



San Francisco  
Health Network

SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

**CavityFree** <sup>SF</sup>

# Capacity of Dental Clinics in San Francisco to Serve Children Ages 0-5 years With Denti-Cal Insurance in Summer 2018: A Cross sectional survey

**San Francisco Department of Public Health (SFDPH)**

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# BACKGROUND:

- Children's oral health is an important part of a child's overall health<sup>1</sup>
- Tooth decay is the most common chronic childhood disease. <sup>1</sup> Worldwide, 60–90 percent of school children have dental cavities <sup>2</sup>
- Low-income children and race-ethnic minorities have disproportionately higher tooth decay rates<sup>1</sup>
- Dental pain related to tooth decay is also a major reason for school absenteeism<sup>3</sup>
- Children with untreated decay have more missed school days and lower academic performance<sup>3</sup>
- Tooth decay is largely preventable with relatively inexpensive and efficient intervention
- Once a cavity is formed it can only be healed by treatment
- **Developing preventive oral health habits early in life such as regular dental care and oral hygiene practices** including: daily tooth brushing with fluoridated toothpaste, drinking fluoridated tap water, eating a healthy diet, low in fermentable sugars, lead to better oral and overall health later in life <sup>1, 2</sup>

1. Centers for Disease Control and Prevention (CDC). Children's Oral Health. [https://www.cdc.gov/oralhealth/children\\_adults/child.htm](https://www.cdc.gov/oralhealth/children_adults/child.htm)

2. World Health Organization (WHO). Oral health fact sheet. [http://www.who.int/oral\\_health/publications/factsheet/en/](http://www.who.int/oral_health/publications/factsheet/en/)

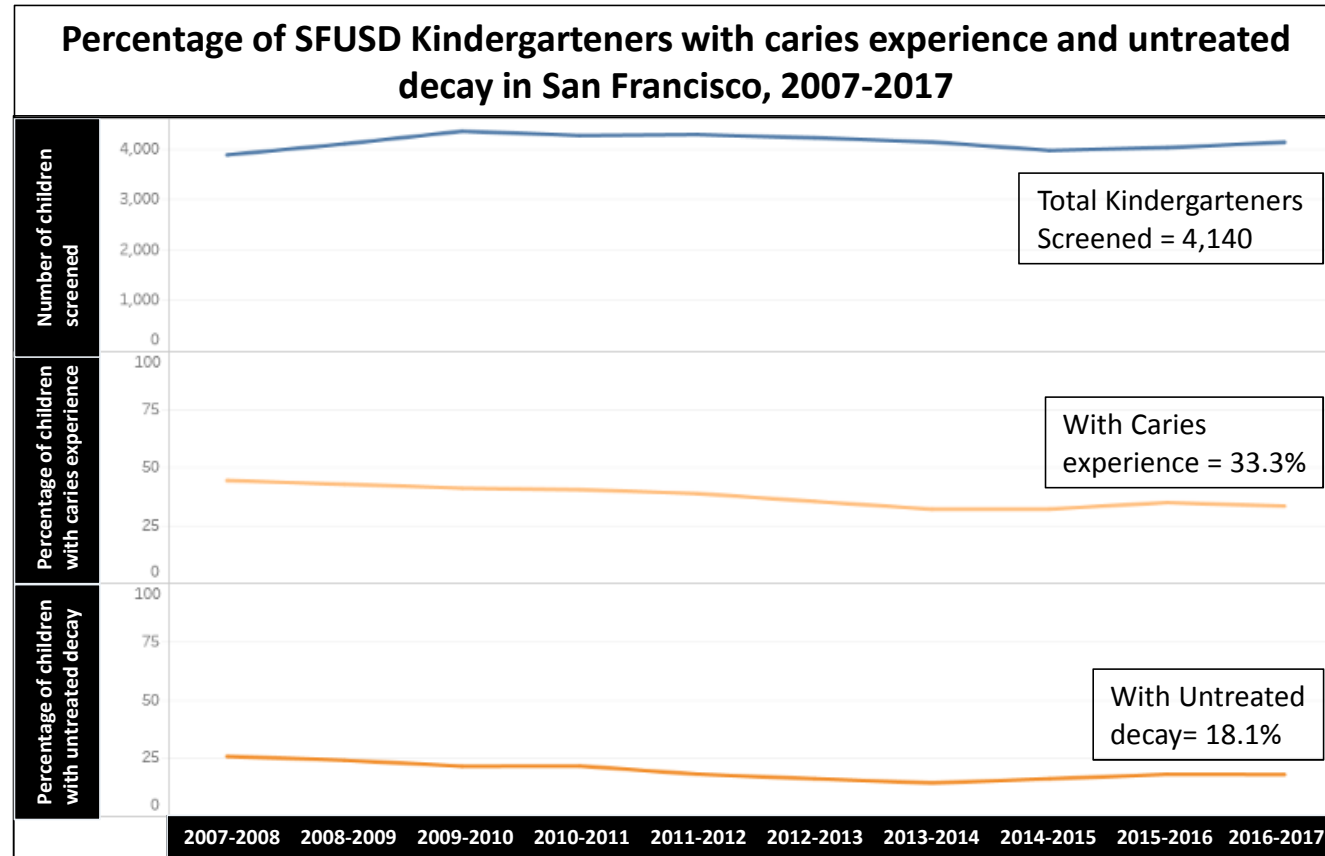
3. Jackson SL, Vann WF, Kotch JB, Pahel BT, Lee JY. Impact of Poor Oral Health on Children's School Attendance and Performance. American Journal of Public Health. 2011;101(10):1900-1906. doi:10.2105/AJPH.2010.200915

# BACKGROUND:

SFUSD - SFDPH\* data show that by the time children have reached Kindergarten:

- 1/3<sup>rd</sup> have experienced dental decay
- 1/5<sup>th</sup> have untreated decay

\*SFUSD: San Francisco Unified School District  
\*SFDPH: Oral Health Screening Program



# BACKGROUND:

- *San Francisco Community Health Needs Assessment*, in Spring and Summer 2018, identified limited access to dental care as a prevalent risk factor for children under age 5
- A list from the California Department of Health Care Services (DHCS), accessed in Summer 2018, indicated that 37 dental clinics in San Francisco accepted Denti-Cal eligible children. The clinics were unevenly distributed across San Francisco<sup>1</sup>
- An estimated 18,342 Denti-Cal eligible, 0 to 5 year old, children live in San Francisco; 9,179 children ages 3 to 5 years and 9,163 children ages 0 to 2 years<sup>2, 3</sup>
- Not all 37 dental clinics on the DHCS list serve Denti-Cal eligible children *ages 0 to 5 years*

**Data Source:**

1. [https://www.denti-cal.ca.gov/Beneficiaries/Denti-Cal/Provider\\_Referral\\_List/](https://www.denti-cal.ca.gov/Beneficiaries/Denti-Cal/Provider_Referral_List/)
2. <https://data.chhs.ca.gov/dataset/test-dhcs-utilization-measures-and-sealant-data-by-county-calendar-year-2013-to-2015>
3. <http://in-sfghtableau/#/views/MCAHPILOTDenti-CalDentalProceduresSFage0-20/Denti-CalbyCustomAge?iid=1>

## OBJECTIVE:

- To describe the capacity of dental clinics in San Francisco to provide dental care to 0 to 5 year old Denti-Cal eligible children
  - Dental care includes oral health education, clinical preventive care and clinical dental treatment.

## SPECIFIC AIMS:

To answer 19 survey questions including :

- How many **Full Time Equivalent (FTE) dentists** treat children 0 to 5 year old in San Francisco? (*1 FTE = 4days/week, 1/2 FTE = 2 days/week*)
  - Describe shortage of FTE dentists by Zip Code
- What are the **wait-times** to get an appointment to see a dentist for a regular dental check-up?
- **How many children** ages 0-2 and 3-5 years are seen per week?
- What **preventive services** are offered?
- For what treatments are children **referred out** to other specialized dental clinics?

# METHODS:

- **Study Design:** Cross-sectional survey
- **Eligibility:** Managers of dental clinics that accept Denti-Cal patients, according to the list maintained by the California Department of Health Care Services (DHCS)<sup>1</sup>
- **Exclusion criteria:** Clinics that serve adults only
- **Procedure:** A questionnaire was sent out to the manager of each eligible dental clinic via online survey in the last week of May, 2018. Reminders were sent out twice via email in each month, June and July. Reminders phone calls were made in the first week of August and survey was closed in the second week of August to meet the Community Health Needs Assessment deadline. A \$50 Safeway Gift card was offered as an incentive to non-anonymous participants. Participants could choose to remain anonymous
- **Data collection:** The questionnaire included 19 questions, which are each described in the following slides. The managers self-reported answers to all 19 questions
- **Estimated time to completion:** 7 minutes
- **Analysis:** Simple descriptive statistics for each question are described

1. [https://www.denti-cal.ca.gov/Beneficiaries/Denti-Cal/Provider\\_Referral\\_List/](https://www.denti-cal.ca.gov/Beneficiaries/Denti-Cal/Provider_Referral_List/)

