Dental Utilization in California's Children's Health Initiatives' Healthy Kids Programs -- 2007

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First 5 California

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Background

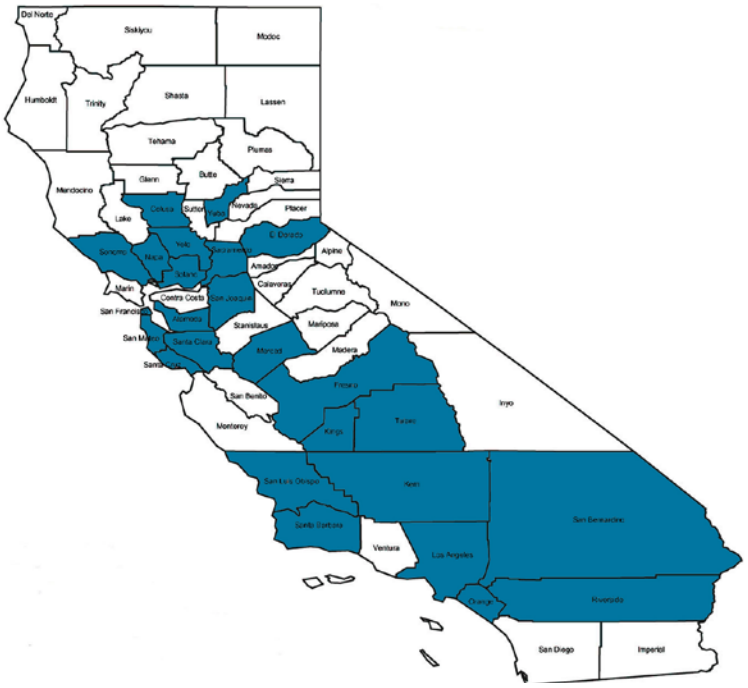


Figure 1: Map of 2007 Healthy Kids Counties

As of December 2007, Children's Health Initiatives (CHIs) with Healthy Kids insurance programs were in operation in 26 California counties providing health care coverage to over 82,000 children. CHIs are locally based programs established to ensure that all children have comprehensive health care coverage. The CHIs conduct extensive outreach and enrollment to maximize utilization of Medi-Cal and Healthy Families.

However, for those children up to 300% of the federal poverty level[1] who are not eligible for Healthy Families or Medi-Cal, the CHIs provide coverage through the Healthy Kids program. Healthy Kids coverage is very similar, if not identical, to Healthy Families and includes medical, dental and vision coverage.

Of the 22 counties that had enrollees with a continuous year of enrollment for the entire 2007 year, all but three of the CHIs contracted with Delta Dental as their dental plan. Los Angeles contracts with Safeguard, while San Bernardino and Riverside Counties contract with Western Dental through the Inland Empire Health Plan. Two of the CHIs cover multiple counties: the Partnership Health Plan covers Napa, Solano, Sonoma and Yolo Counties; the Sacramento Region is composed of Sacramento, Colusa, El Dorado and Yuba Counties. All programs covered children through age 18, except for San Francisco which covered young adults through age 25. In total, there were 69,758 children who were continuously enrolled during calendar year with no more than a 45-day break in coverage.

[1] San Mateo CHI covers up to 400% of the federal poverty level.

Methodology

Upon securing releases of information from each of the study CHIs, researchers obtained electronic utilization records for all services provided to Healthy Kids enrollees from the three dental plans and enrollment data for calendar year 2007 for each of the study Children's Health Initiatives. The electronic utilization records for each CHI were analyzed to determine number of children who received any dental service, preventive services, and restorative services by age. Types of service were identified from dental plan data using the Current Dental Terminology (CDT)[2] Code from the American Dental Association's Code on Dental Procedures and Nomenclature that identifies 12 general categories for services: diagnostic, preventive, restorative, endodontics, periodontics, prosthetics, MFO prosthetics, implants, prosthetics fixed, oral surgery, orthodontics, and adjunctive general. Enrollment data were used to calculate utilization rates based on the number of "eligible" children using the national standards developed for HEDIS[3] measures. An "eligible" child was defined as one who was continuously enrolled for at least 11 months of the year with no more than a 45 day break in coverage. Children who turned 19 during the study period are included in the sample.

Note on data from the dental plans: Delta Dental pays its providers on a fee-for-service basis, i.e., all dentists bill for specific services provided to individual patients. Safeguard pays its non-specialty providers on a capitated basis, i.e., the dentist receives a fixed monthly fee for all services provided to patients that have been assigned to the practice by the dental plan. Specialists are paid by Safeguard on a fee-for-service basis. Western Dental employs dentists directly in its practices. The difference in payment methodologies resulted in differing submission rates for utilization data. Under the fee-for-service model, a dentist's payment is based upon the number and types of services provided, so the billing submissions are an excellent indicator of the services provided. Under the other plans, the submission of utilization data is a separate step from the billing process. Thus, there is less likelihood that a dentist will submit complete utilization data. It is not known what the non-submission rate is for the non-fee-for-service plans. For this reason, the utilization data from the fee-for-service plans and the non-fee-for-service plans are not comparable, therefore they are presented separately.

