Legislative Summary

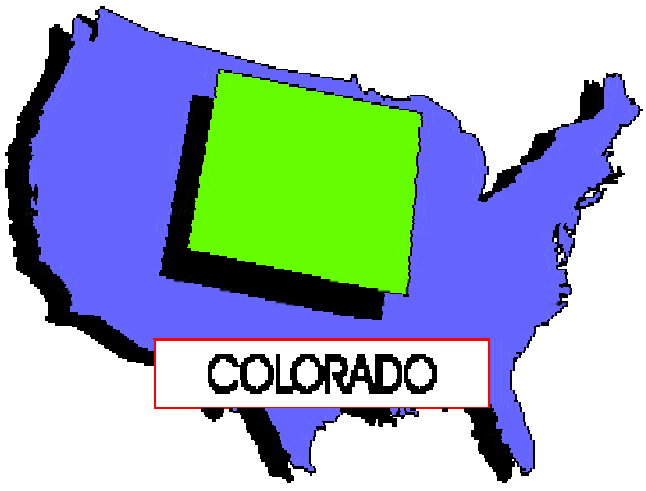
Delivery of 1997 EPSDT Services to Colorado Medicaid Clients

A report prepared for the

State of Colorado

Department of Health Care Policy and Financing

By *First Peer Review of Colorado, Inc.*



This document examines the 1997 performance of seven programs delivering Early Periodic Screening, Diagnosis and Treatment (EPSDT) services for children served by the Colorado Medicaid program. EPSDT services are mandated under federal laws and regulations, and are available to children in Medicaid programs from birth through the age of twenty. This report includes three primary facets of EPSDT: immunizations; EPSDT screening services; and follow-up, referral, and coordination of care. The review of EPSDT services was conducted by First Peer Review of Colorado, Inc., as part of its External Quality Review (EQR) function for the State of Colorado Medicaid Program.

The seven programs covered in this report include five Health Maintenance Organizations (HMOs), as well as the Primary Care Provider Program (PCPP) and the services delivered through the unassigned fee-for-service providers (labeled FFS in this document). One of the HMOs included in this report has since left the Medicaid program (HMO Colorado).

This study reviewed 1997 medical records of eligible children who had received some form of well-child or EPSDT services during the year. The majority of the children were selected because there was at least one encounter[1] or claim record indicating that the child had received some form of EPSDT or well-child services under the Colorado Medicaid program in 1997. Continuous enrollment criteria and payee criteria were placed for inclusion in the sample, in order to ensure meaningful examination of provider patterns of care. The final sample included 764 children, with an approximately equal number of children drawn from seven major plans providing care to Colorado Medicaid children. This includes five HMOs, as well as children receiving care on an unassigned basis from fee-for-service providers, and children receiving care from a provider in the Primary Care Physician Program (PCPP).

Principal Program Findings

This section summarizes the principal findings of the EPSDT services study. Findings are divided into the three major areas examined: patterns and types of service provided, immunizations, and EPSDT screening.

OVERALL FINDINGS

1. In general, for the majority of measures, the HMOs perform better than do the fee-for-service providers and the PCPPs. This holds true for such items as rates of immunization, for notification of clients about screening, for the completeness of screening - as measured by the proportion of children given individual scheduled screening components - and for attention to EPSDT components in the record.

2. The estimated immunization rates for Medicaid children between 15 and 39 months of age lag behind figures obtained in the National Immunization Survey for the entire state of Colorado for that age group. Fifty-three percent of Medicaid children in this

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[1] *A contact between a provider of services and a client of those services is referred to as an encounter. In a fee-for-service setting, an encounter ordinarily results in a claim made by the provider for the services. In a Medicaid managed care setting (e.g., an HMO), an encounter ordinarily results in an encounter record, submitted by the HMO to the State of Colorado. For the five HMOs included in this study, the basic records used were encounter records. For the FFS and PCPP groups, the basic records used were claims records.*

age group had records indicating completion of the 4-3-1 series (4 DTP, 3 polio or OPV, 1 measles immunization). The difference in completion percentages is primarily due to low rates of immunization for later immunization doses in the series. It should be kept in mind that the methods for estimation of rates for this study were not exactly like those for the National Immunization Survey. Nevertheless, the comparison can provide a basis for assessing the current estimates obtained from this study.