# SURVEY RESULTS

# RESPONSE RATE

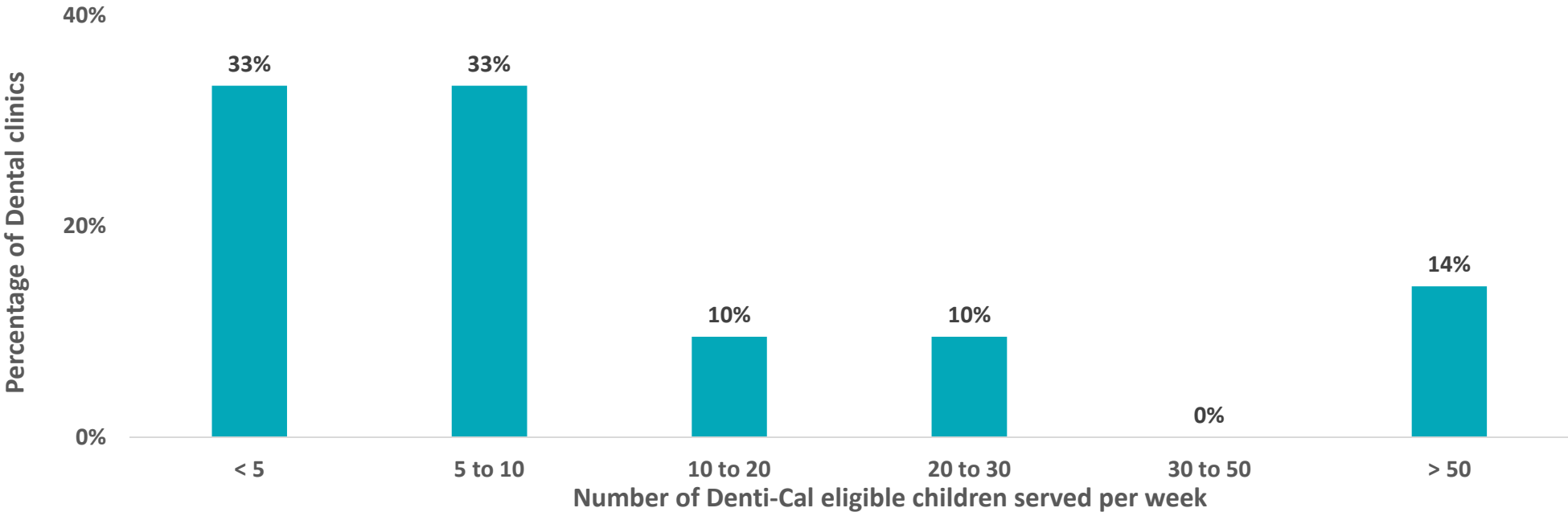
- **Clinics on DHCS list** = 37 dental clinics
- **Excluded** = 2 adult clinics
- **Eligible** = 32 clinic managers at 35 dental clinics
  - **Note:** Some clinic managers represent multiple clinics
- **Responses** = 21 clinic managers representing 24 dental clinics
- **Unable to reach** = 1 clinic manager
- **Response rate:** 66% of managers, regarding 69% of clinics



# Question 1

- 66% of the dental clinics saw less than 10 Denti-Cal eligible children ages 0 to 2 years per week

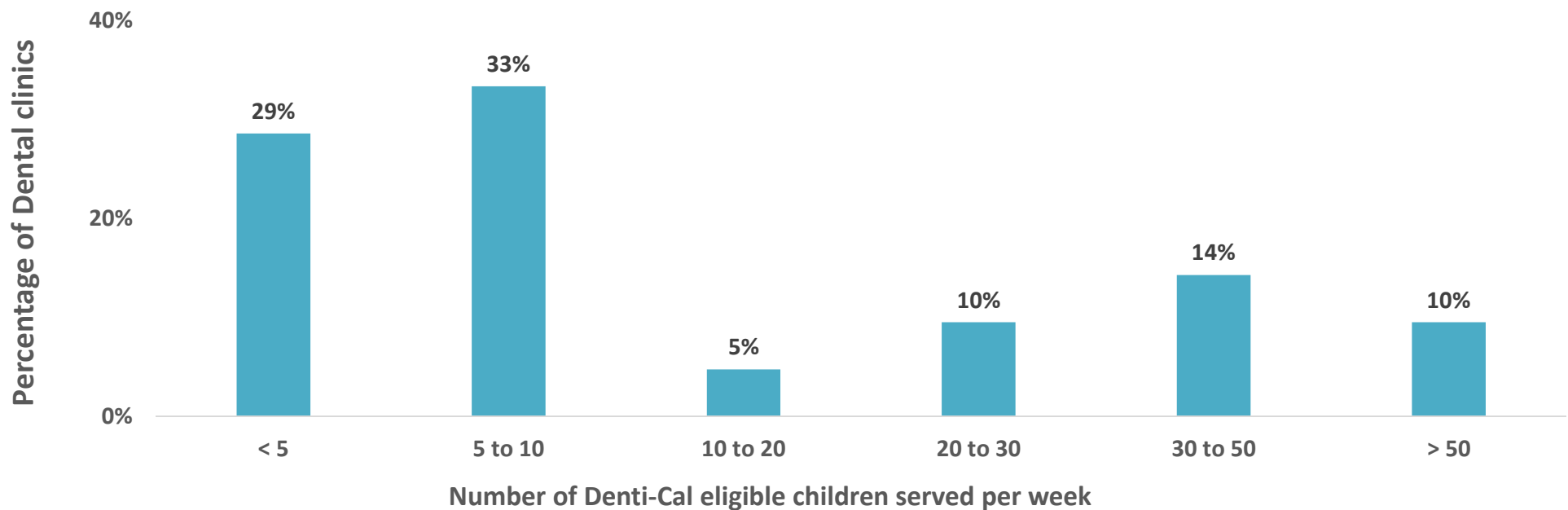
In the past month about how many 0 to 2 year old children with Denti-Cal did your dental office serve (including preventive services and/or restorative services) every week?



## Question 2

- 62% of the dental clinics saw less than 10 Denti-Cal eligible children ages 3 to 5 years per week

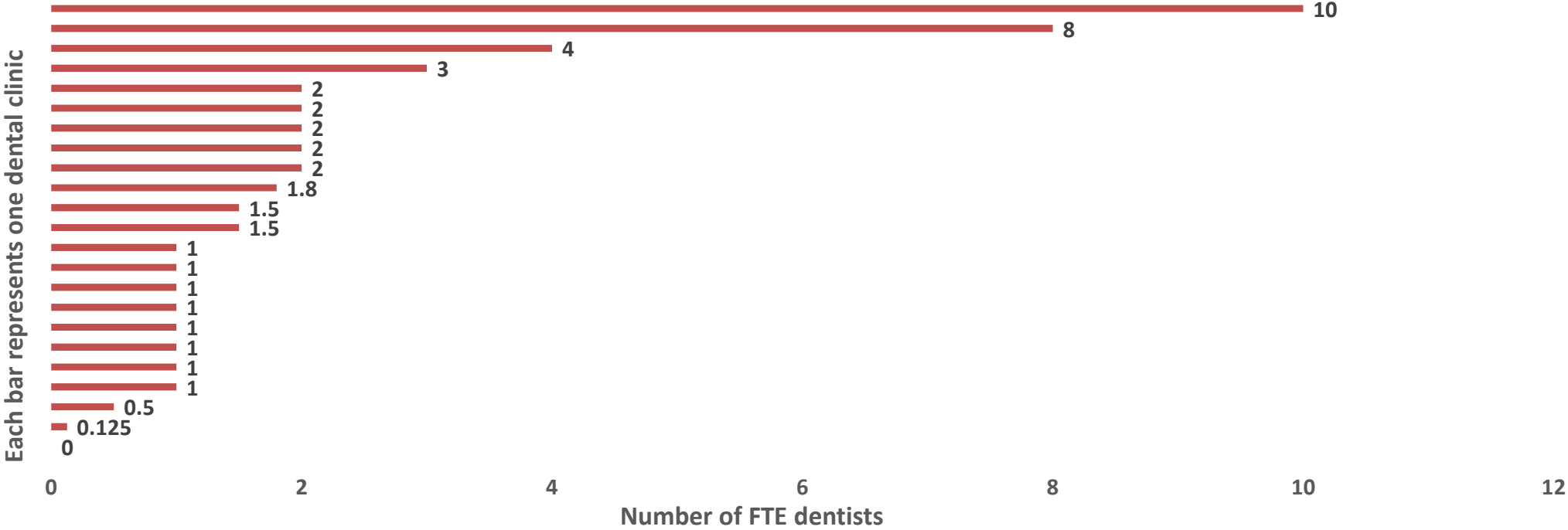
In the past month about how many 3 to 5 year old children with Denti-Cal did your dental office serve (including preventive services and/or restorative services) every week?



# Question 3

- There were 48 FTE dentists at clinics that accepted Denti-Cal eligible children
- 6 FTE dentists were not currently accepting new patients
- **42 FTE dentists** were available to serve **18,342 Denti-Cal eligible** children ages 0 to 5 years in San Francisco

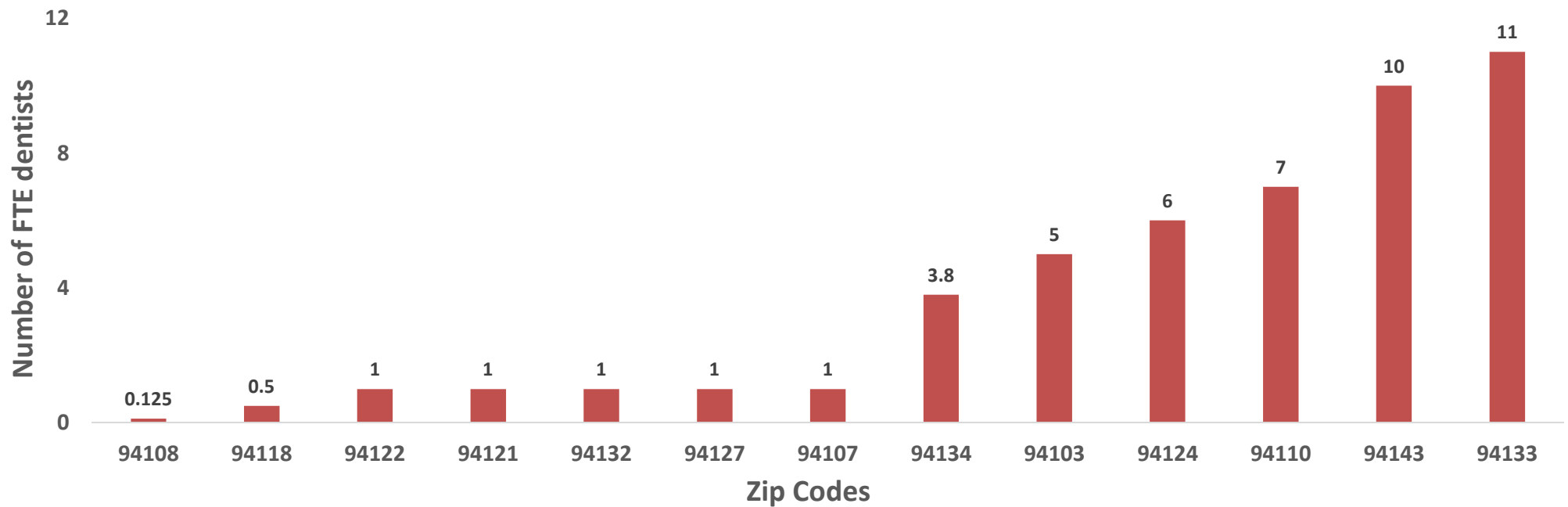
How many FTE (Full Time Equivalent) Dentists treat children in your clinic? (1 FTE = 4 days/week; 1/2 FTE = 2 days/ week)



