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Increasing Children's Health Screenings: A comparative Study of State Medicaid Managed Care EPSDT Programs.

Ponn P. Mahayosnand

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INCREASING CHILDREN’S HEALTH SCREENINGS: 
A COMPARATIVE STUDY OF STATE MEDICAID 
MANAGED CARE EPSDT PROGRAMS

Ponn P. Mahayosnand

B.S., Providence College, 1995

A Thesis
Submitted in Partial Fulfillment of the 
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 Master of Public Health 
 at the 
 University of Connecticut 
 1998
Master of Public Health Thesis

INCREASING CHILDREN’S HEALTH SCREENINGS: A COMPARATIVE STUDY OF STATE MEDICAID MANAGED CARE EPSDT PROGRAMS

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ACKNOWLEDGEMENTS

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Ponn P. Mahayosnand, B.S.
Master of Public Health Candidate
University of Connecticut
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ABSTRACT

This study investigates the impact of performance data and appointment notification on several preventive health services, particularly on EPSDT Medicaid managed care. In 1990, the Health Care Financing Administration set the national goal to achieve 80% of Medicaid health screening of all eligible children by 1995. As of 1998 this goal has not yet been reached. In May 1997, the Office of the Inspector General of the U.S. Department of Health and Human Services showed that when a state informs the managed care program which children are due for EPSDT, children received significantly more EPSDT services. This paper evaluates the effectiveness of Michigan, Nevada and Connecticut’s Medicaid managed care EPSDT intervention programs during the fiscal years of 1994-1997. Michigan (Method #1) has a computerized reminder system for their MCOs and Medicaid recipients, and conducts minor patient outreach. Nevada (Method #2) contacts the MCOs, PCCMs and individual Medicaid recipients, has an active outreach program, but does not follow-up with the MCOs. Connecticut (Method #3) contracts with an external oversight agency to notify and monitor MCOs, and conducts active outreach. This study concluded that methods with an active outreach program produced more screenings than a system with minor outreach (78% and 54% compared to 35%). There was a highly significant difference among the effects of the three methods across all four fiscal years (chi square significance <0.001). The results suggest the benefit of a tracking system with active outreach (Method #3). Although EPSDT participant ratios are higher in Method #2 compared to Method #3, Method #2 is implemented in a predominantly FFS population. Therefore, Nevada’s success rate in a mandated managed care environment is suspect. Method #3 was incorporated into the Medicaid managed care EPSDT programs. MCOs are monitored for efficient access to care and quality care delivery. With states expanding Medicaid services through State Children’s Health Insurance Programs, more children will have access to EPSDT services. Therefore, further research should be conducted to 1) measure the strength of association among different Medicaid managed care EPSDT programs using time series analysis, 2) evaluate
other EPSDT interventions, 3) follow-up with individual MCOs to see what interventions they use to increase their participant ratios, and 4) replicate this case analysis with the new HCFA-416 reporting criteria to better distinguish FFS care from MCO care.
INTRODUCTION

The Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program, a benefit for Medicaid-eligible children that was initiated in 1967, is one of the more successful federal child health care programs (Cleary, 1998)(Sardell and Johnson, 1998). The program was designed to ensure comprehensive health coverage, particularly for preventive health services. In 1989, the Health Care Financing Administration (HCFA) set a goal for states to provide Medicaid health screenings to 80% of eligible children by 1995 (Selby-Harrington, et al., 1995). Few published studies exist on the effectiveness of the states’ activities designed to increase Medicaid children’s access to care and use of preventive or curative services (Gavin, et. al., 1998). Two recent studies have found that mail, phone, or face-to-face outreach efforts have had little or no impact on EPSDT participation among Medicaid children, even though the purpose of such efforts was to motivate parents to seek EPSDT visits for their children (Selby-Harrington, et al., 1995)(Oda, et al., 1995). Most notably, there has been no review of the effectiveness of innovative outreach and informing activities that have been implemented by the states.

The Office of the Inspector General (OIG), U.S. Department of Health and Human Services, recommends that HCFA should encourage states to actively notify managed care plans of enrollees due for EPSDT exams and follow-up if EPSDT services are not completed shortly thereafter (OIG, 1997). In the OIG report, Michigan and Nevada were identified with this tracking method. Both states have significantly higher screening ratios compared to states without similar programs. Connecticut also has a similar tracking system described in the OIG Report. Therefore, I will be comparing Michigan, Nevada and Connecticut’s tracking systems to increase children’s EPSDT participant ratios within Medicaid managed care.
The following research study is divided into three parts:

1) Defining preventive health services and the success of tracking performance data of individual participants.

2) Summarizing the history and present status of EPSDT.

3) Conducting a comparative case analysis of three states’ Medicaid managed care EPSDT tracking programs.

Parts I and II review the literature on children’s preventive health services in the United States and address its present status. Part III is an evaluation with descriptive and statistical analyses and policy recommendations.
PART I

Preventive Health Care

The aim of preventive health care is to stop disease onset (Harris, et. al., 1990). However, this benefit can only be realized when a procedure is performed, an abnormal result is recognized, and the results acted upon. Since screenings detect disease at an early enough point to alter its natural history, screening is the first phase of the preventive care process (Cohen, et. al., 1982). Thus, reminding a patient and/or physician of the appropriate screening appointment assures completion of this first phase. Monitoring the individual’s performance and empowering the patient assure continuous quality health care.

Recommendation guidelines are necessary for preventive procedures, yet Solberg et. al. (1996) demonstrate that guidelines constitute only one facet within the complex nature of the prevention process (see Table I). Each of these facets are needed in order to have a successful children’s preventive health program; primarily through the Medicaid Early and Periodic Screening, and Diagnosis Treatment (EPSDT) program.

<table>
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<tr>
<td>2. Screening</td>
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<td>3. Status summary</td>
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<td>4. Follow-up</td>
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<tr>
<td>b. Important</td>
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<td>5. Reminders</td>
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<td>6. Resources</td>
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<td>7. Counseling</td>
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<td>c. Useful</td>
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<tr>
<td>8. Outreach</td>
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<td>10. Patient activation</td>
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</table>
Performance Tracking in Preventive Health Services

In the early 1980s, research showed that physicians generally do not perform preventive procedures as frequently as guidelines recommend (Harris, et al., 1990). Therefore, researchers began to study the effectiveness of tracking programs as a means of increasing patient compliance and averting acute illness. Cohen et al. (1982) showed that appending a checklist of all recommended prevention procedures to their folder increased occult blood testing, cervical pap testing, mammography and immunization rates (2-40%) as compared with controls. Cohen et al. also noted that educational seminars for the physicians showed less effectiveness in changing the physicians’ behaviors than the appended checklists. While the checklists work as a simple reminder, disadvantages include their limited scope and burdensome processing.

McDonald et al. (1984) showed that a computer reminder system had a strong and persistent effect on preventive care (i.e., occult blood testing, mammography, weight reduction diets, influenza and pneumococcal vaccines). In this study, physicians had a prevention visit compliance rate of 49% compared to the 29% compliance rate among control physicians. Similarly, Davidson et al. (1984) introduced a nurse-initiated maintenance reminder system into a university-based internal medicine practice setting. The system required no additional personnel and was simple for the nursing staff to learn. Once the reminder system was in place, there were significant increases in the performance of stool examination (32 to 47%), breast examination (29 to 46%) and influenza immunization (18 to 40%). Both McDonald’s and Davidson’s studies showed that because computer systems were expensive in the early 1980s, implementing a computerized system into clinical practice would not be widely accepted. Both studies stressed the need for an ongoing and simple system that could be incorporated with the existing personnel and systems to maximize effectiveness and efficiency of performing periodic preventive health care.
In 1990, Harris and colleagues studied the effects of the optional enrollment of patients by physicians into a prompting system. Performance rates of eight preventive health services were compared in three periods according to type of prompting: no prompting, manual prompting, and computer prompting. Seven prompted procedures increased over time (regardless of whether the patient had been enrolled) from 38% (no prompting) to 43% (nurse prompted) and 53% (computer prompted). Influenza vaccination (12 to 59%) and mammography (4 to 33%) showed the greatest increase in performance. Enrollment of patients was strongly associated with physician performance of procedures. Overall performance and the performance of six of the seven prompted procedures increased more among patients enrolled (68%) in the prompting systems than among the not enrolled (37%).

Frame and Werthe (1993) have been working on a computerized health maintenance tracking system for primary care that is designed to be linked to the practice billing system. Providers enter health maintenance data and billing data on one encounter form which takes approximately 22 seconds to complete. Physician and patient reminders are generated once a year for all patients regardless of appointment status. Summary reports are generated to assist with compliance and quality assurance. Among the population receiving computerized reminders, compliance with the health maintenance protocol increased from 44% of indicated procedures to 67%.

Burack et al. (1994) assessed the effectiveness of a computerized reminder system to increase the use of mammography screenings. A full intervention included physician and staff breast cancer control education, facilitated mammography appointment scheduling, elimination of out-of-pocket patient cost for the mammography, a mammography reminder form (prompting mechanism) inserted in the medical record of women who were due to have mammography, and patient reminders (resources, outreach and patient activation). The limited intervention included each component of the full intervention except the mammography reminder form.
The rate of completed mammography among the full intervention groups varied from 43-64%. The rate of completed mammography among limited intervention groups varied from 25-45%. The significant increase of mammograms among full intervention women suggests the effectiveness of referral by prompted physicians. Therefore, the major burden of completing preventive health services is upon the physicians.

