An ABCD Program to Increase Access to Dental Care for Children Enrolled in Medicaid in a Rural County

Tarja Kaakko, DDS; Erik Skaret, DDS; Tracy Getz, MS; Philippe Hujoel, DDS, PhD; David Grembowski, PhD; Carree S. Moore, MS; Peter Milgrom, DDS

Abstract

Objectives: *The Access to Baby and Child Dentistry (ABCD) Program addresses the needs of families in obtaining dental care. In this study, the program was evaluated in rural Stevens County, Washington. Aims were to assess utilization of dental services, average dental expenditures per child, and oral health status.* ***Methods:*** *Medicaid-enrolled children aged 1–4 years were randomly assigned to the ABCD program (n=216) or to regular benefits (n=221). An outreach worker contacted each ABCD family and provided an orientation. Dental care utilization and expenditures were calculated from claims. A posttest-only design was used to evaluate oral health status.* ***Results:*** *An enrollment effect was seen in ABCD, but the difference between groups was not sustained. There was a doubling of utilization between groups for the youngest cohort, while the others showed no differences. In the first year the rate was higher for the entire ABCD group than for the children not in ABCD (34.0% vs 24.7%). Thirty-three percent of ABCD children (70/212) who had visited the dentist had >1 appointment compared to 21.5 percent (47/219) for the children not in ABCD who had visited the dentist. There was no overall difference in expenditures, while expenditures for preventive services were greater for ABCD. ABCD children had fewer teeth with initial caries. The average incremental cost per child per initial lesion prevented was $31.44.* ***Conclusion:*** *ABCD most benefited the youngest cohort of children and improved health. [J Public Health Dent 2002;62(1):45-50]*

Key Words: dental care, Medicaid, preschool children, community health services, health care costs, evaluation.

Disparities in oral health exist for low-income populations in the United States. Children of low socioeconomic status (SES) make 37 percent fewer visits to dental offices than do those from higher SES groups and children from families below 200 percent of the federal poverty level have substantially more unmet dental treatment needs than children from families with higher income levels (1). This pattern remains even though state legislatures have moved to expand eligibility for Medicaid coverage. The literature amply and repeatedly demonstrates these income-related differences in access in various states (2-5), but few state programs to overcome this disparity have been described or evaluated (6-9).

The statewide Access to Baby and Child Dentistry (ABCD) program was designed to address the needs of low-income families in obtaining dental care and has been studied extensively. Its effectiveness in increasing access to dental care has been demonstrated amply and the concept is being adopted in other Washington counties (6-8). The Spokane ABCD program was open to all Medicaid-enrolled children whose families sought admission. In this study, we extend our understanding of the program by conducting a randomized clinical trial in an adjoining rural county where we were able to randomly assign children to the ABCD program or have them remain in the regular Medicaid dental care program to which each was entitled. This study also included clinical outcome measurements. The aims of this study were to: (1) assess the effect of the ABCD program on children's utilization of dental services, (2) assess the oral health effects of the program, and (3) determine the average program expenditures per child.

Methods

Study Site. Stevens County, Washington, is located in the upper right quadrant of the state adjoining Spokane County on the south and Canada on the north (10). It has a predominately rural population of 37,600, with a population density of 15 persons per square mile. The largest town, Colville, has a population of fewer than 5,000. Per capita income in 1999 was $16,071, ranking 38th of 39 Washington counties. In 1998, the population was 91.6 percent white, 6.3 percent Native American, and 2.5 percent Hispanic. There were smaller numbers of blacks and Asians. The county is home to the Colville Indian Reservation. There are currently 14 general dentists and no dental specialists in Stevens County. The number of dentists has decreased by one since the study began. The county was chosen because the dentists and local health district were willing to participate.