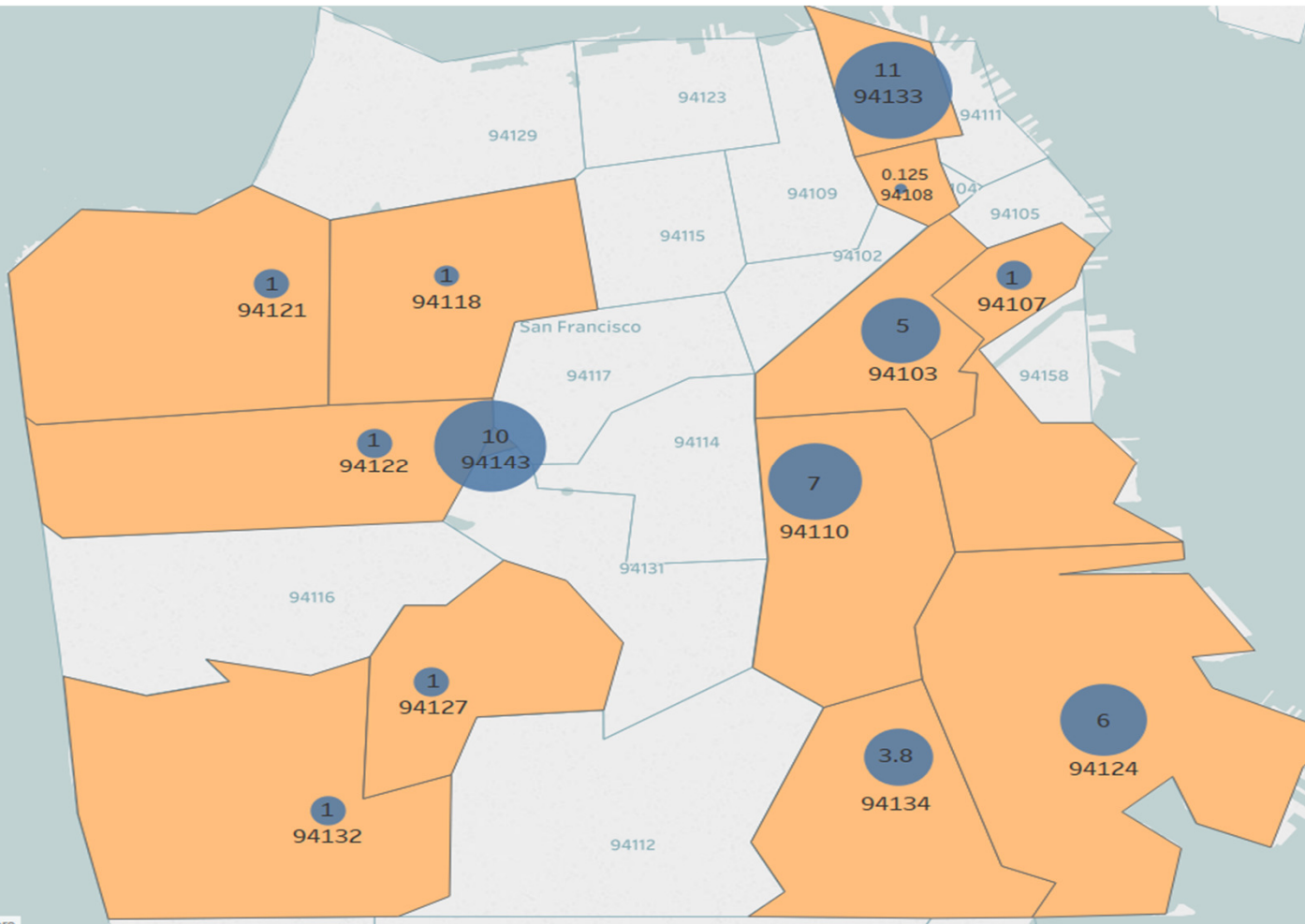
# Question 4

- The number of FTE dentists who accepted Denti-Cal eligible children ages 0 to 5 years varied by zip code
- Zip code 94133 and 94143 had the most number of FTE dentists

What is your dental office zip code?



- FTE dentists serving Denti-Cal eligible children were unevenly distributed across San Francisco



**Bubbles in blue** represent the number of FTEs per zip code. Larger bubble size means more FTEs in that zip code.  
**Zip codes in orange** color represent zip codes that have dental providers treating Denti-Cal eligible children 0 to 5 year old.  
**Zip codes in white** do not have dental providers accepting Denti-Cal eligible children

## CALCULATION TO ESTIMATE THE NUMBER OF PEDIATRIC DENTISTS NEEDED TO SERVE 18,342 DENTI-CAL ELIGIBLE CHILDREN AGES 0 TO 5 YEARS

### CONSERVATIVE APPROACH 1:

- Working days in US = 208 (1FTE = 4 days/week)<sup>1</sup>
  - Average working weeks in US =  $208/7 = 30$  weeks/year
- 1 week = 8 patients/dentist (from slide 10 and 11)
  - 30 weeks (1 year) = 240 patients/dentist
- 240 patients/year = 1 dentist
  - 18342 patients/year = 76.4 dentists
- **We are short by  $76-42 = 34$  dentists**

1. <https://explorehealthcareers.org/career/dentistry/dentist/>
2. [http://www.aapd.org/resources/frequently\\_asked\\_questions/](http://www.aapd.org/resources/frequently_asked_questions/)

### CONSERVATIVE APPROACH 2:

- Working days in US = 208 (1FTE = 4 days/week)<sup>1</sup>
  - Average working weeks in US =  $208/7 = 30$  weeks/year
- 1 dentist = 8 patients/week
  - 42 dentists = 336 patients/week.
  - 42 dentists = 10080 patients, in 30 weeks (1 year).
- 10080 patients/year = 42 dentists
  - 18342 patients/year = 76.4 dentists
- **We are short by  $76-42 = 34$  dentists**

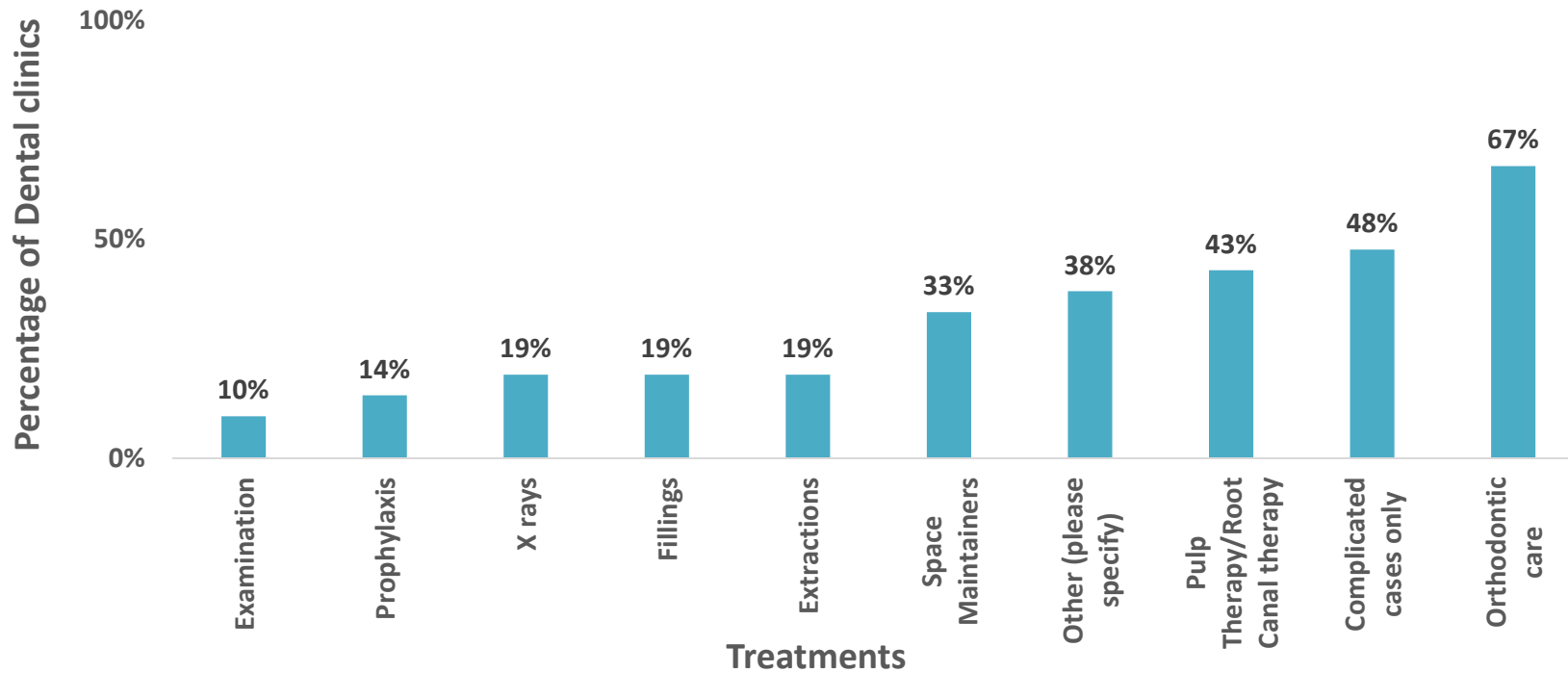
#### Assumptions for this conservative approach:

1. Only 1 visit per year (AAPD recommends twice per year)<sup>2</sup>
2. FTEs represent dentists only serving children 0 to 5 year old – In reality the Denti-Cal population includes older children, teens and adults

# Question 5

- 67% of the dental clinics referred out children for orthodontic care
- 48% of the dental clinics referred out for complicated cases

For what treatments do you refer your child patients out to other offices?