Harris et al. noted that most studies of prompting (i.e., reminder systems) have rarely found performance increases exceeding 69%. Prompting addresses random forgetfulness but does not address other important barriers to physician performance. Understanding and accommodating patient-specific barriers (i.e., financial and transportation problems) not addressed by prompting are necessary to further increase physician performance of preventive procedures. Moreover, while each of the above programs successfully increased patient compliance, neither addressed two essential aspects of the prevention process—follow-up and counseling. The case studies of EPSDT will show that inclusion or exclusion of different aspects of the overall prevention process significantly affects the outcome of children’s participation and screening ratios within each program.
PART II

EPSDT Background

The federal EPSDT program was enacted in 1967 to provide comprehensive (physical and mental) primary care and specialty care, that is medically necessary, to Medicaid-enrolled children, from birth to 21 years of age (HCFA, 1990)(Kanellis, et al., 1997)(Selby-Harrington, et al., 1995)(Nativio, et al., 1995)(Barger, 1993)(Tesh, et al., 1995). Comprehensive services include: health screenings, follow-up care for detected conditions, case management, health education, outreach, anticipatory guidance and counseling, and relatively rare procedures such as organ transplantation (Degal-Isaacson, 1995)(Oda, et al., 1995)(Barger, 1993). The Act requires that any service necessary to treat or ameliorate a defect or condition pre-existing or identified by a screen, must be provided to EPSDT participants regardless of whether the service or item is included in the Medicaid plan (HCFA, 1990)(Tesh, et al., 1995). In an effort to prevent health problems from developing, EPSDT promotes early and periodic health screenings and referrals (Kanellis, et al., 1997). Therefore, the EPSDT guidelines fit the truest definition of an “all inclusive, comprehensive health program” to all eligible children.

Children from low-income families are at higher risk for health problems addressed in EPSDT than children from higher income families (Richardson, et al., 1995). Poor children and their parents make up 73% of the Medicaid population, but account for one-third of the Medicaid expenditures (OIG, 1997). The balance belongs to the elderly and disabled. The EPSDT program is relatively inexpensive because children account for less than one-third of Medicaid dollars. In general, the younger Medicaid participants require less care, less costly services, and very little long-term care compared to the disabled and aged. Therefore, providing EPSDT services early in a child’s life will save future acute care dollars.
Irwin and Conroy-Hughes (1982) reported that periodic screening in EPSDT was associated with a decrease in the prevalence of abnormalities requiring care. Irwin and Conroy-Hughes found that EPSDT participants had almost 30% fewer abnormalities requiring care on re-screening compared with themselves across time or with a control group. Keller (1983) continued to add that as participants received more screenings, less referrals for specialty care were observed. On average, as the number of screenings increased from 1 to 2, 2 to 3, and 3 to 4, decreases in referrals were 3.1, 5.6 and 3.8%. Keller demonstrated that Medicaid costs for Michigan’s EPSDT participants were approximately 7% lower than medical costs for non-EPSDT participants even including EPSDT costs. Both studies demonstrated that EPSDT participation is associated with desirable outcomes on health status and costs.

Despite the benefits, the EPSDT program was underused in the 1970s. Selby-Harrington et al. (1995) noted that in most states, fewer than half of the eligible children received their health screenings, while children in four other states received fewer than 20% of their screenings. In response to these findings, Congress enacted a federal mandate under the Ominibus Budget Reconciliation Act (OBRA) in 1989 to strengthen the program and address problematic program factors (Gavin, et al., 1998)(Cleary, 1998). Increased reimbursement rates and additional payments for immunizations, lab work, or other necessary procedures helped alleviate financial burdens to physicians (Tesh, et al., 1995). Solutions to some administrative barriers included: simplifying claim forms, developing training sessions on how to complete the claim forms, and establishing toll-free numbers for questions on billing. Other requirements for provider participation have been eased, particularly with coverage of other primary care practitioners (i.e., internists, general practitioners, family practice physicians) beside pediatricians since EPSDT benefits are offered to children up to age 21.

Also in 1989, HCFA set a federal goal for states to provide Medicaid health screening to 80% of eligible children by September 1, 1995. While the statute does not instruct the states on
how to obtain this goal, the public health and social service agencies are encouraged to expand their outreach efforts to encourage parents to use EPSDT services for their children (Riportella-Muller, et al., 1996).

Gavin et al. (1998) showed that since the inception of OBRA, states have placed a higher priority on improving the effectiveness of EPSDT by expanding the EPSDT provider base and enhancing outreach and service provision. Gavin et al. also found that there was a significant improvement in provider participation and caseloads, and on children’s use of both preventive care and diagnosis and treatment services. Nonetheless, the effects were modest compared to the national goal of obtaining 80% childhood screenings.

**Barriers to health care for low-income children**

The EPSDT program only ameliorates access problems for low-income children. Yet, there are a number of other reasons why low-income children tend to have poorer health. Lack of money or insurance hinders children from receiving high quality, personal health services critical for good health (Klerman, 1991). Poverty impacts a child’s health through inadequate food, shelter, and clothing. While EPSDT eliminates the lack of health insurance and promotes consistent availability of health services when necessary, time is a major factor to be considered as well. Parental time constraints, due to working more than one job, do not allow for flexible hours. Research has shown that the larger the family, the less medical care each child receives and the poor tend to have larger families (Klerman, 1991)(Lannon, et al., 1995). Additionally, poor families may have a chaotic home environment, or have problems obtaining reliable transportation, finding food, and caring for other children or adults, which may take precedence over seeking personal health services, except in an emergency. Several mothers in Lannon, et al.’s study could not set up their child’s health appointment six weeks in advance because they had unreliable living arrangements. Low-income families tend to relocate frequently.
While free health care services may be attractive to needy families, poor families have difficulty accessing such services. Low-income parents identified more significant barriers in receiving care than their financial circumstances (Riportella-Muller, et al., 1996)(Selby-Harrington, et al., 1995) (Lannon, et al., 1995). Such barriers include: competing family or personal issues and priorities, perceived or actual barriers in the health care system, and issues related directly to problems with outreach efforts. Those who worked around these barriers encountered other barriers; e.g., scheduling and transportation difficulties, long waiting room times, or care that they perceived to be either unresponsive to their medical needs or disrespectful. Since reimbursement policies varied from state to state, parents had difficulty locating providers who participated in the program and some parents had to change providers in order to obtain EPSDT services (Tesh, et al., 1995)(Riportella-Muller, et al., 1996).

Parents in Riportella-Muller et al.’s (1996) study stated that there were structural barriers to their children’s health care delivery as well. These barriers included: constrained health department budgets causing limited clinic hours and staffing, a shortage of primary care providers who provide EPSDT services, inadequate appointment-making assistance, lack of transportation coordinated with the health care, the loss of Medicaid eligibility, and perceived negative connotation of the health care encounter. All these act as deterrents to care (Lannon, et al., 1995).

Lannon, et al. (1995) conducted focus group sessions with fifty uninsured or Medicaid-eligible mothers whose children received care at the health departments in five North Carolina counties. These mothers shared their knowledge and beliefs regarding immunizations. One common belief was the inadvisability of immunizing a sick child. They thought that if their child was sick, the immunization would not ‘take’ or ‘work as well'.
Mothers were also afraid of adverse reactions to a shot, such as the child’s kicking and screaming in pain while the shot is being given, or a possible fever or allergy afterwards. Mothers were aware that a baby needs many shots between birth and one year of age. But, after the child’s first birthday they were unsure of the schedule and therefore would fall behind. Lastly, mothers did not understand the importance of immunizations, nor the difference between a “well-child” (preventive) visit and a “sick visit”. The lack of correct information or fear resulted in a decreased rate of immunizations for the lower income children compared to higher income children.

Lack of money, time, and education do not fully explain the income differentials when accessing health care. The health care system of the poor is inadequate compared to the health system of higher income levels. Most poor families use emergency rooms (ER) or public clinic as their usual source of primary health care. Comparably, most upper income families use family physicians. The two types of services differ dramatically. For example, ER services cost more than physicians. In ERs, no preventive health exams are administered. Waiting lines in ERs are much longer than in physicians’ offices. More importantly, the relationships between the health care provider and patients were worse in an ER compared to a family physician. In order to eliminate income differentials in use of the health care system, financial access, health education and structural improvements in the existing health care system must take place (Dutton, 1978).

Against all these odds, it may seem as if the EPSDT program can not accomplish much. Yet, there is growing evidence that EPSDT programs can dramatically expand the use of preventive health services by low-income children.
**Previous Research on EPSDT Interventions**

In the September 1990 publication of *Healthy People 2000*, one of the three broad national goals is to “achieve access to preventive services” (Nativio, et al., 1995)(Barger, 1993). Yet, in 1992, the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, estimated less than half of Medicaid eligible children received any Medicaid reimbursed services in a given year (OIG, 1997). Since the inception of OBRA and HCFA’s goal to achieve 80 percent screening rates by the year 1995, a number of interventions have been administered and researched. While none have proved significantly successful, they offer recommendations and ideas for further study.