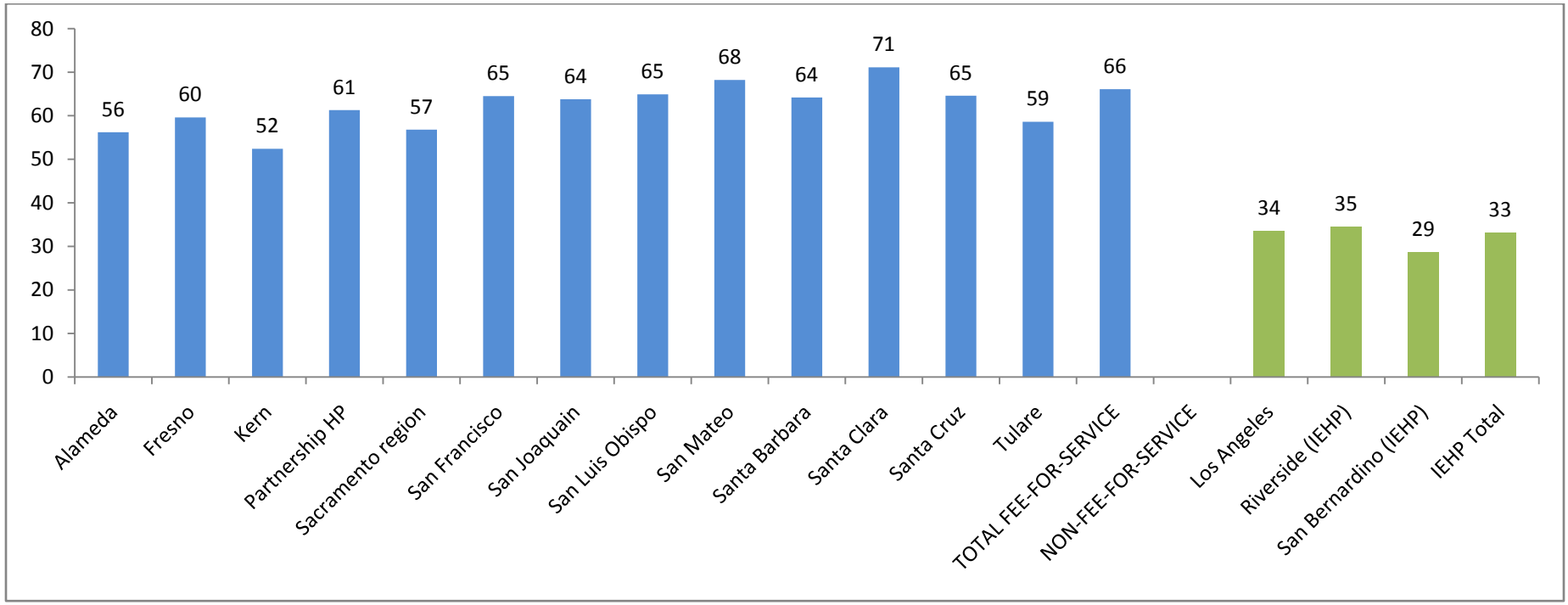
Analysis of this data was approved by the Institutional Review Board at the University of Southern California.

[2] CDT codes are a standardized coding system used to record information about dental treatment procedures and services, and to provide data to agencies involved in adjudicating insurance claims (http://www.ada.org/ada/prod/catalog/cdt/index.asp)

[3] HEDIS is the health plan performance measurement of the National Committee for Quality Assurance, which establishes standardized measures for health plan quality. The only measure for dental plan quality is based upon whether an enrollee had a visit in the past year (http://www.ncqa.org/tabid/59/Default.aspx)

Figure 2: Percent of Continuously Enrolled Children with a Dental Visit – Ages 2-18

