



CALIFORNIA
HEALTHCARE
FOUNDATION

SNAPSHOT

Health Information Technology in California Dental Practices: Survey Findings

2010

Introduction

This sample survey of California dentists examines their use of and interest in health information technology, including the adoption and usage of electronic dental health records (referred to as EDHRs). “Technology” was defined as computer hardware and software, clinical equipment, and Internet/Web site tools and applications. The survey also explores dentists’ interest in federal stimulus support for EDHR adoption provided through the American Recovery and Reinvestment Act (ARRA).

AMONG THE KEY FINDINGS:

- While California dentists understand the importance of health information technology to their practice, few consider themselves to be early adopters.
- Most California dentists have a practice management system in place and have embraced electronic methods to help with the business side of dentistry—billing, insurance, and scheduling. However, the adoption rate for clinical tools, such as EDHRs, has been considerably slower.
- Only 23 percent of California dentists say they have fully implemented an EDHR system in their practice, a proportion well below that for the adoption of electronic health records among office-based physicians (those working solo, in small medical groups, or at community health centers). Another third are either in the process or planning to do so within the next two years. Those who have been practicing for more than 25 years are much less likely to adopt EDHRs. Dentists with young practices (ten or fewer years) are more apt to embrace EDHR implementation.
- California dentists see the benefit of EDHRs in greater business efficiency, accuracy in reporting, and better communication/coordination with other health professionals and patients. They are slightly less likely to see the positive impact on oral health in the form of improved quality and access to care.
- Just one-quarter are inclined to participate in the ARRA program, citing Medi-Cal participation as a disincentive. Those who do profess interest include current Medi-Cal providers and practitioners at community clinics, as well as rural, ethnic, and younger dentists.

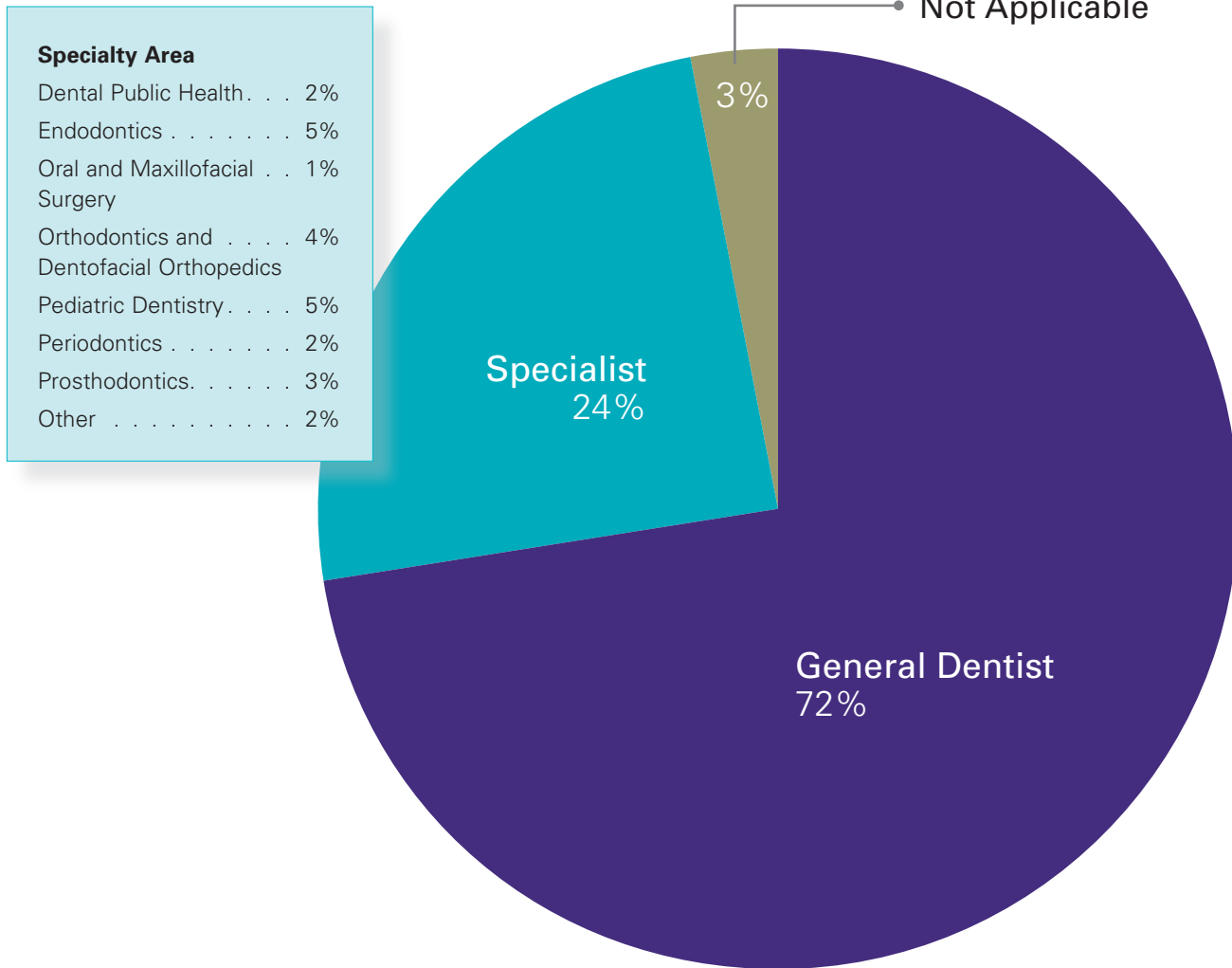
The presentation opens with a general profile of California dental practices, including staff and patient demographics, payment mix, and geographic concentrations. An explanation of the survey [methodology](#) can be found on page 38.

Dental HIT Survey

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Practice Specialty, California, 2010



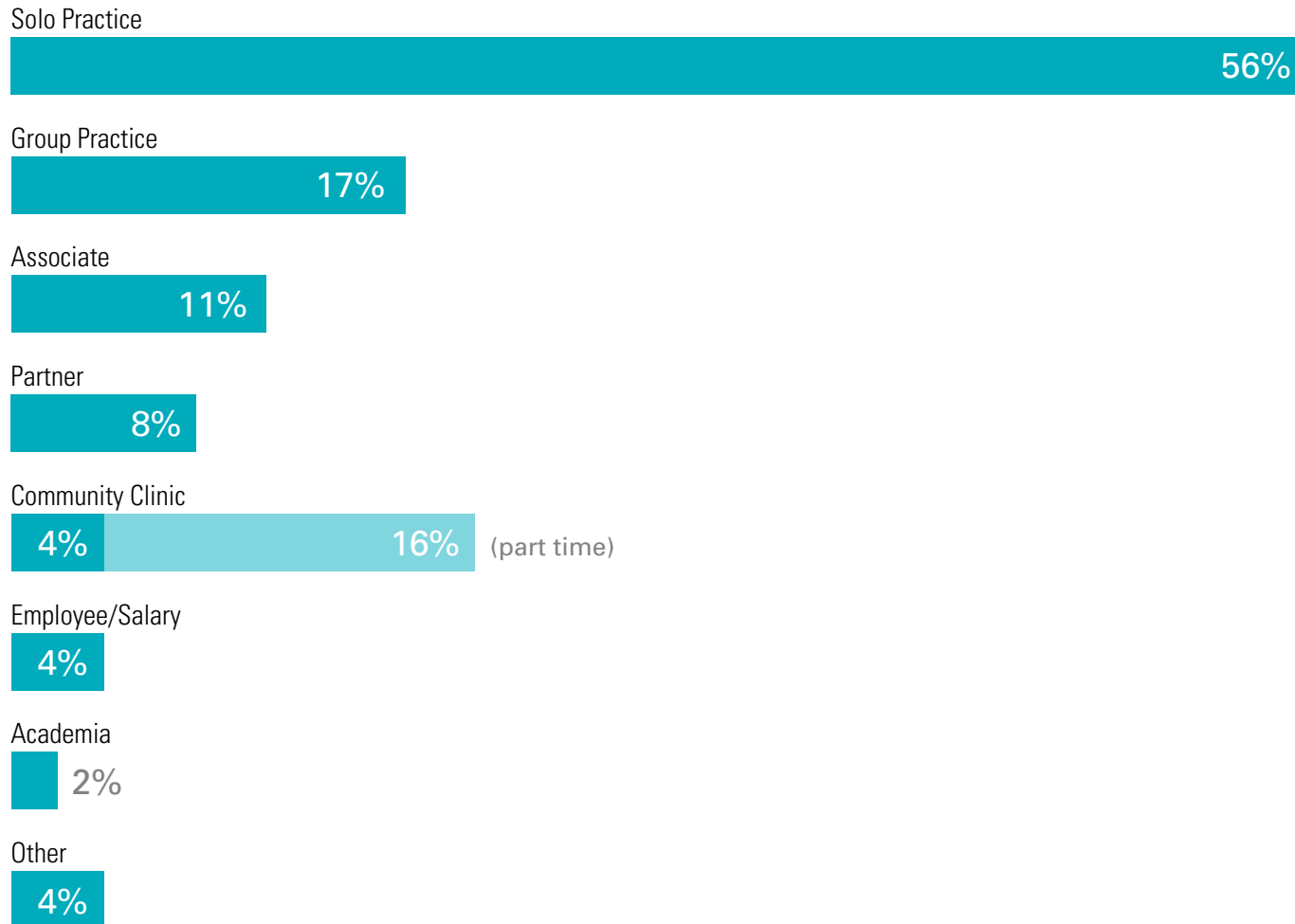
Dental HIT Survey Demographic and Practice Profile

The vast majority of California dentists are general practitioners.