3. One item of potential importance to the overall EPSDT program is the high apparent degree of relationship between client notification rates and performance, particularly on immunizations. Either a strong notification program is indicative of strong performance in the provision of services, or there is a meaningful and measurable direct effect of a strong notification program on rates of service delivery, or possibly both.

TYPES OF SERVICE PROVIDED

4. The overall estimated rate of service utilization was 58 percent, based on the presence of a well-child procedure code in the encounter or claim record. This was considerably higher in the fee-for-service groups than in the HMOs: 44.2 percent of eligible children had services in the HMOs, versus 63 percent of children enrolled with either PCPP or unassigned (fee-for-service) providers. However, this may partly reflect coding and reporting differences in these different populations, rather than genuine service distinctions (see the footnote on the first page).

5. The individual programs do differ, sometimes greatly, in who provides services to children. HMO service providers were more frequently pediatricians and family practitioners than were fee-for-service or PCPP providers. However, the proportion of services delivered by a M.D. is about the same in both the plan types.

IMMUNIZATIONS

6. HMOs differ in the completion percentages for first doses of the four major immunization series, Diphtheria-Tetanus-Pertussis (DTP), Oral Polio (OPV), Measles, Mumps and Rubella (MMR) and Hepatitis B. The plans also differ somewhat from each other in the percentage of immunizations given within the recommended schedule. However, for none of the four types of immunizations did any of the HMOs fall below the completion percentage for fee-for-service and PCPP groups.

7. Percentages of first immunization doses completed were generally better for PCPP than for fee-for-service clients. However, fee-for-service providers performed better than PCPP on the proportion of those immunizations that were within the recommended schedule.

8. Sampled children below 15 months of age receive first immunization doses at a high rate. While the sample results may not completely generalize to the total Medicaid EPSDT-eligible population, the sample is probably most representative of the entire population for this youngest age group. Except for the Varicella immunization, the rate of first doses is always above 80 percent. Rates of completion of the entire series of immunizations are much lower, even for children below the age of three.

9. Immunization rates are the highest for DTP/DTaP immunizations and the lowest for Varicella (Chickenpox). Colorado Medicaid providers, like providers around the country, often elected not to give Varicella immunizations in 1997.

10. HMOs vary in the rate at which children are immunized, and also vary in the degree to which the immunizations given are within the recommended schedule for the immunization. Each HMO is generally consistently ranked across the immunizations. In other words, if an HMO ranks high on one immunization series, it generally ranks among the highest for the other series. HMOs that complete the largest percentages of first immunizations also in some instances have the lowest portion of first immunizations completed on schedule. In general, it must be considered better to complete a large portion of immunizations, even if those immunizations are not within the recommended schedule.

VISITS AND PATTERNS OF CARE

11. For sampled children, all of whom had at least one EPSDT visit, the median number of visits in a year is surprisingly high: an overall median of 5.5 visits for the year 1997.

12. Sample children in the youngest age groups have a higher number of visits than older children. Children in the sample at and above 3 years of age had fewer visits than did children below 3, and children 3-6 years of age in this sample had about the same total 1997 visits per child as did the adolescent age group 12-20.

13. Eighty-four percent of the children in the study (about 10 of every 12 children) had at least one visit during 1997 deemed to be primarily a well-child visit. The percent of clients with at least one visit marked as primarily well-child was the same for HMO clients and fee-for-service clients (83.7 percent).

14. Although the likelihood of an EPSDT visit declines rapidly with age, the likelihood of a problem being noted by the provider based on the screen increases with age. The rate of problems noted for the adolescent age group (12 to 20 years) was 9.4 percent, which was significantly higher than the rate of 4.6 percent in the youngest age group.

15. About 20 percent of children have at least one referral to another provider during the year. These rates are lowest among providers in the Primary Care Physician Program (PCPP).

16. Three percent of all visits made by sample children (both sick visits and well-child visits) result in referral to a specialist. Sixty percent of all visits had evidence in the medical record of some form of follow-up to the primary care physician. Those recorded visits whose primary purpose was follow-up for a specific problem resulted in the highest proportion of referrals to specialists, although referral to a specialist still only occurred in six (6) percent of all such visits.

EPSDT SCREENING COMPONENTS

17. HMO providers complete a higher percentage of due screen components than do the fee-for-service providers, although there are individual screening components for which fee-for-service providers do have higher rates of screening.