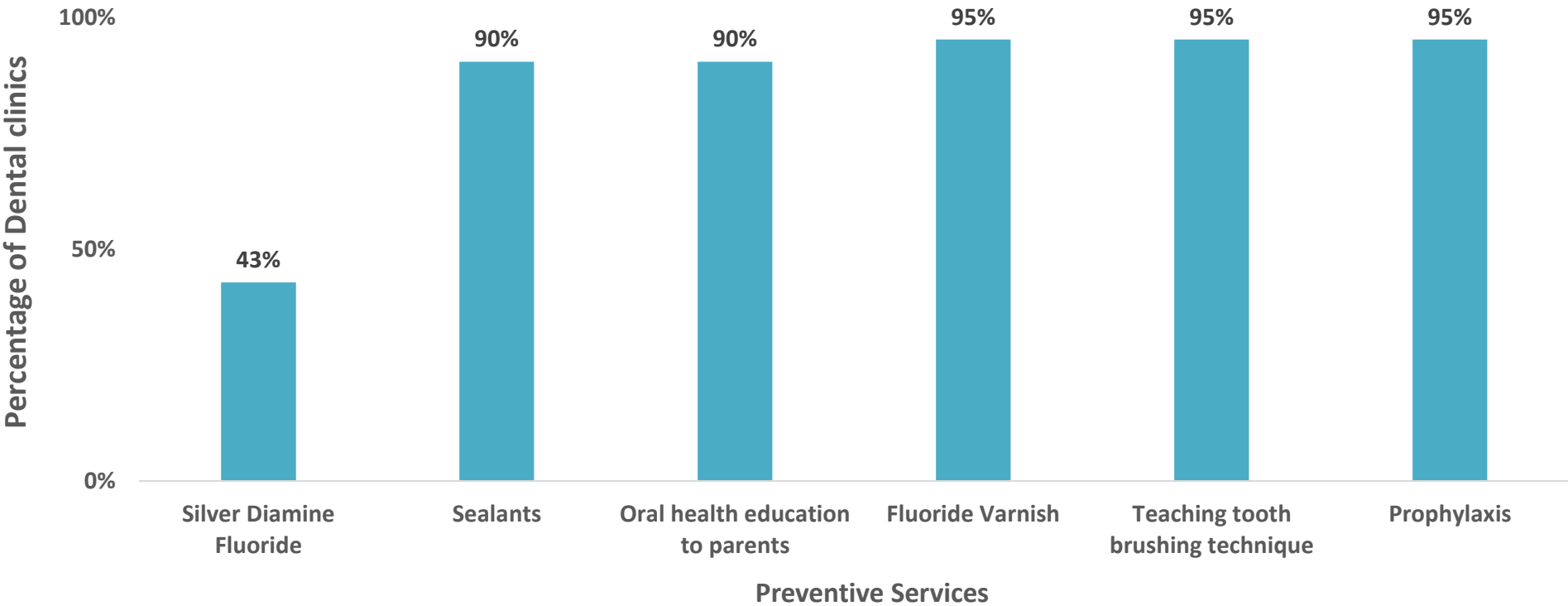
### Others included:

1. Sedation Tx
2. Specialty
3. uncooperative/apprehensive patients who may need nitrous or sedation
4. GA
5. uncooperative
6. Behavior management
7. wisdom teeth extraction, behavioral management

# Question 6

- 95% of the dental clinics offered fluoride Varnish, prophylaxis and teach brushing technique

What preventive services do you offer for children under age 5 at your office? (Check all that apply)

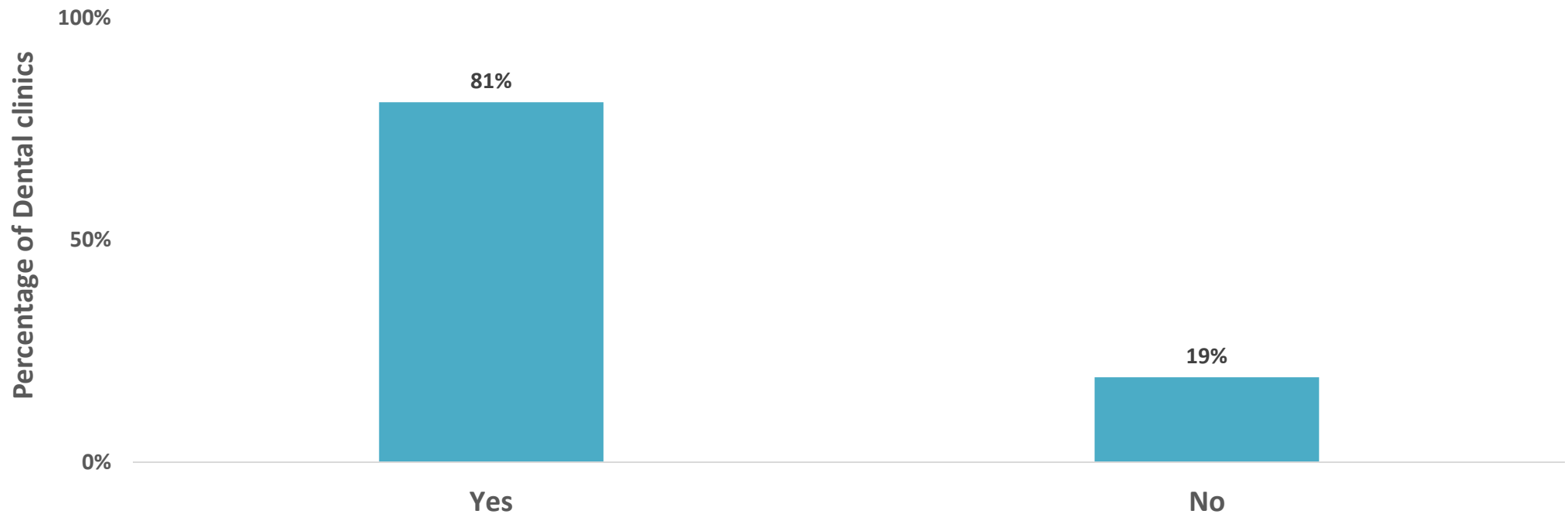




# Question 7

- 81% (17 clinics) of the dental clinics were accepting new Denti-Cal patients 0 to 5 year old
- 4 clinics were not accepting Denti-Cal patients at the time of survey

Are you accepting New Denti-Cal Patients (0 to 5 year old children) at this time?

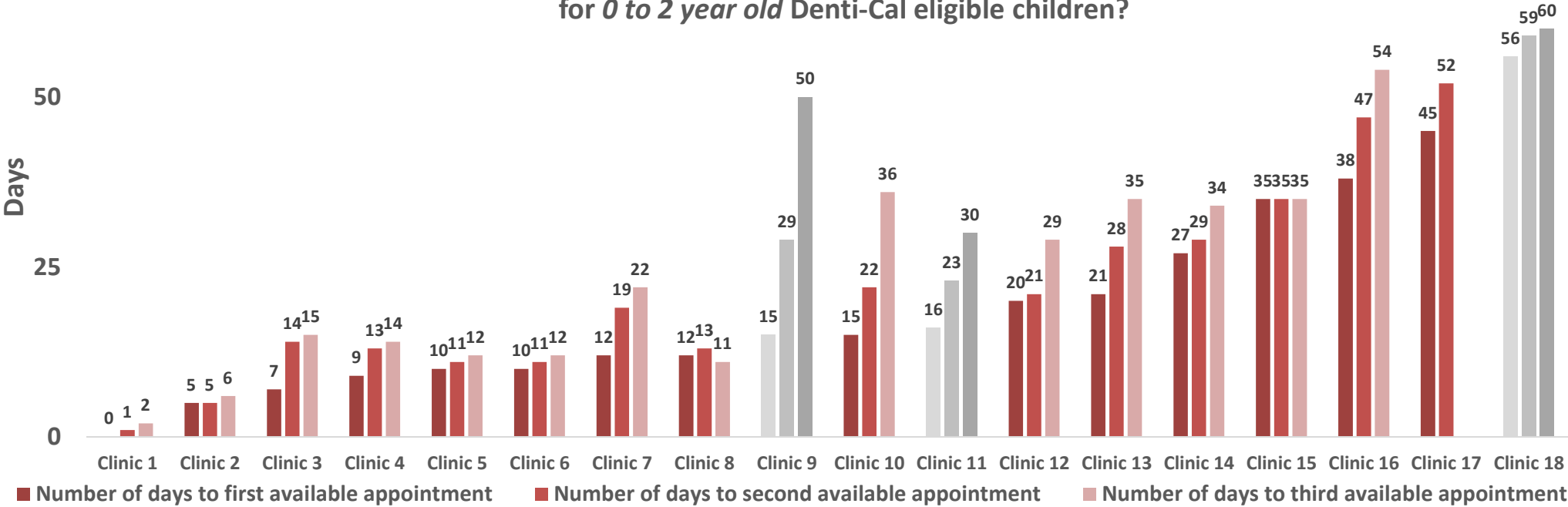


# Question 8

- 39% of the dental clinics had a wait time of 2 weeks or greater for the 1<sup>st</sup> available appointment
- Half of the clinics had a wait time of more than one month for the 3<sup>rd</sup> available appointment

75

How many days until the 1st, 2nd and 3rd available appointment for a check up for 0 to 2 year old Denti-Cal eligible children?

