Increasing dental care utilization by Medicaid-eligible children: a dental care coordinator intervention

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Abstract

Objectives: The aim of this study was to determine the effect of a dental care coordinator intervention on increasing dental utilization by Medicaid-eligible children compared with a control group.
Methods: One hundred and thirty-six children enrolled in Medicaid aged 4 to 15 years at baseline in 2004 who had not had Medicaid claims for 2 years, were randomly assigned to intervention or control groups for 12 months. Children and caregivers in the intervention group received education, assistance in finding a dentist if the child did not have one, and assistance and support in scheduling and keeping dental appointments. All children continued to receive routine member services from the dental plan administrator, including newsletters and benefit updates during the study.
Results: Dental utilization during the study period was significantly higher in the intervention group (43 percent) than in the control group (26 percent). The effect was even more significant among children living in households well below the Federal Poverty Level. The intervention was effective regardless of whether the coordinator was able to provide services in person or via telephone and mail.
Conclusion: The dental care coordinator intervention significantly increased dental utilization compared with similar children who received routine Medicaid member services. Public health programs and communities endeavoring to reduce oral health disparities may want to consider incorporating a dental care coordinator along with other initiatives to increase dental utilization by disadvantaged children.

Introduction

Oral disease is the most glaring health disparity among low-income children in the United States (1). Financial barriers to accessing dental care are largely removed by Medicaid, a federal and state program that offers free general dental care for eligible poor children in the United States. Recent reports indicate that only one-third of Medicaid-eligible children receive dental services each year according to the United States Government Accountability Office(2).

Non-financial factors that have been associated with low dental utilization by Medicaid-insured children include not having a usual source of dental care, a lack of parental knowledge of the importance of dental care or of Medicaid benefits, and the low percentage of dentists who participate in the Medicaid program (3,4). Dasanayake and colleagues also found racial factors to be associated with lower service utilization in Alabama Medicaid children with white children having higher utilization than minority children (5). When mothers do not have a usual source of dental care, their children are less likely to utilize dental care (6,7).

Statewide programs seeking to improve access to dental care for low-income children in Washington (8), Alabama (9), Michigan (10), and North Carolina (11) have had considerable success. These programs increased provider payment, provided training for dentists and families, utilized outreach staff to contact families, and provided program orientation to dentists and families. Investigators have also recommended increasing access by providing children with a usual source of dental care (12) or "dental home."

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This study was based on a theoretical model of access to medical care services developed by Peter Margolis and colleagues (13). The Margolis model identifies structural, financial, and personal barriers that impact the use of services and health outcomes. Margolis tested the model with an intervention study involving community, medical practices, and case managers to reduce barriers and improve child and maternal health (14). Low-income pregnant mothers and their infants, primary care practices, and departments of health and mental health participated in this 3-year study. A key component of Margolis' study was the case manager (care coordinator) intervention where mothers received home visits and assistance in obtaining prenatal care and preventive medical care for their child. Among other positive outcomes, mothers in the intervention group were 2.2 times as likely to take their child to four or more well-care visits before the child's first birthday than were mothers in the comparison group.

The primary goal of this study was to assess the effects of a dental care coordinator intervention on increasing dental utilization among Medicaid-eligible children by reducing the caregiver's personal and structural barriers. The coordinator sought to overcome these barriers by providing oral health education, oral hygiene education, assistance in locating a usual source of dental care if none existed, and assistance in scheduling and keeping dental appointments. Secondary goals were to determine if children with certain characteristics (e.g., annual household income) would benefit more than others from the intervention and to examine the intervention implementation to uncover activities that were more or less influential in achieving positive outcomes.

Methods

Study design

The study used a two-group randomized design and the unit of analysis for the primary outcome, dental utilization, was the study child. The study child was identified by the Medicaid administrator and each child had a caregiver (parent or guardian) on record with the administrator. Although participating caregivers may have had multiple Medicaid-insured children, only one child per caregiver was designated for evaluating study outcomes.