Overall, state outreach activities to inform parents about their children’s eligibility for Medicaid and EPSDT benefits and to educate them on the importance of screening visits and immunizations were viewed as inadequate (Gavin, et al., 1998)(Riportella-Muller, et al., 1996)(Selby-Harrington, et al., 1995)(Oda, et al., 1995)(Nativio, et al., 1995)(Barger, 1993)(Tesh, et al., 1995). Selby-Harrington, et al. (1995) studied the effectiveness of mailed pamphlets, phone calls and home visits by public health nurses. Each method showed minimal effect in increasing well-child screenings. The study verified that briefly informing parents about the program during the Medicaid interview or review proved ineffective. The only significant increase in screening rates resulted from the group of families (with a phone) who received phone calls or a home visit by a nurse. Because the increase was minimal, the expenditures for this outreach method was deemed inappropriate (e.g. $306-1022 for each additional family that obtained screening). In any given Medicaid population, 30-55% of them do not have phones. Therefore, relying on the telephone method omits a significant number of clients. Oda et al. (1995) found no significant effect of nurse phone calls or home visits on increased screening rates. Both Oda, et al. (1995) and Selby-Harrington, et al. (1995) insist that outreach methods should be improved and new ones developed and tested.
Outreach methods clearly need improvement. In order for EPSDT to achieve optimal usage, changes in the health care delivery system must take place.

Nativio, et al. (1995) found that when children reach school-age, a decline in the frequency of health care visits occurs. Since the majority of children receiving EPSDT services attend school, Nativio et al. developed a team approach to delivering EPSDT services in two Pittsburgh schools. The staff (most of whom were volunteers; i.e., school nurses, dental hygienists, school physicians) successfully initiated screening in the two schools, and increased the percentage of those screened. Qualitative evaluation by the staff verified that they all felt their skills and talents were used appropriately within the team approach.

A Board of Education could gain financial rewards for participating in a program of this nature. During the pilot study, it was agreed that two-thirds of the reimbursement from the EPSDT screens would go to the Board of Education and one-third to the physician consultant. At the time of the study, the reimbursement rate for an EPSDT screen was $65. In terms of income, if one EPSDT screen was performed on 20% of approximately 17,000 children who received physicals annually, about $221,000 would be generated. More importantly, with health care reform and budget cutbacks, delivering accessible, quality care should be a priority. The school setting provides an ideal place to bring such services to poor children in the inner city and rural areas.

Barger (1993) noted that failure in EPSDT results from “too few participants, too few providers, and too many children lost to follow-up”. To realize EPSDT’s full potential, access and providers must be increased. Barger suggests that Nurse Practitioners (NPs) may be the answer. Tesh et. al. (1995) agree that NPs are ideal professionals. In states where NPs are allowed to function independently, they will be able to receive Medicaid reimbursement directly. While the NPs improved access to EPSDT screens and referrals, improving
treatment programs for individual patients proved more problematic. This was mostly due in large part to the fact that local physicians were not enrolled with Medicaid. While NP participation in the EPSDT program can help meet national goals for providing screens to needy youth, attention must be paid to the local adaptability, communication and professional relations to provide children with comprehensive health care.

Medicaid Managed Care and EPSDT
Managed care includes, but is not limited to, strategies for controlling costs and improving access. These strategies focus on primary care and prepaid arrangements as an alternative to traditional, fee-for-service (FFS) based, retrospective reimbursement of costs (Hurley, et al., 1993). The managed care organization (MCO) is a generic term for prepayment for a full range of services. Within a MCO, a “gatekeeper” may direct a patient’s care. A Medicaid MCO receives a contracted amount from the state--a fixed capitated rate per member--to provide health care for its members. Approximately 80% of Medicaid managed care participants are enrollees of this MCO-type managed care (HCFA, 1998). The remaining 20% belong to a FFS primary care case management (PCCM) program that offers Medicaid participants access to a primary care provider (PCP) who either delivers services directly or authorizes referral or specialty services (Hurley, et al., 1993).

Although PCCM enrollment accounted for the growth in Medicaid managed care in the early 1990s, now the MCO-type dominates the market (see Appendix I)(Rowland and Hanson, 1996). The total Medicaid managed care enrollment as of June 30, 1997 is estimated to be 15.3 million (47.8% of the total Medicaid population) (HCFA, 1998). This total includes 568 programs (508 MCOs and 60 PCCMs). The 15.3 million figure represents a growth of approximately 2 million beneficiaries over the previous year. Over the past decade, the number of Medicaid managed care enrollees has grown exponentially. Between 1991 and 1997 managed care enrollment increased from 2.7 million to 15.3 million.
Table II details the Medicaid managed care trends in the 1990s. It shows managed care enrollment growing faster than the actual increase in Medicaid enrollment. Presently, just about half of all Medicaid participants are enrolled in managed care programs, a five-fold increase since 1991. Rowland and Hanson (1996) state that managed care is clearly the strategy to deliver Medicaid health services. They encourage more attention devoted to monitoring the impact of managed care on access to and quality of care for this program.

Table II. Medicaid managed care enrollment, 1991-1997

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Medicaid Population</th>
<th>FFS Population</th>
<th>Managed Care Population</th>
<th>Managed Care Percentage</th>
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<tr>
<td>1991</td>
<td>28,280,000</td>
<td>25,583,603</td>
<td>2,696,397</td>
<td>9.5</td>
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<tr>
<td>1992</td>
<td>30,926,390</td>
<td>27,291,874</td>
<td>3,634,516</td>
<td>11.8</td>
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<tr>
<td>1993</td>
<td>33,430,051</td>
<td>28,621,100</td>
<td>4,808,951</td>
<td>14.9</td>
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<tr>
<td>1994</td>
<td>33,634,000</td>
<td>25,839,750</td>
<td>4,808,951</td>
<td>23.2</td>
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<tr>
<td>1995</td>
<td>33,373,000*</td>
<td>23,573,000*</td>
<td>9,800,000*</td>
<td>29.4*</td>
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<tr>
<td>1996</td>
<td>33,241,147</td>
<td>19,911,028</td>
<td>13,330,119</td>
<td>40.1</td>
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<tr>
<td>1997</td>
<td>32,092,380</td>
<td>16,746,878</td>
<td>15,345,502</td>
<td>47.8</td>
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</tbody>
</table>

* Indicates approximate numbers. Total Medicaid population was provided by the Office of the Actuary which used 2082 data to calculate average Medicaid enrollees over 1995. The managed care population differs from the 11,619,929 reported in the 1995 report as the number represented enrollment of some beneficiaries in more than one plan.

State Medicaid agencies have turned to managed care to help reduce the unnecessary utilization of medical services, lower health care costs, increase access to services, and provide a vehicle to better monitor the quality of care provided to Medicaid beneficiaries. As a result of this trend, the Department of Health and Human Services, Office of Inspector General (OIG), conducted a study on Medicaid managed care EPSDT programs and published their findings in May 1997.
**OIG Report**

The purpose of the OIG study was to examine the extent to which Medicaid managed care programs (MCO-types and PCCMs, both large and small) delivered EPSDT to Medicaid children. The study found that approximately one-third (28%) of the Medicaid children enrolled in managed care programs received timely EPSDT services, 12% received some services and 60% received none at all. Older adolescents received significantly fewer required services than other children. For example, within the age group between 15 - 20, 14% received all their EPSDT services, 0% received some services, and 86% did not receive any services. In contrast, of children of the birth - 5 year old age group, 30% received all their EPSDT services, 22% received some services, and 48% received no services. The study also found no significant differences in performance between MCOs and PCCMs, large or small. Nor was there a difference in performance if a break in managed care enrollment occurred. Overall, there was under-utilization of the EPSDT program.

OIG also reviewed random medical records to determine how EPSDT visits were being recorded and how often they were completed. The medical records showed that most office visits by Medicaid participants occurred because the child was sick. These visits were noted as “sick visits” and only the existing symptoms were treated (with very few exceptions). Rarely did the health care practitioner take advantage of this opportunity to turn the “sick visit” into a full EPSDT visit. Similarly, OIG discovered that only a few treated conditions were discovered during previous EPSDT screens. Reviewing medical records showed under-utilization of EPSDT services and problems in documenting rendered services. The most significant finding by OIG was that children received significantly more EPSDT services from Medicaid managed care programs when states informed the managed care programs which children were due for EPSDT screens.
Michigan and Nevada identify children currently due for EPSDT screens to their managed care programs and closely monitor EPSDT performance by programs for these children. Fifty-four percent of the Medicaid children in these plans received all of their EPSDT services compared to 19 percent of those enrolled in other managed care programs. The OIG report concluded with recommendations to HCFA regarding these issues. The recommendations and HCFA’s comments are outlined in Appendix II.
PART III

Methodology

Due to the wide variety of managed care services within the Medicaid managed care system, the most appropriate study approach is an intensive case study of exceptional states as a follow-up to the OIG Report. The OIG Report was seen as an in-depth examination of a representative group of states across the United States and its methodology will be outlined for validity. The purpose of the case analysis is to examine how well different performance tracking methods affect the delivery of EPSDT services to children in Medicaid managed care programs. The hypothesis is that the states’ performance tracking systems will have significantly different EPSDT participant ratios depending on the method of the intervention.

To draw the sample, OIG first stratified managed care programs that treated Medicaid-enrolled children as of January 1, 1994 into two groups - PCCM model and HMO model (equivalent to MCO-type) (OIG, 1997). These two groups were further divided into groups of 50,000 Medicaid enrollees or more, and less than 50,000 Medicaid enrollees. Twelve programs were randomly selected: six from the large HMO model, two from the small HMO model, two from the large PCCM, and two from the small PCCM. This random sampling ensured accurate representation from each size and type of Medicaid managed care program. The twelve plans represented ten states.