Note: May not add to 100 percent due to rounding.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Practice Setting, California, 2010

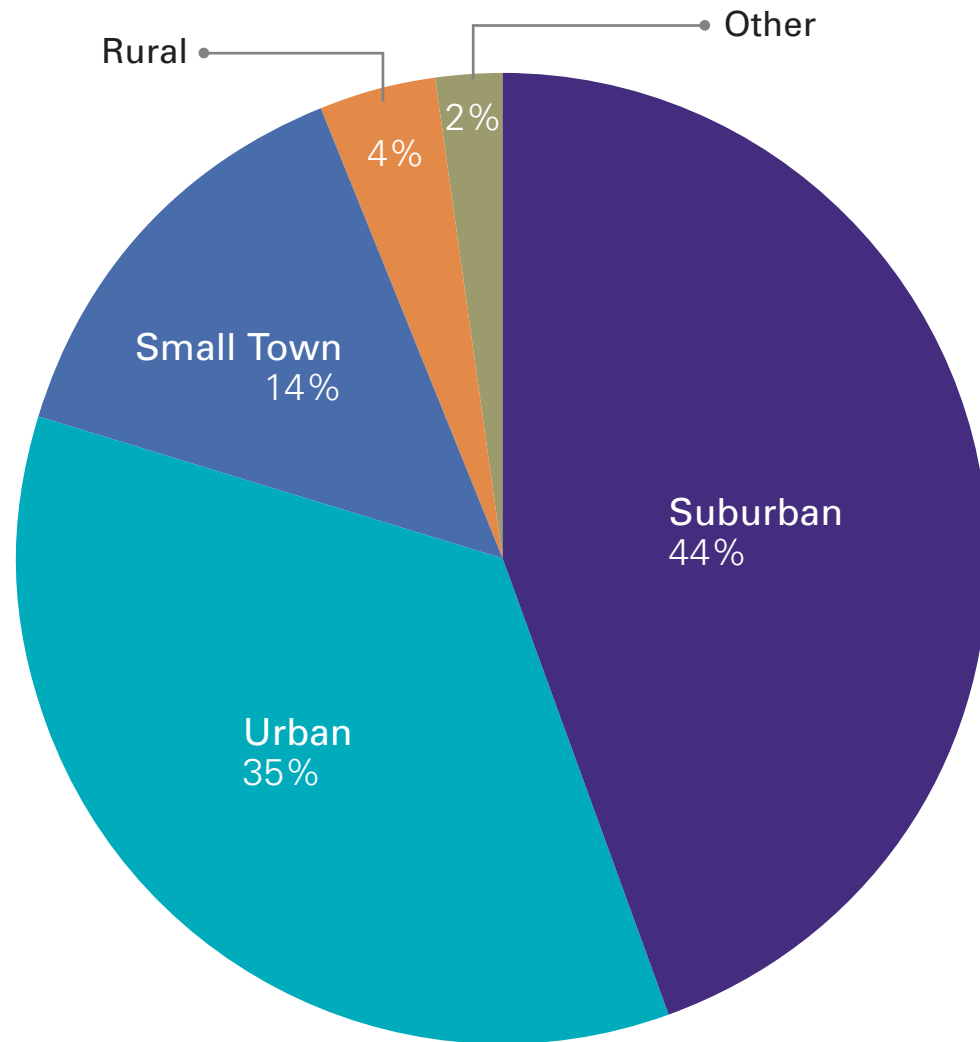


Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey Demographic and Practice Profile

More than half of dentists in California work in solo practices; about 20 percent of dentists work in community clinics part time or full time.

Practice Geographic Area, California, 2010



Note: May not add to 100 percent due to rounding.

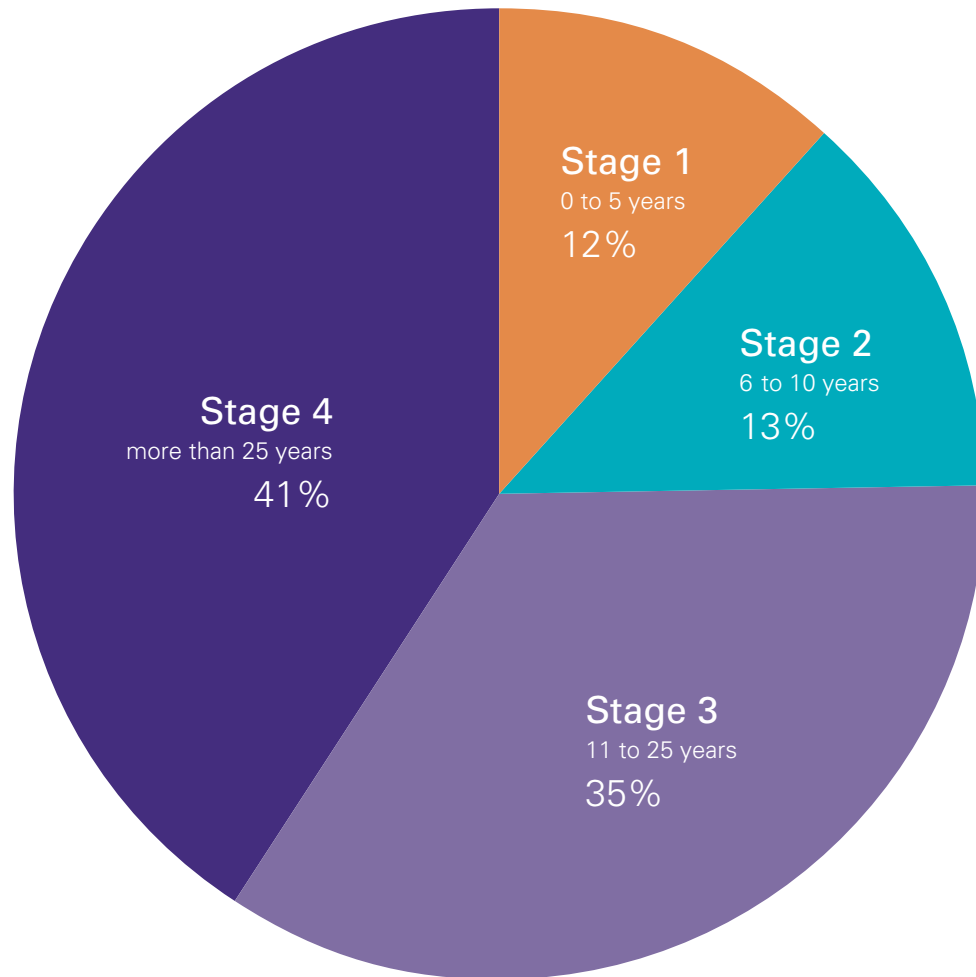
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

Four in ten California practices are suburban, another third are in urban locations, and fewer than two in ten dentists practice in small towns or rural areas.

Stage of Practice, by Years, California, 2010



Note: May not add to 100 percent due to rounding.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

Three-quarters of California dentists have been practicing for more than ten years.

Demographics, by Stage of Practice, California, 2010

	TOTAL	STAGE 1 0 to 5 years	STAGE 2 6 to 10 years	STAGE 3 11 to 25 years	STAGE 4 more than 25 years
Gender					
Male	69%	54%	52%	63%	91%
Female	31%	46%	48%	37%	9%
Age					
Under 25	1%	—	—	—	—
25 to 39	24%	83%	52%	16%	*
40 to 54	39%	10%	39%	73%	14%
55 to 64	28%	6%	6%	8%	66%
65 and older	7%	—	3%	1%	18%
Prefer not to answer	2%	1%	—	3%	2%
Race/Ethnicity					
White	57%	32%	36%	62%	73%
Black or African American	1%	—	—	*	1%
Asian or Pacific Islander	26%	46%	47%	23%	13%
Native American or Alaskan native	*	1%	—	—	1%
Mixed race background	2%	1%	4%	1%	2%
Some other race	4%	3%	1%	6%	3%
Prefer not to answer	9%	17%	11%	8%	7%
Spanish/Hispanic/Latino Origin					
Yes	6%	2%	5%	6%	5%
No	83%	80%	83%	84%	86%
Prefer not to answer	11%	18%	12%	10%	9%

*Less than 1 percent.

Note: Bold numbering indicates significant difference at 95 percent confidence level.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

The demographic makeup of California's dentists is changing. Gender, racial, and ethnic diversity has increased among younger dentists entering practice.

Net Income per Dentist, by Stage of Practice, California, 2010

	TOTAL	STAGE 1 0 to 5 years	STAGE 2 6 to 10 years	STAGE 3 11 to 25 years	STAGE 4 more than 25 years
Less than \$100,000	25%	29%	35%	23%	21%
\$100,001 to \$250,000	35%	37%	31%	29%	39%
\$250,001 to \$500,000	15%	14%	11%	14%	19%
More than \$500,000	3%	—	1%	4%	3%
Prefer not to answer	22%	19%	22%	29%	17%

Note: Bold numbering indicates significant difference at 95 percent confidence level.