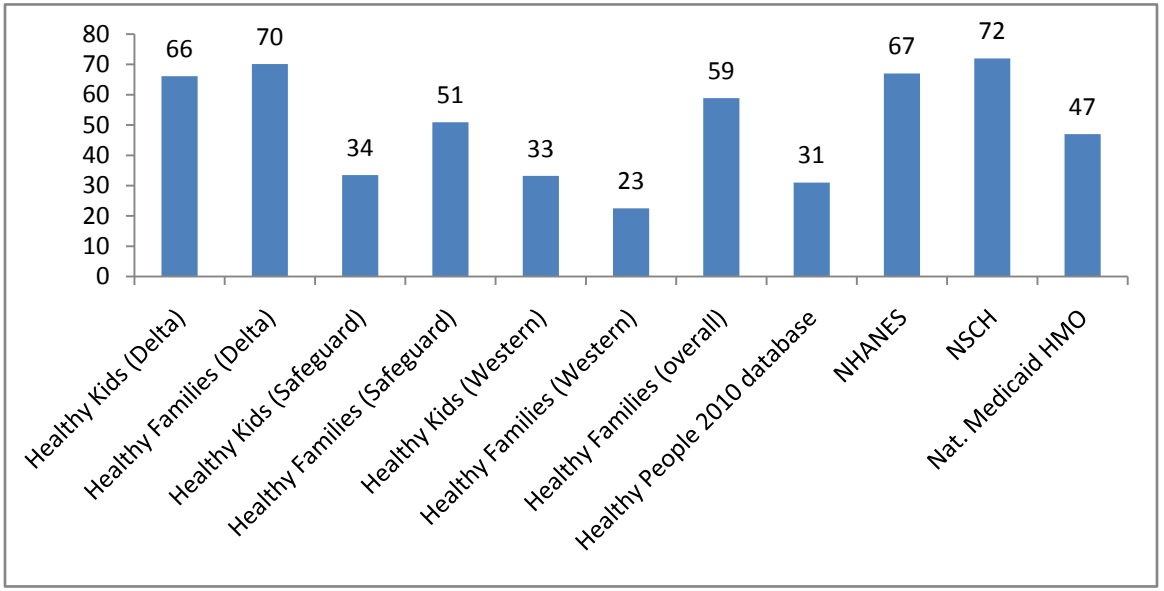
Overall, two thirds of children in fee-for-service plans had a dental visit; non-fee-for-service plans reported that one-third of children had a dental visit



Comments: For 2-18 year olds, the overall percentage of children who had a dental visit in fee-for-service plans was 66%. Among these plans, Santa Clara had the highest utilization (71%) and Kern had the lowest (52%). In the non-fee-for-services plans, the utilization rates were much lower, but as noted in the methodology section these rates are affected by the number of services that are actually reported to the dental plans.

Figure 3: Percent of Children with a Dental Visit – Comparison with Various Plans and Surveys

Overall, Healthy Kids fee-for-service plans had comparable utilization to other similar public plans



California Healthy Families: 59% of 2-18 year olds overall had a visit in 2007; for those in Delta Dental: 70% had a dental visit, Safeguard enrollees: 51% had a visit, and for Western Dental: 23% had a visit. [4]

National Healthy People 2010 Database: 31% of children ages 2-10 under 200% FPL had a dental visit in past year.[5]

National Health and Nutrition Examination Survey (NHANES): 67% of children ages 2-17 had a dental visit in the past year. [6]

National Survey of Children's Health: 72% of 1-17 year olds in the US had a dental visit while 71% had a dental visit in California.[7]

National Medicaid HMO Average: 47% of 4-18 year olds.[8]

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[4] California Managed Risk Medical Insurance Board, Healthy Families Program 2007 Dental Quality Report, Retrieved 06/25/2009 from http://mrmib.ca.gov/MRMIB/HFP/2007_Dental_Quality_Report.pdf.

[5] CDC, Healthy People 2010 Database, Retrieved 06/26/2009 from http://wonder.cdc.gov/data2010/focus.htm.