The Office of the Inspector General generated its own rates for analysis: Medicaid managed care enrollees who 1) received all EPSDT services, 2) received some EPSDT services, and 3) received no EPSDT services. With this method of analysis, OIG identified Michigan and Nevada has having increased screening ratios compared to the other states. Tracking performance data and monitoring individual participants were the intervention used by these states. Michigan has predominantly MCO-type Medicaid managed care programs, while Nevada is principally serviced by PCCMs. Michigan uses an electronic tracking system.
Nevada also uses a tracking system, but integrates an active outreach program. While Connecticut was not one of the states studied by the OIG, Connecticut was also chosen for the analysis because it has a unique tracking program. The state tracks the performance of Medicaid enrollees directly with the MCOs through an external oversight agency.

For this paper, I gathered data from the HCFA-416 Reports and EPSDT Participation Reports from Michigan, Nevada and Connecticut during the fiscal years of 1994-1997. I chose the HCFA-416 Report for analysis because it is the universal and standardized EPSDT Report generated annually by each state.

The rate of analysis is the EPSDT participant ratio.
Number of eligible children under 21 who received at least one initial or periodic screening service
Number of eligible children, adjusted for the average period of eligibility during the reporting period
(Number of eligible children * Number of recommended initial or periodic screening services per age group number)

The participant ratio is the most accurate number to answer the hypothesis being tested. [Note: the rates for analysis differ from that of the OIG Report]. Reports and documents regarding the states tracking procedures and outreach efforts was also reviewed. Then, I conducted interviews with the state EPSDT officers. Lastly, I acquired the national EPSDT participation ratios for fiscal years 1992-1995 directly from the HCFA EPSDT Unit.

**Case Studies**

*Michigan* (Method #1)

The Medical Services' Administration (MSA) is Medicaid arm of the state agency, Michigan Department of Community Health (MDCH)(Michigan MSA, 1998)(personal communication(1), 1998). MCOs report electronically to the MSA all completed well child
visits each month. The electronic transfer also updates the history file of all children who received their EPSDT screens. The MDCH reviews the history file monthly and generates an “outreach list” that notifies each MCO of the children due or overdue for the following month. Once the MCOs receive the list, they must contact the families either by writing or telephone and attempt to schedule a well child visit. Reimbursement for this outreach effort is included in the capitation rate. Additionally, MDCH informs families if their children are due or overdue for a screening. The younger children receive six month due-date reminders up to age 2, while the older children receive notifications when due (according to the periodicity chart). If the history file is not updated when it is half way to the next due date, the child will show up as overdue.

*Outreach by the Michigan Department of Community Health*

When caregivers apply for Medicaid, they receive an informational sheet about the EPSDT program. The MDCH also distributes an EPSDT brochure to caregivers at the time the electronic due-date list is sent out to providers. The brochure briefly explains the program and encourages caregivers to call their providers to schedule an appointment. The notice is specific to MCO-type or FFS. MDCH expects the MCOs to contact each caregiver by phone or written communication. Another reminder letter, sent to the caregivers on a quarterly basis, explains what a “free health check-up” is and also encourages the caregivers to schedule an appointment.

*Michigan’s screening rates*

Although Michigan has an electronic tracking system in place, the annual reports for the fiscal years 1994-1997 have shown a continuous decrease in its EPSDT screening rates (see Appendix III, Figure I). In review of this trend, the Program Specialist of the Institutional Policy Division of the Medical Services Administration within MDCH stated that no changes in operation, policies or management of the EPSDT program had occurred in recent years.
She speculated that although MCOs are responsible for reporting all well child visits, the health plans do not report regularly. One reason is that a MDCH member with a strong rapport with the MCOs has told the plans that reporting of well-child visits was not necessary. Given this option, many MCOs were not reporting. If a child is not reported as receiving a well-child visit, the history file is not updated. MSA will not know if a well-child visit was completed, and the record for that child remains “over-due”. To strengthen the accountability of MCO reporting, MSA has recently discussed the development of a health plan report card designed to grade EPSDT progress. MSA hopes that a report card will work as an incentive because no plan would like to be at the bottom of the utilization, access and/or participation list.

Nevada (Method #2)

The Department of Human Resources in the Nevada state agency, the Division of Health Care Finance and Policy (DHCFP), acts as the Medicaid branch within the department (Nevada DHCFP, 1998)(personal communication(2),1998). To better facilitate the EPSDT program, Form NMO-25A/B (see Appendix IV) was developed. This single three-page carbon-copy form performs multiple tasks. It acts as the invoice for reimbursement, prior authorization for prescriptions, referral for consultation, screening summary and treatment profile. This document centralizes the information for all involved parties (e.g., PCCM, Medicaid office, parents, and referred practitioners). The original white copy is sent to Blue Cross/Blue Shield (BC/BS), the fiscal intermediary for DHCFP. BC/BS is responsible for: 1) all claims processing and billing with the exception of MCOs, and 2) maternal and child health educational training at the request of providers. The second yellow copy is saved by the health care practitioner. The bottom green copy is given to the district EPSDT office. The EPSDT staff divides the green copies into referral and non-referral piles, then checks the claims file to see if referrals were completed. If the child did not receive medical care, EPSDT staff and volunteers try their hardest to contact the care-giver(s) by telephone.
Nevada’s success may be attributable to this powerful tool, the NMO-25A/B. Each EPSDT participant has found great organization and convenience in this basic form.

**Tracking and performance monitoring program**

The DHCFP established a computerized mainframe WELF (tracking) system in 1972. The system is based on Medicaid eligibility and claims data. The mainframe extracts pertinent information to generate monthly, quarterly and annual reports. Monthly reports are generated, first by eligibility files and then by claims history. In the initial Medicaid eligibility interview, the interviewer has the caregiver sign a EPSDT acceptance form. A copy of this form is sent to the district EPDST office staff. Mainframe programmers check newly eligible children, an “initial letter” is sent to the caregiver, and a list is generated with this information. Claims history is collected by BC/BS and electronically transferred to the mainframe. A complete list of all the children who received screens or referrals is generated. This list is divided into the type of service by Current Procedural Terminology (CPT) and state-devised codes, then divided once again into EPSDT age groups. These monthly reports are sent to the statewide EPSDT Coordinator the first week of each month. The lists are further broken down to PCP and MCO and titled respectively. PCPs are reimbursed through the Medicaid FFS. A claim is generated and EPDST services are tracked by this claim payment history. MCOs can access this information through an electronic bulletin board. However, claims data are not available for MCOs, since they report via encounter data. The MCO is responsible for outreach and follow-up, but their methods are unknown.

**Nevada’s EPSDT Outreach**

EPSDT outreach efforts are well-integrated into the mainframe WELF system. Outreach begins at the initial welfare eligibility interview. The EPSDT information form is signed by the caregiver and a copy is sent to the district EPSDT office staff. In addition to receiving an “initial letter” from the mainframe WELF system, the caregivers also receive an EPSDT
introduction package including a notification letter, instructions how to set up a screening exam, a list of all providers and an informational EPSDT brochure. The bi-lingual (English/Spanish) notification letter is customized for PCCM and MCO.

Birthdays also work as a “trigger mechanism” because a child often enters a new periodicity schedule. On each child’s birthday, a notification of eligibility and an annual exam due is generated by the WELF system. The birthday places the child on the screening due list as well. If no claim is filed in the mainframe WELF system 60 days after the screening due date, a re-notification letter and EPSDT brochure is sent out once again and the children are placed on a re-notification list. After 120 days, if a claim is still not on file, the mainframe WELF system automatically drops the child from the system. On the child’s birthday the following year, an exam notification is sent and the process repeats itself.

Another trigger occurs when the mainframe WELF system recognizes that a child has entered a new periodicity schedule. Notification letters are sent and the process stated above is duplicated. The guardians of children eligible for EPSDT services are well-informed of these services and are instructed on how to access the benefits appropriately.

EPSDT services, also known as “Healthy Kids” receive a large amount of exposure in the state of Nevada. This program is well-integrated into other state health initiatives. A few of these initiatives include: Maternal Obstetrical Management Services (MOMS), a program designed to assist pregnant women to have healthy babies. In the seventh month of their pregnancy, they receive information about EPSDT, the importance of good child health care and how to access the system. Local professionals involved in maternal and child health meet for a monthly “brown bag lunch” to discuss informally program problems and successes. DHCFP relies heavily on community and public health nurses for outreach. The EPSDT and MOMS programs always have a booth at any health fairs held statewide.
EPSDT has a inter-local agreement with the Women, Infant and Children (WIC) program in which EPDST literature and posters are visible and promoted. WIC is a successful advertising tool for EPSDT and MOMS because it is wide-spread at the local level. For example, in Las Vagas alone there are approximately 20 WIC sites. WIC has been extremely successful in getting radio and television time. Air time has been sponsored through the state broadcaster association and volunteering services by recognized individuals, such as Jackie Joyner-Kersy and famous boxers. Market analysis was conducted to determine the television programs that child-bearing women watched, and advertisements targeted to their demographics. The new year (1999) brings the evolution of a “fathers” program designed to reduce the stigma of the typical Medicaid/WIC participant and caregiver.