A telephone survey with the child's caregiver was conducted at study entry to collect demographic and self-report information. Children were randomly assigned to the dental care coordinator intervention or to the control group by the computer-assisted telephone interviewing software (WinQuery, The Analytical Group Inc., Scottsdale, AZ) upon completion of the telephone survey. Compensation for the caregiver's time in the amount of $15.00 was provided, and money orders were mailed to the caregivers within a few days of survey completion.

Medicaid dental utilization records were obtained to evaluate dental utilization before and during the study period. The study was conducted from April 2004 through March 2005.

Study area

The study was conducted in Louisville, Kentucky, an area of 385 square miles with a population of 693,604, and a median household income reported in the 2000 Census of $36,696 (15). The population is approximately 77.4 percent White, 18.9 percent Black, 1.4 percent Latino, and 1.4 percent Asian/Pacific Islander (16). The census tracts in the western portion of the city, where the majority of low-income persons reside, are designated as a medical and dental professional shortage area by the United States Department of Health and Human Services (17). The Medicaid program in Louisville and adjacent counties is administered by Passport Health Plan, a HMO-managed care Medicaid program that subcontracts with Doral Dental, a managed care dental program.

Study participants

The Institutional Review Boards of the University of Louisville, the Pacific Institute for Research and Evaluation, and the Kentucky Cabinet for Health and Family Services reviewed the study and all consent and authorization forms. Informed consent was obtained from the study child's caregiver. Eligibility criteria for the study were children who a) currently and for 2 years prior had Medicaid insurance; b) 4 to 15 years at study entry; c) had not had Medicaid dental claims filed for the previous 2 years; and d) lived in Jefferson County in Louisville, Kentucky.

An *a priori* power analysis was conducted to determine the number of children needed to distinguish a significant difference in dental care utilization between the intervention and control groups. It was estimated that 20 percent of the control group children in the study would utilize dental care, based on an article published in the year 2000 that only one in five Medicaid children routinely receive dental care (1). Increasing the utilization rate to 45 percent in the intervention group would be a practical/clinically relevant effect, thus an event rate of 0.20 in the control group and 0.45 in the intervention group was selected. A total sample of 120 children with 65 in the control and 65 in the intervention group with a criterion for significance (alpha) of 0.05 would provide power of 90 percent – that is, there would be a 90 percent chance of detecting an effect size of this magnitude.

The researchers worked with Passport Health Plan and Doral Dental to identify Medicaid-insured children and to recruit their caregiver for the study. The flow diagram of children through the study is provided in Figure 1. Doral Dental reviewed their utilization records to identify children who had been insured for 2 years and provided the information to

