Child Development Services in Medicaid Managed Care Organizations: What Does It Take?

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Abstract. ***Objective.*** **We sought to understand why certain Medicaid managed care organizations (MMCOs) implemented child development services or programs and how they had done so. We also sought to identify barriers and facilitators to successful initiation and implementation of child development programs.**

Methods. **We conducted 9 key informant interviews and 4 site visits, and performed qualitative analyses to identify major themes across responses.**

Results. **We identified a small number of MMCOs with child development services. High-level support was crucial for program initiation; physician buy-in, staff support, and strong working relationships with outside health professionals or agencies were principal factors in successful program implementation.**

Conclusions. **MMCOs that were committed to implementing child development services were successful in doing so, without external funding or regulatory mandate. The results provide valuable strategies for MMCOs interested in developing programs and for researchers and advocates interested in promoting child development services for low-income children. *Pediatrics* 2000; 106:191–198; *Medicaid managed care, child development services.***

ABBREVIATIONS. MMCO, Medicaid managed care organizations; HCFA, Health Care Financing Administration; CEO, chief executive officer; ER, emergency room; PCP, primary care provider.

BACKGROUND

A substantial body of evidence demonstrates the positive impacts of early intervention services and programs on low-income children's cognitive development and later academic achievement,[1–5] antisocial behavior and delinquency,[2,6] parenting practices, and economic self-sufficiency. Low-income children, in particular, are at increased risk for poor developmental outcomes and their families may have less access to developmentally oriented services than their middle- and upper-class counterparts.[7–10] Early intervention services for children and families have been delivered most commonly outside of the traditional health care system, typically in the context of educational or social service delivery. Many children and families, however, do not encounter these systems until the children are well past infancy. Because the majority of parents interact with health care systems prenatally and in early childhood, the health care system is in a uniquely advantageous position to offer and provide developmentally oriented advice, counseling, and other services during the critical window of opportunity.

Medicaid, as a public insurance program, offers unique opportunities to improve coverage and access to child health and development services for low-income children. The Medicaid program now covers 23% of children 0 to 5 years old, making it the single most consistent source of health insurance for low-income young children.[11] Over half (54%) of current Medicaid recipients are enrolled in Medicaid managed care organizations (MMCOs)[11] and it is widely believed that this percentage will increase over the next few years. Managed care, consistent with its emphasis on preventive care, supports the inclusion of educational and support activities that could promote child development within the context of providing health care. We know of no attempts to characterize the provision of child development services to families enrolled in MMCOs.

With support from The Commonwealth Fund, we initiated a study of MMCOs in an effort to learn more about the possibility and feasibility of implementing child development services within the context of public insurance. The first objective of the study was to identify the types of child development programs that MMCOs had initiated, implemented, and funded. The second objective was to describe the content of identified developmentally oriented services or programs. A third objective was to understand why MMCOs had decided to implement these services or programs, and how they had gone about the process. The fourth objective was to identify the barriers and facilitators to successful initiation and implementation of child development programs.

METHODS

Key Informant Interviews

MMCOs

We used the US Health Care Financing Administration (HCFA) definition of MMCOs.[a] We targeted for key informant

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[a]Private insurance companies with whom states contract to be managed care organizations.

interviews those MMCOs that are perceived by experts outside the plans themselves to have current developmentally oriented programs in place that are over and above good, preventive well-child care. We contacted children's health and policy experts (eg, representatives involved in national funding of child development research and demonstration projects) for assistance in identification and verification of MMCOs with notable child development programs. We obtained a list of potential contacts from the Special Populations division of a large private insurer heavily involved nationally in Medicaid, and a list of MMCO medical directors who had attended a forum on early childhood development in the summer of 1998. The respondents from the selected MMCOs also referred us to other MMCOs with child development programs in place. The experts confirmed all selections and the MMCOs themselves had to agree that they had developmentally oriented programs in place that represented services over and above good pediatric care.

Twelve MMCOs met the criteria for key informant interviews, of which 9 completed interviews. The 3 MMCOs we did not interview either did not return calls, declined to be interviewed, or proved too difficult to schedule.

