. 1998	Comm. 1998	Med. 1997	Comm. 1997
Adolescent immunization	51%	59%	46%	52%	49%	51%
Adolescent well care visits	29%	29%	27%	28%	32%	N/a
Cervical cancer screening	59%	72%	60%	70%	62%	71%
Prenatal care in the first trimester	59%	85%	59%	84%	60%	N/a
Checkup after delivery	48%	72%	46%	70%	44%	66%
Eye exam for diabetics	40%	45%	38%	41%	40%	39%
Children's access to primary care						
12-24 months	82%	91%	83%	90%	82%	89%
25 months-6 years	72%	81%	73%	80%	74%	80%
7-11 year	72%	82%	74%	82%	72%	79%
Well child visits, 3-6 years	51%	51%	51%	51%	59%	54%

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The Steering Committee was interested in learning if there had been an improvement in the scores of the subset of plans that had reporting HEDIS measures since 1997. Therefore we asked NCQA to extract, from each year's data, the scores reported by plans

that were in the database in both years, and calculate a mean for each of the benchmarked measures using the data from only that subset of plans. Those measures in which the 1999 N was more than 10% different from that of 1997 were excluded. (Remember, not all plans report on all measures every year.) Five measures met that second test. The results are shown in Table 5.

Table 5

Comparison of Medicaid Mean Scores, Selected Measures, of Group of Plans Reporting in Both 1997 and 1999

Measure	1999 N	1999 mean	1997 N	1997 mean
Adolescent well care visits	47	31.4%	46	33.9%
Checkups after delivery	51	48.9%	51	44.7%
Children's access to primary care				
12-24 months	48	85.7%	44	81.7%
25 months-6 years	49	75.5%	46	74.6%
Well child visits, ages 3-6	51	52.6%	48	59.2%

The plans whose data is reflected in Table 5 outperformed the national means on all measures in both years. That is not surprising, given that these plans, by 1999, had more experience with the HEDIS measures than do the plans that began reporting in 1998 or 1999 for the first time. The early reporters have had an opportunity to improve their data collection and accuracy, as well as undertake improvement activities. Moreover, most of these plans are located in states that have been leaders in managed care performance measurement, public reporting, and quality improvement -- Colorado, Massachusetts, Michigan, Minnesota, New York, Oklahoma.

The performance of this subset of plans reflects, however, the same disappointing pattern with respect to well child care that appears on Table 4. The scores for well child visits, ages 3 to 6, show a sharp decline between 1997 and 1999, for both the "repeater" group (down 6.6 points) and for the plans as a whole (8 points). All of that drop occurred between 1997 and 1998, and we have been unable to pinpoint any single explanation for so dramatic a change.

Performance improvement takes time. The need for improvement is identified, the intervention planned and implemented, and the performance remeasured to determine the intervention's success. In general, for a measurement system based on a full year's performance, one would expect the measure/identify/intervention/remeasure cycle to take place over three years. The year one performance data is calculated by June of year two, improvement needs are identified and the intervention planned and implemented by the beginning of year three, and the remeasurement (the year three performance) results are known in year four. Thus, for deficiencies identified from 1997 data, one could expect the quality improvement initiative would have been in place for 1999 and the expected improvement reflected in the data for 1999. Often, however, the time between identification of the need and the implementation of the intervention takes longer than

one year, especially when there are multiple opportunities for improvement and the state and plan must jointly determine which will have priority. Therefore we look forward eagerly to similar analyses of the data for measurement year 2000.

Section 4. 1999 Utilization of Services

From the beginning of this project, three utilization measures have been included in the annual selection for benchmarking:

- The number of inpatient discharges (general hospital, acute care) per 1,000 member months;
- The average length of inpatient stay; and
- The number of emergency room visits per 1,000 member months.

The results for 1999, both Medicaid and commercial enrollees, are shown on Table 6.

Table 6

Selected Utilization Data, Medicaid and Commercial Means, 1999

Measure	Medicaid	Commercial
Hospital discharges per 1,000 member months	8.7 discharges	4.4 discharges
Average length of inpatient stay	3.6 days	3.6 days
Number of emergency room visits per 1,000 member months	42 visits	12.5 visits

Discharges

The Medicaid mean number of inpatient discharges for 1999 was 8.7 per 1,000 member months, a very sharp decline from the previous years. The Medicaid mean in 1997 was 12, in 1998, 11. While this data does not tell us enough to explain why the number is dropping so sharply, it appears that the plans are being more successful in keeping inpatient admissions down. This is borne out by another piece of data, which is a comparison of the number of discharges for the "repeater" plans – those in the database in both 1997 and 1999. For these plans the mean in 1997 was 9.6 discharges, for 1999 it was 8.7 -- a drop of 0.9 over the three year period.