Nevada’s Future with Medicaid managed care

To date, there is no reliable reporting system integrating FFS data with MCO data. As of December 1, 1998 Nevada is mandating Medicaid managed care for the Temporary Assistance to Needy Families (TANF) and Children’s Health Assurance Program (CHAP) population. DHCFP Managed Care Unit is presently developing a system that will integrate the MCOs into the tracking and reporting mainframe WELF system more easily. Eventually, Nevada’s Medicaid information systems will be developed to capture encounter data documenting provision of specific services, such as EPSDT services. The MCOs have corrective action plans integrated into the health plan’s contracts. As a last resort, financial sanctions will be added.
**Nevada’s screening rates**

Nevada’s EPSDT screening ratio has gradually increased in the past four years. During fiscal year 1997, Nevada came very close to achieving the national goal of 80% with an EPSDT participation ratio of 78% (see Appendix III, Figure II). Nevada’s upward trend can be attributable to its well-defined tracking system and integrated outreach program to everyone involved in the EPSDT program, such as the caregivers, medical community, and state Medicaid agency.

The statewide EPSDT Coordinator has attributed the state’s increase in EPSDT screening to the ownership of responsibility by the district EPSDT offices. The Coordinator added that the EPSDT staff can be successful because of the administrative support by DHCFP. DHCFP prints all EPSDT brochures and covers postage for all mailings. The EPSDT staff has also been resourceful in recruiting volunteers interested in creating a healthier environment for the children of their state. The added administrative aid has helped Nevada develop a client outreach program unlike any EPSDT intervention implemented in the country. EPSDT staff actually “tracks” each Medicaid recipient through letters and phone calls. By educating the caregivers of the EPSDT benefits, Nevada is engaging them to following through with their children’s health care.

Nevada must face the state mandate of Medicaid managed care this fall (1998). Some administrative problems are predicted during the transition, because MCOs do not report EPSDT services on a regular basis, nor do they receive the monthly re-notification list of children who did not meet their screening due-date. Fortunately, MCOs are already connected to the mainframe WELF system. MCOs can connect to a monthly “bulletin board” which allows them to receive each monthly report that the statewide EPSDT Coordinator receives. To date, DHCFP does not know if the MCOs take advantage of this program. As previously discussed, the DHCFP managed care unit is trying to build better relations with
the MCOs. By educating MCOs about the importance of EPSDT services and the need to report, they may be more reliable with the monthly reports and follow-ups.

**Connecticut (Method #3)**

The Children’s Health Council (CHC) was established by the Connecticut General Assembly and charged with the responsibility of 1) monitoring and evaluating compliance of the Medicaid managed care program with the requirements of the EPSDT program, 2) developing a coordinated health care delivery system in each region of the state, 3) implementing outreach efforts in each region of the state to ensure uniform statewide health care access for children (CT General Assembly, 1995). CHC is a multi-interdisciplinary council that acts primarily on the policy-level. CHC is a public-private partnership in which the Hartford Foundation for Public Giving provides administrative and other support and the Department of Social Services provides funding. To operationalize the policies set forth by CHC, Connecticut’s Children’s Health Project (CCHP) was developed and implemented. CCHP is responsible for the tracking and monitoring system, health education and training, providing technical support, and operating InfoLine to enhance the use of medical services through the EPSDT program (CHC/CCHP, 1997)(personal communication(3), 1998).

**Tracking and performance monitoring program**

A three-step tracking and performance monitoring program was implemented in 1996 to increase EPSDT participation within the state of Connecticut. First, the project identifies children who are due-for screening exams based on birthdate and periodicity schedule. Then, a report is generated and sent to the MCOs to inform them of the dates when their members are due, two months in advance. The MCOs, in turn, are responsible for making sure the enrollees get the preventive services. Outreach differs among the MCOs. Some look at the PCPs while others generate postcards to the child’s family.
In the second step, the project looks at the encounter database to see which children did not receive a screen 90 days after their “due date” and generates an “over-due” list that is sent to the plans. This follow-up list helps the MCOs to target their outreach.

The last step, which takes place 180 days after the “due date”, includes a review of monthly performance rates. The project calculates the EPSDT on-time visit rate on a monthly basis. The rate is an estimate of performance in terms of rate at which individual children enrolled in Medicaid managed care actually receive timely screening exams (CHC, Jan. 12, 1998). The “on-time” window depends on the frequency of recommended exams given each child’s age. The EPSDT on-time visit rates are reported quarterly to the Department of Social Services (DSS) and others (such as the Medicaid managed care council and advocacy groups). In addition to this tracking system, the project conducts ad hoc special studies to answer access and utilization questions; for example, a longitudinal analysis on the frequency and timeliness of EPSDT services was conducted (Children’s Health Council, 1998).

**Outreach by the Connecticut Children’s Health Project:**

The Children’s Health InfoLine (toll-free, statewide, confidential, bi-lingual resource) provides care coordination and answers questions about children’s health services, EPSDT and Medicaid managed care. Care coordination by the case workers has been essential in resolving problems and obtaining necessary health services. With its ability to track calls, InfoLine offers a unique opportunity to identify issues, trends and gaps in services and provide feedback for improvement in the health care delivery system.

The Connecticut Children’s Health Project provides education and training on EPSDT and Medicaid managed care to address the needs of consumers, health care providers, educators and advocates through free materials it has developed (e.g., a video, “Keeping Kids Healthy: Managing Your Child’s Health Care” in English and Spanish describes what every parent
needs to know and how to access health care services; a brochure "Keep Track of Your Child’s Health—EPSDT" in English and Spanish; and an activity book for children as a companion piece to the brochure. A training video, "Navigating the Medicaid managed care system," describes the services which consumers are entitled to, and how and where they are available. Presently, CCHP is conducting training sessions with 1) approximately 600 case workers in the Department of Children and Families, 2) the Connecticut Association for Foster and Adoptive Parents, and 3) member service and utilization management staff in all the health plans to increase providers’ and consumers’ understanding of Medicaid managed care and EPSDT (personal communication(3), 1998).

Under the Medicaid managed care contracts, the health plans are responsible for providing telephone support, case management, home visiting and member education. To date, some consumers have reported receiving literature and phone calls from their health plans, while others report never receiving outreach other than mailings. CCHP tracks and monitors these issues through focus group studies and surveys to help plans target outreach.

The Department of Social Services (DSS) is the purchaser of the health care services. Therefore, DSS is ultimately responsible for the EPSDT program to HCFA. To achieve the EPSDT participation goals, CHC urged DSS to include incentives and sanctions tied to the national goals in the next contract. To improve EPSDT participation (RFP Section VII, p.21, 22) “….Health plans will be required to meet EPSDT compliance standards throughout the term of their contract with the Department….and may be subject to a withhold of their capitation payment or suspension of enrollments for a failure to meet the stated compliance standards.” To improve the quality of encounter data submission (RFP, Section IX, p.4). “The Department reserves the right to impose a system of fines to enforce health plan contractual and policy compliance at such times when the Department, or its agent(s), is not satisfied that all encounter data has been received in a readable and usable fashion".
July 1998, an incentive payment awarded to the health plan with the best EPSDT participation ratio was included in the health plan contracts. Adding financial sanctions to the contracts is still pending (personal communication(3), 1998).

**Connecticut screening rates**

Connecticut’s EPSDT screening ratios for the 1991-1997 period as depicted in Appendix III, Figure III increased dramatically between 1991 and 1994, held steady for the next two years, and then showed a significant growth between 1996 and 1997 (preliminary figures). This latter increase may be attributed to the implementation of a tracking system and outreach program at the end of 1995. Connecticut has been successful in phasing in Medicaid recipients with the MCOs. The perceived “easy” transition may largely be due to an external oversight agency educating all the involved parties (i.e., MCOs, Medicaid recipients, DSS staff); the monitoring system; and attention paid to the policy issues concerning the program. States that mandate Medicaid managed care might want to look at the Connecticut model when developing a tracking and outreach program to increase children’s health screenings through the EPSDT program.

It is also important to note that the tracking system draws from a wealth of “qualitative” information collected by CHC/CCHP. For example, the InfoLine observed a dental access problem, so the project looked at the encounter database and found that only 31% of children continuously enrolled for one year received preventive dental services. Since children should receive 100% of their preventive dental services, finding access problems through this method is a valuable process for CHC/CCHP. The Policy Analyst of CHC adds that positive movement in the EPSDT program can be attributable to “public accountability”. CHC/CCHP ensures that the health plans report EPSDT encounters on a monthly basis and reports the results to DSS on a quarterly basis. By overseeing the progress of the EPDST program as an external agency, CHC/CCHP can help the state of Connecticut reach federal EPSDT goals.
**Comparative Analysis**

*National screening rates*

Figure IV depicts the national EPSDT participant ratio of all Medicaid recipients (fee-for-service and managed care) from 1992 - 1995. Data were based on the HCFA-416 form. As shown, the national levels increased modestly, and have not yet reached the 80% goal set for 1995.

**Figure I**

![Graph showing EPSDT participant ratios across the United States, Michigan, Nevada, and Connecticut. The national EPSDT participant ratio, which combines the rates of all 50 states including the three being analyzed, increased modestly from 36% in 1992 to 57% in 1995. Although Michigan is generally equal to the national ratio in 1993 (41%), it continued to be the only state that decreased its EPSDT participant ratio at any given time, starting in 1995. Nevada achieved a dramatic increase in its participation ratio compared to...](image)

Figure I details the nature of EPSDT participant ratios across the United States, Michigan, Nevada, and Connecticut. The national EPSDT participant ratio, which combines the rates of all 50 states including the three being analyzed, increased modestly from 36% in 1992 to 57% in 1995. Although Michigan is generally equal to the national ratio in 1993 (41%), it continued to be the only state that decreased its EPSDT participant ratio at any given time, starting in 1995. Nevada achieved a dramatic increase in its participation ratio compared to...