Interview Protocols

In accordance with typical process or implementation evaluation methodology, we developed an interview protocol that included open-ended, "discovery-oriented" questions that enabled the key informant to thoroughly describe the process of program initiation and implementation, and to explain why the program was or was not successful.[12,13] The protocol included background information on the plan (eg, size and geographic characteristics of plan, number of children in plan),[14] child development services within the program (eg, history of the program, incentives to develop the program, program staffing, characteristics of participants), key determinants of successful implementation and program maintenance, perceived benefits of the program, barriers to program success and how they were addressed,[13,14] methods of documentation and evaluation, and overall advice and recommendations to other MMCOs. To assess perceived program benefits, we asked key informants to describe the tangible benefits of the program to recipients and to the plan, key selling points of the program from the perspective of a managed care plan providing services to Medicaid enrollees, and reactions of staff and families to the program.

After inquiring about obstacles encountered in implementing child development services, we asked informants to describe how they addressed these obstacles. Included here was a question concerning the modifications that plans have made to the child development program that took into account the unique barriers faced by Medicaid recipients. Finally, to elicit recommendations regarding child development programs, we asked key informants what they would do differently in hindsight. We also solicited their advice for a) "a plan that wants to address unique needs of a Medicaid population with a program like this one," and b) "a medical director or administrator thinking about incorporating this program into their plan." All questions in the interview protocol were open-ended. We made minor modifications to the protocol for ease of use and clarity after a pilot interview.

Interview Procedures

The MMCO medical director was the target respondent because he or she would be able to provide significant information and insight about each developmental program, from inception to the present, from a broad, plan-level perspective. If the medical director did not wish to participate, he or she recommended another senior level administrator or program contact for interview participation.

Potential interviewees received mailed letters of introduction. Approximately 2 weeks later, the project director made follow-up calls to identified MMCOs. During the first telephone conversation, she introduced the project in greater detail and scheduled a telephone interview. The contact received a faxed copy of the interview protocol several days before the interview took place. A senior member of our research team led each telephone interview, which lasted approximately 1 to 1.5 hours. A trained research assistant took extensive notes and recorded each interview, after permission was obtained from the key informant(s). The research assistant immediately transcribed the contents of the interview.

Site Visits

We selected key informants that we had interviewed by telephone for site visits, using additional criteria that included maximization of geographical diversity, managed care penetration, plan arrangement, generalizability to other MMCOs, and demonstrated benefits and outcomes that could serve as incentives for other MMCOs. We visited a total of 4 sites and interviewed a total of 12 key informants at these sites. The site visits built on the information obtained during the initial telephone interviews, so we used loosely structured interview protocols that paralleled the telephone interview and allowed us to gather more in-depth information.

Approach to Qualitative Analyses

Consistent with standard practice in qualitative research, the goal of our analyses was to identify major themes in the key informants' responses.[15–16] Coding schemes were developed to categorize major themes for each set of interview questions, and were then refined through successive iterations until they consistently and thoroughly captured the qualitative variation in responses. In keeping with the primary objectives of our study, we developed coding categories in the following areas: a) incentives to develop and implement a child development program; b) key determinants of successful implementation; c) program benefits; d) barriers to program success; e) how such barriers were addressed; and f) recommendations. In cases where more than 1 question was asked to assess a given topic area (eg, questions soliciting recommendations), we used a single overarching coding scheme to classify responses to these multiple questions. Data from telephone interviews and site visits were combined. In those cases where a key informant gave the same response at both interview and site visit, that response was counted only once.

To assess interrater reliability, an independent rater not involved in the study classified a subset of the open-ended responses. This subset consisted of 5 of the 9 MMCOs (a total of 139 responses). These 5 MMCOs were selected because their responses reflected the full range of coding categories. The independent rater agreed with 90% of our classifications; disagreements were resolved to consensus through discussion.

We examined the data in 2 ways. One question of interest concerned the number of MMCOs for which at least 1 key informant mentioned a particular response. To address this question, we computed the number of times a given response was mentioned by each plan, regardless of the number of informants within a plan who gave the response. A second question of interest concerned the frequency with which all respondents mentioned a given response, across all MMCOs. Here, because we were interested in the total number of instances of a particular response, we collapsed across MMCOs and tallied all mentions of that response, even if more than 1 informant within a plan mentioned the response. This latter approach enabled us to obtain a sense of how pervasive various themes were in our sample.

RESULTS

Overview of Plan and Program Characteristics

MMCOs represented most major geographical areas of the country and multiple types of service delivery systems (Table 1). All but 2 had commercial enrollees as well as Medicaid enrollees. MMCOs ranged tremendously in size, from 12 000 to 5.4 million covered lives.