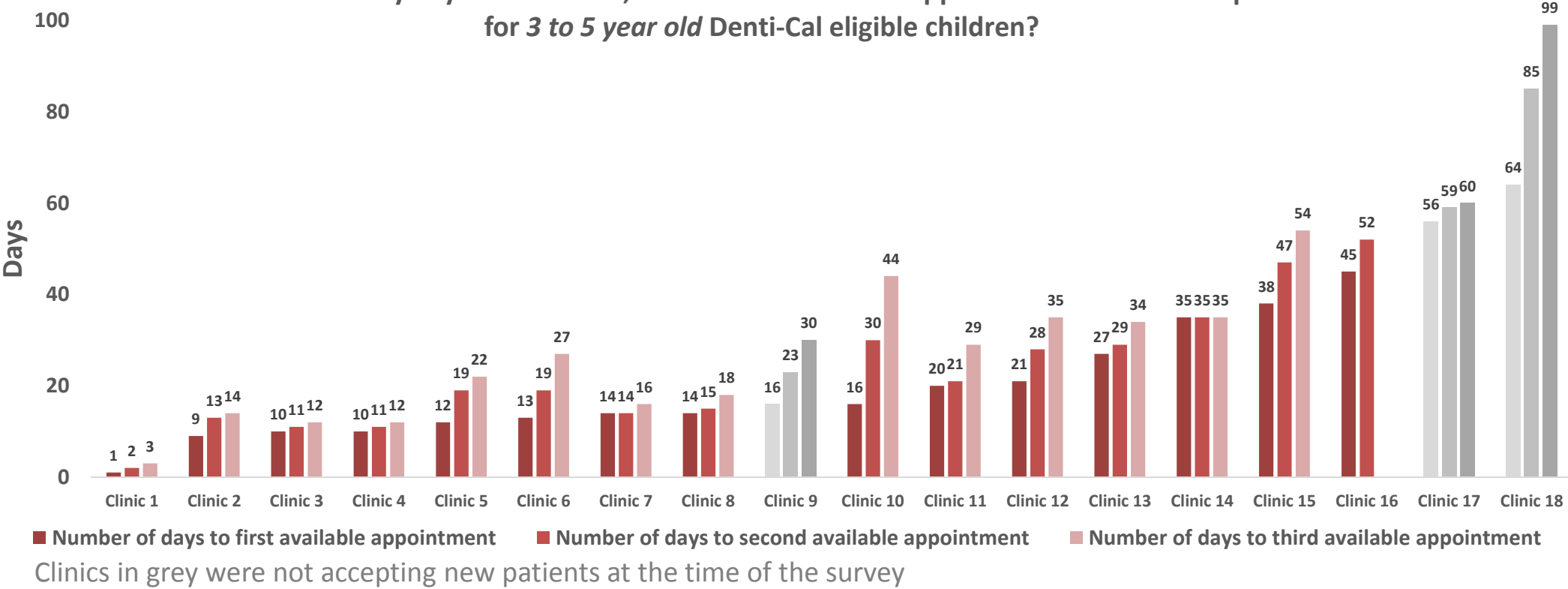


Clinics in grey were not accepting new patients at the time of the survey

# Question 9

- 39% of the dental clinics had a wait time of 2 weeks or greater for the 1<sup>st</sup> available appointment
- Half of the clinics had a wait time of more than one month for the 3<sup>rd</sup> available appointment

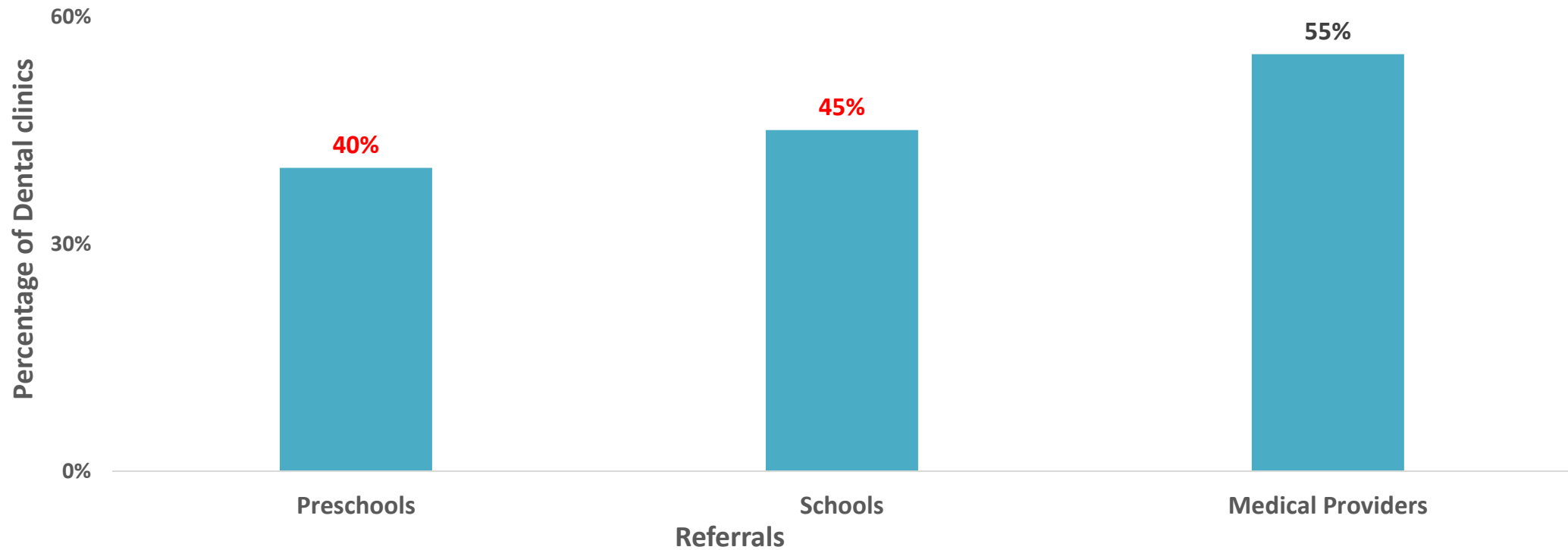
How many days until the 1st, 2nd and 3rd available appointment for a check up for 3 to 5 year old Denti-Cal eligible children?



# Question 10

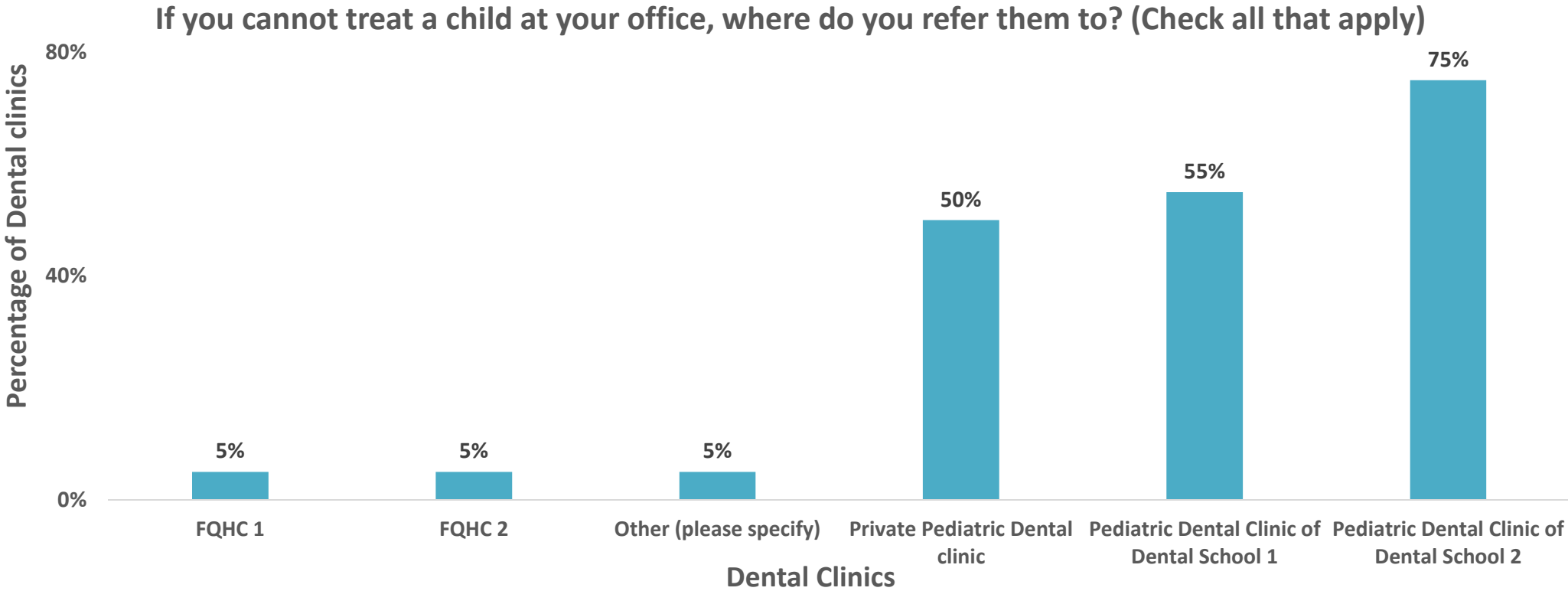
- 55% of the referrals to dental clinics came from Medical providers
- 40% come from preschools and 45% came from schools