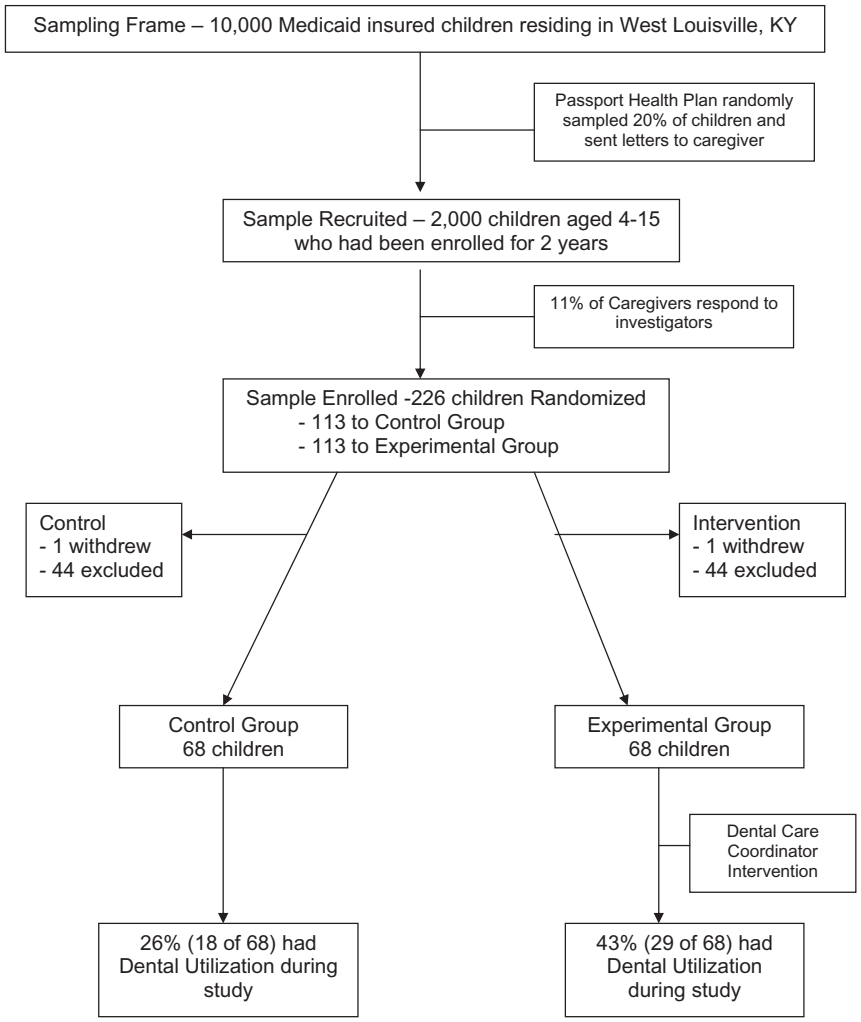

Figure 1 Study child flow through study.

Passport. The sample was drawn from approximately 10,000 Medicaid-insured children who resided in six zip code regions in the western area of Louisville, Kentucky. Based on the <10 percent response rate to a recruitment mailing that we experienced in a prior study with this population (4), we estimated that 2,000 children would need to be recruited to meet our sample size requirements. Systematic sampling was used for randomly selecting cases by taking every k^{th} case from the list of all cases. After starting at a random point, the interval of five was used to identify children for recruitment to the study.

Passport Health Plan thus used a systematic interval technique to select a random sample of 2,000 children from the list provided by the dental plan administrator. Passport prepared and mailed a letter addressed to the child's caregiver, as identified in their records, inviting him/her to participate in the study and to respond to the investigators if they chose to participate. Caregivers who chose to participate in the study completed contact information and research authorization forms and returned them to the investigators.

During the study, 226 children were initially enrolled in the study and randomly assigned into an intervention and control group. Eleven caregivers had two children who were randomly assigned to the intervention and control group (22 children total), and these families were excluded from the study. Caregivers of two children (one intervention and one control) withdrew from the study after the random assignment and were also excluded from the study. Additionally, when Medicaid prior utilization data were reviewed, it was determined that 33 children in the intervention group and 33 children in the control group had been receiving routine dental care in the 2 years prior to the study and therefore did not meet study eligibility criteria.

The final sample was composed of 136 children (68 children in the intervention group and 68 children in the control group) who met the eligibility criteria of the child

not having a Medicaid dental claim filed for 2 years prior to enrollment (no dental utilization for 2 years) and one designated study child per caregiver. A group equivalency analysis (18) was conducted to determine if there were any differences between those families whose child had been utilizing dental care and those who had not been. There were no differences in demographic characteristics (caregiver age, child age, household income, caregiver education, employment status or marital status, number of children in the family, etc.) and potential confounding factors (caregiver perception of child oral health, parent having a usual source of dental care, etc.) between the prior utilizing families and the non-utilizing families. The group equivalency analysis suggests that although the original random assignment of families was altered, the original design of the study was not compromised and threats to internal validity are minimal.

Study intervention

The intervention was based on the model used by Margolis (14) who used intensive home visitation by a case manager to assist mothers in overcoming personal and structural barriers to medical care utilization. In our study, the dental care coordinator contacted the caregivers of children in the intervention group by telephone to schedule an in-person visit within 4 weeks after the telephone survey. The intervention was intended to consist of a 45-60-minute in-person home visit by the dental care coordinator. When caregivers refused in-person meetings, the coordinator used both telephone communication and mailings in place of the in-person visit.

Personal barriers, including lack of knowledge of Medicaid and the importance of oral health, were addressed by the coordinator in person or over the telephone when caregivers refused in-person visits. He verbally provided information regarding Medicaid services and providers available for the child, as well as education about the importance of oral health to general health. The verbal information was supplemented with pamphlets prepared by the American Dental Association (Chicago, IL) and oral care products such as toothbrushes, toothpaste, and mouth rinses. When in-home visits were possible, the coordinator also provided the child with oral hygiene instruction. When caregivers refused in-person visits, the pamphlets and oral care products were mailed to the home.