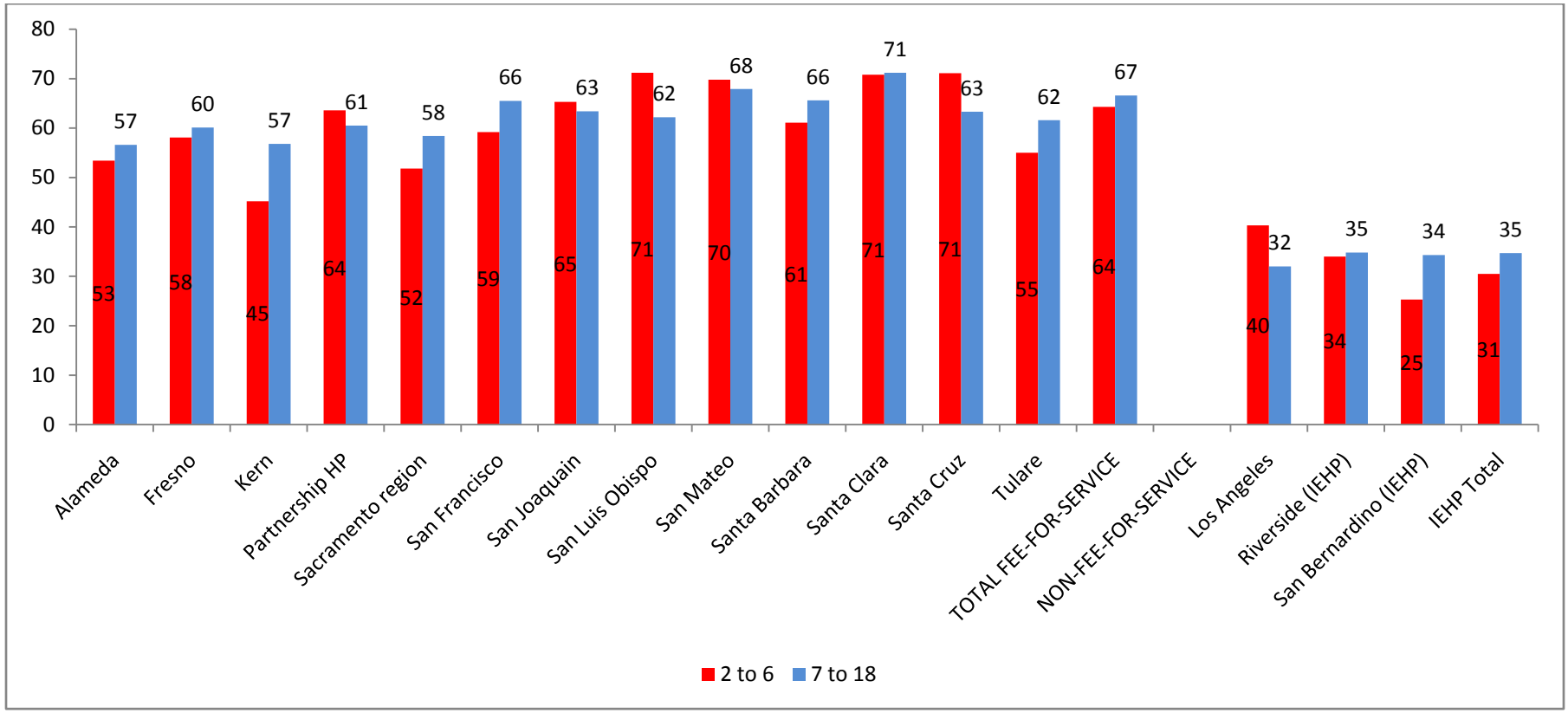
[6] National Health and Nutrition Examination Survey (NHANES), 1999-2002

[7] Child and Adolescent Health Measurement Initiative. *2003 National Survey of Children's Health*, Data Resource Center for Child and Adolescent Health website. Retrieved 05/09/2009 from www.nschdata.org.

[8] National Committee for Quality Assurance, HEDIS 2008 Audit Means, Percentiles and Ratios, Retrieved 06/25/2009 from http://ncqa.org/tabid/334/Default.aspx.

Figure 4 : Percent of Children with a Dental Visit – Ages 2-6 and 7-18

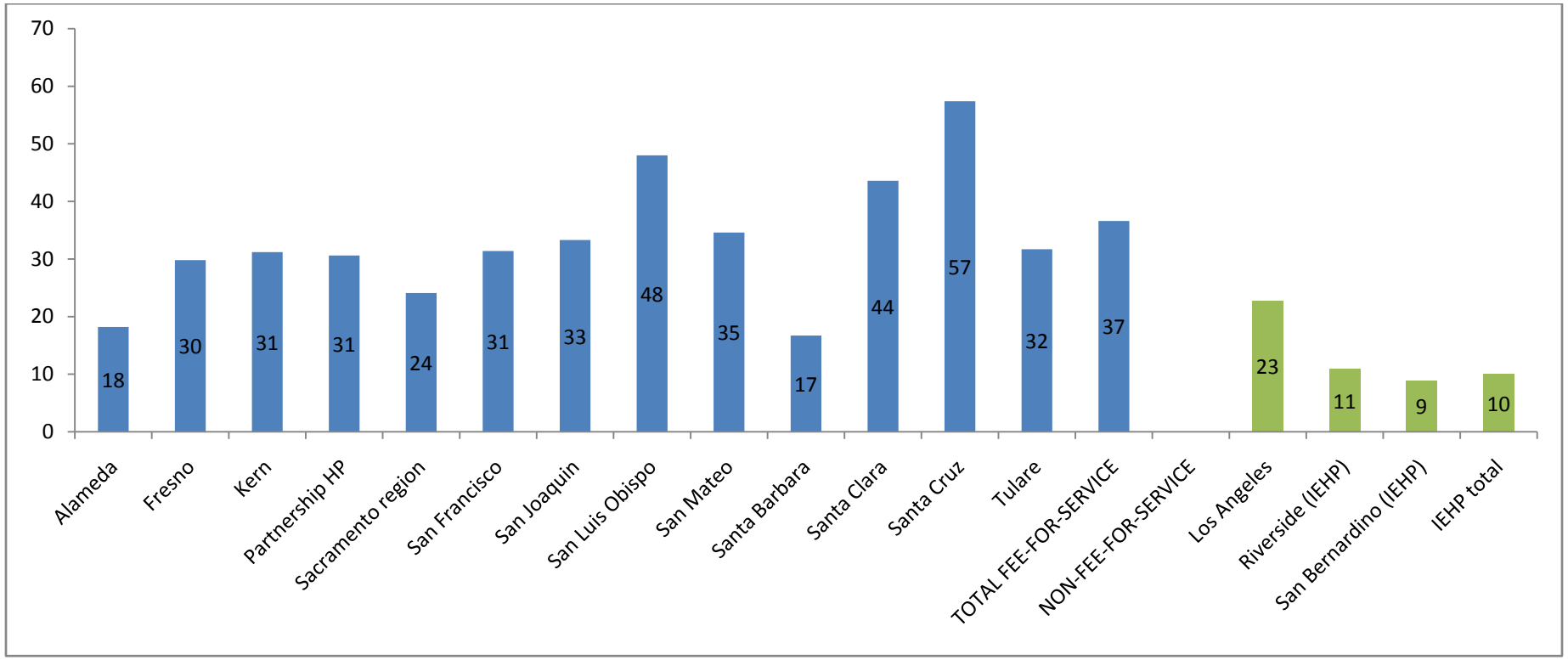
Overall, two thirds of older children in fee-for-service plans received a visit, with slightly fewer younger children having a dental visit