Sample. A three-stage protocol was used in recruiting the sample. First, the Medicaid Management Information System at the Medical Assistance Ad-

Send correspondence and reprint requests to Dr. Milgrom, Department of Dental Public Health Sciences, Box 357475, University of Washington, Seattle, WA 98195. E-mail: dfrc@u.washington.edu. The authors are all with the Department of Dental Public Health Sciences, School of Dentistry, University of Washington, Seattle, and the Medical Assistance Administration, Department of Social and Health Services, Washington. Dr. Kaakko is research assistant professor, Dr. Skaret is visiting instructor, Mr. Getz is a lecturer, Dr. Hujoel is associate professor, and Drs. Grembowski and Milgrom are professors. Dr. Grembowski is also with the Department of Health Services, School of Public Health and Community Medicine. Ms. Moore is dental program manager for the Medical Assistance Administration. This research was supported, in part, by grants #R01 DE0982 and #P30 DE09743 (RCDRC) from the National Institute of Dental and Craniofacial Research, NIH. Manuscript received: 9/29/00; returned to authors for revision: 12/7/00; accepted for publication: 3/22/01.

ministration (MAA), Department of Social and Health Services was used to identify the children. MAA mailed a passive consent letter to the parents of all the eligible children to inform them about the study. The letter introduced the study and instructed those parents who did not wish to be contacted to telephone using a toll-free number. MAA then provided a file of the names, addresses, and telephone numbers of all the households, except for those letters returned as undeliverable or where parents or guardians telephoned to request that their children be removed from consideration.

In the second stage, two weeks after the MAA-mailing, an advance letter including a full description of the study, a consent form with postage-paid return envelope, and a postage-paid return postcard was sent by the Social and Economic Sciences Research Center (SESRC) at Washington State University to the eligible households. The letter indicated that a staff member from SESRC would be calling. The postcard allowed parents to provide their current telephone numbers and best times to call. The consent form was to be returned to SESRC.

Finally, potential recruits were contacted by telephone. The call offered an opportunity to answer questions the parents or guardians might have had about the study. Up to 20 attempts were made to reach each parent. Once a child was enrolled, SESRC contacted the families at six-month intervals to maintain up-to-date addresses and telephone numbers. The Institutional Review Board of the Department of Social and Health Services approved the research protocol.

All children who were listed in Medicaid files in February 1997 and whose date of birth fell between January 1, 1993, and December 31, 1996, were selected. From an initial selection of 955 children, 525 (55%) had working telephone numbers. Of these families, 67 refused and 21 were never reached despite repeated attempts. Eighty children were considered ineligible because their families had never used Medicaid benefits or were not currently residents of Stevens County. Some working poor families were able to buy sliding-scale medical insurance from the state, which made their children eligible for Medicaid dental benefits. Families that never used these dental benefits were excluded. After adjusting for those who were ineligible, 50.1 percent (438/875) of the adults consented to participate and their children were included in the study.

Description of the Intervention. The major goal of the program was to provide early intervention by dentists in private practice to prevent and control major dental problems and costs that otherwise could escalate in the future (11). The program focused on preschool children to circumvent the cycle of painful emergency treatment that is common among low-income recipients of dental care and that often results in the development of permanent fears and avoidance of dental care. The program also aimed to promote early visits to reduce the impact on busy dental practices whose experience with children from low-income families was limited.

Children from low-income families in Washington State are eligible for dental benefits under the Categorically Needy Program. Income limits for this program are based on 200 percent of the federal poverty level. The ABCD program in Stevens County consisted of four components developed initially for the Spokane County program: outreach, training and certification of dental professionals, enhanced dental benefits, and enhanced dental fees (6-8).

In cooperation with the local dental society, dentists and dental office staff received special training and were certified to receive enhanced payments for dental services under Medicaid. The training, provided by faculty from the University of Washington, consisted of a full day program of instruction on child management, preventive education, and use of fluoride varnish and fluoride-releasing glass ionomer fillings, both as sealants and filling material. Instruction also covered emergencies and related topics.

Enrolled children receive enhanced benefits that include coverage for three fluoride varnish treatments per year, fluoride-releasing glass ionomer materials used as sealants and fillings in primary teeth, and family preventive oral health instruction once per year. All dental services for children under the Early and Periodic Screening, Diagnosis, and Treatment program (EPSDT) were included.