Average length of stay

In 1999 the average length of stay was 3.6 days. This is identical to the mean for the commercial enrollees for that year. The Medicaid average length of stay has increased since 1997; that year's mean was 3 days. An increase also appears in the "repeater" group, from a mean of 3.4 days in 1997 to 3.7 in 1999. One possible explanation for this

change is the passage of federal legislation banning so-called "drive by deliveries" in maternity care. Many of the hospitalizations in the Medicaid population are for maternity care.

Emergency room visits

The third benchmarked measure is the average number of emergency room visits per 1,000 member months. The mean for 1999 is 42 visits, more than three times the commercial rate of 12.5 visits. This disparity between Medicaid and commercial rates probably reflects the fact that many of the Medicaid members have been accustomed to seeking primary care through hospital emergency rooms and breaking those patterns is difficult.

Section 5. Childhood immunization detail

There are actually eight childhood immunization rates in the HEDIS 2000 specifications: six that are antigen-specific and two combination rates. The measure benchmarked in this project is a combination rate. For the 1999 measurement year, however, we asked NCQA also to calculate and report to us some of the rates for specific antigens. Because improvement in childhood immunization rates in the Medicaid population is one of the federal Government Performance and Reporting Act goals, considerable public resources have been devoted to child immunization measurement over the past three years. We thought it would be useful to states to have the more detailed national information in order to identify better either outstanding performance or areas to target.

For each of the individual measures, the denominators were the same: all children who turned two during the measurement year and were continuously enrolled in the health plan for twelve months immediately preceding the child's second birthday, with no more than one gap in enrollment of up to 45 days during that 12 month period. The numerator is either evidence of the antigen, or documented history of the illness, or a seropositive test result. The mean scores, all plans reporting, for five of these measures are shown in Table 7. The N differs from rate to rate because not all plans reported on all the different antigens.

Table 7

Selected antigen-specific child immunization Medicaid means, 1999

Measure	N (Number of plans)	1999 Mean
4 DTP/DTaP (diptheria, tetanus, pertussis)	151	65.7
3 IPV/OPV (polio)	152	73.8.
1 MMR (measles, mumps and rubella)	152	78.5
2 HiB (H influenza type b)	152	72.3
1 VZV (chicken pox)*	152	55.9

* The VZV rate is not included in the combination rate selected for Medicaid benchmarking

The scores on each of the individual rates is higher than that of the benchmarked combination rate (52.2%) because the combination measure requires evidence that the child has received all the recommended DTP, OPV, MMR and HiB vaccines plus 3 hepatitis B. It is statistically improbable that a plan will score better on a measure with multiple factors in the numerator than on the measure with one. It is particularly challenging in the Medicaid environment, because children often receive immunizations in sites other than those of the health plan and it is difficult for the plan to capture documentation that the immunization has occurred. The Center for Disease Control's *Healthy People 2000* goal is that 90% of the children under age two receive the full complement of recommended immunizations. While there is clearly opportunity for improvement, this breakdown of the immunization data shows that the health plans serving Medicaid children have made considerable progress toward achieving this goal.

Section 6. Special study of selected plans

We do not release plan-specific data from our Medicaid HEDIS® database. From time to time, however, we are asked if it is possible to analyze the performance of certain types of plans -- those that have only a Medicaid product line, those that serve both Medicaid and commercial plans, local plans, national plans, etc. Several projects are currently underway by outside researchers to attempt such analyses. In response to a request from the Association of Health Center Affiliated Health Plans, however, we did agree to do a special analysis focusing on the performance of nine of their member plans[4] that reported HEDIS® measures to this database in 1999. The result is shown in Table 8.

As noted several times in this report, not all plans report every measure. Therefore the N is not uniform across all measures.

[4] The nine plans are: Colorado Access, CO; Neighborhood Health Plan, MA; Community Choice, MI; First Guard, MO; Bronx Health Plan, NY; Center Care, NY; Community Choice, NY; Health Plus, NY; and Neighborhood Health Plan, RI.