Structural barriers, such as provider availability and transportation, were also addressed by the coordinator. He provided assistance in finding a dentist when the child did not have one and assistance with scheduling dental appointments. When the caregiver agreed to an in-person visit, the coordinator would make every effort to call the dental office and schedule an appointment for the child. When the caregiver refused an in-person visit, the coordinator would discuss scheduling an appointment and offer to set an appointment and inform the caregiver of the time and date. Assistance with transportation was provided (i.e., bus vouchers) when caregivers identified transportation as a barrier to obtaining dental care.

The dental care coordinator continued to contact the families each week during the study to determine if they had made and/or kept their child's dental appointment and if not, to continue to provide assistance in obtaining dental care. All children and caregivers in the study (intervention and control) continued to receive Medicaid member services during the study, including routine benefit up-dates and newsletters.

Four dental practices that participated in the Medicaid program and were located in the geographic areas of the children's residences were recruited by the dental plan administrator and the coordinator to participate in the study and provide dental care for the intervention group children who did not already have a dentist. The dental plan administrator (Doral Dental) provides assistance to all dental practices participating in the Medicaid program in the Louisville area with eligibility determination and filing claims for dental care, and they continued to do so during the study. The dental care coordinator provided assistance to all the dental practices where the children were scheduled, by attempting to reduce tardiness and missed appointments by the study children, and by calling the caregivers to remind them of the appointment.

The dental care coordinator was hired before the caregivers of the children were enrolled in the study. He was a young Caucasian who had an undergraduate Psychology degree and experience as a case manager for disadvantaged individuals. The dental care coordinator worked closely with the dental plan administrator staff, dental practice staff, and the investigators throughout the study.

The control families were not contacted or assisted by the coordinator during the study. In accordance with ethical principles, control families were contacted at the end of data collection and offered assistance in obtaining dental care.

Measures

Dental utilization

The primary outcome variable for this study was the utilization of preventive and/or routine dental care by the Medicaid-eligible child after the intervention was implemented. For analysis of study questions, a dummy variable was created where 1 = utilization and 0 = no utilization. Medicaid dental utilization data was extracted from claims files by Passport Health Plan and provided to researchers for analysis. Procedures were considered to be routine or preventive if they were coded by American Dental Association procedures

Table 1 Caregiver and Child Characteristics at Study Entry (n = 136)

Characteristic	Control group (n = 68)	Intervention group (n = 68)	Difference (P value)
Child age, mean (range)	10 (6-14)	10 (5-15)	0.55
Caregiver age, mean (range)	36 (22-57)	38 (20-74)	0.24
Caregiver gender, *n*			
Male	0	1	0.32
Female	68	67	
Caregiver race/ethnicity, *n* (%)			
African American	60 (88%)	55 (81%)	0.43
White	8 (12%)	11 (16%)	
Asian	0	1 (1.5%)	
American Indian	0	1 (1.5%)	
Other	0	0	
Caregiver education, *n* (%)			
Did not complete high school	16 (23.5%)	7 (10%)	0.08
High school graduate	18 (26.5%)	30 (44%)	
Some college	32 (47%)	29 (43%)	
Graduated college	2 (3%)	2 (3%)	
Caregiver employment, *n* (%)			
Working	33 (48%)	24 (35%)	0.18
Not working	23 (34%)	24 (35%)	
Other (retired, in school)	12 (18%)	20 (30%)	
Caregiver marital status, *n* (%)			
Single	40 (59%)	38 (56%)	0.71
Married/partner	10 (15%)	8 (12%)	
Divorced/separated/widowed	18 (26%)	22 (32%)	
No. of children living at home, Mean (range)	3 (1-9)	3 (1-9)	0.92
Household income, *n* (%)			
Under $5,000	23 (34%)	18 (27%)	0.65
$5,000–$15,000	23 (34%)	26 (38%)	
$15,000–$25,000	18 (26%)	17 (25%)	
Over $25,000	4 (6%)	4 (10%)	
Caregiver – "Do you currently have a dentist?" *n* (%)			0.85
Yes	49 (72%)	48 (70.5%)	
No	19 (28%)	20 (29.5%)	
Caregiver – "What is your estimate of your child's dental health?" *n* (%)			0.93
Poor	3 (4%)	4 (5%)	
Fair	11 (16%)	8 (12%)	
Good	26 (38%)	29 (43%)	
Very good	19 (28%)	19 (28%)	
Excellent	9 (13%)	8 (12%)	