The Medicaid program pays dentists on a fee-for-service basis. The fees for the ABCD program-certified dentists were enhanced beyond the previously existing level by a series of add-on fees. This was done to raise the level of maximum allowable payments to the 75th percentile of all usual and customary fees. Dental office staff was trained and given assistance in following billing procedures so delays in payment could be substantially reduced. The state Medical Assistance Administration entered into an interagency agreement with the Tri-County Regional Health District to provide funds for outreach.

Assignment to Conditions. Assignment to conditions was done by SESRC during recruitment in eight cohorts between June 12 and October 14, 1997, using a random number function. Families with more than one eligible child were treated as a single unit during randomization. In this way, the children in one family were assigned to the same dental program. The final sample included 216 children assigned to ABCD and 221 children who were in the Medicaid dental program but not in ABCD, after adjustment for a small number of families who dropped out when contacted by the outreach staff. Dropouts at this later stage were not replaced.

Once a child was recruited to the ABCD program beginning in June 1997, an outreach worker from the Tri-County Regional Health District contacted the family and provided an in-person orientation to the program, a list of certified dentists, and an identification card. Families with Medicaid-enrolled children not in ABCD did not receive any contact from the outreach staff.

Measures. *Utilization and Expenditures.* Utilization and expenditure data were extracted from MMIS claims files and provided to University of Washington researchers for analysis. The utilization and expenditure variables were constructed from Medicaid dental claims between February 1, 1997, and July 31, 1999. The data were analyzed in two periods, February 1, 1997, to January 31, 1998, and February 1, 1998, to May 31, 1999, to determine whether the intervention had different effects on dental utilization in the start-up years than in the second year of program operation. The earliest period includes five months before the program began to show that no utilization differences existed between

the groups before the intervention began. The May 31, 1999, cutoff date was used to be sure the claims experience of each enrollee was complete and not affected by the claims processing procedures.

Oral Health Status. After two years of study, parents or guardians were recontacted by SESRC and invited to participate in the clinical examination phase of the study. With the assistance of local volunteers, families were contacted by telephone and scheduled for an oral examination. Two community-based screening sessions were conducted to examine the study children. From the total of 431 children, 302 (70.1%) children could be contacted after two years. Of these, 276 children (64%) received a dental exam (123 ABCD, 153 Medicaid-enrolled but not ABCD). The parents of 24 children (5.6%) refused to have their child examined and two children refused to let the dentist examine their teeth. Thirty-nine percent of the children were examined during the screening sessions. The remaining children were examined during in-home visits.

A dental examination was conducted using a mirror, an explorer, and a headlamp. Each tooth surface of the primary teeth was examined for initial caries, caries in the dentin, fillings, sealants, or secondary caries. Missing teeth were recorded. Permanent teeth were not included in the examination. The caries diagnoses were recorded according to the following criteria (12):

—Initial caries is white or discolored enamel or small cavitation in enamel, no dentin exposure.

—Caries in dentin. Moderate to extensive cavity in enamel with exposed dentin (verified by probing). Exposure in dentin differs from moderate to substantial loss.

Four calibrated dentists performed the dental examinations. During the calibration session, the criteria for oral examinations were explained for each dentist. Series of photographs were used to demonstrate the criteria for caries. After the calibration session, each dentist examined 16 children to assess interexaminer reliability. The intraclass correlation coefficients were 0.96 for sound teeth, 0.87 for initial caries, 0.81 for decayed teeth, 0.70 for filled teeth, and 0.97 for sealants (13). The lower reliability for filled teeth was because one dentist recorded two teeth as tooth-colored crowns instead of sound.