Table 8

Performance of Nine Health-center Based Health Plans, 1999

Measure	Number of Plans	National Medicaid Mean	Mean for These Plans
Childhood immunization combination 1	9	52.2%	65.1%
Adolescent immunization – MMR	5	51.0%	62.9%
Adolescent well care visits	5	29.3%	43.3%
Cervical cancer screening	8	59.1%	73.7%
Checkups after delivery	8	47.9%	52.3%
Prenatal care in the first trimester	6	59.2%	58.5%
Eye exams for persons with diabetes	7	40.4%	38.6%
Children's access to care			
12-24 months	8	82.1%	83.5%
25 months - 6 years	8	71.9%	73.1%
7 - 11 years	8	72.3%	80.1%
Well-child visits, 3-6 year olds	6	51.2%	66.4%

These nine plans share certain common characteristics. They were formed by local non-profit community health centers. Some are owned fully by the community health centers and some share ownership. They all use the community health centers as the core of their provider base, although they do have other providers in their networks as well. The community health center structure, essentially a large group practice, offers certain benefits such as capital funds for systems improvements and smaller variations in clinical practice that have typically produced superior scores on HEDIS®-type measures.

In addition, these plans usually have a strong collaborative relationship with the local, state and federal agencies that serve or fund health care for lower-income populations, and they continue to serve the health care needs of beneficiaries even if the beneficiary loses insurance coverage. Arguably, therefore, they have less turnover in their caseload than is true of other plans and more opportunity for effective case management.

APHSA staff has worked with a number of these plans on an initiative, funded by the DHHS Health Resources and Services Administration, to identify promising practices for improving care access and quality, and we knew they put major emphasis on good

performance. Still, we were surprised to learn how much better their performance is than that of the plans as a whole. Compare, for example, their child immunization rate for combination 1 with the national mean -- 65.1% vs. 52.2% . With regard to preventive care, their mean for adolescent well care visits is 43.3%, compared to 29.3% for the nation; for well child care for three through six year olds, 66.4% compared to 51.2%. Certainly other plans serving the Medicaid population also have comparable scores on some of these measures, but the achievements of these nine suggest they would be good models for further study.

Section 7. Outlook

When this project began in 1998, it was unclear how many states would embrace the HEDIS® measurement set and how robust the database might become. As we look back over these three years, and look ahead to year four, it is clear that the use of HEDIS® has far exceeded our early hopes. Indeed, in year four several more states plan to submit the data they have generated by using HEDIS® measures for their state-managed PCCM systems, perhaps allowing us to develop some comparative data for those systems.

In our first year report we cautioned that the initial benchmark figures should not be used to evaluate the performance of a plan or plans in a state. With three years' data in hand, however, that cautionary note can be dropped. With the sizeable number of plans reporting on each of the benchmarked measures, and the consistency of the scores over the years, we believe the 1999 scores are a reliable indicator of average plan performance nationwide. States should expect that plans with scores significantly below the benchmarks, especially in the areas such as access to primary care where the national performance mark is high, have or will shortly initiate improvement projects to address their areas of deficiency.

The three years of benchmarked data also point to two areas where the performance is weak for many plans: maternity care (both the prenatal care and the checkup after delivery measures) and care of the adolescent population. With respect to maternity care the gap between plan performance for the commercial enrollees and that for Medicaid beneficiaries is huge – more than 20 percentage points on both measures. Closing that gap is a major challenge, and cannot be done by the plans alone. It will require partnerships with local and state public health agencies, and continuing efforts from the primary care providers themselves. Further study of community health center based plans, and documenting some of the practices of high performing commercial plans, could also be important contributions to this effort.

With respect to adolescent well care, the scores are equally poor for both Medicaid and commercial enrollees, confirming what front-line providers already know – this population is hard to reach. As with maternity care, broad-based partnership efforts, in this instance also including school-based health providers, will be required to effect any real improvement.