Comments: Overall in the fee-for-service plans there were similar utilization rates among younger and older children, with some notable differences in the individual CHIs. For the non-fee-for-service plans, more younger children had reported encounters in Los Angeles, and few in the Inland Empire.

Figure 5: Percent of Children with a Dental Visit – Ages 2-3

The youngest children, ages 2-3 received the fewest visits overall

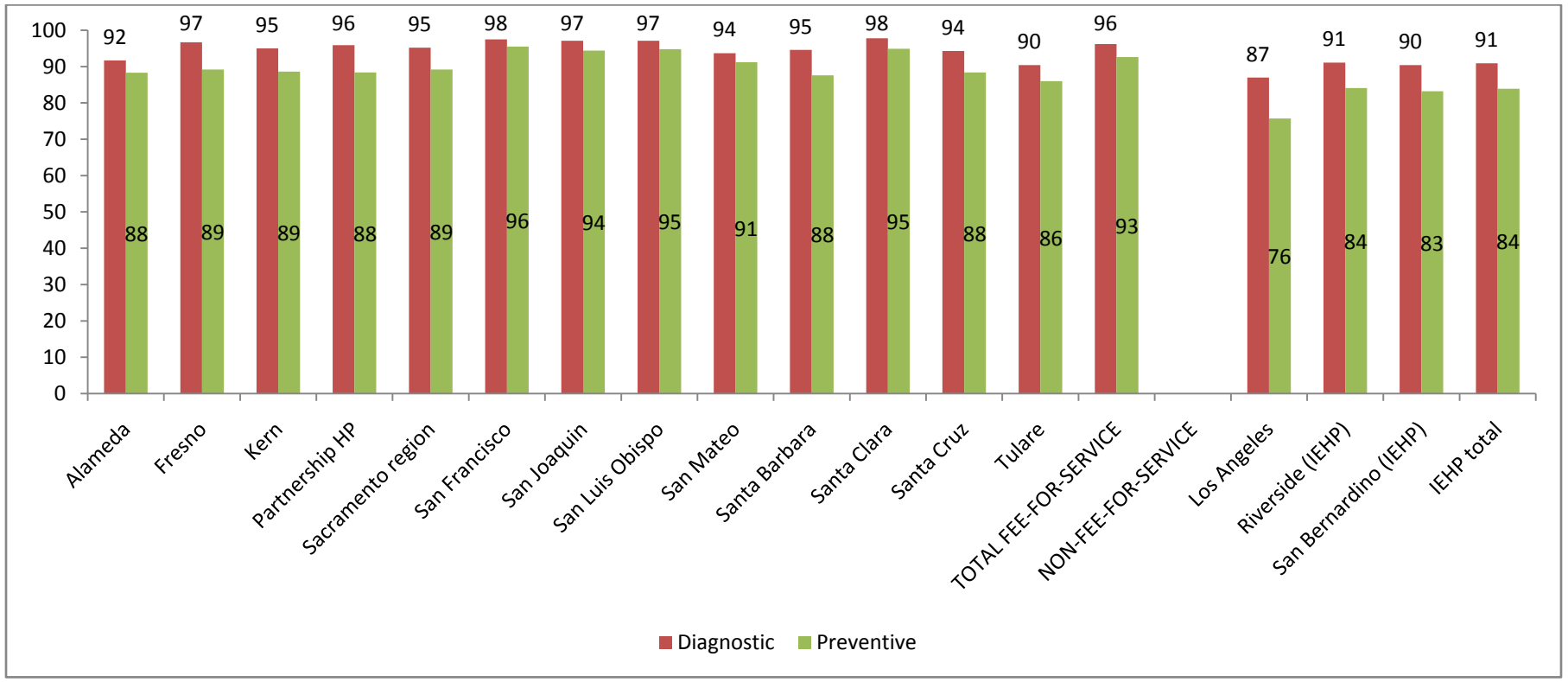


Comments:

Younger children should be going to the dentist at earlier ages. Both the American Academy of Pediatrics and the American Academy of Pediatric