**Statistical Analysis**

Statistical analysis of the effectiveness of the three EPSDT intervention methods involved comparing the frequency of success across each fiscal year 1994-1997. This difference was significant. A chi-squared test statistic was used for this purpose, with a 0.05 level of significance. Results are shown in Table II, which shows that p < 0.001 for each year across all states.

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DISCUSSION

The findings of this study have relevance for health officials, researchers and policy makers concerned with promoting the efficient use of the EPSDT program. Tracking performance data was recognized in the early 1980s as a successful method to increase participation in preventive health services. In the early 1990s, outreach methods such as mailed pamphlets, phone calls and home visits by public health nurses, proved ineffective in increasing EPSDT participation. Therefore, programs showing incremental increases in EPSDT participation through tracking performance data and active outreach deserve immediate attention.

This study verified that informing the MCOs about monthly performance data alone does not increase the EPSDT participation ratio (Method #1). An active outreach component must be added to increase program participation (Methods #2 & 3). However, because Method #2 is used primarily with a PCCM population (79.8%), it is not known how effective it would be in promoting participation in a predominantly managed care environment. In contrast, Method #3 was developed for Medicaid managed care programs (64.4% MCO population), and the upward trend in EPSDT participation is a clear indication of its success (HCFA, 1997).

While there was an increase in EPDST services in Michigan between 1992 and 1995, the continuous decrease between 1995 and 1997 demands immediate attention. One speculation is that because Michigan only tracks children due or overdue for their EPSDT services, this method alone may not be able to achieve a greater number of EPSDT screens. Adding a more active outreach component that stresses the benefits of EPSDT to the MDCH staff, MCOs, medical community and children’s caregivers may help make the difference. Other recommendations include: 1) creating better relations with the MCOs to assure better reporting, and 2) developing incentives and sanctions tied to the national goals within the MCO Medicaid contracts.
Nevada’s consistent increase in EPSDT participation ratio deserves applause and national attention. (The reason for the dramatic increase between 1993 and 1994 was unknown at the time of this paper). It would be disturbing if the state could not maintain its high success rates because of its mandate to shift to Medicaid managed care. Since Nevada has worked predominately with a FFS-type service (PCCMs receive retrospective reimbursement for their services, rather than a captiated rate), the state may benefit from Connecticut’s experience with MCOs. If the state could draw from its past success and learn from Connecticut’s experience with oversight, Nevada should retain its upward trend as it moves toward Medicaid managed care. Another recommendation includes adding incentives and sanctions integrated into the health plan contracts. The incentives and sanctions should be based on reaching the national goal and holding MCOs accountable for reporting accurate information on a timely basis. Incorporating MCOs within Nevada’s existing tracking program and outreach policies might prove highly effective in promoting EPSDT participation.

Connecticut’s first noticeable increase in participation ratios between 1993 and 1994 was attributed to the change in methods for calculating the ratio (personal communication(3), 1998). The second obvious increase between 1996 and 1997 was due to the implementation of CHC/CCHP’s tracking program and outreach efforts beginning at the end of 1995. It is believed that with similar efforts, Connecticut’s upward trend will continue into the future. Uniquely, Connecticut mandated an external oversight agency to initiate children’s health policies and implement programs designed to promote EPSDT, such as tracking Medicaid enrollees directly through the MCOs (CT General Assembly, 1995). Connecticut’s external agency aids in the continuity of care by overseeing the Medicaid managed care system.
The key to understanding the success of an intervention is to focus on the “processes” (Solberg, et al., 1997). The processes are divided into three types of components—essential, important, and useful. The essential components include the guidelines, screening, status summary and follow-up. Better defining the EPSDT program through guidelines and goals outlined by HCFA augmented the EPSDT participation ratios. However, nearly a decade later, HCFA’s goals have not yet been reached. Although screenings are well-defined in the EPSDT guidelines, their importance is not as well-understood by the general public. Screenings should follow the EPSDT periodicity schedule and include a methodological examination by a health care professional (note Appendix V). If the guidelines are adhered to, screenings help will determine the difference between well children and those requiring additional preventive treatment or care.

Status summaries should be generated for each preventive health service and placed into a patient’s file. By organizing a patient’s health reports, one can better identify risk factors and track follow-up care. Follow-up should involve a routine in which patients receive timely information concerning their screening that reinforces behavior change and stresses the importance of returning for special appointments.

Important components include a reminder system, resources, and counseling services. First, a reminder system should be designed to remind the clinic staff and health care professionals that a child needs a particular preventive service. A reminder system can better prepare the staff for a particular visit and ensure that all necessary services are completed. Harris, et al. (1990) states that most studies of prompting have shown that physicians have increased performance up to 69%. Acceptance by the physician community of a mechanical aid, such as a computerized tracking system, requires extensive promotion prior to implementation (McDonald, et al., 1984). McDonald et al. showed that medical literature itself is not strong enough to influence physician practice. To impact the performance rate of children’s
preventive health services, a computerized tracking system is essential. Therefore, promotion by professional societies, commercial interests (i.e., MCOs), and/or an external oversight agency (e.g., CHC/CCHP), or even federal legislation are important factors to make this type of administrative change.

Unfortunately, studies have shown that reminders/prompting systems rarely have achieved performance ratios of over 69% (Harris, et al., 1990). For those not reached by this system, resources and counseling services must be available. Resources help develop a universal understanding of the particular preventive services, their necessity, and time frame. Examples of resources include EPSDT program brochures and mailings, toll-free information lines, educational videos and consumer training sessions. Connecticut and Nevada have successfully implemented a wide-variety of educational materials into their tracking system. Effective counseling services must include a non-physician who can provide patients with information beyond advice and problem-solving assistance. The EPSDT program addresses this need by providing mental assessments. By involving counseling professionals in the managed care networks, appropriate use of these counseling services may occur.

Useful components include outreach, prevention visits and patient activation. Throughout this discussion, the importance of educating and engaging patients and their family members has been addressed. Since a portion of EPSDT funds is dedicated to outreach efforts, states should attempt to obtain greater public exposure. Burack et al. (1994) showed that eliminating the out-of-pocket costs for a preventive procedure (such as mammography) is not a sufficient method to maximize utilization. The free services of the EPSDT program alone will not attract optimal utilization. Therefore, the underlying message within any parent/child outreach effort should be “to encourage active participation in the program in order to maintain the child’s physical and mental well being”. Connecticut’s outreach methods may be one model.
A preventive visit involves the administration of preventive procedures (i.e., dental, visual and auditory hearing screenings). EPSDT services follow a strict periodicity schedule based on age (see Appendix V). If followed correctly, proper preventive care can help avoid the development of physical or mental illness. Once a medical/mental problem is detected, treatment should be performed. Nevada terms a medically necessary follow-up visit as an “inter-periodic” visit. These visits are determined by patient-specific intervals according to the individual’s physical or mental illness or condition, rather than by the specified periodicity schedule for a well child.

Patient activation is the positive engagement of the patient to follow through with the prescribed health care plan. Encouraging parents to be responsible for their children’s health, may motivate them to keep up with their children’s health schedule. Empowered parents can also become valuable public health advocates by promoting the utilization of EPSDT services to their friends and family, and Medicaid expansion to policy makers.

Often there are barriers to implementing a periodic health screening program, e.g., lack of physician participation, patient resistance, and fragmentation of medical care services (Davidson, et al., 1984)(McDonald, et al., 1984). To increase physician participation, Congress enacted a federal mandate under the Omnibus Budget Reconciliation Act (OBRA) which increased reimbursement rates and allocated additional payments to physicians for immunizations and lab work. Tesh, et al. (1995) and Barger (1993) also recommend the use of NPs and PAs. Connecticut and Nevada developed the following strategies to overcome specific barriers: (1) expanding parent/child outreach to diminish patient resistance; (2) employing an external oversight agency to ensure continuous medical care; (3) utilizing an electronic reporting system to maintain a consistent prompting system; and (4) Fourth, incorporating a simple, user-friendly computer system for moderate training of administrative staff.
The EPSDT program includes a wide variety of preventive services, i.e., screenings, health education, and counseling. After careful review of random medical records, the OIG study found that the services were not well documented in the medical records. For example, health education and counseling were often not reported, which may be due to sensitive or illegal situations. After review of the OIG Report, the Assistant Secretary for Health, DHHS, recommends “the collection of EPSDT data on a standardized EPSDT reporting form, including areas of health education, counseling, and anticipatory guidance, for all Medicaid beneficiaries (under 21)”. Nevada’s NMO-25A/B “Healthy Kids (EPSDT) Adolescent Screening Assessment” form has clarified these reporting problems because it details all aspects of a necessary EPSDT service (see Appendix IV). This three-page carbon-copy form is used for billing and case filing. It also helps assure continuous care by providing the health care professional, either the primary practitioner or referred specialist, with a copy. Connecticut might profit from this standardized form.

Presently, HCFA collects EPSDT data for both managed care and fee-for-service provides on one form, HCFA-416 which does not differentiate between MCO and FFS care. Collecting data from FFS care is easier because it is based on the provider’s claims (financial reimbursement receipts), whereas MCO data is based on encounter data (the time when a service is completed). As Nevada and Michigan have experienced, reporting from MCOs has been problematic. This inconsistent data collection may skew present HCFA-416 results.