APPENDIX A

PLANS REPORTING HEDIS® DATA

FOR 1999, 1998, AND 1997

State	In 1997	In 1998	In 1999	Plan name	Enrollment as of
					30-Jun-99
CA		yes	yes	Alameda Alliance for Health	77,812
CA		yes	yes	Blue Cross/Alameda, Kern, et al.)	
CA			yes	Blue Cross/Tulare)	264,544
CA		yes	yes	Blue Cross/Sacramento	50,176
CA			yes	Blue Cross/San Diego	9,759
CA		yes	yes	CalOPTIMA	215,088
CA		yes	yes	Central Coast Alliance for Health	21,145
CA			yes	Community Health Group	74,715
CA		yes	yes	Contra Costa Health Plan	41,515
CA		yes	yes	Health Net/Fresno/LA/Tulare	436,178
CA		yes	yes	Health Net/Sacramento	24,960
CA		yes	yes	Health Plan of San Joaquin	53,720
CA		yes	yes	Health Plan of San Mateo	39,813
CA		yes	yes	Inland Empire Health Plan	142,716
CA		yes	yes	Kern Family Health Care	49,926
CA		yes	yes	LA Care Health Plan	611,967
CA		yes	yes	Maxicare/Sacramento	18,547
CA		yes	yes	Molina Medical Centers	27,589
CA		yes	yes	Partnership Health Plan	49,707
CA		yes	yes	San Francisco Health Plan	21,943
CA		yes	yes	Santa Barbara Regional Health	39,745
CA		yes	yes	Santa Clara Family Health	43,532
CA			yes	Sharp Health Plan	47,637
CA			yes	Universal Care/San Diego	13,958
CA		yes	yes	Western Health Advantage/Sacramento	15,184
CO	yes	yes	yes	Colorado Access	43,029
CO	yes	yes	yes	Community Health Plan of the Rockies	11,856
CO	yes		yes	Kaiser Permanente/Colorado	3,431
CO	yes	yes	yes	Rocky Mountain HMO	19,443
CT		yes	yes	Physician Health Services Plan	73,039
FL		yes	yes	Foundation Health	32,512
FL		yes	yes	Healthplan Southeast	
FL		yes	yes	Humana/Central Florida)	
FL			yes	Humana/Fort Walton)	
FL		yes	yes	Humana/Norrth Florida)	142,415
FL			yes	Humana/South Florida)	
FL		yes	yes	Humana/Tampa)	
FL		yes	yes	Neighborhood Health Partnership	9,471
FL			yes	United Health Care of Florida	56,596
HI			yes	Kaiser Permanente/Hawaii	16,862
IL	yes	yes	yes	American Health Care Providers	17,215
IL			yes	Humana/Illinois	13,953
IN			yes	Maxicare/Indiana	69,194
KY			yes	Passport Health Plan	95,184
MA		yes	yes	Medical Center Health Plan/Boston	16,983
MA	yes	yes	yes	Fallon Community Health Plan	15,806
MA	yes	yes	yes	Harvard Pilgrim Health Plan	42,733
MA	yes	yes	yes	Neighborhood Health Plan	59,176
MA		yes	yes	Network Health Plan	6,825
MA	yes	yes	yes	Primary Care Clinician Plan (PCCM)	433,663

State	In 1997	In 1998	In 1999	Plan name	Enrollment as of
					30-Jun-99
MD		yes	yes	FreeState Health Plan	92,856
ME		yes	yes	Aetna U.S. Healthcare/Maine	5,569
MI		yes	yes	American Family Care of Michigan	2,513
MI		yes	yes	Blue Care Network of Michigan	5,637
MI	yes	yes	yes	Botsford Health Plan	2,637
MI	yes	yes	yes	Cape Health Plan	25,286
MI	yes	yes	yes	Care Choices	16,434
MI	yes	yes	yes	Community Care Plan	21,010
MI	yes	yes	yes	Community Choice Michigan	55,448
MI	yes	yes	yes	Great Lakes Health Plan	60,848
MI	yes	yes	yes	Health Alliance Plan	25,319
MI		yes	yes	Health Plan of Michigan	13,642
MI	yes	yes	yes	Health Plus of Michigan	57,188
MI	yes	yes	yes	M-Care	9,335
MI			yes	McLaren Health Plan	7,872
MI	yes	yes	yes	Midwest Health Plan	13,969
MI	yes	yes	yes	Oakwood St. John's Health Plan	15,630
MI	yes	yes	yes	OmniCare Health Plan	44,824
MI		yes	yes	Physicians Health Plan/South Michigan)	
MI		yes	yes	Physicians Health Plan/Mid-Michigan)	64,929
MI		yes	yes	Physicians Health Plan/SW Michigan)	
MI		yes	yes	Priority Health	21,294
MI			yes	Pro Care Health Plan	4,043
MI	yes	yes	yes	Select Care	27,614
MI	yes	yes	yes	Total Health Care	39,883
MI	yes	yes	yes	Ultimed HMO of Michigan	16,874
MI		yes	yes	Upper Peninsula Health Plan	18,679
MI	yes	yes	yes	Wellness Plan	115,475
MN			yes	Altru Health Plan	824
MN		yes	yes	Blue Plus	69,892
MN		yes	yes	First Plan of Minnesota	3,254
MN			yes	Group Health/Central Minnesota	1,456
MN			yes	Health Partners	29,046
MN			yes	Itasca Medical Care	3,885
MN		yes	yes	Medica Health Plans	87,730
MN			yes	Metropolitan Health Plan	17,592
MN		yes	yes	UCARE	54,437
MO			yes	BC/BS of Kansas City	19,099
MO	yes	yes	yes	First Guard Health Plan	21,721
MO			yes	HealthCare USA/Eastern Missouri)	
MO			yes	Health Care USA/Central Missouri)	91,802
MO			yes	HealthNet/Kansas City	11,312
NC			yes	Coventry Health Care of the Carolinas	
NC	yes	yes	yes	Wellness Plan of North Carolina	22,703
NE	yes	yes	yes	Exclusive Healthcare/Midwest	11,180
NE		yes	yes	United HealthCare of the Midlands	16,872
NJ		yes	yes	Aetna U.S. Healthcare/Northern N.J.	69,191
NJ		yes	yes	Physicians Health Services of N.J.	22,578
NM	yes	yes	yes	Cimarron Health Plan	50,661
NM	yes	yes	yes	Lovelace Health Systems	43,012
NM	yes	yes	yes	Presbyterian Health Plan/Salud	114,855