Dentistry recommend a dental visit for high-risk children by age one. Nearly all Healthy Kids enrollees would be considered high risk due to their income status. CHIs could engage in more outreach to parents of younger children and consider linking children with a dental provider when enrolling in the Healthy Kids program.

Figure 6: Types of Services Received by Children with a Dental Visit – Ages 2-18

Nearly all children received diagnostic and preventive services

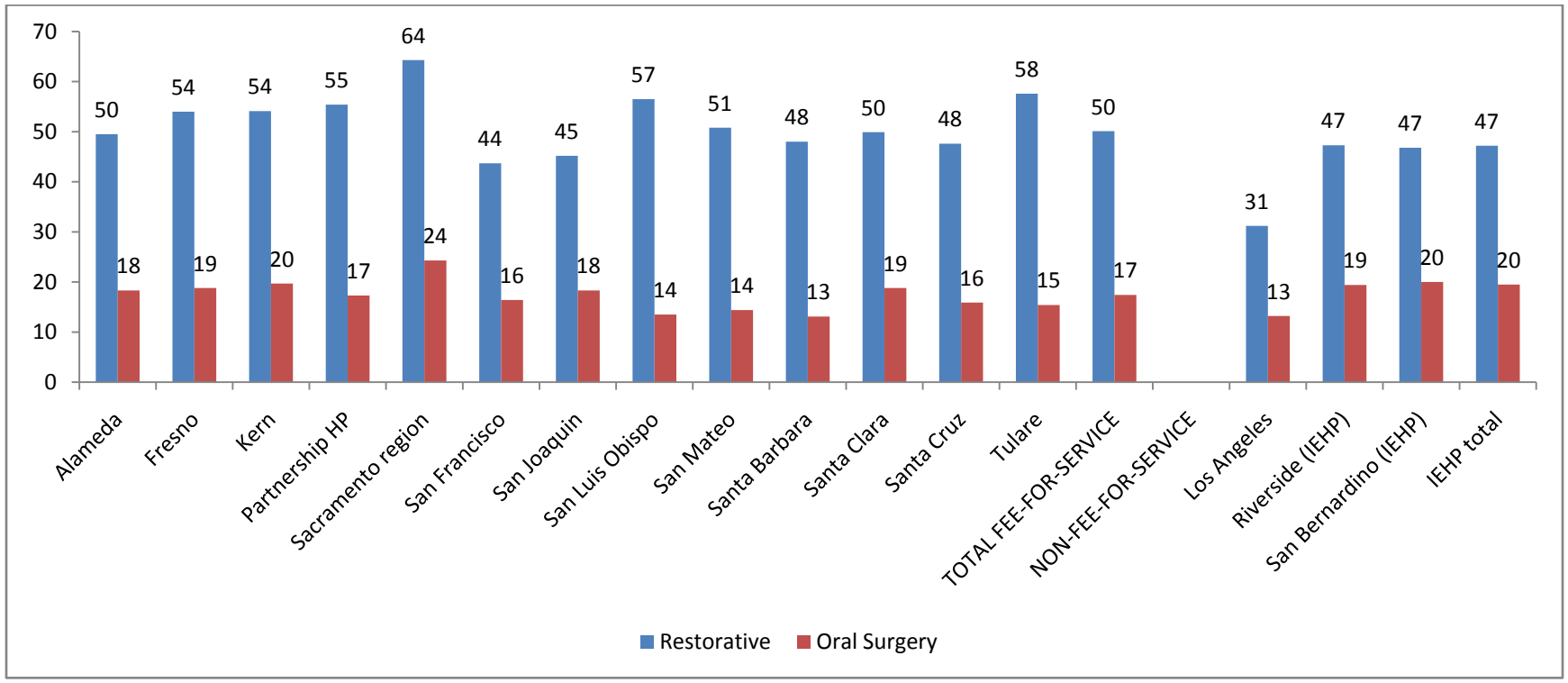


Comments:

Nearly all children received a diagnostic service, and slightly fewer received preventive services.