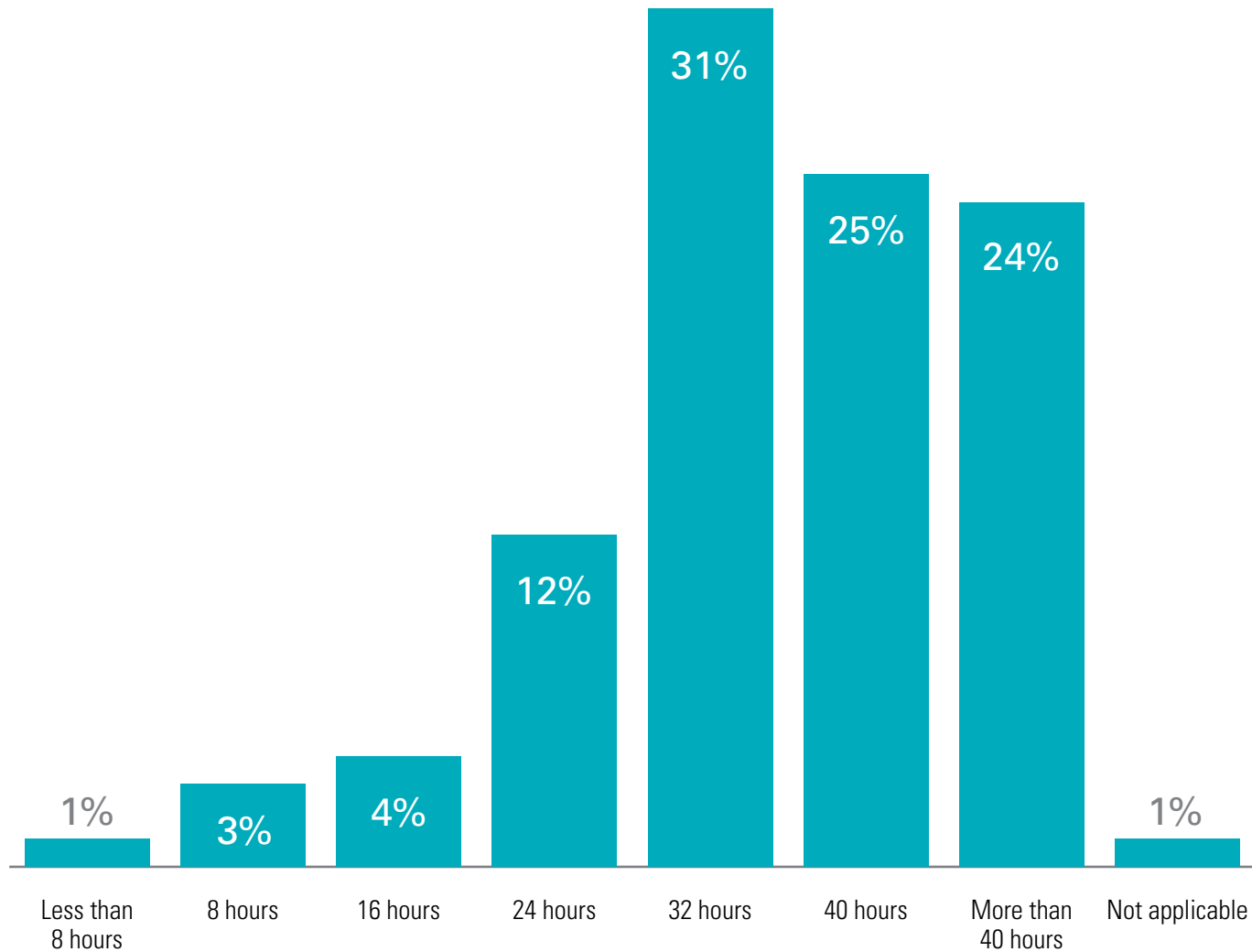
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

Dentists in later stages of practice tend to have higher annual incomes.

Hours Worked per Week, California, 2010



Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

About half of California dentists work at least a full 40-hour week, and 80 percent work at least 32 hours.

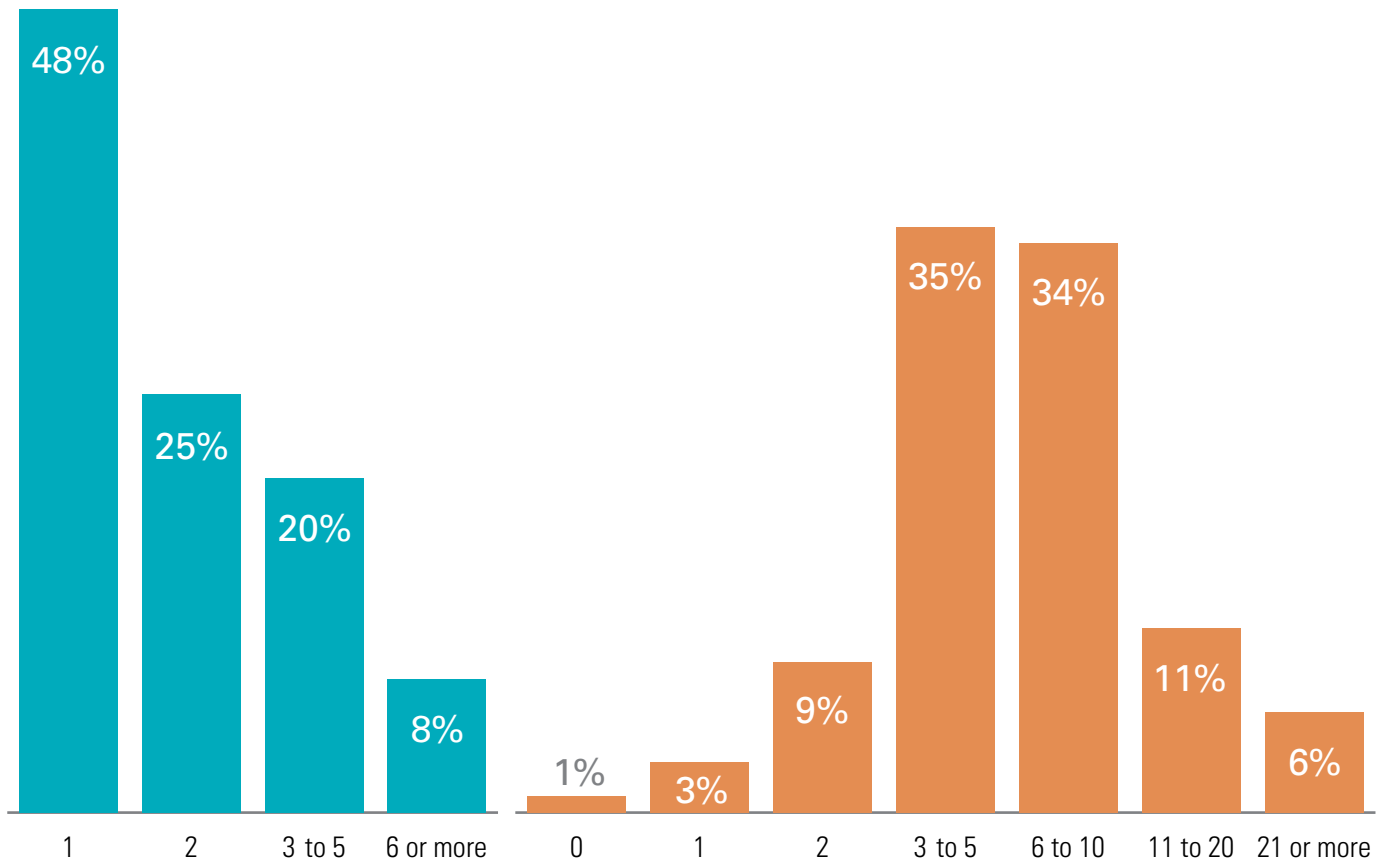
Practice Staffing, California, 2010

Dentists

mean: 2.4, median: 2.0

Staff

mean: 7.7, median: 6.0



Note: May not add to 100 percent due to rounding.

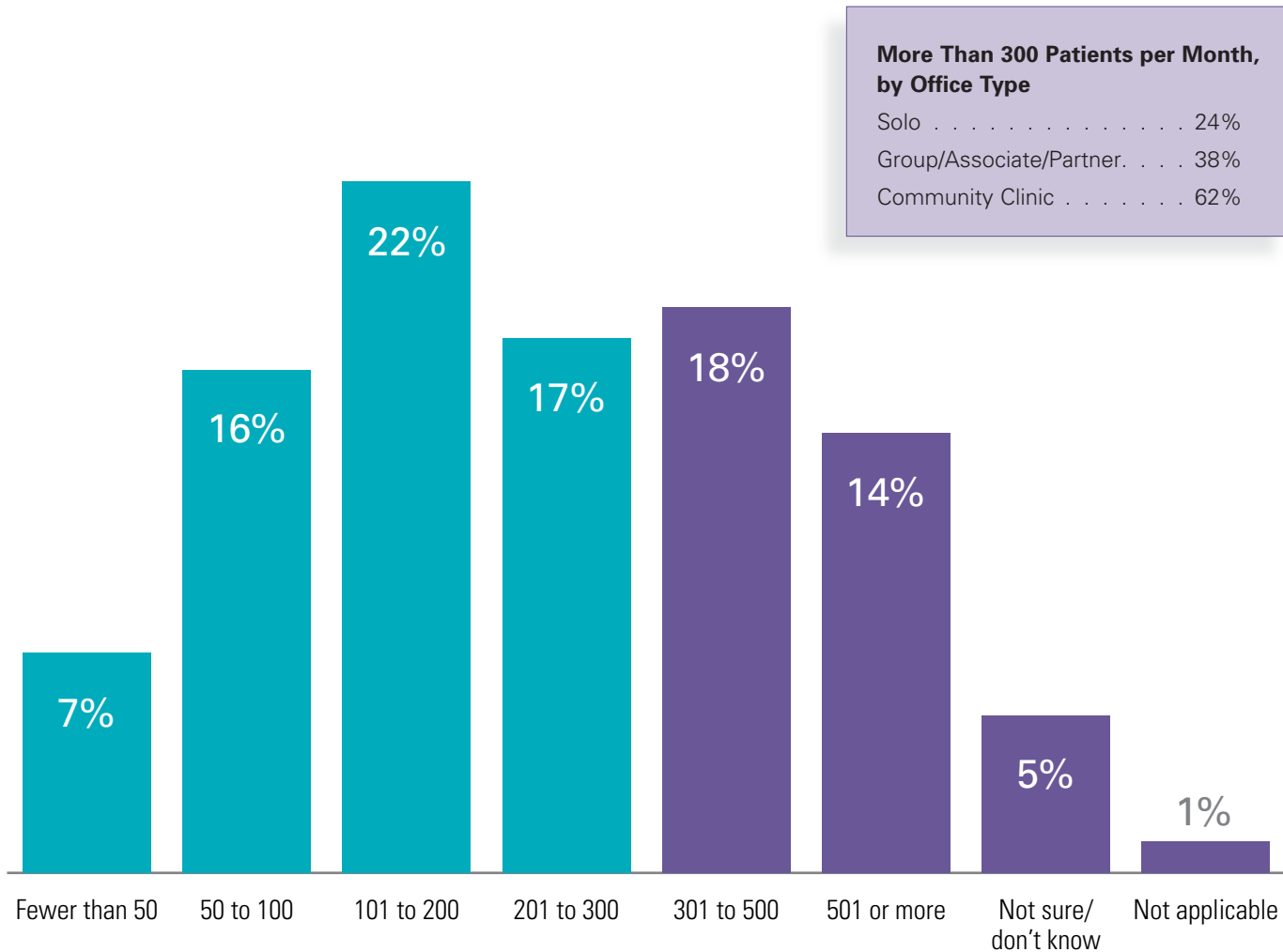
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

The typical office has one to three dentists and five to eight support staff members.