State	In 1997	In 1998	In 1999	Plan name	Enrollment as of
					30-Jun-99
NY	yes	yes	yes	ABC Health Plan	2,100
NY	yes	yes	yes	BC/BS of Western NY (Community Blue)	15,977
NY	yes	yes	yes	Bronx Health Plan	27,608
NY	yes	yes	yes	Buffalo Community Health	7,162
NY	yes	yes	yes	Capital District Physicians Health Plan	15,102
NY	yes	yes	yes	Care Plus	8,499
NY	yes	yes	yes	Center Care	16,878
NY	yes	yes	yes	Community Choice of Westchester	5,592
NY		yes	yes	Community Premier Plus	9,511
NY	yes	yes	yes	Compre Care	1,902
NY		yes	yes	Excellus (Blue Choice)	30,370
NY	yes	yes	yes	Genesis Health Plan	23,173
NY	yes	yes	yes	Health Plus	14.739
NY	yes	yes	yes	Health Insurance Plan of Greater NY	48,500
NY			yes	HUM Healthcare Systems	4,538
NY	yes	yes	yes	Independent Health of Western NY	24,985
NY	yes	yes	yes	Managed Health Systems (Health First)	69,355
NY	yes	yes	yes	MetroPlus	53,846
NY	yes	yes	yes	Neighborhood Health Providers	24,609
NY	yes	yes	yes	NY Hospital Community Health Plan	6,915
NY	yes	yes	yes	NY State Catholic Health Plan (Fidelis)	62,825
NY	yes	yes	yes	Partners in Health (St. Barnabus)	10,419
NY	yes	yes	yes	Preferred Care	12,444
NY	yes	yes	yes	Suffolk Health Plan	8,178
NY	yes	yes	yes	Total Health Care/Syracuse	9,527
NY	yes	yes	yes	United Healthcare of NY	1,675
NY	yes	yes	yes	United Healthcare of Upstate NY	6,316
NY	yes	yes	yes	Vytra Health Plans Long Island	5,893
NY	yes	yes	yes	Wellcare of NY	19,197
NY	yes	yes	yes	Westchester Prepaid Health Plan	12,071
OH		yes	yes	Family Health Plan	11,271
OH		yes	yes	Paramount Health Care	16,367
OH		yes	yes	Summacare	21,897
OK	yes	yes	yes	BlueLincs	30,825
OK	yes	yes	yes	Community Care Plan	28,202
OK	yes	yes	yes	Prime Advantage Health Plan	10,308
OR		yes	yes	Kaiser Foundation Plan of the NW	22,524
OR	yes	yes	yes	Providence Health Plan	27,796
PA			yes	AmeriChoice	
PA			yes	AmeriHealth	18,779
PA		yes	yes	Gateway Health Plan	114,762
PA		yes	yes	Health Parners of Philadelphia	107,335
PA		yes	yes	HRM Health Plan (Oak Tree)	58,431
PA	yes	yes	yes	Keystone Mercy Health Plan	220,275
PA			yes	UPMC Health Plan	69,593
PR		yes	yes	Humana/Central)	
PR		yes	yes	Humana/Southeast)	223,601
PR	yes	yes	yes	Triple S	345,068
RI		yes	yes	Coordinated Health Partners (Blue Chip)	5,028
RI		yes	yes	Neighborhood Health Plan of RI	28,401
RI		yes	yes	United HealthCare of New England	45,260