Figure 7: Types Of Services Received by Children with a Dental Visit – Ages 2-18

A sizable percentage of children received restorative and oral surgery services

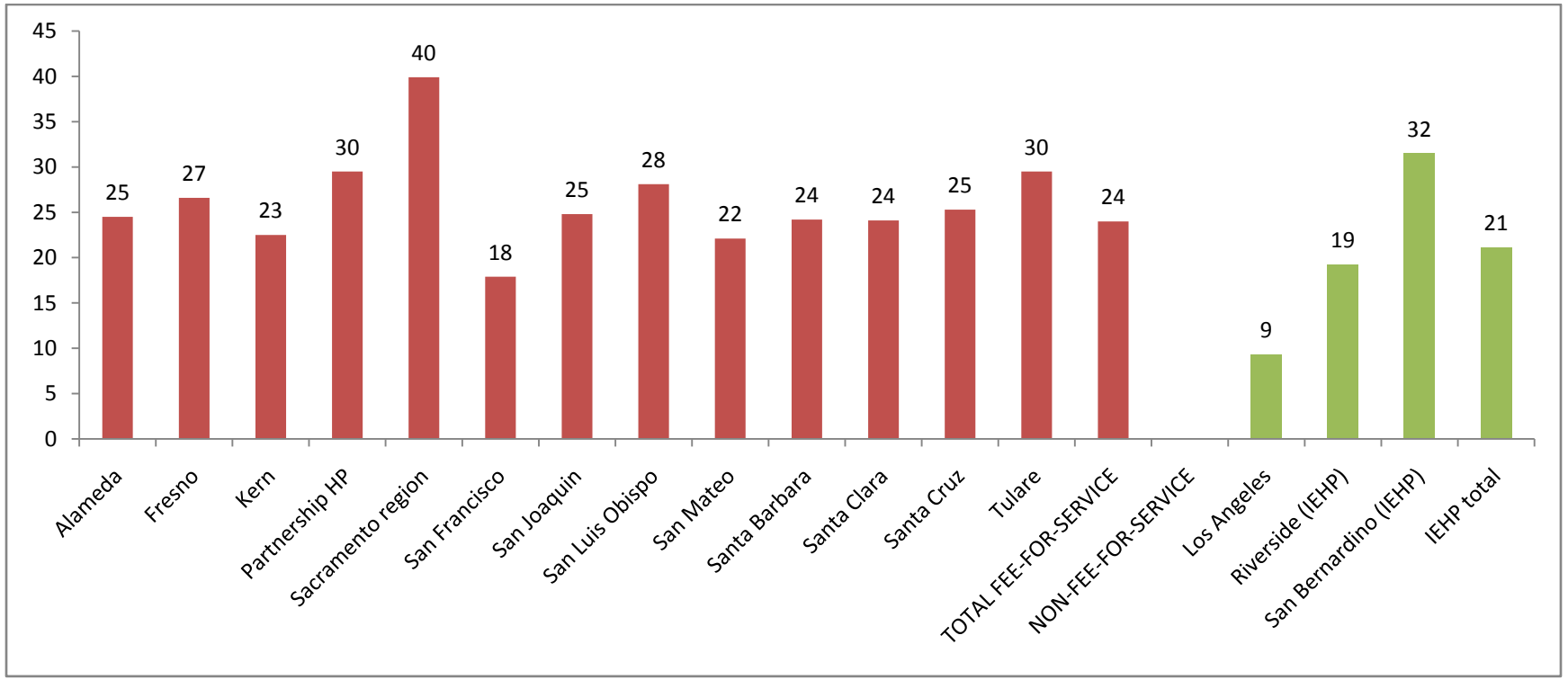


Comments:

Among children who had a dental visit, there is great variability among plans in the types of services the children received. For instance, the rates of oral surgery in the fee-for-service plans ranged from 24% in the Sacramento region to 13% in Santa Barbara. Similarly, a higher percentage of children in the Sacramento region received restorative services (64%) than in Santa Barbara (48%) and Santa Cruz (48%).