Who refers children to your dental office? (Check all that apply)



# Question 11

- 75% of the referrals for difficult cases went to *one* Dental clinic in San Francisco

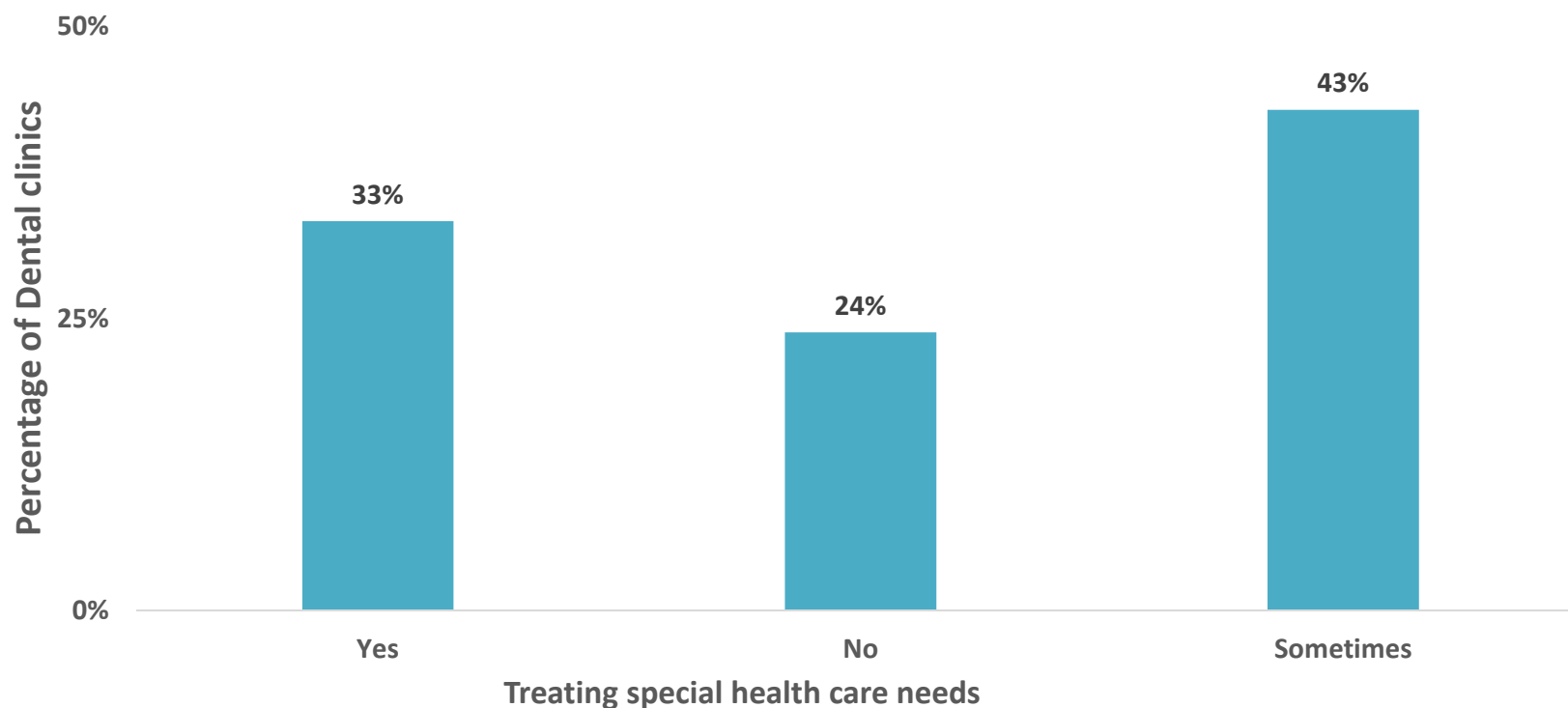


Others included: Insurance List

# Question 12

- 33% of the dental clinics treated some patients with special health care needs
- *Only one dental clinic treated patients with all types of special health care needs*
- 1/4<sup>th</sup> of the dental clinics do not treat patients with special health care needs

Do you treat patients with special health care needs?

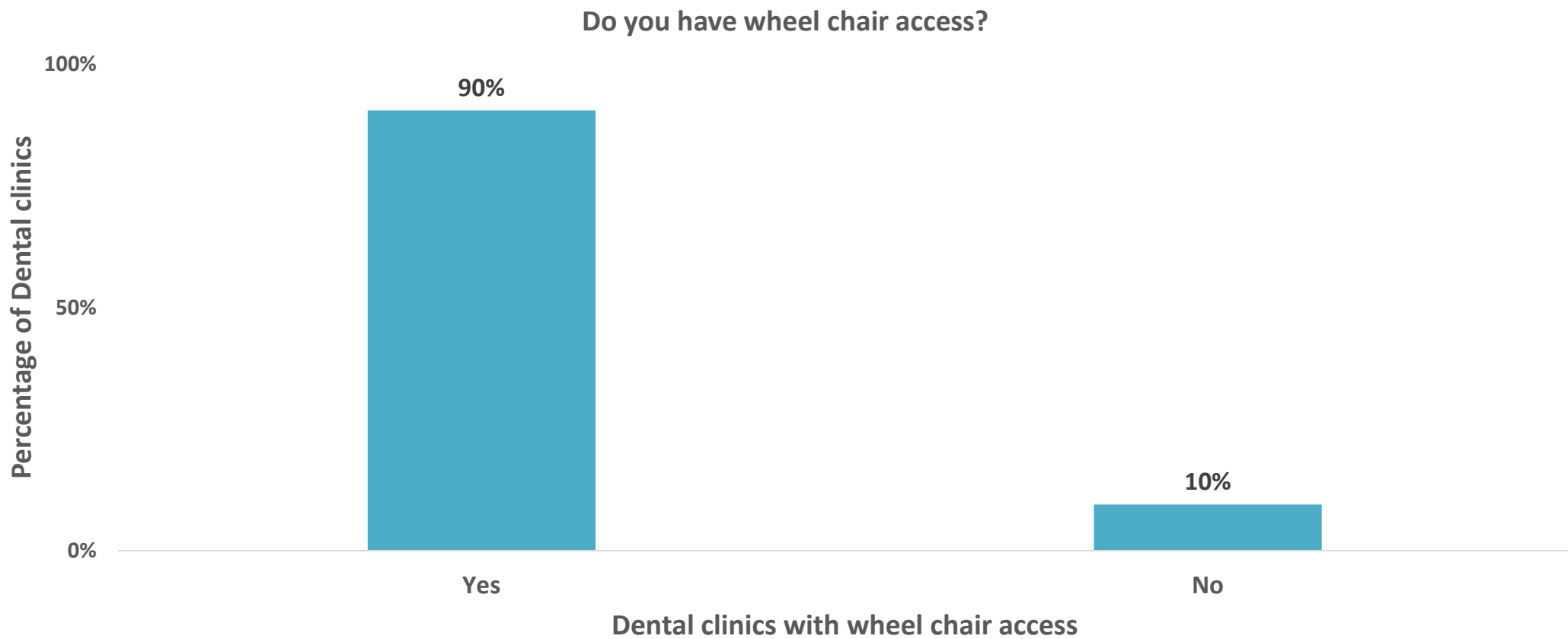


**Types of special health care needs addressed:**

- Autism
- Down Syndrome
- Vision impaired
- Physically challenged
- Wheel Treat
- Cognitive Challenges
- ADHD
- All special health care needs patients

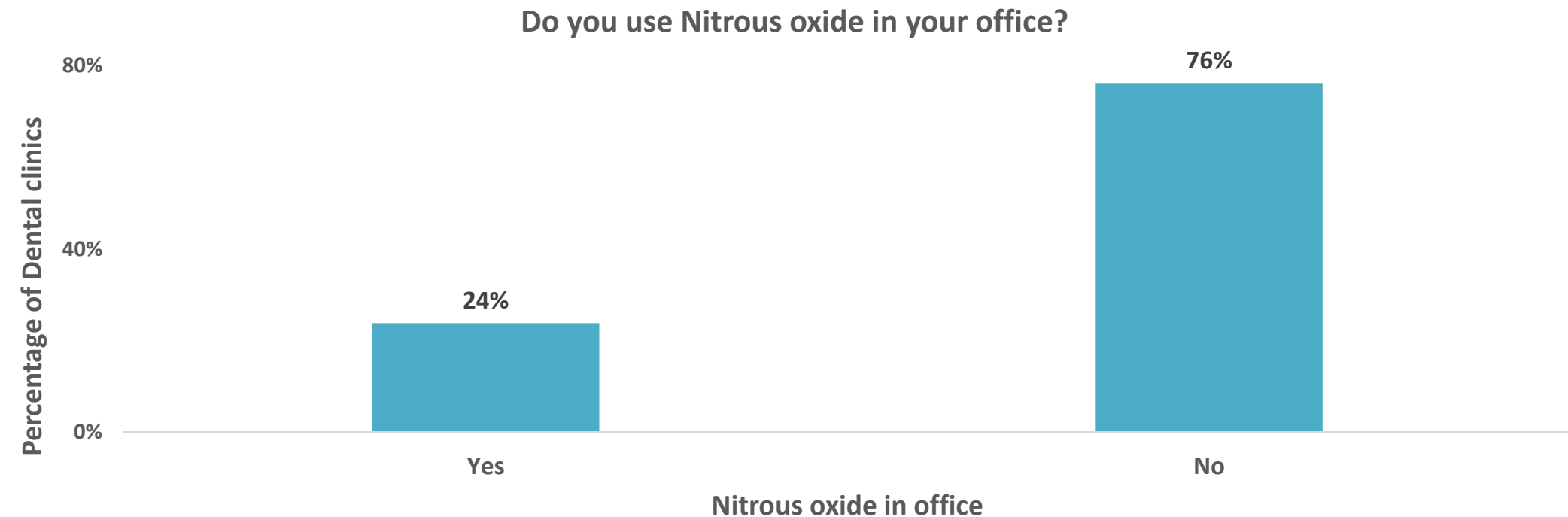
# Question 13

- 90% of the dental clinics had wheel chair access



# Question 14

- 24% of the dental clinics used Nitrous oxide in their offices



**Nitrous oxide:** Nitrous oxide is a safe and effective sedative agent that is mixed with oxygen and inhaled through a small mask that fits over nose to help patient relax. Nitrous oxide, also called “laughing gas,” is one option dentist may offer to help make patients more comfortable during certain procedures. It is not intended to put patient to sleep. Patient will be able to hear and respond to any requests or directions the dentist may have.