Half of the child development programs were implemented in the last 3 years; only 2 programs were over 10 years old (Table 2). Most programs served predominately urban populations. Child development services varied widely, as did the types and mix of providers.

TABLE 1. Plan Characteristics

	Region	Commercial Enrollees	Models of Service Delivery	Total Number of Enrollees	Number Medicaid Enrollees
1	West Coast	Yes	Network and IPA	5 400 000	450 000
2	Mid-Atlantic	No	Network	12 000	8 000
3	Pacific Northwest	Yes	Staff, Network, and IPA	657 000	40 300
4	New England	Yes	Staff	291 500	14 500
5	Upper Midwest	Yes	Staff and plan contracts with clinics to provide care	780 000	32 000
6	West Coast	Yes	Network	2 200 000	460 000
7	West Coast	Yes	Group	2 700 000	20 200
8	Rocky Mountain Region	Yes	Group	348 600	4968
9	Mid-Atlantic	No	Network	230 000	230 000

IPA indicates Independent Practice Association.

TABLE 2. Program Characteristics

Plan	Year Program Began	Service Area	Service Format	Primary Providers	Eligible Participants
1	1998	Primarily suburban	Primarily postnatal home visitation	Nurses	First time mothers; mothers <19; early hospital discharges; mothers/babies identified as high-risk by medical or psychosocial criteria
2	1998	Primarily urban	Home visitation; telephone warm line; parenting classes; reading promotion	Nurses; trained plan staff	All pregnant women; all parents with children 0–3
3	1994	Primarily urban	Office-based/home counseling	OB physician; nurses	Childen 0–3 and their parents; high-risk pregnant women
4	1989	Urban/suburban mix	Telephone counseling; home visitation	Social workers; pediatricians; speech/physical therapists	Children 0 to 22 years
5	1997	Primarily urban	Reading promotion	Office staff	Children 0 to 8 years
6	1998	Primarily urban	Telephone counseling	Nurses	All plan members
7	1986	Urban/suburban mix	Temperament counseling	Trained temperament counselors	Children 4, 18, and 30 months
8	1981	Primarily urban/ suburban mix	Home visitation	Nurse practitioners; certified nurse midwives; licensed professional counselors	Voluntary participation with 6000+ mother-baby pairs; 70% low-risk mothers and babies, 12% high-risk mothers, and 8% high-risk infants
9	1990	Primarily urban	Home visitation	OB providers; case managers	All pregnant women in plan eligible; 18% to 25% of pregnant members participate; average age, 21

OB indicates obstetrics.

Incentives to Develop and Implement a Child Development Program

In only 1 of the 9 MMCOs did the specific idea clearly originate with upper level individuals. In 3 MMCOs the idea originated with a physician within the plan. However, in 1 of these 3 MMCOs, although the original idea came from a pediatrician, the chief executive officer (CEO) played a major part in getting the program going, "[The CEO] was committed to the program; it is a passion of his. It came from the top." Informants from the remaining 5 MMCOs either did not know or did not comment on the origin of the idea for the program.

In 7 MMCOs, the decision to develop and implement a child development program enjoyed high level support from within the plan. The specific idea did not necessarily originate with an upper level individual, but that person's support was essential for program initiation. Five MMCOs reported that this support appeared to be based on a sense of moral or ethical responsibility, rather than on financial considerations for the plan. In the words of a parent educator from Plan 7, "The Chief of Pediatrics pays me out of his own budget because he believes in it." A key informant from Plan 9 said, "[We] are doing the right thing for the member, which is the bottom line." The CEO of Plan 5 elaborated:

> *We now understand that the years 0–5 are critically important to the development and connectivity of children's neurons, lifetime intelligence, lifetime development, and lifetime emotional status, and it is criminal not to put that*

information into the hands of parents, community groups, legislators, and others who can make use of it to improve life for kids. This is a medical issue as far as we are concerned. These are neurons and this is connectivity in the same way that ligaments connect.

In our analysis of the above set of questions using individual informants, as opposed to MMCOs, as the unit of analysis, no more than 1 key informant per plan mentioned each particular response. Thus, the results were identical to those reported above.

Key Determinants of Successful Implementation and Program Maintenance

The factors most frequently cited as facilitating program implementation were physician buy-in, staff support, and strong working relationships with other outside health care professionals or agencies. As was the case for the questions concerning high-level support, results were the same regardless of whether the unit of analysis was MMCOs or individual informants.

