

ABSTRACT

Background: Early caries is still the most prevalent disease of childhood. Its incidence continues to be high, despite recent progress in the amount of untreated caries. The disease is more prevalent in low socio-economic and minority groups. To address this issue, in 2008 Texas implemented the First Dental Home Program for Medicaid children from 6 to 35 months old. The program consists in providing up to 10 preventive and oral health education visits to children very early in life. A specific dental visit code and a bundled payment of \$94 were offered to insure adequate dental provider participation. Little is known about the program results to date. This paper evaluates program development at 5 years.

Methods: Two data sets on first dental home patients and providers were obtained from the Texas Department of Health Services. The data cover a 5-year period (3rd quarter of 2008 to end of 2nd quarter 2013). Program participants were geocoded and their distribution was compared to dental underserved areas. Program uptake over time and the relationship between provider and patient locations were also evaluated.

Results: The program covered 440,191 children between September 1st, 2011 and February 28th, 2013. All but two counties in Texas had at least one patient enrolled in the program. As expected, program uptake was higher in highly populated and economically disadvantaged counties. Forty-five percent of Texas licensed dentists participated in the program. The number of dental providers certified to provide first dental home services was highly correlated with the number of patients enrolled in the program ($r=0.893$). The number of children participating in the program was between 20.4% and 23%. 29.7% of the first dental home patients had only one visit while only 17.1% had five or more visits. The number of patients and the number of visits per patient peaked at the end of 2011 and flatten thereafter.

Conclusion: Many children benefited from the program since its rollout. However, despite considerable financial resources and dental provider participation, the uptake of the first dental home program by Medicaid beneficiaries could be improved. Moreover, those who participate do not always take full advantage of the program. Without adequate participation, the desired outcomes of the program may not materialize. Additional efforts to catalyze program development and on-going evaluation may be needed.

KEY WORDS

Dental home, dental underserved area, early childhood caries, caries prevention