Form HCFA-416 also does not capture the number of EPSDT services one child receives in one year. Rather it emphasizes the ratio of EPSDT encounters to the total EPSDT eligible population. For example, children between 0 to 1 years of age must receive six services in their first year. If six children of this age group completed one visit each, one-sixth (6/36) of the services are accounted for. Similarly, if two children in this age group received two
services, and two other children received one each, the ratio one-sixth (6/36) remains the
same. This type of reporting does not show if a child received all, some, or none of the
services for a given year. Conversely, the OIG Report accounted for individual children.
Therefore, Michigan’s use of Form HCFA-416 may explain why the state appeared to have
decreased EPSDT participant ratios between 1994-1997, whereas the OIG study showed an
increase in participation. Michigan may not have increased the overall program participation,
but the children receiving care may have received most of their services.

In 1997, HCFA developed an EPSDT work group to address these problems (note Appendix
II). The agency addressed the MCO versus FFS reporting/documenting problems by
publishing “Strategies for Improving Form HCFA-416 Reporting: Merging Medicaid
Eligibility, Fee-for-Service and Managed Care Encounter Data” in March 1998. The report
describes an analytic file system that merges Medicaid eligibility information with EPSDT
FFS claim and managed care encounter utilization data to improve the information. Some of
the proposed methodology may not be acceptable to all states. Therefore, HCFA recommends
that states evaluate the proposals and their present systems in order to proceed most
effectively.

The Health Care Financing Administration (HCFA) provides ongoing technical assistance to
address the need to perform all required EPSDT services by MCOs. It also encourages the
review and approval of new and existing managed care contracts to include specific EPSDT
requirements on a timely basis. One recommendation is to follow Arizona’s and Florida’s
lead of adding incentives and sanctions into the MCO contracts. By actively holding the
managed care programs responsible for their enrollee’s health care and the validity of their
reporting, these states are taking the initiative to reach the federal goals and standards.
Connecticut has followed through with this recommendation as well. Unfortunately, the
reporting of individual enrollees has not yet been addressed appropriately.
CONCLUSION

In 1997, the 105th Congress passed the largest single commitment to children since the enactment of Medicaid in 1965 (Congress, 1997)(Saudell and Johnson, 1998). States will be allocated $24 billion over the next five years to develop State Children’s Health Insurance Programs (SCHIP). Each state may expand Medicaid or provide coverage to children whose family incomes are less than 200% of the federal poverty level. Therefore, many more children will be eligible for the EPDST program. To date, EPSDT interventions lacking a tracking system have not increased participation ratios. Therefore, Connecticut and Nevada’s intervention methods deserve national attention. These findings show that the three states have very different amounts of success with their programs. Additional evaluation research must be conducted using these particular methods during a longer period of time, in order to use time series analysis.

Given the trend toward Medicaid managed care, more attention should be devoted to monitoring the impact of the MCOs on access to and quality of care in the EPSDT program. As seen in each of the three case studies, the Medicaid/EPSDT Departments in each of the states were unaware or unfamiliar with the outreach methods used by the MCOs to increase their EPSDT participant ratios. A follow-up survey of the individual MCOs to identify the interventions they use to increase their participant ratios would prove beneficial. While this paper looked at EPSDT tracking intervention models, more research is needed on other interventions and how they affect participation ratios. Lastly, this evaluation should be replicated with the new HCFA-416 reporting criteria to better compare FFS care with MCO care.
Presently, most states are mandating Medicaid managed care. Connecticut has demonstrated that having an external oversight agency primarily as the policy-makers for Medicaid managed care is beneficial for the EPSDT program. Connecticut tracks the MCOs carefully each month. The MCOs are held accountable for contacting their enrollees and completing all EPSDT services. Close MCO tracking may prove more successful in increasing EPSDT services than Nevada’s extensive tracking of individual families. By delegating the responsibilities of the EPSDT programs (i.e., policies to CHC, education and monitoring to CCHP, and administration to the Hartford Foundation for Public Giving), Connecticut has successfully integrated many parties into the health care system. This public-private partnership in the managed care system supports Rosenbaum, et al.’s (1997) concept of developing an expansive managed care network.

While Nevada’s performance ratios are the highest among the three states discussed, its population is primarily FFS (80.2%)(HCFA, 1997). As the state moves toward a managed care system, it needs to develop mechanisms to maintain its successful track record. Nevada is currently seeking Connecticut’s counsel to help integrate its new managed care system into its well-established EPSDT program. Connecticut could serve as a model for other states as they strive to meet present mandates. But, Connecticut can improve its system as well. One recommendation would be to integrate a school-based prevention program with the school districts, similar to the one described by Nativio and colleagues (1995) in two Pittsburgh schools.

Fortunately, none of the states has a funding barrier for EPSDT interventions because outreach dollars are included in the Medicaid benefit. Since the health of low-income children continues to be a problem of great concern, the allocation of these funds should concern everyone. Although the EPSDT program was initiated in 1967, it has been widely under-used. Therefore, this report was dedicated to finding ways to improve the program.
These case analyses represent the most recent and complete data from three state EPSDT programs. It is hoped that this report will serve as a tool in the development of policies, programs and services aimed at achieving notable increases in participation ratios. The ultimate goal is to improve the health of our nation's most vulnerable children—the poor and uninsured.
REFERENCES


Growth In Medicaid Managed Care Enrollment, 1983–1995

<table>
<thead>
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<th>Millions of Medicaid beneficiaries</th>
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<tr>
<td>12</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>0</td>
</tr>
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</table>

- Health maintenance organization/prepaid health plan
- Primary care case management

(Rowland and Hanson, 1996)
APPENDIX II

Comments of the Health Care Financing Administration (HCFA) on Office of Inspector General Draft Report: “Medicaid Managed Care and EPSDT,” (OEI-05-93-00290)

OIG Recommendation

HCFA should revise its EPSDT reporting requirements and data collection to emphasize the number of children who receive all of their EPSDT screens in a timely fashion.

HCFA Response

We concur. HCFA convened a work group of representatives from the public and private sectors to assess and recommend changes to the current EPSDT reporting and data collection tool, the HCFA-416. The workgroup will focus on, among other issues: (1) developing an instrument that will collect more consistent, meaningful data from states regarding the furnishing of EPSDT services, especially services provided under managed care arrangements; (2) reviewing the effectiveness of periodicity schedules that vary by state to determine if there is a better way to measure each state’s participation goal against the actual periodicity requirement in the state; and (3) determining if Health Plan Employer Data and Information Set (HEIS) measure will be a useful tool in measuring EPSDT services in managed care settings.

It should be noted the current HCFA-416 collects data that identifies children of different ages. Using the periodicity schedule of the American Academy of Pediatrics to measure the number of screens children should be receiving in order to adjust the figure (i.e., 6 screens for less than 1 year old, 50 screens for the 15-20 years old who should receive one every other year).

OIG Recommendation

HCFA should encourage states to actively notify managed care programs of enrollees due for EPSDT exams and follow-up if EPSDT services are not rendered shortly thereafter.

HCFA Response

We concur. We will address this as part of the follow-up activities resulting from George Washington University’s recently released study of Medicaid managed care contracts, or as part of the Medicaid Managed Care Team’s outreach efforts.

OIG Recommendation

HCFA should work with states to ensure timely managed care EPSDT reporting.
HCFA Response

We concur. This issue has been an ongoing concern of HCFA and will be addressed by the workgroup mentioned above.

OIG Recommendation

HCFA should emphasize to states the need to define and clarify EPSDT requirements in their Medicaid contracts with managed care programs.

HCFA Response

We concur. In addition to encouraging states through ongoing technical assistance, HCFA will continue to encourage states through its review and approval of new and existing waivers to include specific EPSDT programmatic requirements in their contracts with managed care programs.
APPENDIX III

Figure 1

MI EPSDT Participant Ratio

Fiscal Years, 1992 - 1997

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>NUMERATOR*</th>
<th>DENOMINATOR**</th>
<th>Participation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>187,842</td>
<td>793,926</td>
<td>24%</td>
</tr>
<tr>
<td>1993</td>
<td>341,054</td>
<td>823,052</td>
<td>41%</td>
</tr>
<tr>
<td>1994</td>
<td>206,544</td>
<td>499,468</td>
<td>41%</td>
</tr>
<tr>
<td>1995</td>
<td>230,755</td>
<td>490,145</td>
<td>47%</td>
</tr>
<tr>
<td>1996</td>
<td>212,075</td>
<td>549,551</td>
<td>39%</td>
</tr>
<tr>
<td>1997</td>
<td>184,657</td>
<td>522,918</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: Annual HCFA-416 EPSDT Participation Reports for Michigan

* NUMERATOR = Number of eligible children under 21 who received at least one initial or periodic screening service

** DENOMINATOR = Number of eligible children, adjusted for the average periodic of eligibility during the reporting period (Number of individuals eligible for EPSDT * Number of recommended initial or periodic screening services per age group number)
**Figure II**

**NV EPSDT Participant Ratio**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>NUMERATOR*</th>
<th>DENOMINATOR**</th>
<th>Participation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>8,959</td>
<td>35,381</td>
<td>25%</td>
</tr>
<tr>
<td>1993</td>
<td>9,584</td>
<td>34,845</td>
<td>28%</td>
</tr>
<tr>
<td>1994</td>
<td>19,972</td>
<td>31,112</td>
<td>64%</td>
</tr>
<tr>
<td>1995</td>
<td>25,377</td>
<td>37,277</td>
<td>68%</td>
</tr>
<tr>
<td>1996</td>
<td>24,852</td>
<td>36,603</td>
<td>68%</td>
</tr>
<tr>
<td>1997</td>
<td>26,281</td>
<td>33,807</td>
<td>78%</td>
</tr>
</tbody>
</table>