Monthly Patient Volume, California, 2010



More Than 300 Patients per Month, by Office Type

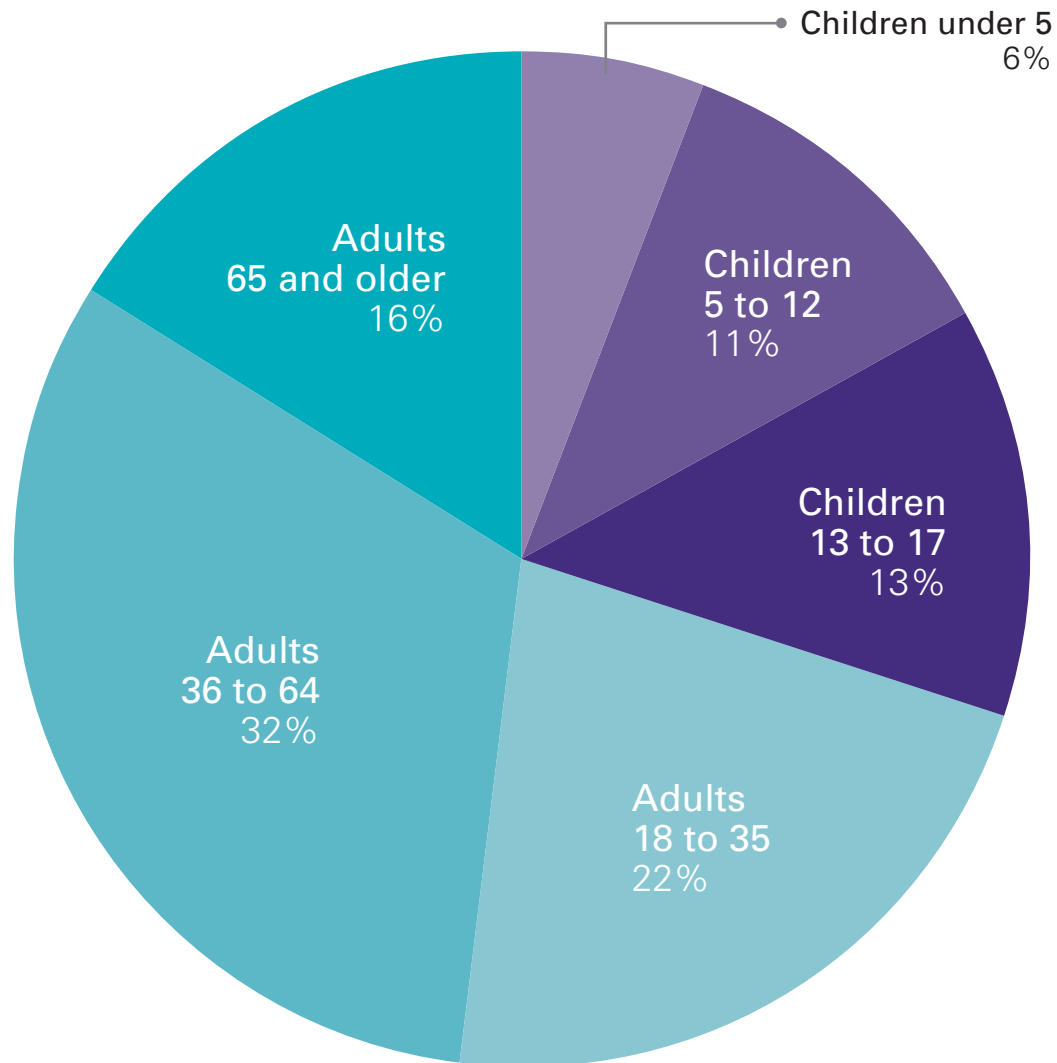
Solo	24%
Group/Associate/Partner.	38%
Community Clinic	62%

Dental HIT Survey Demographic and Practice Profile

About half of dental practices in California treat more than 200 patients per month. Community clinics see the most patients.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Patient Volume, by Age, California, 2010



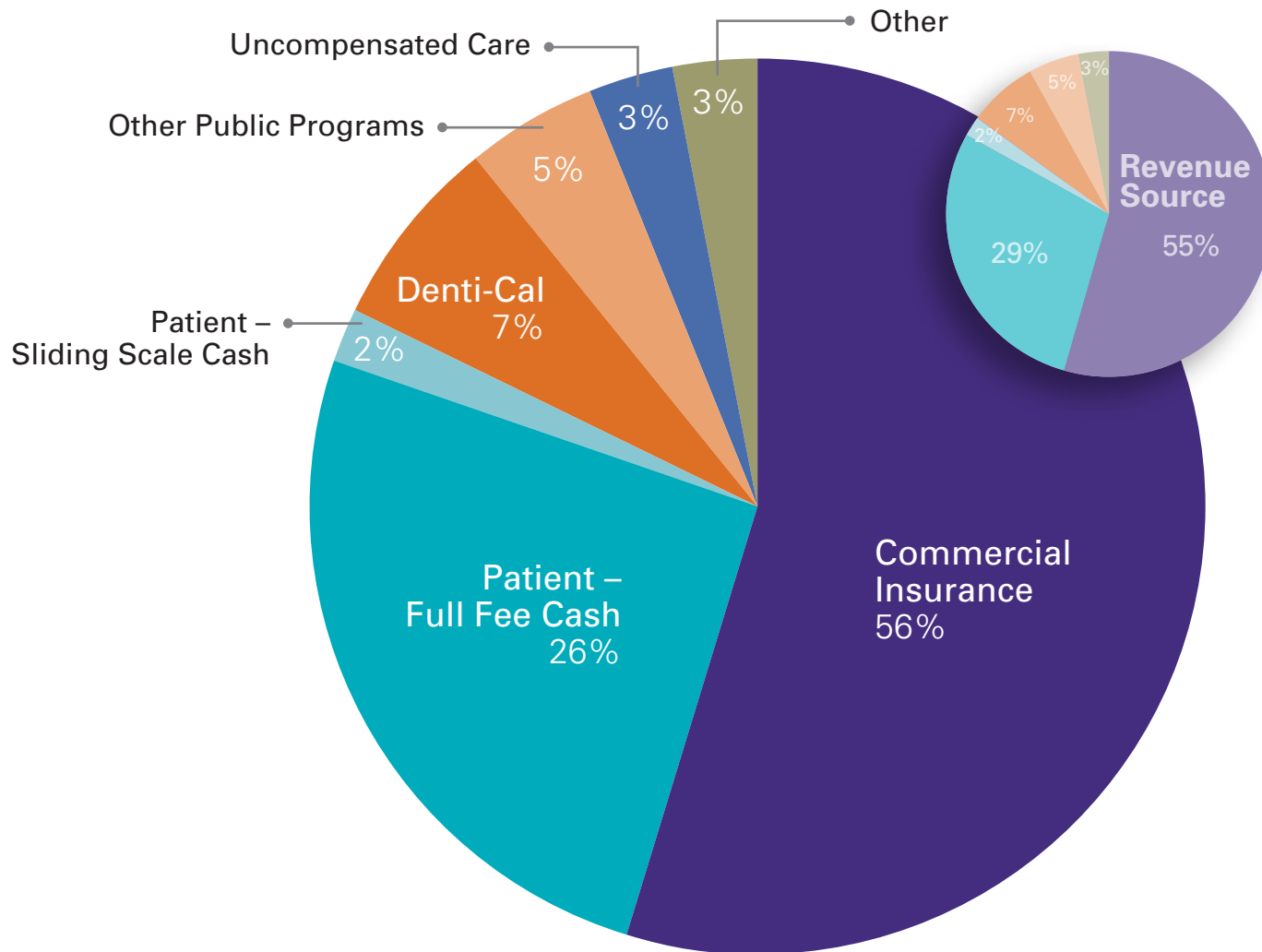
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

Children and teenagers account for 30 percent of dental patient volume, while 70 percent are adults.

Patient Volume, by Payer, California, 2010



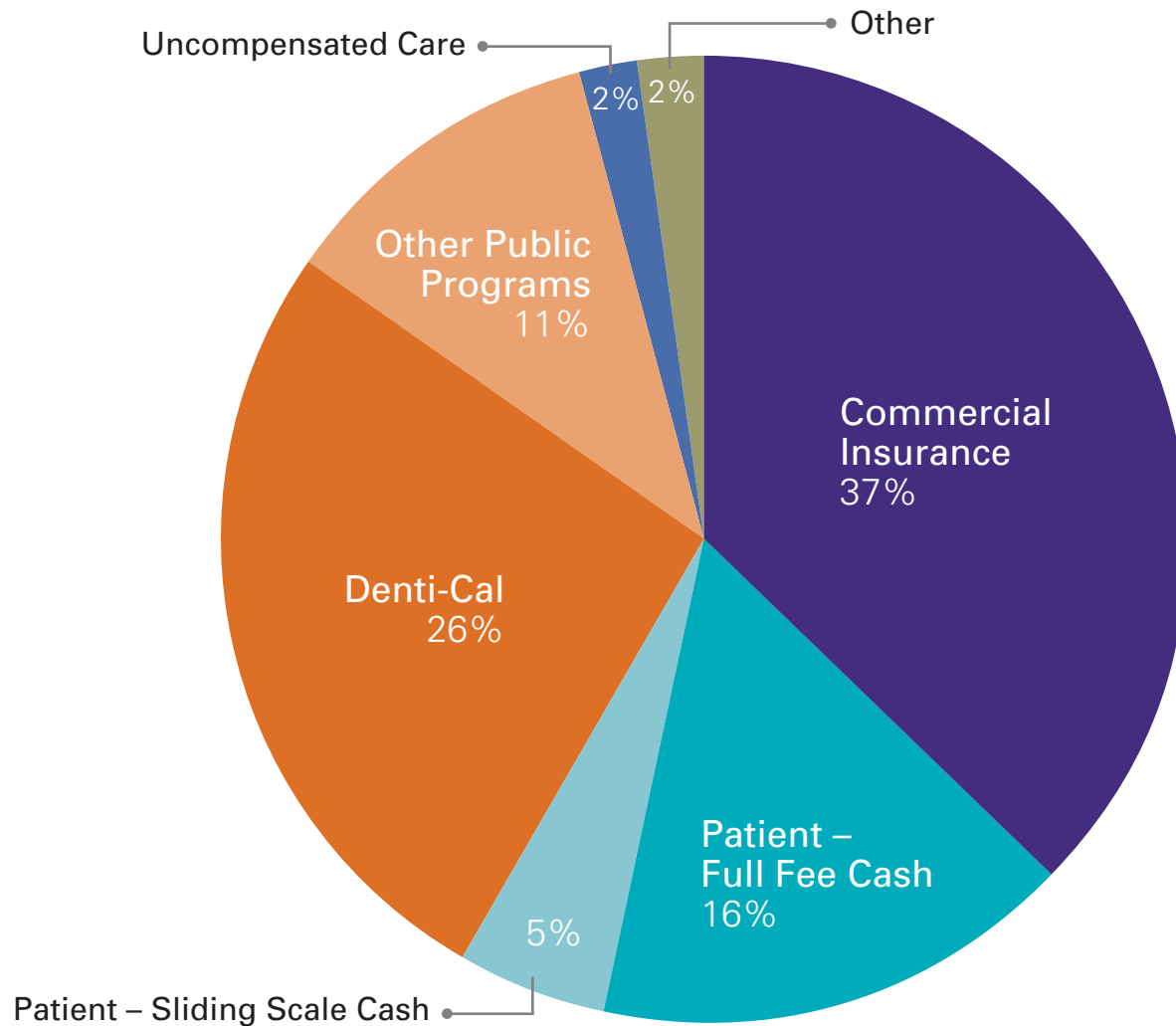
Dental HIT Survey Demographic and Practice Profile