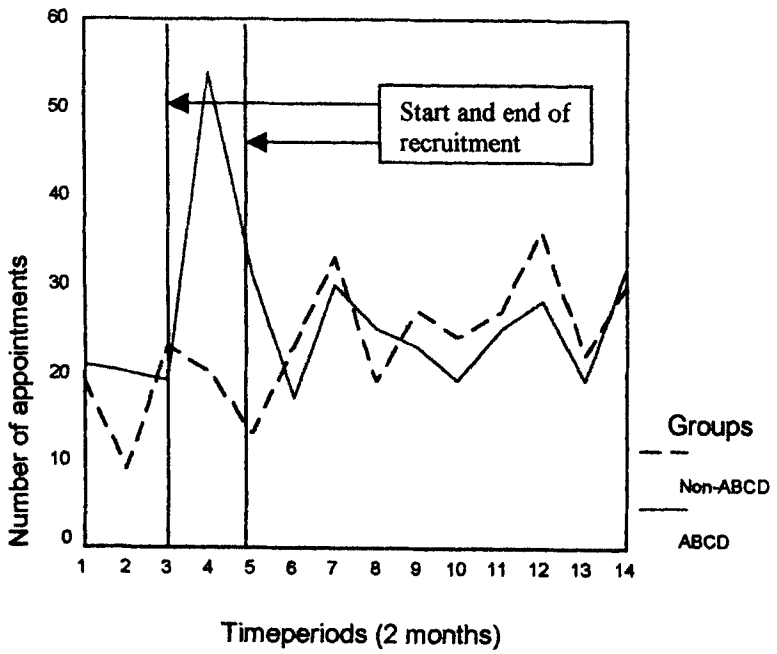
TABLE 1
Percent of Children Who Had One or More Dental Claims, by Time Period and Group Assignment

Variable	% ABCD (*n*=212)	% Not ABCD (*n*=219)	*P*-value
Feb. 1, 1997–Jan. 31, 1998	34.0	24.7	.03
Feb. 1, 1998–May 31, 1999	35.4	35.6	.52

TABLE 2
Number and Percentage of Medicaid-enrolled Children Who Used Any Dental Service Between February 1, 1997, and May 31, 1999, by Group Assignment and Year of Birth, Stevens County, WA

	ABCD (*n*=212)		Not ABCD (*n*=219)		
Year of Birth	*n*	%	*n*	%	*P*-value
1996	19	35.8	12	19.7	.05
1995	15	35.7	23	37.7	.83
1994	27	54.0	28	60.9	.49
1993	42	62.7	33	64.7	.82
1993–96	103	48.6	96	43.8	.33

FIGURE 1
Number of Claims Filed for ABCD and Medicaid-enrolled Children Not in ABCD in 2-month Periods



Data Analysis. Group differences in utilization and cost were analyzed with chi-square tests and one-way analysis of variance (ANOVA). ANOVA was used to measure the difference between the mean numbers of teeth with initial caries lesions, decayed teeth, filled teeth, and missing teeth between the groups. Expenditures for the dentist certification course and for the outreach effort for

the ABCD children after assignment to conditions by SESRC were obtained from university and state records. These expenditures were added to the average cost per child for dental care in the ABCD group and the number was compared to the cost per child for the Medicaid-enrolled children not in ABCD. For each health outcome that was statistically significant ($P<.05$), the difference between the average expenditures for the two groups was divided by the difference in the average outcomes in the two groups to obtain the average cost of an additional unit of benefit from the intervention (14). The data were analyzed by using in SPSS (Version 9.0).

Results

Dental Utilization. Consistent with the goals of the program, the data show an almost doubling of the rate of utilization between the groups for the youngest cohort (born in 1996), while the other groups show no differences (Tables 1 and 2). Figure 1 gives the distribution of claims by two-month periods. Utilization before the program started was similar between groups. The difference in utilization between the two groups was highest in the two-month period from August 1 to September 30, 1997, following the outreach activity that began in late June. In the first period, 33 percent of the ABCD children (70/212) who had visited the dentist had more than one dental appointment compared to 21.5 percent (47/219) for the Medicaid-enrolled children not in ABCD who had visited the dentist (chi-square=7.3, $P=.01$). No difference was found in the second period. Overall, 43 percent of ABCD children received at least one fluoride treatment, and 22 percent of all the ABCD children received this treatment more than once. Thirty-nine percent of ABCD children received family oral health education, and 20 percent of all the ABCD children received this treatment more than once.