Source: Annual HCFA-416 EPSDT Participation Reports for Nevada

* NUMERATOR = Number of eligible children under 21 who received at least one initial or periodic screening service

** DENOMINATOR = Number of eligible children, adjusted for the average periodic of eligibility during the reporting period (Number of individuals eligible for EPSDT * Number of recommended initial or periodic screening services per age group number)
Figure III

CT EPSDT Participant Ratio

Fiscal Years, 1991 - 1997

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>NUMERATOR*</th>
<th>DENOMINATOR**</th>
<th>Participation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>Not available</td>
<td>Not available</td>
<td>13%</td>
</tr>
<tr>
<td>1992</td>
<td>33,588</td>
<td>166,521</td>
<td>20%</td>
</tr>
<tr>
<td>1993</td>
<td>46,310</td>
<td>193,094</td>
<td>24%</td>
</tr>
<tr>
<td>1994</td>
<td>58,340</td>
<td>140,712</td>
<td>41%</td>
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<tr>
<td>1995</td>
<td>62,139</td>
<td>147,283</td>
<td>42%</td>
</tr>
<tr>
<td>1996</td>
<td>62,743</td>
<td>148,576</td>
<td>42%</td>
</tr>
<tr>
<td>1997</td>
<td>77,908</td>
<td>144,704</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source: Annual HCFA-416 EPSDT Participation Reports for Connecticut

* NUMERATOR = Number of eligible children under 21 who received at least one initial or periodic screening service

** DENOMINATOR = Number of eligible children, adjusted for the average periodic of eligibility during the reporting period (Number of individuals eligible for EPSDT * Number of recommended initial or periodic screening services per age group number)
Figure IV

US EPSDT Participant Ratio

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>NUMERATOR*</th>
<th>DENOMINATOR**</th>
<th>Participation Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>6,926,867</td>
<td>19,084,031</td>
<td>36%</td>
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<tr>
<td>1993</td>
<td>8,321,635</td>
<td>21,162,002</td>
<td>39%</td>
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<tr>
<td>1994</td>
<td>7,414,705</td>
<td>14,324,780</td>
<td>36%</td>
</tr>
<tr>
<td>1995</td>
<td>8,053,418</td>
<td>14,200,353</td>
<td>39%</td>
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Source: Annual U.S. HCFA-416 EPSDT Participation Reports

* NUMERATOR = Number of eligible children under 21 who received at least one initial or periodic screening service

** DENOMINATOR = Number of eligible children, adjusted for the average periodic of eligibility during the reporting period (Number of individuals eligible for EPSDT * Number of recommended initial or periodic screening services per age group number)
APPENDIX IV

HEALTHY KIDS (EPSDT) ADOLESCENT SCREENING ASSESSMENT

CLIENT MEDicaid NR ____________________________ VA inserted by PROVIDER

AGE GROUP

0 - 5 Years 6 - 10

SEX

M = Male F = Female 2 = Unknown

DATE OF BIRTH

MONTH YEAR

CLIENT NAME

ETHNIC ORIGIN

SEX

DATE OF BIRTH

CASE NAME/RESPONSIBLE ADULT

RELATIONSHIP TO CLIENT

RESIDENCE ADDRESS

TELEPHONE

IMPORTANT: The above authorization guarantees payment ONLY if the client is Medicaid-eligible at the time of screening. Please check your patient's CURRENT MONTH Medical Certificate before providing services.

1. MALE HISTORY
   Living Dead * Dead give cause
   Father
   Mother
   Siblings (No)

2. BIRTH HISTORY
   Give significant medical history: cause of hospitalization, accident, etc.

3. CONDITIONS... Current Medications

4. SCREENING ASSESSMENT
   * List all problems on separate paper
   EYES
   01 Muscle
   02 Fundus
   03 Vision
   04 Refraction
   EAR
   05 Tinnitus

   NOSE
   06 Rhinitis

   THROAT
   07 Hayfever

   HEARING
   08 Ear

   DENTAL
   01 Caries
   02 Decayed
   03 Oral Disease

   PHYSICAL
   04 Head
   05 Neck
   06 Limb
   07 Spine
   08 Abdomen
   09 Genitalia
   10 Blood Pressure
   11 Body Temperature
   12 Body Build
   13 Heart Sounds
   14 Respirations

   DEVELOPMENTAL
   01 Height
   02 Weight
   03 Motor Skills
   04 Language Skills
   05 Family Interactions
   06 Communication
   07 Emotional Status
   08 School Performance
   09 Birth Defect Specified

   LABORATORY
   01 Urine
   02 Hemoglobin
   03 Blood Pressure
   04 Sickle Cell
   05 Blood Type

   NUTRITION
   01 Nutritional Status
   02 Vitamin D Deficiency
   03 Calcium Deficiency
   04 Iron Deficiency

   IMMUNIZATION

   PROVIDER SIGNATURE

3. SECTION TO BE COMPLETED BY PROVIDER

LOC: PROCEDURE CODE:

CHARGED

ABCD

EFGH

IV

PHARMACY

PROVIDER ID NUMBER

Provider Name & Address (Print Type)
APPENDIX V

RECOMMENDED EPSDT COMPONENTS BY AGE OF RECIPIENT

<table>
<thead>
<tr>
<th>AGE</th>
<th>INFANCY</th>
<th>EARLY CHILDHOOD</th>
<th>LATE CHILDHOOD</th>
<th>ADOLESCENCE</th>
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<tr>
<td></td>
<td>By Mo</td>
<td>2 Mo</td>
<td>4 Mo</td>
<td>6 Mo</td>
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<tr>
<td>HISTORY</td>
<td></td>
<td></td>
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<tr>
<td>Immunization Review</td>
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<td>♦</td>
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</tbody>
</table>

KEY: ♦ = To be performed
* = At least one test must be performed during the indicated time period
* = Test high risk child

1. If a child is to be seen for the first time at any age on the schedule, or if any items are not accomplished at the suggested age, the schedule should be brought up to date at the earliest possible time.
2. An immunization review should be performed at each appointment, with immunizations being administered at appropriate ages, or as needed.
3. A review assessment should be performed at each appointment. By the Department of Social Services recommends that a complete eye examination be done every other year (more often if medically necessary). Referrals should be made accordingly.
4. A developmental assessment should be performed at each appointment. An objective developmental test should be performed on children under six years of age based on the standards of good practice. The provider may perform the objective test and bill it separately, or the child may be referred.
5. A dental examination should be performed at each appointment. The American Academy of Pediatrics recommends that a complete dental examination be done every six months for children three years of age or older. Recommended should be made accordingly.
6. A complete physical examination should be performed at each appointment. Infants should be totally undressed, older children unclothed and suitably draped.
7. Antenatal guidance/health education should be consistent with the recommendations of the American Academy of Pediatrics (AAP). At the time of this printing, the recommendations are in the Guidelines for Health Supervision I, which may be obtained from the AAP. An outline of discussion topics from the recommendations may be obtained from the Michigan Department of Social Services.
8. If the child was born in Michigan Hospital and after October 1, 1987, the sickle cell test is not required. For children with all or some black heritage, the test is required prior to the child's 3rd birthday unless the child is known to be sickle cell positive. If the child is considered sickle cell positive, the test must be performed.
9. The TB test can be given yearly without conducting a well child visit (e.g., if the child is high risk at six years of age, a TB test should be done at seven years of age, but the next well child visit should not be conducted until eight years of age).
APPENDIX VI

EPSDT Program Recommendations

<table>
<thead>
<tr>
<th>RECOMMENDATION</th>
<th>MI</th>
<th>NV</th>
<th>CT</th>
<th>HCFA</th>
</tr>
</thead>
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<tr>
<td>2. Promote a tracking system with active outreach (e.g., Methods #2 &amp; 3)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>3. Follow-up with the MCOs:</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>a. to determine modes of outreach they conduct in order to increase EPSDT participation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. to assure effective access and delivery of health service (i.e., including NPs &amp; PAs into the MCO network) (Barger, 1993)(Tesh, et al., 1995)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Develop a school-based program in vulnerable neighborhoods, i.e., inner cities &amp; rural communities (e.g., Nativio, et al., 1995)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5. Create a standardized EPSDT service form to document the use of health education and counseling services (e.g., Form NMO 25A/B. Method #2)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Develop close/better relations with the MCOs and hold them accountable for valid EPSDT reporting on a timely basis (e.g., Method #3)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Include incentives and sanctions into the Medicaid MCO contracts (e.g., Method #3)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Delegate EPSDT policy issues to an external oversight agency (e.g., CHC. Method #3)</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Conduct active outreach to state agency personnel, MCOs, medical community, &amp; general public (i.e., Methods #2 &amp; 3)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Refer to the referenced case study or journal entry for details.
APPENDIX VII

Percentage of Medicaid MCO and PCCM enrollment in three states

<table>
<thead>
<tr>
<th>State</th>
<th>Medicaid enrollment</th>
<th>Percentage of MCO enrollment</th>
<th>Percentage of PCCM enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>1,115,903</td>
<td>77.6%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Nevada</td>
<td>88,500</td>
<td>29.8%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>360,246</td>
<td>64.4%</td>
<td>35.6%</td>
</tr>
<tr>
<td>United States</td>
<td>32,092,380</td>
<td>47.8%</td>
<td>52.2%</td>
</tr>
</tbody>
</table>