codes as a periodic or comprehensive dental examination, prophylaxis (cleaning), radiographs, sealants, and fillings.

Telephone survey

The telephone survey that was administered at study entry was constructed to collect demographic information (income, education, etc.) presented in Table 1 as well as questions concerning the caregiver having a usual source of dental care ("Do you currently have a dentist you could go to if you had a problem? Yes or No") and concerning caregiver perceptions of the oral health status of the designated child ("What is your estimate of your child's oral health? Would you say Poor, Fair, Good, Very Good, or Excellent?"). The time required to complete the survey was limited to 15 minutes to maximize response rate and ease response burden. The survey was reviewed and approved by the University of Louisville's Institutional Review Board and the Kentucky Cabinet for Health and Family Services. Prior to the study, the telephone survey was pretested to determine the clarity, comprehensiveness, and acceptability of the research instrument. For the pretest, the investigators recruited a random sample of 60 of the individuals that participated in our focus group study (4); the survey was administered and refined as needed.

Implementation measures of the intended in-person home visit included the ability of the dental care coordinator to

Table 2 Dental Utilization during Study Period among All Children April 2004 through March 2005 ($n = 136$)

	Control *n* (%)	Intervention *n* (%)	χ^2, *P* value
Utilization	18 (26.5%)	29 (43%)	$\chi^2 = 3.9$, $P = 0.047$
No utilization	50 (73.5%)	39 (57%)	(95% CI 1.0-4.25)
Total	68	68	136

CI, confidence interval.

conduct an in-person visit with the caregiver and child, the ability to schedule a dental appointment for the child during the home visit, and whether the home visit was interrupted. When caregivers refused an in-person visit, the implementation measure was the number of telephone calls made by the coordinator.

Analysis

Frequency distributions were tabulated for dental care utilization and potential covariates. Each potential covariate was examined for its association with utilization, using two-way frequency tables and Pearson chi-squared statistics or independent sample *t*-tests. A Pearson chi-squared test was used to evaluate statistically significant associations of implementation processes with utilization.

A probability of <5 percent was used as the criterion for statistical significance. Data analyses were conducted using SPSS Statistics 17.0 (SPSS, Inc., Chicago, IL).

Results

Study participants

Children in the study were predominantly African-American and their average age was 10 years. The majority of the caregivers were unmarried, African-American females who reported that their child had "good to excellent" dental health. Although each caregiver had only one designated child in the study, there was an average of three children in each household. Almost 70 percent of the study children lived in households at or below $15,000 per year, well below the $18,852 2004 Federal Poverty Guideline for a family of four (19).

Utilization outcome results

Dental utilization during the study by the 136 children who had not been receiving dental care for 2 years prior to the study was higher in the intervention group (43 percent or 29/68) relative to the control group (26 percent or 18/68); $\chi^2(1) = 3.93$, $P = 0.047$ (Table 2). From a practical perspective, the care coordinator intervention had an effect on dental utilization with almost twice as many intervention children obtaining dental care compared with control children (95 percent confidence interval 1.0-4.5). Bivariate analyses were conducted to determine if there were certain characteristics of all caregivers that were associated with taking their child to the dentist during the study period, as well as any differences between the intervention and the control group families. The characteristics analyzed included demographic and individual factors previously reported in the literature such as having a usual source of dental care, household income, caregiver education and employment status, and child age. There were no factors independently associated with dental utilization or significant differences between the intervention and control groups; therefore, no multivariate analyses were conducted.