Commercial insurance is the payment source for more than half of dental patients, and another quarter pay the full fee out of their own pockets. Denti-Cal and other public options account for just 10 percent of California dentists' reported monthly patient volume. Revenues by payer align closely with patient volume.

Notes: May not add to 100 percent due to rounding. Denti-Cal is California's Medicaid dental program.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Patient Volume, by Payer Among Denti-Cal Providers, California, 2010



Notes: May not add to 100 percent due to rounding. Denti-Cal is California's Medicaid dental program.

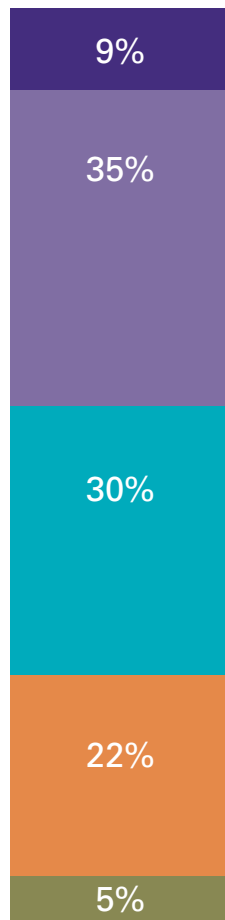
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Demographic and Practice Profile

Among practices that accept Denti-Cal coverage, more than one-third of patients are publicly insured.

Technology Adoption Mindset, California, 2010



■ Early Adopters

I tend to be a very early technology adopter, usually buying new technology equipment, hardware, and software before other dentists.

■ More Quickly than Average

I tend to purchase new technology more quickly than the average dentist, but am not always among the first to purchase a new technology.

■ Comparable to Most Other Dentists

I purchase new technology at roughly the same time as other dentists.

■ Slower than Average

I usually buy new technology after most other dentists have them.

■ Not Sure

Dental HIT Survey

Adoption and Importance

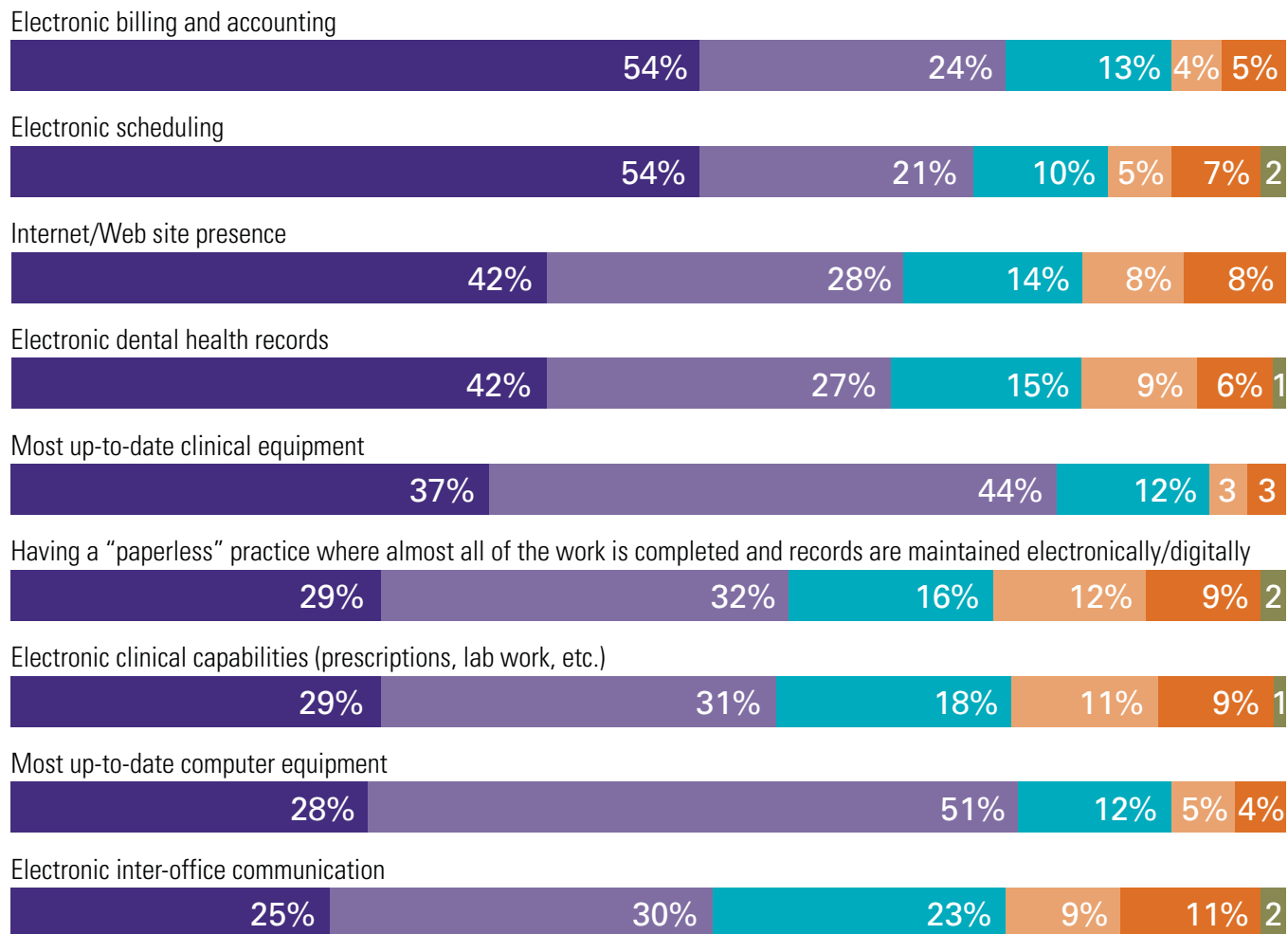
Few dentists consider themselves to be early adopters of technology, but four in ten see themselves as ahead of the curve.

Note: May not add to 100 percent due to rounding.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Importance of Health Information Technology for Dental Practices, California, 2010

■ Very Important
 ■ Somewhat Important
 ■ Neutral
 ■ Somewhat Unimportant
 ■ Very Unimportant
 ■ Not Sure



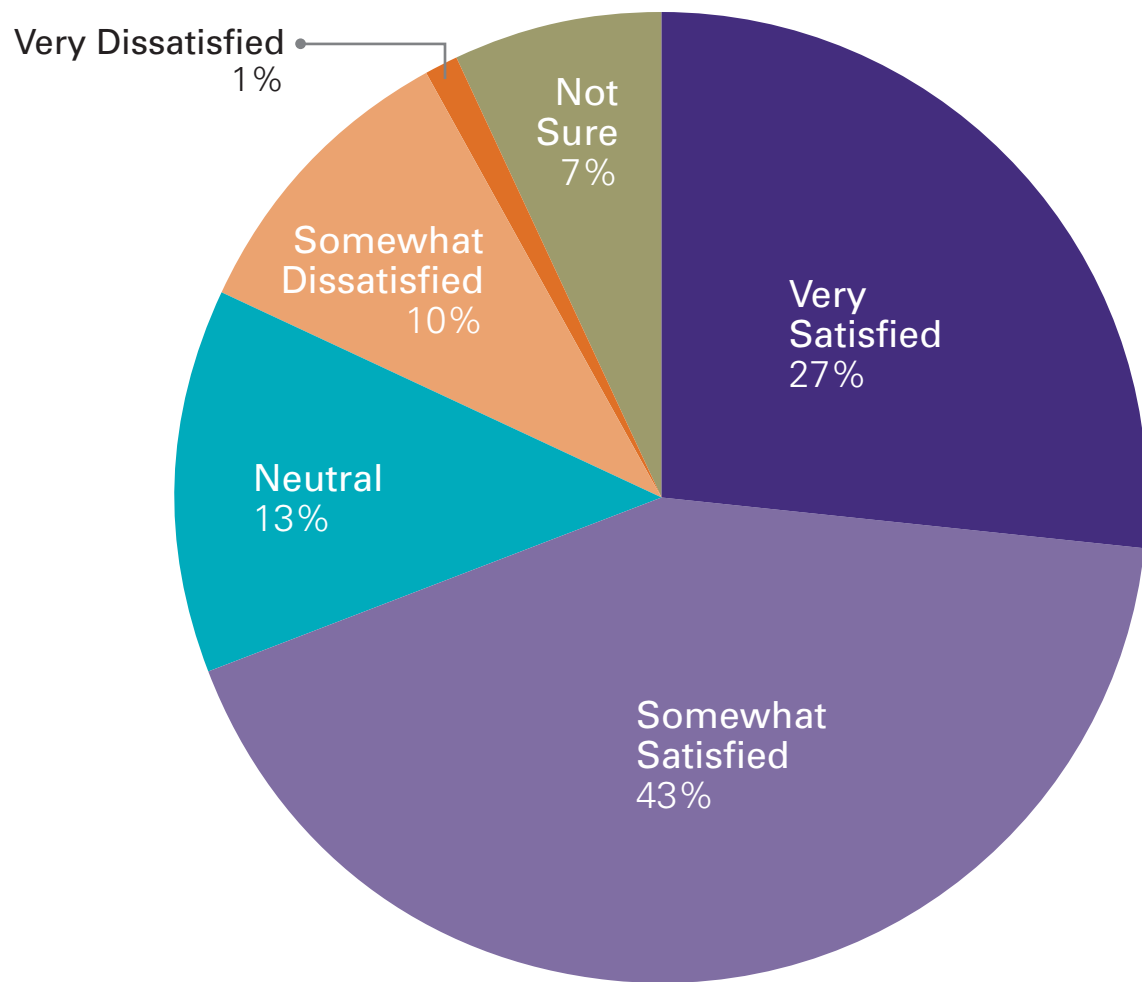
Note: May not add to 100 percent due to rounding.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey Adoption and Importance