State	In 1997	In 1998	In 1999	Plan name	Enrollment as of
					30-Jun-99
SC			yes	Select Health Care of SC	7,454
TX		yes	yes	Community First	19,390
UT			yes	Altius Health Plans	5,027
UT	yes	yes	yes	IHC Health Plans (Intermountain)	36,135
UT			yes	United Health Care of Utah	22,621
UT		yes	yes	University Health Care Network	5,753
VA			yes	Optima Health Plan	
VA		yes	yes	Peninsula Health Care	12,781
VA		yes	yes	Priority Health Care	18,701
VA			yes	Southern Health Services	7,603
WA		yes	yes	Clark United Providers	12,891
WA	yes	yes	yes	Group Health Cooperative of Puget Sound	24,793
WA	yes	yes	yes	Kaiser Foundation Plan of the NW	8,223
WA		yes	yes	Premera Blue Cross	45,947
WA	yes	yes	yes	QualMed Washington	54,344
WI			yes	United Health Care of Wisconsin	8,282
	69	131	168		7,360,022
Note: Enrollment data is taken from the CMS Medicaid Managed Care Program Summary, June 30, 1999.					

APPENDIX B

DESCRIPTION OF BENCHMARKED MEASURES

FOR 1999

(NCQA HEDIS® 2000 SPECIFICATIONS)

For the convenience of readers who may not be very familiar with HEDIS®, this describes in detail each of the twelve measures selected for benchmarking. The measures are grouped into three categories: effectiveness of care, access/availability of care, and use of services.

Effectiveness of Care Measures

Childhood immunization status, combination measure #1. The percentage of enrolled children who turned two years old during the measurement year, who were continously enrolled for 12 months immediately preceding their second birthday and who were identified as having received, by the second birthday, all of the following recommended immunizations:

- four diphtheria/tetanus/pertussis (DTP/DtaP)
- three oral or injectable polio virus (IPV/OPV)
- one measles/mumps/rubella (MMR)
- two haemophilus influenza type b (Hib)
- three hepatitis B vaccines (Hep B)

Adolescent immunization status. The percentage of enrolled adolescents who turned 13 during the measurement year, were continuously enrolled for 12 months immediately preceding their 13th birthday and who were identified as having had a second MMR vaccination by the member's 13th birthday.

Cervical cancer screening. The percentage of women age 21 through 64 years, who were continuously enrolled during the measurement year and who received one or more Pap tests during the measurement year or the two years prior to the measurement year.

Prenatal care in the first trimester. The percentage of women who delivered a live birth during the measurement year, who were continuously enrolled for 280 days prior to delivery and who had a prenatal care visit(s) on or between 176 days to 280 days prior to delivery (or estimated day of delivery, if known).

Check-ups after delivery. The percentage of enrolled women who delivered a live birth during the measurement year who were continuously enrolled 56 days after deliver, with no breaks in enrollment, who had a postpartum visit on or between 21 days and 56 days after delivery.

Eye exam for diabetics. The percentage of members with diabetes (Type 1 and Type 2) age 18 through 75 years old, who were continuously enrolled during the measurement year, who had an eye screening for diabetic retinal disease. In certain situations an eye exam performed in the year prior to the measurement year may be counted toward the numerator.

Access/availability of care measures

Children's access to primary care providers. (3 cohorts). The percentage of enrollees age 12 months through 24 months, or 25 months through 6 years who were continuously enrolled during the measurement year and who have had a visit with an MCO primary care practitioner during the measurement year. The percentage of children age 7 years through 11 years who were continuously enrolled during the measurement year and the calendar year preceding the measurement year and who have had a visit with an MCO primary care practitioner during the measurement year or the calendar year preceding the measurement year.

Use of services

Well child visits in the third, fourth, fifth and sixth year of life. The percentage of members who were three, four, five or six years old during the measurement year, who were continuously enrolled during the measurement year, and who received one or more well-child visit(s) with a primary care practitioner during the measurement year.

Adolescent well care visits. The percentage of enrolled members who were age 12 through 21 years during the measurement year who were continuously enrolled during the measurement year and who have had at least one comprehensive well care visit with a primary care practitioner or an OB/GN practitioner during the measurement year.