An exploratory analysis was also conducted to ascertain if there were any interactions with preexisting demographic characteristics that may show enhanced influences in dental utilization within subgroups. Among all the characteristics listed in Table 1, a subgroup analysis indicated that income was the only demographic characteristic that may have interacted with the intervention to affect utilization. Among the 67 percent (92/136) of families in the study having an annual income less than $15,000, the children in the intervention group had significantly more dental utilization ($P = 0.014$) during the study than those in the control group (Table 3). Poorer children in the intervention group were more than three times more likely to receive dental care during the study than children in the control group.

Table 3 Dental Utilization during Study Period by Income ($n = 136$)

	Control *n* (%)	Intervention *n* (%)	χ^2, *P* value
Income under $15,000 ($n = 92$)			$\chi^2 = 6.09$, $P = 0.014$ (95% CI 1.2-8.0)
Utilization	9 (20%)	20 (43%)	
No utilization	37 (80%)	26 (57%)	
Total	46	46	92
Income over $15,000 ($n = 44$)			$\chi^2 = 0.00$, $P = 1.00$ (95% CI 0.3-3.3)
Utilization	13 (59%)	13 (59%)	
No utilization	9 (41%)	9 (41%)	
Total	22	22	44

CI, confidence interval.

Intervention process results

The dental care coordinator conducted in-person sessions with 52 percent ($n = 35/68$) of the intervention families. The other 33 caregivers declined to meet with him in person but he was able to establish and maintain contact with these families via telephone and mail. The average length of the in-person visits was 60-90 minutes. Seventy-five percent of the in-person home visits were interrupted. The coordinator was only able to schedule a dental visit while meeting in person with the caregivers 30 percent of the time. He continued to encourage and assist all the families in the intervention group during the study and he averaged 10 contacts (telephone and/or in person) per family during the 12-month study.

Whether the dental care coordinator provided the education and assistance in person (35/68) or via telephone and mail did not influence dental utilization (33/68) [$\chi^2(1) = 0.034$, $P = 0.853$]. In the event that an in-person visit was conducted (35/68), the intervention was more effective in getting the child to the dentist if a dental appointment was scheduled by the coordinator during the home visit (7/7 scheduled versus 7/28 not scheduled) [$\chi^2(1) = 11.53$, $P = 0.001$] and if the home visit was not interrupted [8/11 not interrupted versus 6/24 interrupted; $\chi^2(1) = 5.51$, $P = 0.02$].

Discussion

The purpose of this study was to assess the effects of a dental care coordinator intervention on increasing dental care utilization among Medicaid-insured children who had not been receiving routine dental care. The specific aims were to provide children and caregivers with oral health education and support in obtaining dental care, determine if children with certain preexisting characteristics would benefit more from the intervention, and what intervention activities were more influential in getting children to the dentist.

Forty-three percent of the children in the intervention group received nonemergent dental care during the study compared with 26 percent of children in the control group. These results are practically and statistically significant and approach the Healthy People 2010 Objective 21-12's target of 57 percent of low-income children and adolescents receiving dental service during the past year. It is possible that the intervention could be even more effective in meeting public health objectives if it were refined and used in a larger study that incorporated lessons learned in this small study.

An important finding was that household annual income was the only demographic characteristic that appeared to influence differences in intervention versus control group dental utilization. The exploratory analysis indicated that the intervention most benefited the children in the study who lived in households with incomes at least $3,000 below the Federal Poverty Guideline of $18,000 per year for a family of four. Families well below the poverty level may well have less social support and the care coordinator provided needed assistance with managing parental responsibilities for obtaining dental care.

Although the intervention was not homogeneous (i.e., not all received in-person home visits), it produced favorable results regardless of whether or not the dental care coordinator was able to conduct an in-person visit with the caregiver and child. This result suggests that caregivers can be successfully engaged, motivated, and assisted in obtaining dental care for their children by a dental care coordinator either in person or via telephone. The results also suggest that if the dental care coordinator can schedule a dental appointment for the child while in contact with the caregiver, the child is more likely to receive dental care than if the caregiver is left to schedule the appointment alone.