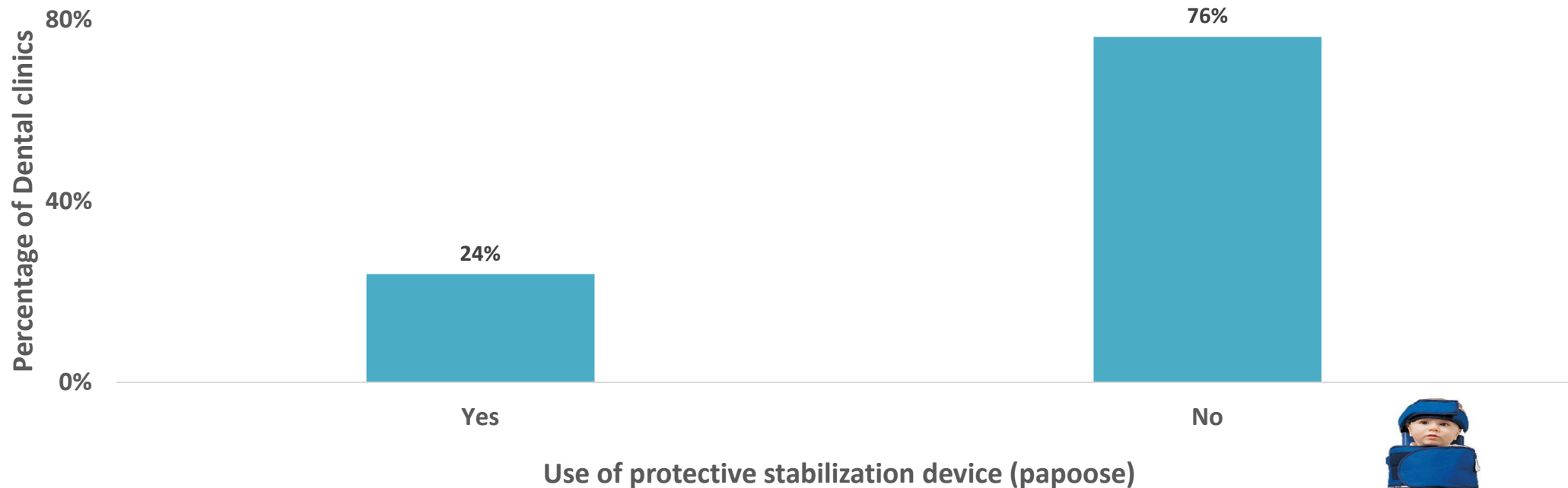
<https://www.mouthhealthy.org/en/az-topics/n/nitrous-oxide>



# Question 15

- 24% of the dental clinics used protective stabilization device (papoose) in their practice when needed

Do you use protective stabilization devices (papoose) in your practice when needed?

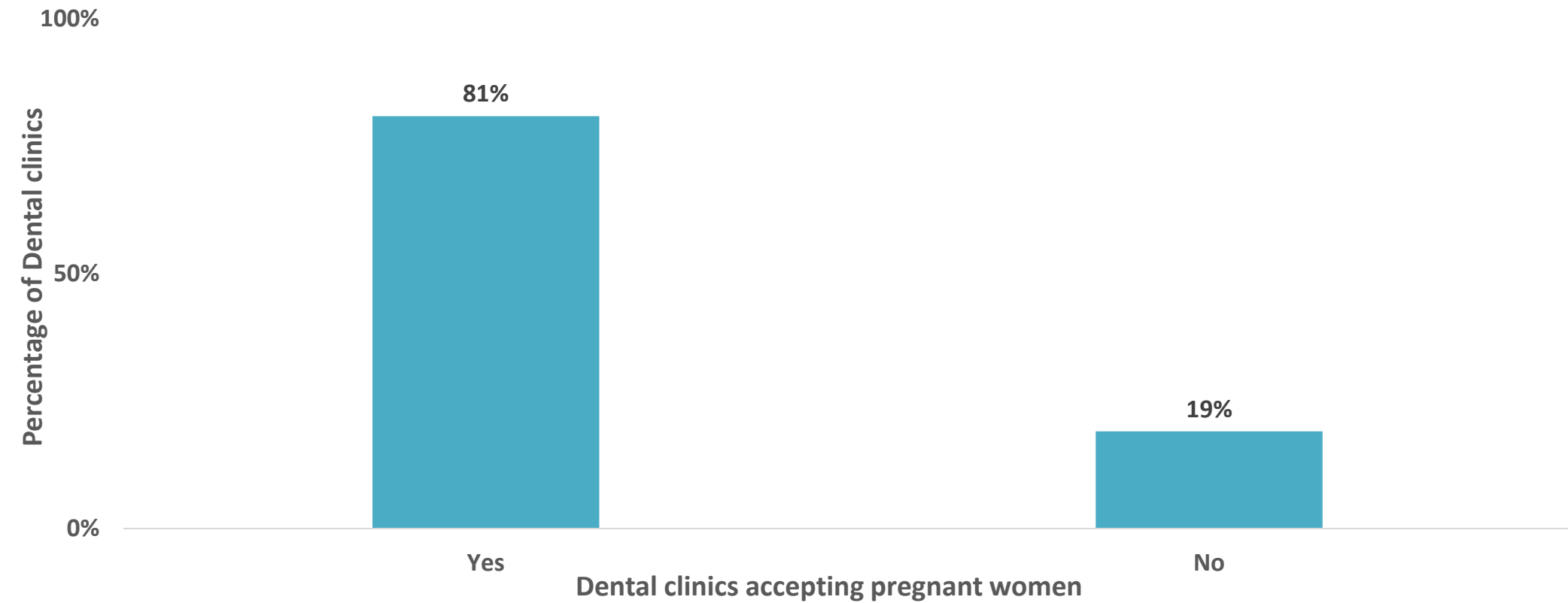


**Protective stabilization** is the term utilized in dentistry for the physical limitation of a patient's movement by a person or restrictive equipment, materials or devices for a finite period of time in order to safely provide examination, diagnosis, and/or treatment. A. (2017). Protective Stabilization for Pediatric Dental Patients. Accessed 8/29/18.

# Question 16

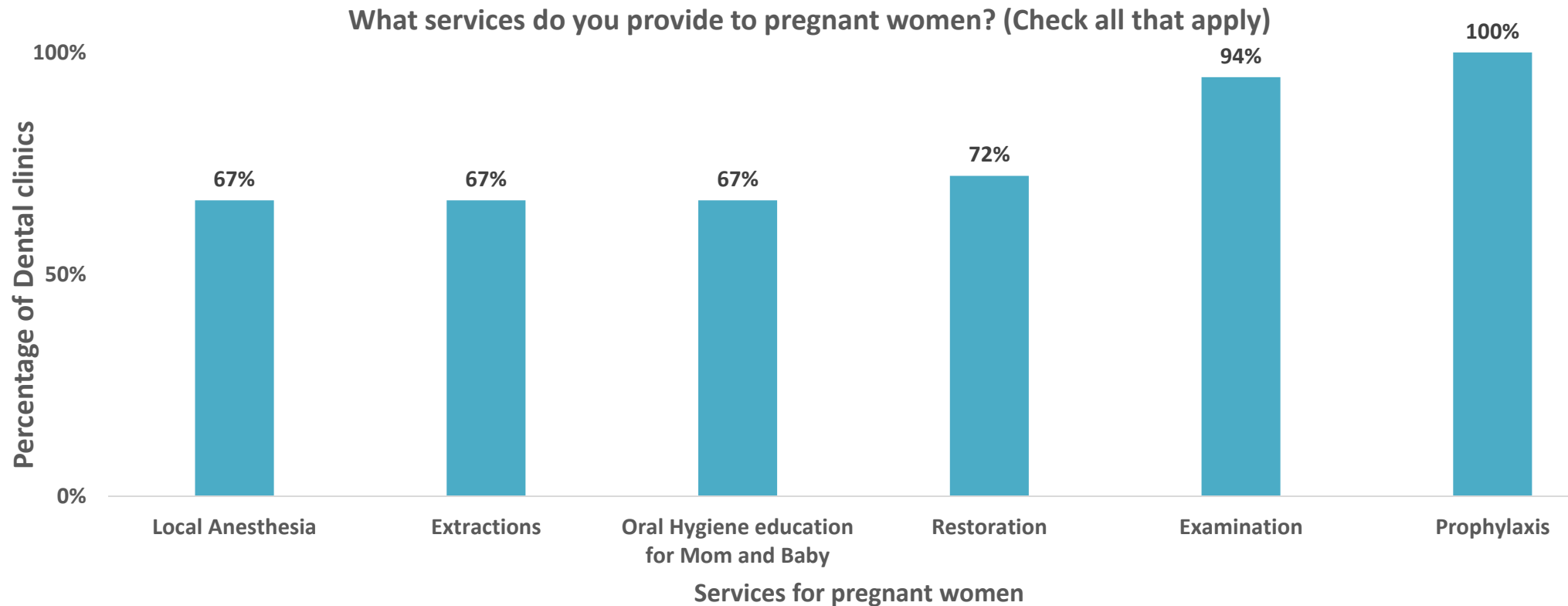
- 81% of the dental clinics accepted pregnant women with Denti-Cal insurance

Do you accept pregnant women with Denti-Cal insurance?