Dentists understand the importance of technology, and majorities see each of the technology functions examined as either somewhat or very important. The ability to use electronic billing, accounting, and scheduling are seen as the most important aspects of technology in dental offices. Seventy percent say EDHRs are somewhat or very important to their practice.

Satisfaction with Electronic Information Exchange Capabilities, California, 2010



Notes: May not add to 100 percent due to rounding.

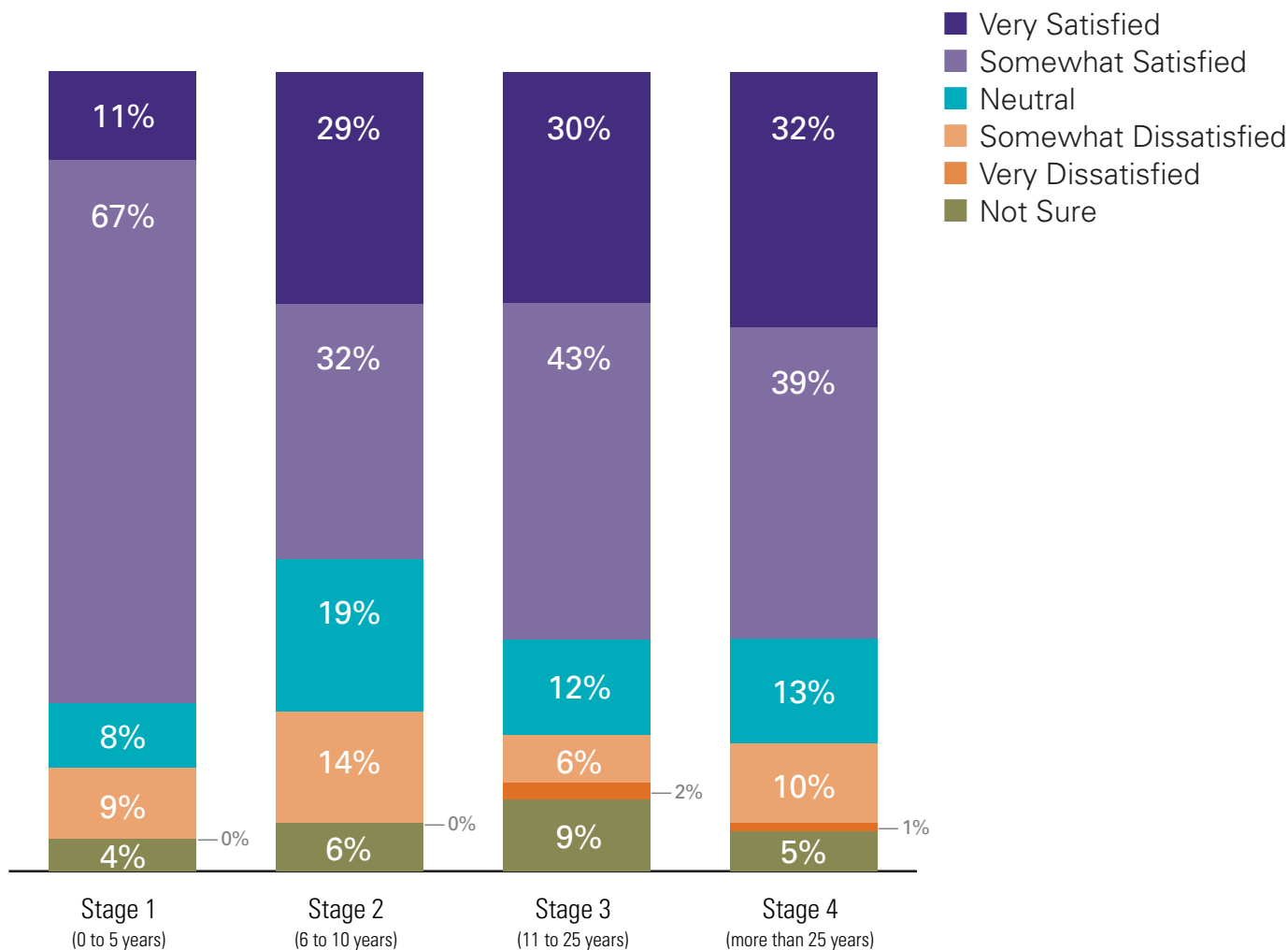
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Satisfaction Levels

Only a quarter of California dentists say they are very satisfied with their ability to exchange information electronically, while four in ten report being somewhat satisfied. Few say they are dissatisfied.

Satisfaction with Electronic Information Exchange Capabilities, by Stage of Practice, California, 2010



Note: May not add to 100 percent due to rounding.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Satisfaction Levels

Younger dentists (those in practice five years or less) are least content with the status quo—just one in ten say they are very satisfied with their practice’s ability to receive, transmit, and exchange information electronically.

Practice Functions Done Electronically, California, 2010

	ELECTRONIC (partly/primarily)	PAPER (primarily)	DON'T DO/KNOW
Billing/Accounting			
Patient accounting and billing	88%	6%	6%
Processing insurance forms	86%	7%	7%
Maintaining expense reports	80%	10%	10%
Submitting electronic claims	74%	8%	18%
Clinical			
Charting—odontogram and periodontal exam	50%	46%	4%
Decision support and point of care resources (e.g., evidence based dentistry, protocols, alerts and reminders)	46%	38%	16%
Progress notes	45%	54%	1%
Clinical results reporting	42%	50%	8%
Consults/reports to/from other dentists or health providers	40%	51%	9%
Referrals to/from other dentists or health providers	38%	60%	2%
Access test results	26%	39%	35%
Submit lab or radiology orders	19%	65%	16%

	ELECTRONIC (partly/primarily)	PAPER (primarily)	DON'T DO/KNOW
Patient Scheduling and Communication			
Scheduling patients (by practice)	84%	13%	3%
Automatic recall and reminders to patients	67%	24%	9%
Records			
Maintaining records—			
• Radiographic images	68%	28%	4%
• Intraoral photographs/video	67%	18%	15%
• Examination forms	54%	43%	3%
• Treatment progress notes	54%	43%	3%
Dental/medical history	48%	51%	1%
Transfer complete dental records to another provider	44%	46%	10%
Provide patients with easy access to their dental records	29%	46%	25%

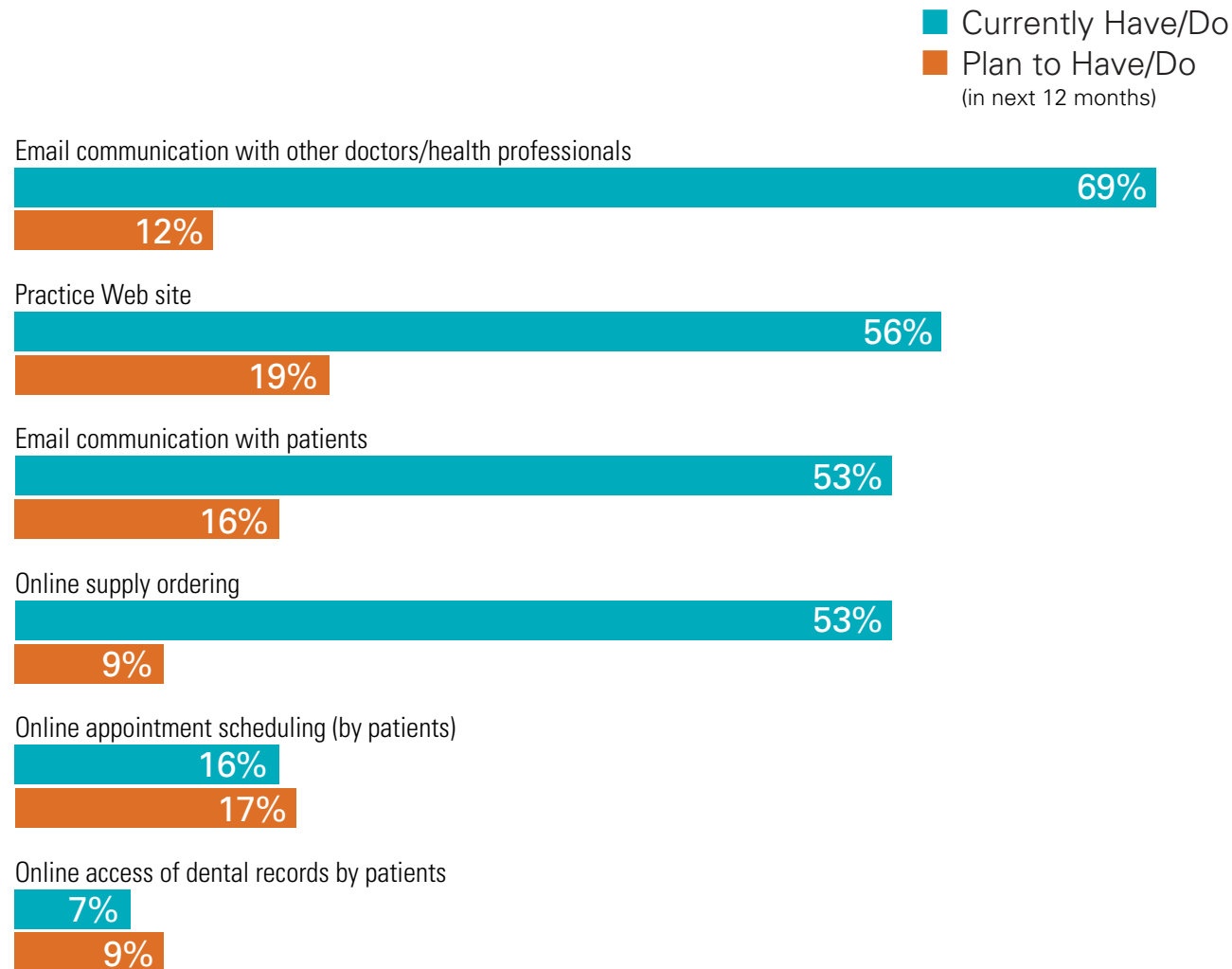
Dental HIT Survey Practice Participation

Most California dentists have embraced electronic methods to help with the business side of dentistry —billing, accounting, and scheduling. They are not as far along on the oral health side—fewer are using electronic means to maintain dental records, and many clinical functions are still done via paper.