Six MMCOs emphasized the importance of obtaining physician or provider buy-in. For example, these respondents spoke of finding physicians and nurses who wanted to learn to respond to these issues as advocates, reassuring the physician groups that this service was going to be helpful, and fostering communication and trust with the medical team. Two of these MMCOs cited the importance of having the support of the CEO or other people in top positions. One nurse from Plan 3 explained that "the CEO was a major factor in getting [the program] off the ground. This is a population he is very tuned in to and interested in." Thus, there was wide consensus that physician and CEO support are critical to a program's initial implementation and long-term success. Physician support can influence how other physician colleagues view the program, which may in turn influence how the health plan funds it. Physician support will also determine the degree to which patients are referred into the program; key informants stressed repeatedly that the success of their programs often depended on physician referrals.

One-third of the MMCOs reported that they considered staff integral to the success of their programs. They cited staff and site buy-in, stressing the importance of having committed staff, fostering a sense of ownership at the sites, appealing to what the staff wants, and keeping them excited about the program. Related to this, 1 pediatrician in Plan 5 considered the presence of a site champion critical to the success of their program. This informant reported that because their program was being implemented at several different sites, a site champion was crucial, especially with reluctant sites. A charismatic site champion helps staff get past the mentality that the program is going to be a burden and encourages them to support the program.

Four MMCOs cited strong working relationships with other outside health care professionals or agencies as instrumental for the success of the program. Respondents from these MMCOs explained that working with outside agencies gave the program publicity (eg, by advertising the program's classes) and, in some cases, also facilitated member accessibility by providing conveniently located sites for program activities. One key informant from Plan 9 stressed the importance of establishing a visible community presence and developing a strong network with community leaders and organizations "so that they will have a positive impression of the plan and will be willing to work with you." This key informant suggested attending health fairs or working with community advocates as ways to strengthen these community connections.

Perceived Benefits of Child Development Program

Four MMCOs reported having documented benefits of the program (eg, data on pregnancy rates, immunization rates, readmission rates, lengths of stay, rates of Early and Periodic Screening, Diagnostic, and Treatment program compliance). However, these MMCOs were unwilling to release documentation, claiming either that they had not yet collected enough information or that the data were not publicly available. Two MMCOs were in the process of developing strategies for evaluating or tracking outcomes, and two MMCOs had information only from informal member satisfaction surveys. It is noteworthy that many of the respondents were convinced of the success of their programs and confident of their positive outcomes, even with no formal evaluation or documentation.

Across all telephone and site visit interviews, there were 56 instances in which informants cited program benefits. Of these 56 instances, the most frequently cited benefits were: reduced or more appropriate utilization of care (16% of all mentioned benefits), benefits for providers and staff, such as saving providers' time and improving staff morale (16%), family satisfaction (14%), cost savings (14%), improved health and developmental outcomes (13%), and member retention (13%).

Turning to the number of MMCOs citing a given benefit, 6 MMCOs reported that their programs led to improved health outcomes (eg, reduction in pregnancy rates, higher immunization rates, improved blood lead screening rates, increased number of well-child visits within the appropriate time period, improved rate of prenatal care) and improved developmental outcomes (eg, enhanced parenting skills, increased number of parents reading to their children). One plan was very vocal about the critical importance of stimulating children's neurons during key years and about potential long-term societal benefits (ie, breaking the cycle of poverty, crime, and racism).

Six MMCOs reported that their program led to reduced health care utilization or more efficient and appropriate utilization of care. For example, child development services resulted in "fewer visits to the pediatrician," "reduction of emergency room (ER) visits," "reduced length of stay for premature babies," and "more efficient use of existing services in the plan and more appropriate use of outside services." It is important to note that de-

creased health care utilization is not necessarily an accurate indicator of the effectiveness of child development services. On the contrary, it could be argued that *increased* utilization might be a more valid indicator if it reflects greater health awareness among program recipients and greater use of available resources and recommended services. Nevertheless, our key informants viewed decreased utilization as an important benefit of the program. That is, by educating members or providing preventive care, the program contributed to more efficient utilization of care (eg, by directing members to the appropriate service or by reducing later unnecessary care).