Figure 8: Types Of Preventive Services Received by Children with a Dental Visit – Ages 6-18

A small percentage of children received dental sealants, a proven preventive measure

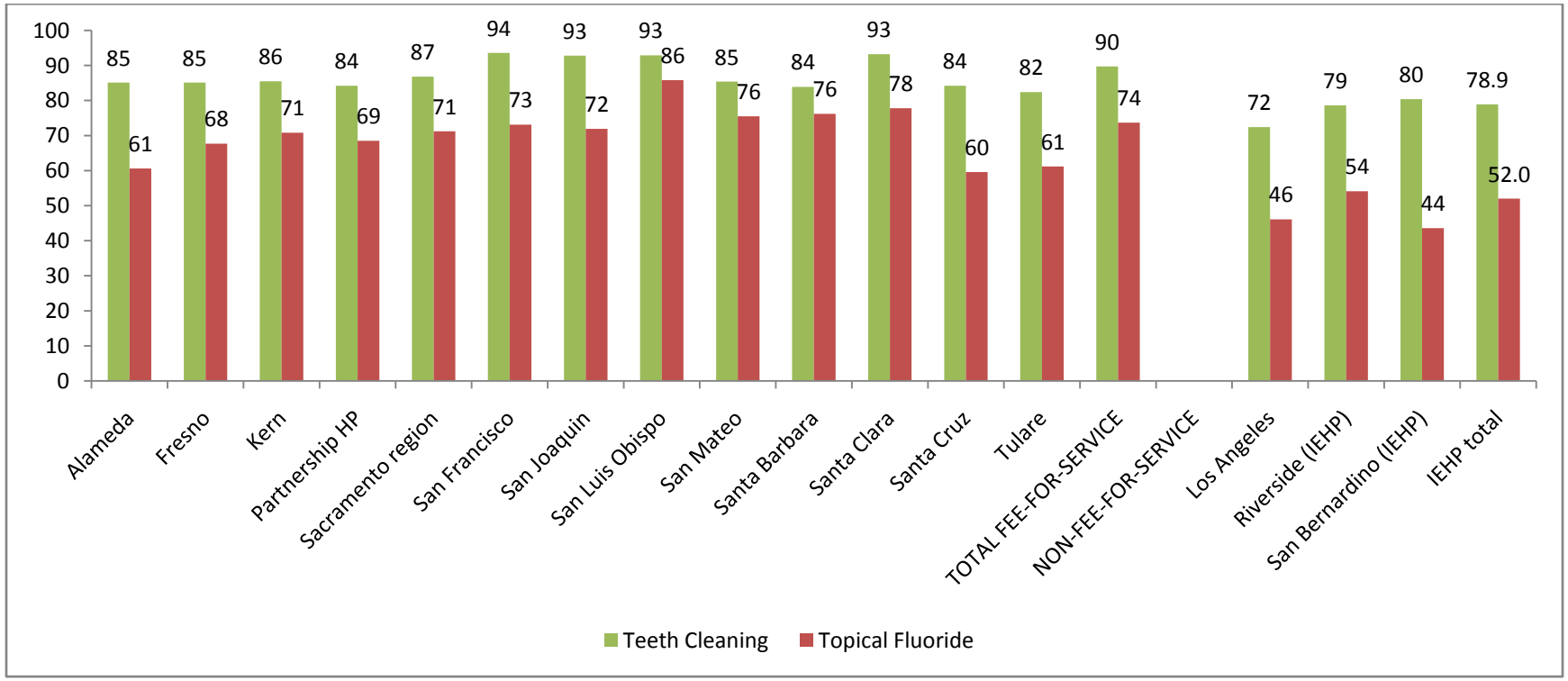


Comments:

Dental sealants are an effective preventive service and more children should be receiving them. There is great variability among the fee-for-service plans for utilization of dental sealants ranging from 18% in San Francisco to 40% in the Sacramento region.

Figure 9: Types of Preventive Services Received by Children with a Dental Visit – Ages 2-18

Most children had their teeth cleaned, with fewer receiving topical fluoride treatments



Comments:

Topical fluoride is a proven, effective preventive treatment that can be applied to children multiple times during the year, at the dentist's office, at the doctor's office and in other settings. Its utilization can be increased.

RECOMMENDATIONS

Although Healthy Kids utilization rates are comparable to other similar programs and national data, more efforts can be made to ensure that very young children have a dental visit and establish a dental home by age one. In particular:

1. CHIs maintain accurate lists of dentists that accept Healthy Kids and the ages they treat.
2. CHIs should develop a relationship with dentists that accept Healthy Kids and link families to dentists.
3. In communities where language barriers exist between dentists and parents, CHIs should develop a translation service that parents can use to make dental appointments.
4. On enrollment, CHIs should give parents information on the importance of a dental visit and encourage them to take their children to a dentist as soon as possible.
5. On renewal, CHIs should ask parents if their child had a dental visit and if not find out why.
6. Written information sent to parents should always stress key oral health messages, including prevention.
7. CHIs should link up pediatric providers with dental providers who are willing to see Healthy Kids enrollees.

Dental providers should maximize the use of topical fluoride treatments for all children and sealants for older children.

Data reporting needs to be improved for the non-fee-for-service plans since there is an apparent underreporting of encounters and services by the providers who are paid on a capitated, rather than a fee-for-service basis.