Notes: This question was split-sampled in the online survey to avoid respondent fatigue; n=495. Bold numbering indicates a majority of dentists use this particular method.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Online Capabilities of Dental Practices, California, 2010

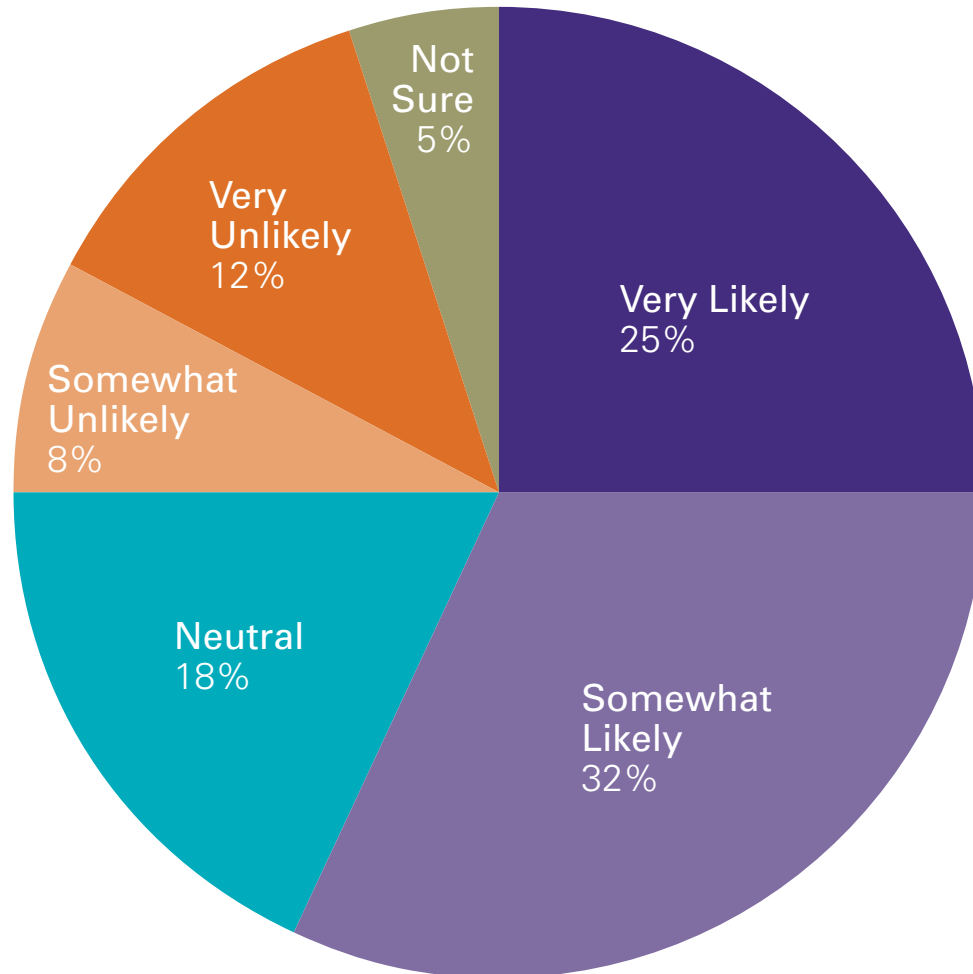


Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey Practice Participation

Email is commonly used to communicate with other professionals, and, to a lesser extent, patients. About half of California practices have a Web site and order supplies online. California dentists do not appear ready to allow patients to schedule their appointments or view their dental records online.

Likelihood to Increase Work Done Electronically, California, 2010

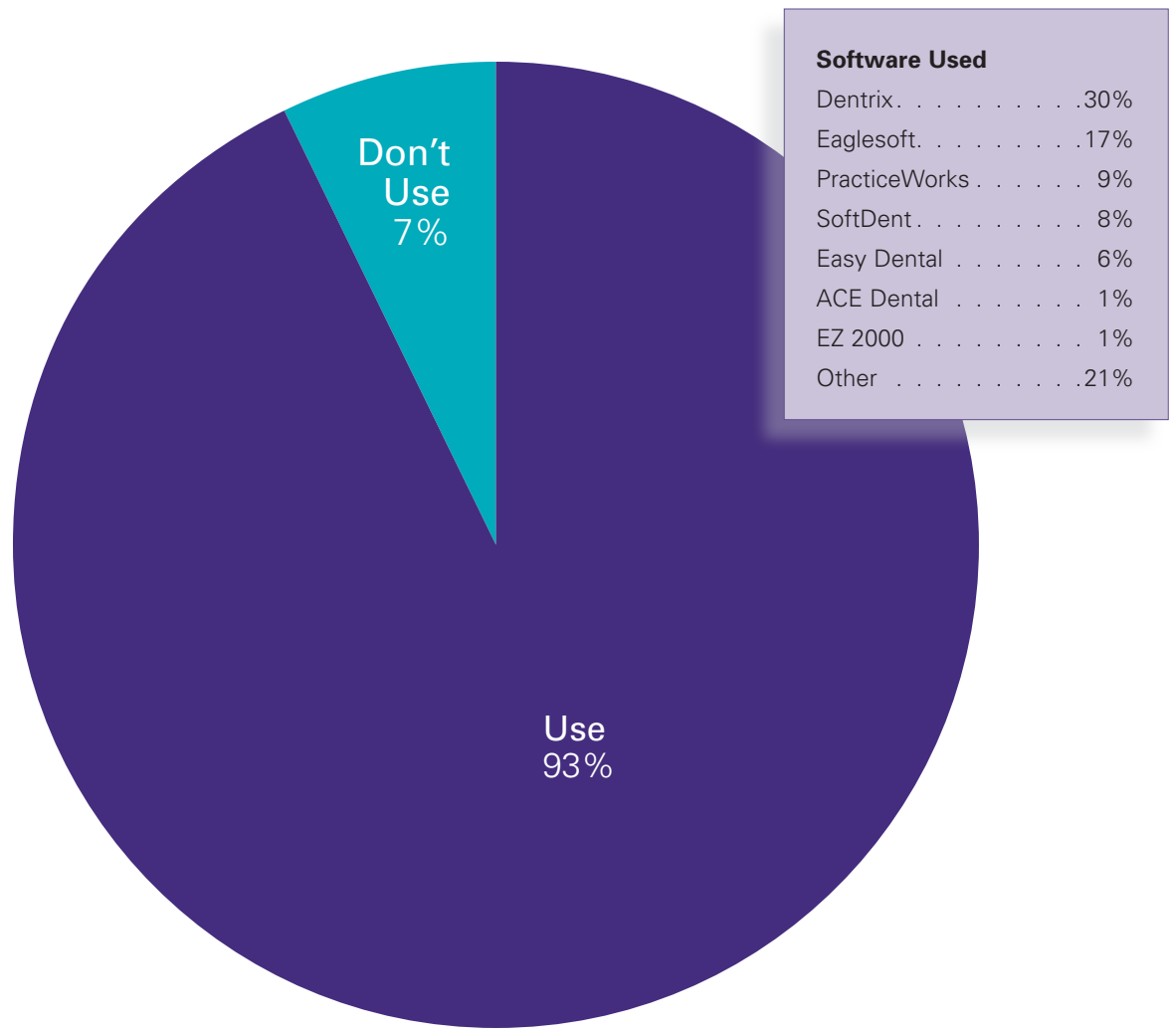


Dental HIT Survey Practice Participation

More than half of dentists are likely to increase the percentage of work done electronically in the next year.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Use of Practice Management Software, California, 2010