Utilization is described in two periods: the first period was February 1, 1997, to January 31, 1998, and the second period was February 1, 1998, to May 31, 1999. In the first period the utilization rate (based on one or more dental claims) was significantly higher for the ABCD group than for the group of Medicaid-enrolled children not in ABCD (34.0% vs 24.7%; chi-square= 4.5; $P=.03$) (Table 1).

There were no statistically significant differences between the groups in average number of services, by category of service. However, during the first period the ABCD children had a significantly higher average number of claims for fluoride varnish than Medicaid-enrolled children not in ABCD (0.36 vs 0.21; $P=.01$). Both groups were eligible for this benefit. During the second period, there was no statistically significant difference in utilization rates between ABCD and Medicaid-enrolled children not in ABCD.

Expenditures. There were no statistically significant differences in overall expenditures for dental care between the groups in either period. During the first period, annual dental care expenditures were $67.32 for ABCD children and $52.44 ($P=.35$) for Medicaid enrolled children not in ABCD, respectively. However, as expected, expenditures for preventive dental services were greater for the ABCD group in the first period ($18.37 vs $11.38; $P=.05$).

Oral Health. The results of the 276 clinical examinations show that the ABCD group children ($n=123$) had significantly fewer teeth with initial caries [mean (standard deviation)=1.09 (1.7)] than the Medicaid-enrolled children ($n=153$) not in ABCD [1.59 (2.1); $P=.03$]. There was no difference in caries in the dentin, fillings, or missing teeth between the groups. Similarly, there was no difference in the percentage of children who were caries free: 34.1 percent ($n=94$) of the children in the ABCD program who could be examined were free of caries in the dentin compared to 39.9 percent ($n=110$) in the Medicaid-enrolled children not in ABCD ($P=.39$); and 23.6 percent of ABCD children ($n=65$) were free of caries in the enamel vs 24.6 percent of Medicaid-enrolled children ($n=68$) not in ABCD ($P=.17$). There were no differences by age cohort.

Incremental Cost of Prevention. The mean expenditures for training and outreach were $5.76 and $15.72 per child, respectively. For the entire 29-month period, the mean dental care expenditures per child were $181.41 (ABCD) and $192.50 (Medicaid enrolled children not in ABCD). The difference in the average number of initial carious lesions was 0.5. The cost per unit of benefit was determined to be $31.44.

Discussion

We conducted a randomized trial to evaluate the impact of the ABCD program in Stevens County, Washington. This evaluation builds on the work conducted in adjoining Spokane County, but differs in that assignment was random from a sample of families receiving Medical Assistance benefits for their children. This, along with the descriptive work in Spokane County (6-8), is one of few evaluations of statewide programs designed to overcome disparities in access and oral health status for Medicaid-enrolled children. It is particularly important because it demonstrates coordinated efforts by dental care providers, local government, and the Medicaid dental program.

Consistent with the hypothesis that enrollment in the ABCD program would result in increased utilization, the ABCD children demonstrated a 38 percent higher level of utilization than the Medicaid-enrolled children not in ABCD in the first year of the program (Table 1). The number of claims for preventive services also was greater. This result is parallel to that described in the evaluation of the Spokane County experience (6-8). The children in this study were aged 1–5 years in the first year that utilization was measured. This age distribution is similar to that in the Spokane program. In Spokane, 42.3 percent of ABCD children and 14.3 percent of Medicaid-enrolled children not in ABCD had at least one dental visit. The differences in Spokane were consistent across age cohorts, but largest in the youngest children. In this study, 34 percent of the ABCD children had at least one visit in the first year and 48.6 percent had at least one visit during a two-year period. However, a larger number of Medicaid-enrolled children not in ABCD had visits than in the nonrandomized Spokane evaluation study.