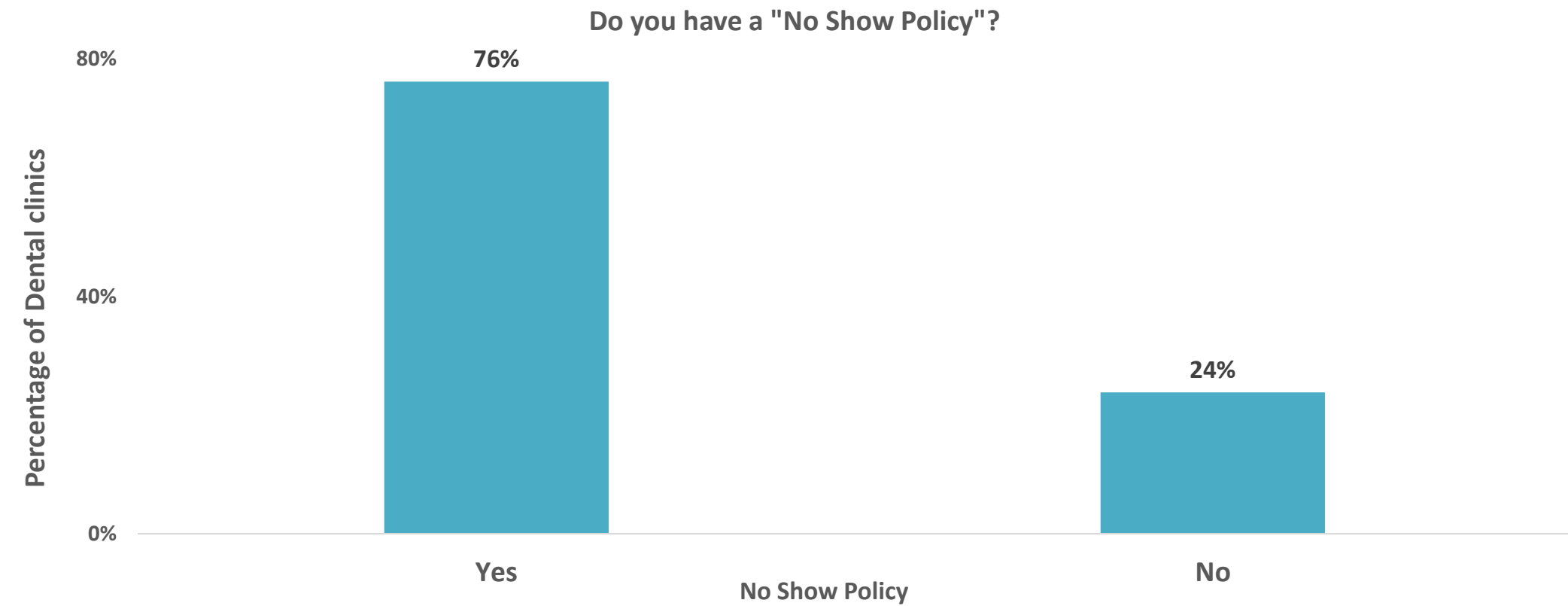
# Question 17

- All (100%) of the dental clinics provided prophylaxis to pregnant women
- 94% provided examination
- 72% provided restorations



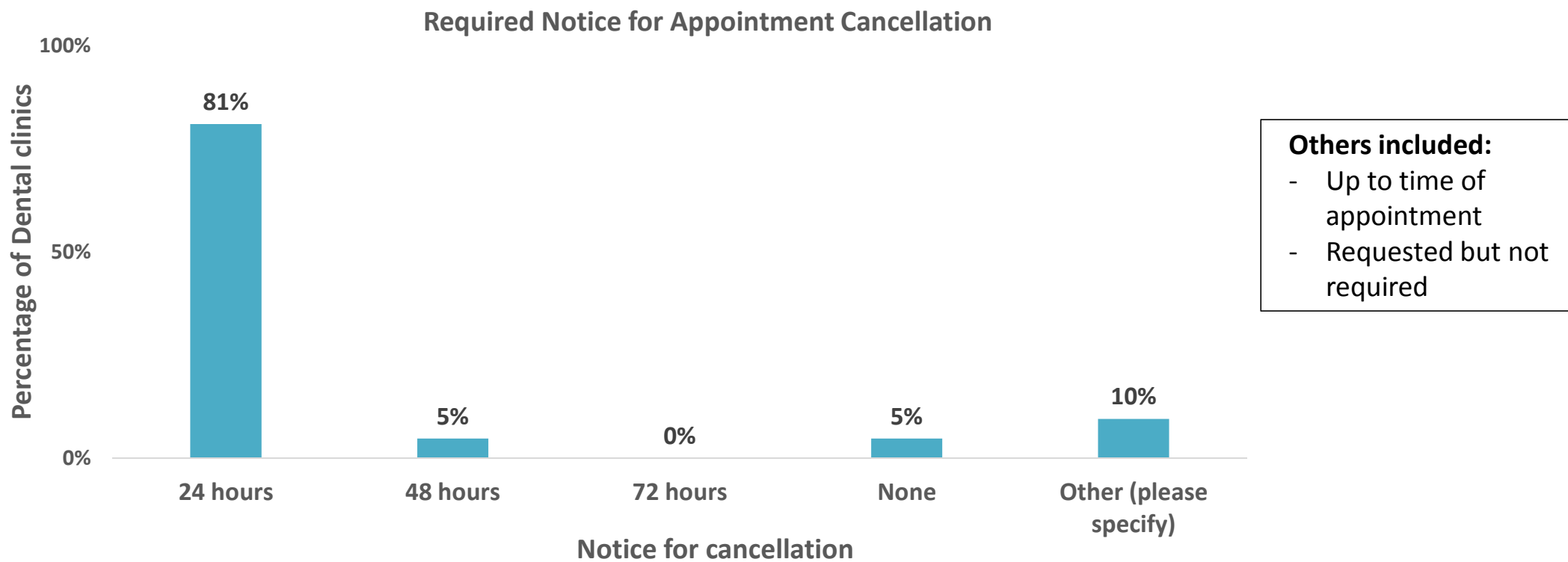
# Question 18

- 76% of the dental clinics had a “No-Show Policy”



# Question 19

- 81% of the dental clinics had 24 hours required notice for appointment cancellation



<b>No – Show Policy description of each individual clinics</b>
When a Patient misses 3 appointments, they need to wait for 2 months to be seen again
3 times no show will be placed on a 6 months probation period. During probation, the patient must check in one hour early to all appointments.
Three strikes and you are out (with exceptions of course).
If 3 N/S in any 12 month period we will counsel the client
3 consecutive broken appointments, patient need to meet in person with lead dentist to discuss future appointments
3 no shows members are put on "stand By" cannot schedule another appointment until 3 stand by visits are completed
We have patient call us for same-day appointments only after they "No Show" many times. We try to hold them accountable
3 no shows patient is deactivate
2 consecutives no show appointment result in close file
After the second no show appointment we close field
If patient misses 1 appointment then patient is discontinued from the clinic.
no show without any calls, next apt will be 3 months later
Charge \$50.00
It is our procedure that patient call 24 hrs prior to cancel appointment or there will be a charge of \$50 for broken appointment
Missed appointment fee applied
Charge

## SUMMARY:

- There were only 42 reported FTE dentists for about 18,342 Denti-Cal eligible 0 to 5 year old children
  - The estimated shortage of FTE dentists in San Francisco was 34 dentists
- Half of the clinics had a wait time of more than one month for the 3<sup>rd</sup> available appointment
- 66% of the dental clinics saw fewer than 10 Denti-Cal eligible children ages 0 to 2 years per week
- 62% of the dental clinics saw fewer than 10 Denti-Cal eligible children ages 3 to 5 years per week
- 95% of the dental clinics provided preventive services such as fluoride varnish, teaching brushing technique and prophylaxis; 90% clinics provided sealants and oral health education to parents and 40% provided SDF (Silver Diamine Fluoride)
- Only a quarter of clinics were equipped with tools (nitrous oxide and protective stabilization devices) to treat pre-cooperative young children (0 to 5)
- Patients were referred out mostly for Orthodontic treatment, complicated cases, pulp therapy, behavior management and uncooperative child
  - 75% of the referrals for difficult cases go to *one* Dental clinic in San Francisco
  - Only 33% clinics treat special health care needs patients
  - Only one dental clinic in San Francisco treats all patients with special health care needs

## CONCLUSION:

- San Francisco has a shortfall of greater than 34 FTE dentists who will serve Denti-Cal eligible children 0 to 5 year old
- FTE dentists are particularly needed in zip codes 94112 and 94132
- San Francisco lacks services for Denti-Cal eligible children with special health care needs



## LIMITATIONS:

- Cross-sectional survey
- The results are based on self-reported information from clinic managers
- Managers reported estimated counts of patients served, not prospectively documented
- The survey was done in the summer, so may not reflect conditions at other times of year
- Our survey did not capture parents perspective on dental care access and utilization
- All the numbers should be considered approximate given the 66% response rate, the data may not represent all dental clinics in San Francisco.

## ACKNOWLEDGEMENT:

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# THANK YOU

For questions contact Mimansa Cholera at  
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