Five of the 6 MMCOs that mentioned decreased health care utilization also cited financial benefits and attributed the cost savings to the program's impact on utilization. For example, several informants explained:

> *Economically, I [parent educator] am saving doctor hours and reducing the number of people who schedule a visit for some other problem and then bring up the behavior issue. [The program] also prevents psychiatric services needed down the line [by] trying to catch problems early. (Plan 7)*
>
> *We didn't do a cost-benefit analysis, but preventive care is very important in terms of when there is high utilization for catastrophic/complex illnesses as a result of presenting often at the ER or waiting until you're terminally ill to go to your primary care provider (PCP) . . . This population was accustomed to having the ER as their provider/PCP. We've managed to educate our members. I don't think they have done a proper analysis of this, but I know that our utilization in terms of using the ER as a PCP has decreased. (Plan 9)*

Seven MMCOs believed that their child development programs attracted new enrollees and lowered disenrollment rates. For example, a respondent from Plan 9 said that the program "helps maintain and retain membership [because] the members feel cared for and comfortable and they learn how to work the system." A parent educator in Plan 7 noted:

> *Parents make decisions about which health plan [to enroll in] based on what they hear from others they work with . . . If they hear about the help that [the plan] is giving to parents through this program, it is a reason to choose it. We have had people switch health MMCOs to [our plan] in order to get more health/parenting education.*

Related to this, 2 MMCOs explicitly cited publicity, visibility, and good will as benefits of their programs. According to these key informants, the programs enhanced the plans' visibility in the community and fulfilled an aspect of the plans' missions, which "translates into positive community relations and good marketing which adds to overall success."

Finally, 6 MMCOs mentioned family satisfaction as a benefit of their programs, and 6 MMCOs cited benefits for providers and staff. An informant from Plan 4 commented, "Families feel good about their pediatricians and the program." Another informant from Plan 9 said, "Patients were initially apprehensive about the intrusiveness of the home visit, but liked the program after they had more involvement. They liked having the contact with the case manager and having someone they could call during the pregnancy with any problems."

Key informants cited several benefits to providers and staff, stating that their program saved providers time and reduced their burden, improved staff morale and satisfaction, and was viewed by staff as providing a valuable service to members. For example, respondents noted that staff were "excited and proud to be a part of the program" (Plan 5) and that "staff [who are] not involved in program delivery are very glad that there is a program to coordinate medical needs and community services" (Plan 4). Other informants elaborated:

> *Pediatricians find that I am worth the hours because it saves them from having to do a lot of the phone calls around behavior issues . . . It helps the pediatrician to have someone they can send parents to with behavior questions; they can bring up an important subject without being worried that they won't have the time to address it. (Plan 7)*
>
> *We have a follow-up system where the provider faxes us within 48 hours if a member misses their appointment. We actually reimburse the provider for doing that and then we do outreach to the member. The providers really appreciate our efforts because they really know that they should do outreach to get the member in and [they] want to do it, but sometimes they can't. (Plan 9)*

Only 1 plan (Plan 7) mentioned negative staff reactions, stating that the program was seen as "fluff by those interested only in a medical model."

Taken as a whole, our analyses of perceived program benefits suggest that key informants were just as likely to report improved health and developmental outcomes and family/staff satisfaction as they were to report financial savings and more efficient utilization. Indeed, 1 CEO was adamant that direct benefits to the plan, in the form of cost savings or marketing advantage, were immaterial:

> *There are direct benefits to our plan in that our commitment is to do the right thing for the children and this is clearly the right thing for the children. I'm not sure that there is any other . . . I don't think there is a marketing advantage, although there may be. Clearly there is a patient satisfaction advantage. This is not about marketing issues, though, any more than immunizing children is a marketing issue; that's not why we do it. (Plan 5)*

Barriers to Program Success

All 9 of the MMCOs reported encountering at least 1 barrier in implementing their child development program for a Medicaid population. These obstacles fell into 3 distinct categories: provider-related obstacles, population-related obstacles, and organizational barriers. Six MMCOs cited both provider-related obstacles and organizational barriers, and 4 mentioned obstacles related to the populations being served (eg, issues inherent in a Medicaid population that presented barriers to program success). Across all telephone and site visit interviews, there were 32 instances in which informants mentioned an obstacle. Of these 32 instances, 47% (15) focused on population-related obstacles, 28% (9) concerned provider-related obstacles, and 25% (8) dealt with organizational barriers.