18. Although both fee-for-service and PCPP providers complete fewer EPSDT screening components than do the HMO providers, PCPP providers complete a larger percentage of most needed EPSDT screening components than do fee-for-service providers.

19. There is a high degree of variability with which EPSDT screening components are completed in children for whom those components are due. Common components carried out at young ages, or at all ages, such as height and weight, are completed a high proportion of the time. Screening components for adolescents (e.g. pelvic exam, STD screening) are seldom completed. Health education and counseling are recorded in the medical record as being completed for a very high percentage of visits (>98 percent). However, the extent or thoroughness of such education and counseling cannot be readily measured.

Findings by Program

SUMMARY OF PERFORMANCE FOR IMMUNIZATIONS

A part of the evaluation of the EPSDT services was the evaluation of immunizations and percent of immunizations completed. This section presents summary findings for certain measures of immunization completeness[2], in the form of counts of the number of items for which a 'superior,' or 'Above average' rating, was given, and counts of the number of items for which a 'Below average' rating was given. An overall ranking or rating is given as the last entry to the table.

Table 1. Summary rating and ranking of programs for immunization measures

Program	Number of measures above average	Number of measures below average	Overall rating for immunizations
Co. Health Plan of the Rockies	0	0	Average
Colorado Access	0	0	Average
HMO Colorado	3	0	Highest
Kaiser	0	0	Average
Rocky Mountain	2	0	Second highest
FFS	0	1	Low
PCPP	0	3	Lowest

[2] *Immunization measures included were: 1) Percent of children in whom the first immunization in each of the four series DTP, OPV, MMR and Hepatitis B; 2) Percent of those first immunizations given within the recommended time schedule (timeliness) for the same four immunization series; and 3) Percent of children for whom the reviewer indicated that immunizations were complete prior to 1997.*

Most plans were not significantly different from the average on most measures, and therefore were not rated as either 'above average' or 'below average' for the majority of the measures. Nevertheless, there is considerable differentiation in the quality of immunization services provided, and findings presented in the table reflect the more detailed findings given in the broader report.

HMO Colorado clearly scores the highest of the seven programs on provision of immunization services, with Rocky Mountain HMO a close second. Fee-for-service and PCPP providers have the lowest overall rating, with PCPP providers scoring lower than fee-for-service, based on the summary measures.

Completion of Screening Components

This section presents the findings for those screening components that are either (1) common components of an EPSDT screening program; or 2) in the judgment of the analyst have particular importance to the question of quality of EPSDT services being provided[3]. Certain components that apply to a small subset of individuals (e.g. pelvic exam) or are in some way elective or controversial (e.g. blood lead level) have been omitted from this analysis.

SUMMARY FOR COMPLETION OF EPSDT SCREENING COMPONENTS

This section presents the summary of results for completion of fifteen EPSDT screening components[4]. The table below gives counts of the number of components for which each program rated 'Above average,' and the number of components for which the program rated 'Below average.' The overall ranking for each program is based on the difference between the two numbers.

Table 2. Ratings for completion of EPSDT screening components

Program	Number of components with 'Above average' rating	Number of components with 'Below average' rating	Overall ranking, based on ratings
CHPR	2	2	Average
Colorado Access	8	0	Superior
HMOC	11	0	Highest
Kaiser	2	3	Average to below
Rocky Mountain	1	2	Average to below
FFS	0	8	Lowest
PCPP	0	4	Below average

[3] *Needed screening components are based on the age and status of the child, and not all components are due at any given visit. In all instances, the denominator was the total number of visits for which the particular component was needed.*

[4] *The fifteen screening components included are: Health history; Height; Weight; Head Circumference; Developmental Behavior; Vision Testing; Hearing/Audiogram; Health Education; Immunizations; Dental Screen; Complete Physical Exam; Blood Pressure; Lead Risk Assessment; Newborn Screen.*

HMOC again scores the highest in the completion of EPSDT screening services, with Colorado Access scoring next highest. Fee-for-service and PCPP providers score the lowest, with fee-for-service being lower than PCPP, by virtue of a 'below average' rating on eight of the fifteen components included. All others fall into the range that should be considered 'average.'