Utilization in the second year remained at the level of the first year, but the difference between the groups disappears (Figure 1). Both groups experienced higher utilization than was typical in the statewide Medicaid program. For example, in 1997 overall utilization for persons younger than 21 years of age was 33.5 percent. Utilization for persons under 4 years of age in the ABCD group was 35.8 percent compared to 24.1 percent in the statewide AFDC population (15). This is a

small rural county and the dentists were not blinded. Thus, it appears that some families with Medicaid-enrolled children not in ABCD may have responded to the increased attention to oral health generated in the community. Also, the intervention appears to have raised the overall level of preventive activity in the practices in this rural area. Furthermore, children in both groups in Head Start received additional help in seeking dental services. This boost is likely to have affected both groups and probably reduced differences between ABCD and Medicaid-enrolled children not in ABCD program in the second year of the program. This might explain why the major differences in utilization were in the youngest (pre-Head Start) cohort.

Nevertheless, while preventive services increased in the first period over the control condition and remained at this higher level in the second period, the absolute percentage of children who received one or more fluoride treatments was below program goals. This problem seems to stem from three sources. First, the dental offices are accustomed to six-month recall periods and this program, which emphasizes a higher level of visits for preventive services, differs from usual practice. Qualitative data from the Spokane ABCD project confirms that dental office staff has difficulty in accommodating this change. Evidence from the Spokane project also indicates that many parents are not fully aware of the benefits to which their children are entitled and therefore may not have made appointments according to the program guidelines (16). Second, preventive health is not a well-established approach in many rural families with low incomes. Many parents respond only to emergency conditions (17), which also might help explain the overall lower level of utilization of the program. This points to the need for more vigorous outreach and follow-up efforts and more emphasis on preventive visits by outreach workers.

Finally, transportation is a problem in both counties, but may be a much larger problem in rural Stevens County (16). Many families are quite distant from dental practices located in the largest towns, and winter weather can be quite severe. While the state Medicaid program provides transportation and it was mentioned in the parent orientation, at follow-up it appeared that many parents were not aware of the services or did not know how to use these services effectively. Attention to this problem is needed.

Expenditure data parallels utilization. Of particular interest is that the overall average cost of care for the two groups was not significantly different, even though the money spent on preventive services was greater for the ABCD group. The increased level of preventive service utilization resulted in an improvement in oral heath. Medicaid-enrolled children not in ABCD had, on average, 45 percent more teeth with initial lesions, although the absolute level was low (1.59 vs 1.09). Examiners could not differentiate between lesions in the dentin that had been treated with fluoride and arrested versus those that were active. Nonetheless, the trend in both dentin lesions and secondary caries was in the same direction. The cost per incremental unit of benefit was $31.44—more than the cost of a fluoride treatment, but certainly less than the cost of a filling.

The goal of Healthy People 2010 is to reduce the proportion of children aged 2 to 4 years with dental caries experience to no more than 11 percent (18). Our findings demonstrate that greater and sustained efforts are needed to reach this goal, particularly in rural areas. Efforts to improve access to Medicaid health care services and boost utilization have had mixed success (19-20). Nevertheless, intensive programs similar to those carried out successfully by provider groups, government, and private foundations for primary medical care for children are needed in dentistry. Programs that focus on dentist or physician fee increases alone are rarely fully effective (20). Although the results in this paper about Stevens County should be interpreted cautiously, the ABCD program overall, with multiple aims addressing both providers' and clients' needs, has had considerable success (6-8,16). The program is not static and is being expanded to additional counties with additional support of the Cavity Free Kids program of the Washington Dental Service Foundation. As the findings in this paper, as well as from the evaluations from Spokane County, are addressed, enhanced benefits to children can be anticipated.

Acknowledgments

We wish to acknowledge the contribution of the Social and Economic Sciences Research Center at Washington State University, which performed the telephone recruitment of subjects. We appreciate the support received from the Tri-County Regional Health District, the Head Start Program of Rural Resources, Colville School District, Colville Community Dental Clinic, ECEAP, New Hope, Key Clubs, Kiwanis Clubs of Colville and Chewelah, Colville N.E.W. Medical Group, ESD 101, Eastern Washington University, Spokane Community College, Spokane District Dental Society, and the Spokane Regional Health District. We also appreciate the support of Dr. Bud Evans and Dr. Rod Hartwick. Professor Peter Domoto was responsible for the dentist training program. Darlene Smolen assisted in organizing the local community for the oral examinations and Dr. Yukie Nakai and Dr. Jorge Castillo helped in performing the oral examinations during the community screenings. Dr. Sharon Chong, Ryan Doyle, and Tim Randall were instrumental in locating children and performing in-home examinations. We also appreciate the statistical support given by Dr. Lloyd Mancl.