Key informants discussed several provider-related barriers that initially impeded the success of their programs. Pediatricians were initially unen-

thusiastic about the programs for a variety of reasons, including: a mindset on treating existing problems rather than adopting a preventive orientation (eg, "putting out fires as they occur rather than focusing on preventive care and trying to connect with families before things happen"), skepticism about program effectiveness, and concern that the programs might undermine their own communication with patients. Respondents mentioned staff resistance, stemming from attitudes toward the targeted population. For example, a nurse in Plan 3 reported, "We have run into some pretty heavy bias with people from within the center who feel like this is a population that doesn't deserve the time we give them because they are not paying for their services and they are high utilizers."

Population-related obstacles mentioned by key informants included language barriers, adult literacy problems, cultural barriers, lack of education (eg, parents who do not know when their child is due for periodic screening visits), lack of transportation, and difficulty contacting members who have moved or who have disconnected phones. The most frequently cited population-related barriers were cultural differences, language, and transportation problems, which were each mentioned by 3 MMCOs.

The organizational obstacles encountered by MMCOs included financial issues, technical issues (eg, keeping membership and provider service databases updated), and difficulty eliciting cooperation from other organizations (eg, difficulty getting hospitals to send referrals).

How MMCOs Have Addressed Barriers

All 9 MMCOs reported at least 1 modification they had made to overcome obstacles encountered in implementing child development services for their Medicaid enrollees. Seven MMCOs made modifications aimed at facilitating members' access to services and enhancing their comprehension of materials. These modifications included: offering transportation assistance (eg, subway tokens, bus routes), changing the location of program activities to more easily accessible sites, providing interpreters and brochures translated in many languages, using culturally appropriate language in printed materials and being sensitive to cultural differences, writing materials at the appropriate grade level, providing resources for illiterate parents, and offering gifts and incentives to encourage participation.

Five MMCOs mentioned strategies that addressed provider-related obstacles. In general, these modifications were designed to foster communication with physicians and included: finding a site champion, working closely as a team, distributing program brochures and newsletters to pediatric staff, visiting with pediatricians in their offices, and holding problem-solving meetings with physician groups. These strategies were described as crucial for overall communication of program content and goals to providers and for ultimate physician buy-in. Although some providers initially felt threatened by a program, providers realized over time that they were burdened with fewer administrative tasks as program participants began to navigate the system more effectively and efficiently.

Three MMCOs reported taking steps to enhance the staff's knowledge of the targeted population. These strategies included: training the staff in Medicaid issues and regulations (eg, "staff stays current on Medicaid issues"), and raising staff awareness of the Medicaid population's limitations, priorities, and pressing needs.

We coded a total of 31 instances in which modifications were made to address obstacles. Sixty-one percent of these modifications (19 of 31) were aimed at facilitating members' access to services and enhancing their comprehension of materials, 19% of the modifications mentioned (6 of 31) were attempts to address provider-related obstacles, and 10% were designed to enhance the staff's knowledge of the targeted population.

Learning From Plan Experiences

The most frequently offered recommendations stressed the importance of securing pediatrician buy-in and high-level support, and facilitating families' access to the child development services. Specifically, 7 MMCOs recommended that other MMCOs obtain physician buy-in and high-level support from the beginning. For example, respondents urged MMCOs to "work with a group of [physician leaders] from the beginning when you are still in development," and "obtain provider input in formulation and throughout the program [and] be creative with mechanisms and incentives to keep providers in contact with the program."

In addition to obtaining provider buy-in, informants strongly recommended that MMCOs facilitate members' access to services and, in general, take steps to make the program as user-friendly as possible. Five MMCOs made at least 1 recommendation pertaining to user-friendly issues. For example, respondents recommended that MMCOs "provide transportation," "make sure that the educational material is available at the right educational level and in a variety of languages," "be sensitive to cultural differences," and "make sure to let families know that you care and want to help." The overall flavor of this advice is captured by the following quotes:

> *Make sure you don't just think of access as a concept, but really give people concrete information and assistance to access the services . . . Design an extremely user-friendly model and give people all of the information so that they don't have to search around on their own. (Plan 5)*
>
> *Be flexible, adapt your standards and requirements for the audience. For example, streamline the referral process; either make it seamless for the members or eliminate it. (Plan 9)*

Four MMCOs advised others to formulate program goals clearly and emphasized the importance of having an in-depth understanding of the targeted populations' needs and barriers. For example, a key informant in Plan 8 urged other MMCOs to "clearly

establish ahead of time what [the program] is hoping to accomplish" and "have a realistic sense of the limitations of the [Medicaid] population." Other informants offered the following suggestions:

> *Keep in mind that working with a Medicaid population involves a different set of skills than other commercial populations. [You] want people who have medical knowledge and experience working with the population so that they can assess needs and work with members to ensure follow-up. (Plan 9)*
>
> *Make sure the care management staff understands Medicaid regulations and services . . . Provide special training on this area because it is not the same as the commercial aspect of the plan. (Plan 6)*

Community forums and focus groups were suggested as vehicles for identifying program objectives, families' developmental needs, and the barriers that these families are facing.