STUDY LIMITATIONS AND CAUTIONS

This section discusses the major limitations of the study briefly. The reader is referred to the broad report for a more detailed discussion.

- Two factors determine the magnitude of medical services rendered to any free group, including this one: services *provided* and services *sought*. For example, differences in immunization rates among various programs might be due to differences in the degree to which its members (or parents and guardians) *seek services*, not to the degree to which services are available or provided to those seeking them.

- The sample for which results are described in this study may not be entirely representative of the entire sample in level of services provided and sought. Reasons for this are given in detail in the broader report. It is probably not possible to generalize this group's level of services to the entire EPSDT-eligible population. On the other hand, the *quality and nature* of services provided is probably representative of the services given to the entire EPSDT population. However, as with all studies that utilize sampling, this is only a reasonable inference, not a certainty.

- Particularly with regard to immunization rates, it is likely that this group's immunization rates do not reflect those of the entire Medicaid population. It is highly probable that the individuals included in this study are at least as likely, and probably more likely, to have had immunizations than the children of the entire EPSDT-eligible population. Therefore, immunization rates found in this study should be taken as probable upper-bound estimates of the rates for the entire group.

Recommendations

The following major recommendations for the EPSDT program are based on the findings of this study, as well as on a general knowledge of the Colorado Medicaid program.

1. *HMOs and providers need to be more conscientious about the reporting of well-child services in encounter data*.

2. *Efforts to complete immunizations for the youngest groups of children need to be intensified.* In particular, the administration of the last doses of immunization series appears to lag considerably behind recommendations. This is particularly true for the fee-for-service and PCPP populations. The plans apparently differ in the efforts to complete immunizations, or else have Medicaid client populations that differ considerably in their willingness or ability to complete all immunizations in the series.

3. *All providers, particularly fee-for-service and PCPP providers, need to be educated more thoroughly in the importance of completing immunizations, and also of maintaining thorough immunization records*. It is also important to educate providers and provider offices on the importance of having immunization histories for older children who may not currently be in need of immunization. The proportion of older children for whom no immunization history is contained in the record is quite high.

4. *Providers and plans need to be more conscientious about notifying clients or client families of EPSDT screens due*.

5. *Fee-for-service and PCPP providers should be encouraged to include standard well-child or EPSDT forms in the medical record of a child for whom they are providing well-child and EPSDT services*.

6. *Greater efforts need to be made to encourage older children and their parents and guardians to avail themselves of EPSDT services.* Provision of screens specifically for the older age groups should be given a higher proportion of the time for those children or adolescents who do have well-child or EPSDT services. However, it should be noted that mothers of children receiving EPSDT services are frequently eligible for EPSDT services themselves.

7. *HMOs and the state need to examine the client notification program (reminder system for notifying parents or guardians or clients of upcoming or needed services).* There is a wide variation among HMOs in the proportion of charts that contain a record that there a notification given of services due. Based on study results, this factor seems to be closely tied to the overall assessment of the HMO's EPSDT services, particularly to the immunization rates. It seems logical that the strength and coverage of the reminder system could be a significant factor in the strength of the HMO's EPSDT service program.

8. *An HMO wishing to increase the overall quality of EPSDT services should attempt to make those changes that affect all aspects of the EPSDT program*. HMOs generally perform comparably in all aspects of their EPSDT service program. For example, an HMO with a strong immunization program usually also performs well on well-child checks and screening procedures, and vice-versa. Consequently, it is probably more fruitful to take actions that strengthen the overall program, rather than a single aspect of the program. For example, the HMO might attempt to strengthen the reminder system or to increase the number of children receiving at least one well-child visit a year, rather than encouraging providers to increase their immunization coverage rates – because the former actions will change all aspects of the EPSDT program rather than a single aspect only.

9. *The HMOs, the State, and the EQRO should examine the current system for coordination of care*. There are multiple federal and state programs now available to provide EPSDT-related services, which means that the role of the provider and the HMO may increasingly become that of overseeing and managing the child's care, rather than directly providing all the care. Therefore, a coordination system may become an increasingly important component of an overall managed care EPSDT service delivery system.

This summary is taken from the findings presented in an overall report on 1997 EPSDT services delivered to Medicaid children prepared for the Colorado Department of Health Care Policy and Financing by First Peer Review of Colorado. That report is available from the State of Colorado Department of Health Care Policy and Financing.