The results of this randomized trial compare well with those reported by Greenburg and colleagues who pilot-tested a dental case management program in Tomkins County in New York State. The program increased dental care utilization among adults and children from 8.7 percent in the year 2000 to 41.2 percent in 2004. The case manager not only increased utilization by Medicaid clients but also increased the number of dentists participating in the program (20).

The study outcomes are similar to the Community Dental Facilitator Project, an initiative in a low-income, urban, Canadian community that sought to increase dental care utilization by poor children. Three lay workers, who represented the community's predominant ethnic groups, worked with families to enroll children in government programs and assist them in obtaining dental care. The program increased the number of dental appointments scheduled to 49 percent, and parents reported after 1 year that 71 percent of those with appointments had completed treatment (21).

The Community Dental Health Coordinator (CDHC) (22), a pilot program sponsored by the American Dental Association (ADA) where expanded duty dental assistants or dental hygienists provide a brief oral assessment, is worthy of consideration. In our study, the dental care coordinator was not a dental professional but he was asked by caregivers to provide dental examinations and advice. The ADA states that "The CDHC is part social worker and part dental assistant who, under the supervision of a dentist, can help people navigate the public health system to get the dental care they need." The goals of the CDHC program are similar to this study where the coordinator will provide education and assistance in accessing and obtaining dental care.

The cost of incorporating a dental care coordinator in public health programs may vary by settings. In this study, the coordinator was a full time employee with an annual salary of ~$29,000 and full benefits. The cost per child/caregiver (68) served in this research setting was thus ~$500, a very large expense for a Medicaid administrator. In a real-world setting,

a coordinator could serve 300 or more children each year for a cost of ~$100 per child. The results of our study suggest that targeting a coordinator intervention to the children in the lowest income groups may be the most cost-effective approach by potentially preventing more serious and costly dental needs.

A limitation of this study concerns the characteristics of the sample and possible selection bias that could result in potential problems with generalizability of the study results. The methods used to identify and recruit the study sample may have provided a sample of parents who were already concerned about oral health. The results of the study may not be generalized to all Medicaid-eligible children in the area of Louisville, Kentucky, or to other similar populations, because the caregivers may not represent the actual population of caregivers of Medicaid-eligible children.

A second limitation is that the research team unknowingly randomly assigned some children who were already routine utilizers of dental care. This occurred due to the Health Insurance Portability & Accountability Act (HIPAA) privacy requirements that required the investigators to rely on Medicaid administrator personnel to examine utilization records to randomly select potential study participants. The group equivalency analysis, however, suggests that there were minimal threats to the internal validity of the study.

A third limitation is that the dental care coordinator differed from the caregivers in race and gender. The literature is mixed on this issue with some authors recommending matching of caregiver and case managers (23,24). Others report that interpersonal characteristics of the case manager are more important than matching, but suggest that, if possible, the case manager be from the same community (25). It is possible that a gender-and-race-matched case manager from the community may have produced even better outcomes.

Other limitations include the possibility that children may have lost Medicaid eligibility during the study, and/or that the caregiver had private dental insurance and may have taken the child to a non-Medicaid-participating dentist. We did not collect data on these factors and we may thus have underestimated or overestimated dental utilization. Given that almost 70 percent (92 of 136) of the children lived in households with an annual income <$15,000, however, it is unlikely that most caregivers had private dental insurance or that the children lost eligibility.

Even with these limitations, the results of the study add to the knowledge of proven interventions to reduce oral health disparities. The randomized design of the study provides evidence of the direct effect of the coordinator intervention on increasing dental care utilization. In addition, we found that the intervention was more effective for children living in households with $15,000 or less income per year. Additional research in a larger and more geographically diverse population would validate our findings.

In summary, the results of this study support the finding of Peter Margolis and colleagues that a case manager/care coordinator intervention can reduce personal and structural barriers, thereby increasing care utilization by disadvantaged children. The intervention was especially beneficial for those children whose families were well below the federal poverty level. Regardless of whether the coordinator met in person or interacted with the families via telephone and mail, the intervention was effective in increasing dental care utilization.

Public health programs and communities endeavoring to reduce oral health disparities may choose to consider incorporating a dental care coordinator in larger initiatives to increase dental utilization by disadvantaged children.

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