Finally, 3 MMCOs stated that in hindsight they should have been more rigorous in their data collection and measurement (eg, use more objective measures and reliable indicators, develop more sophisticated data management tools for case managers).

Across all interviews, there were 33 instances in which informants offered advice or recommendations. Of these instances, one-third focused on facilitating user-friendliness, 24% focused on formulating program goals and understanding the targeted population, and 24% centered on securing provider and top-level support.

DISCUSSION

We were successful in identifying MMCOs that had initiated and implemented child development services beyond the delivery of usual preventive pediatric care. Key individuals in these MMCOs, without prompting from regulations or external funding sources, had become interested and enthusiastic about the impact of child development services on young children's lives and had started programs in this area. The very existence of even a small number of such programs suggests that it is possible to implement child development services in MMCOs.

On the other hand, the number of MMCOs with self-initiated programs was limited and, on interview, several of these programs did not appear to offer services we considered to be truly developmentally oriented (eg, services limited to high-risk pregnant women). In addition, many of the identified programs were small and limited in scope, while research indicates that the most effective early intervention strategies involve comprehensive services and multiple routes to promote children's development.[5] The fact that some MMCOs believed, erroneously, that they had incorporated child development services or had implemented services too narrow in scope to be particularly effective suggests there is a need for more specific and concerted education for insurers on the topic of child development.

The importance of high-level administrative support and physician and staff buy-in were consistent themes among respondents. Fostering a climate in which providing child development services is both expected by consumers and applauded by colleagues may have the greatest impact on the likelihood of initiating and successful implementation of such services. Some prominent individuals and organizations, including Rob Reiner, The Commonwealth Fund, The David and Lucile Packard Foundation, the American Academy of Pediatrics, and Children Now have made considerable progress in stimulating interest in this area, by informing and educating the public, health care providers, and purchasers about the value and benefits of child development services. As awareness of the critical role that child development services play increases, demand for such services may increase.

Respondents were very enthusiastic about the perceived benefits of their child development programs. Although some MMCOs recognized positive effects on child development and health, other benefits important to MMCOs would not necessarily impress child development experts or even families themselves, such as decreased health care utilization, member retention, and cost savings. Even if reduced health care utilization is not the most appropriate goal of child development programs, it may be important to keep in mind when "marketing" child development services that some of the incentives for MMCOs to implement any services include short-term cost benefits. Although the literature on early intervention demonstrates long-term benefits to participants and society,[1–6] the field lacks empirical research evaluating the shorter-term effects of implementing child development services on health care utilization, enrollment patterns, and patient and provider satisfaction. Solid findings in these areas could enhance efforts to promote a climate in which it is unacceptable for health MMCOs *not* to provide child development services.

One limitation to this study, the small number of MMCOs interviewed, must be noted. Because of the limited number of MMCOs, relationships among variables, (eg, the relationship between barriers and program characteristics) could not be assessed. We cannot conclude that the results are generalizable to all MMCOs, and in fact, these 9 MMCOs may represent a highly self-selected group. We believe that the fact that we found only a small number of MMCOs to study reflects the reality that very few MMCOs offer child development services.

Although the integration of child development services into Medicaid managed care is not widespread or comprehensive, the results from this qualitative study provide some optimism that some MMCOs have taken early steps in this direction. MMCOs that were committed to implementing child development services beyond standard well-child care were successful in doing so, without external funding or regulatory mandate. Staff identified and creatively addressed barriers, many of which appeared typical to implementing new programs of any kind targeting low-income families. Respondents from all 9 MMCOs were convinced

that their programs were highly successful and were very satisfied with the perceived benefits for the MMCOs and the program participants. The information gained from the experiences of these MMCOs provides other MMCOs with valuable ideas and models for developing their own programs. More broadly, the results of this study suggest avenues of research and action for child development experts and advocates.

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