References

1. Vargas CM., Crall JJ, Schneider DA. Sociodemographic distribution of pediatric dental caries: NHANES III, 1998-1994. J Am Dent Assoc 1998;129:1229-38.
2. Kanellis MJ, Damiano PC, Momany ET. Utilization of dental services by Iowa Medicaid-enrolled children younger than 6 years old. Pediatr Dent 1997; 19(5):310-14.
3. Cashion SW, Vann WF Jr, Rozier RG, Venezie RD, McIver FT. Children's utilization of dental care in the NC Medicaid program. Pediatr Dent 1999;21:97-103.
4. Waldman HB, Perlman SP. Are we reaching very young children with needed dental services? ASDC J Dent Child 1999;66:390-4.
5. Stewart DC, Ortega AN, Alos V, Martin B, Dowshen SA, Katz SH. Utilization of dental services and preventive oral health behaviors among preschool-aged children from Delaware. Pediatr Dent 1999;21:403-7.
6. Milgrom P, Hujoel P, Grembowski D, Ward JM. Making Medicaid child dental services work: a partnership in Washington State. J Am Dent Assoc 1997;128: 1440-6.
7. Milgrom P, Hujoel P, Grembowski D, Fong R. A community strategy for Medicaid dental services. Public Health Rep 1999;114:43-7.
8. Grembowski D, Milgrom P. Increasing access to dental care among Medicaid preschool children: the Access to Baby and Child Dentistry (ABCD) program. Public Health Rep 2000;115:448-59.
9. Silberman P, Wicker DA, Smith SH Jr, DeFriese GH. Assuring access to dental care for low-income families in North Carolina. The NC Institute of Medicine Task Force Study. NC Med J 2000;61:95-8.
10. State Data Book 1999. Office of Financial Management, State of Washington,

Olympia, 1999.
11. Milgrom P, Weinstein P. Early childhood caries: a team approach to prevention and treatment. Seattle, WA: University of Washington Continuing Dental Education, 1999.
12. Amarante E, Raadal M, Espelid I. Impact of diagnostic criteria on the prevalence of dental caries in Norwegian children aged 5, 12, and 18 years. Community Dent Oral Epidemiol 1998;26:87-94.
13. Shrout PA, Fleiss JI. Intraclass correlations: uses in assessing rater reliability. Psychol Bull 1979;86:420-8.
14. Haddix AC, Teutsch SM, Shaffer PA, Dunet DO. Prevention effectiveness: a guide to decision analysis and economic evaluation. New York: Oxford University Press, 1996.
15. Medical Assistance Administration. Dental utilization by budget aid code and age of client. Calendar year 1997. Olympia, WA: Department of Social and Health Services, Jul 14, 1998.
16. McNabb K, Coldwell SE, Cobb K, Vanderlinde M, Grembowski D, Milgrom P. Parent input on access to dental care for children on Medicaid [Abstract]. J Dent Res 2000;79:553.
17. Milgrom P, Tishendorf D. Rural dental care. In: Geyman JP, Norris TE, Hart LG, eds. Textbook of rural health care. New York: McGraw-Hill, 2000: chap 13.
18. US Department of Health and Human Services. Healthy People 2010 Objectives. 2nd ed. Washington, DC: US Government Printing Office, 2000.
19. Gortmaker SL. Medicaid and the health care of children in poverty and near poverty. Some successes and failures. Med Care 1981;19:567-82.
20. Coburn AF, Long SH, Marquis MS. Effects of changing Medicaid fees on physician participation and enrollee access. Inquiry 1999;36:265-79.