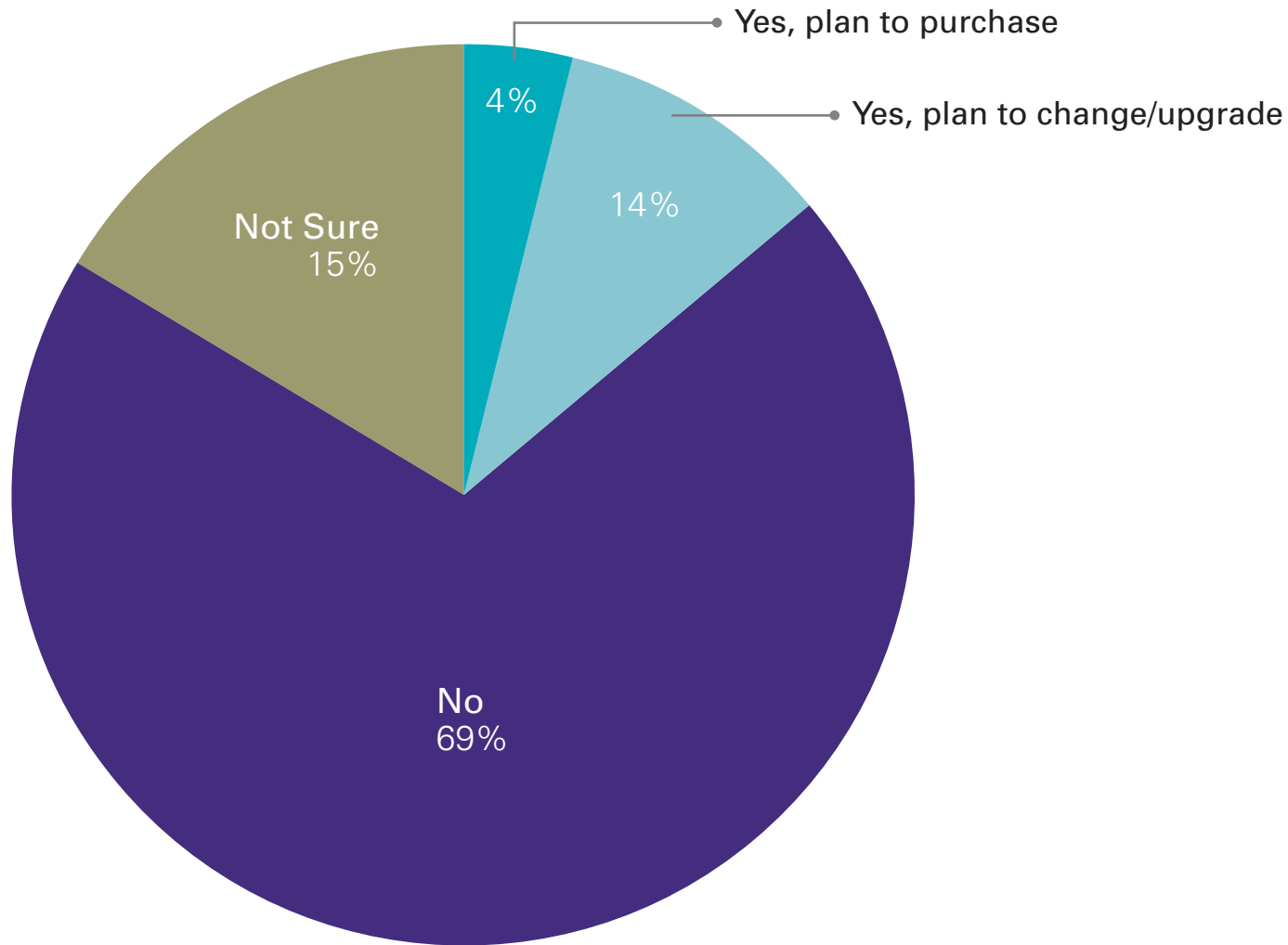


Dental HIT Survey Practice Participation

Nearly all dentists use practice management software. Dentrix has the largest market share, with 30 percent of California practices using it.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Plans to Purchase or Upgrade Practice Management Software, California, 2010



Notes: May not add to 100 percent due to rounding, n=100.

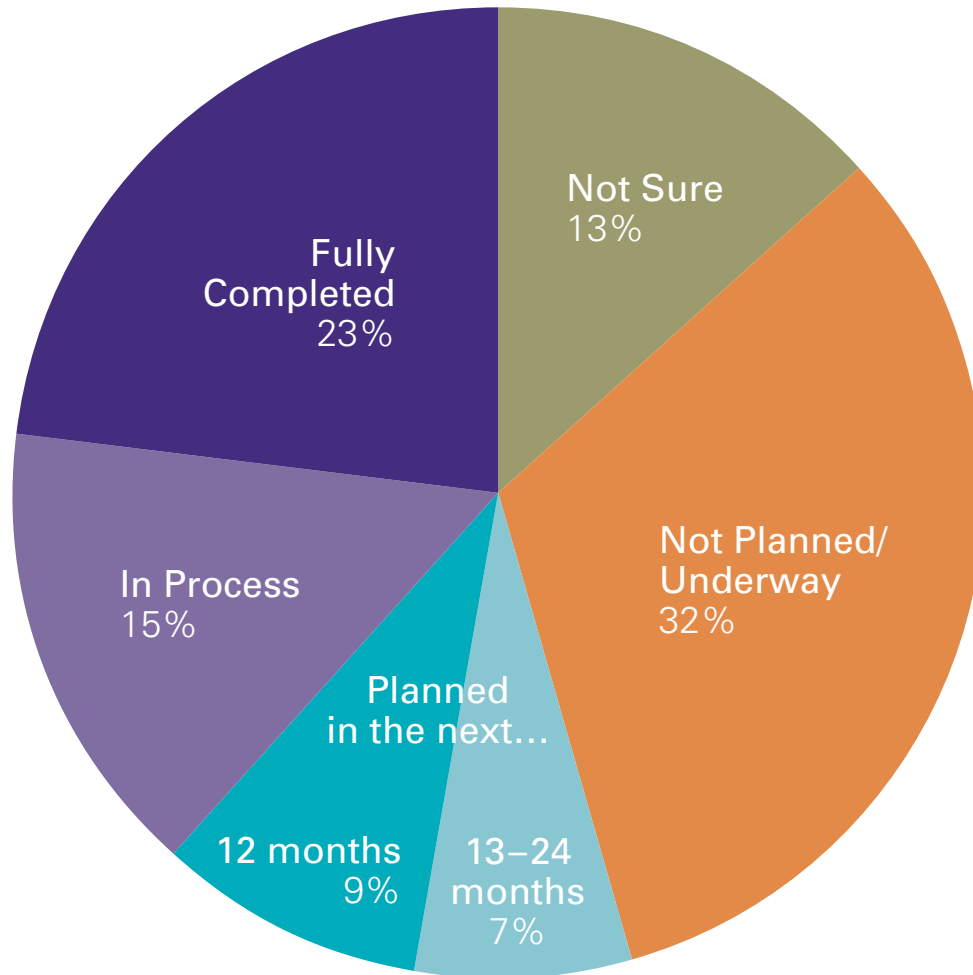
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey Practice Participation

A small portion of practices plan to purchase or upgrade their software in the next year. Among those planning to purchase or upgrade, 50 percent are considering Dentrix.

EDHR Implementation at Dental Practices, California, 2010

IMPLEMENTATION IS...

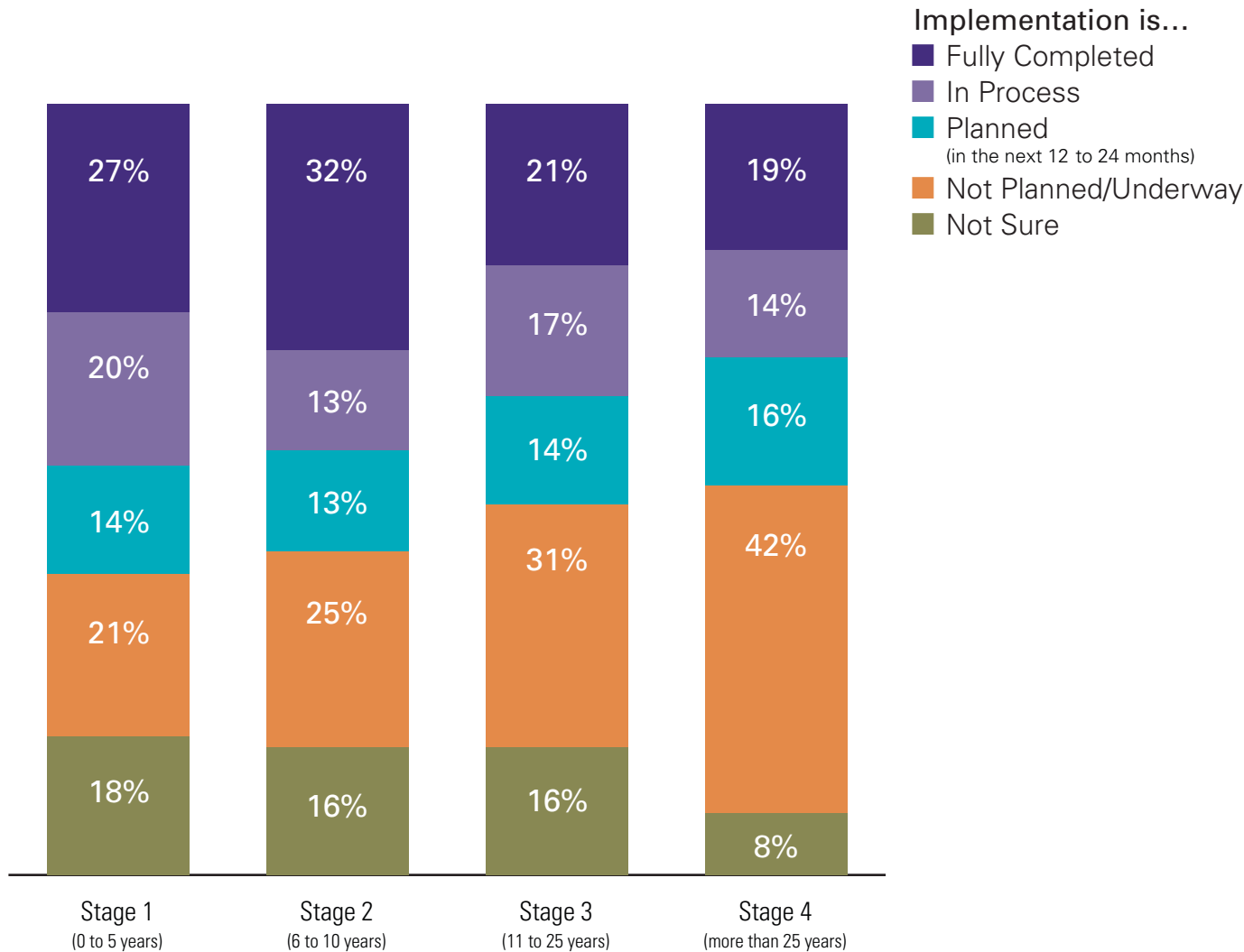


Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey Practice Participation

More than one-third of dentists have implemented an EDHR system or are in the process of doing so, and another 16 percent have plans to follow suit sometime in the next two years.

EDHR Implementation, by Stage of Practice, California, 2010

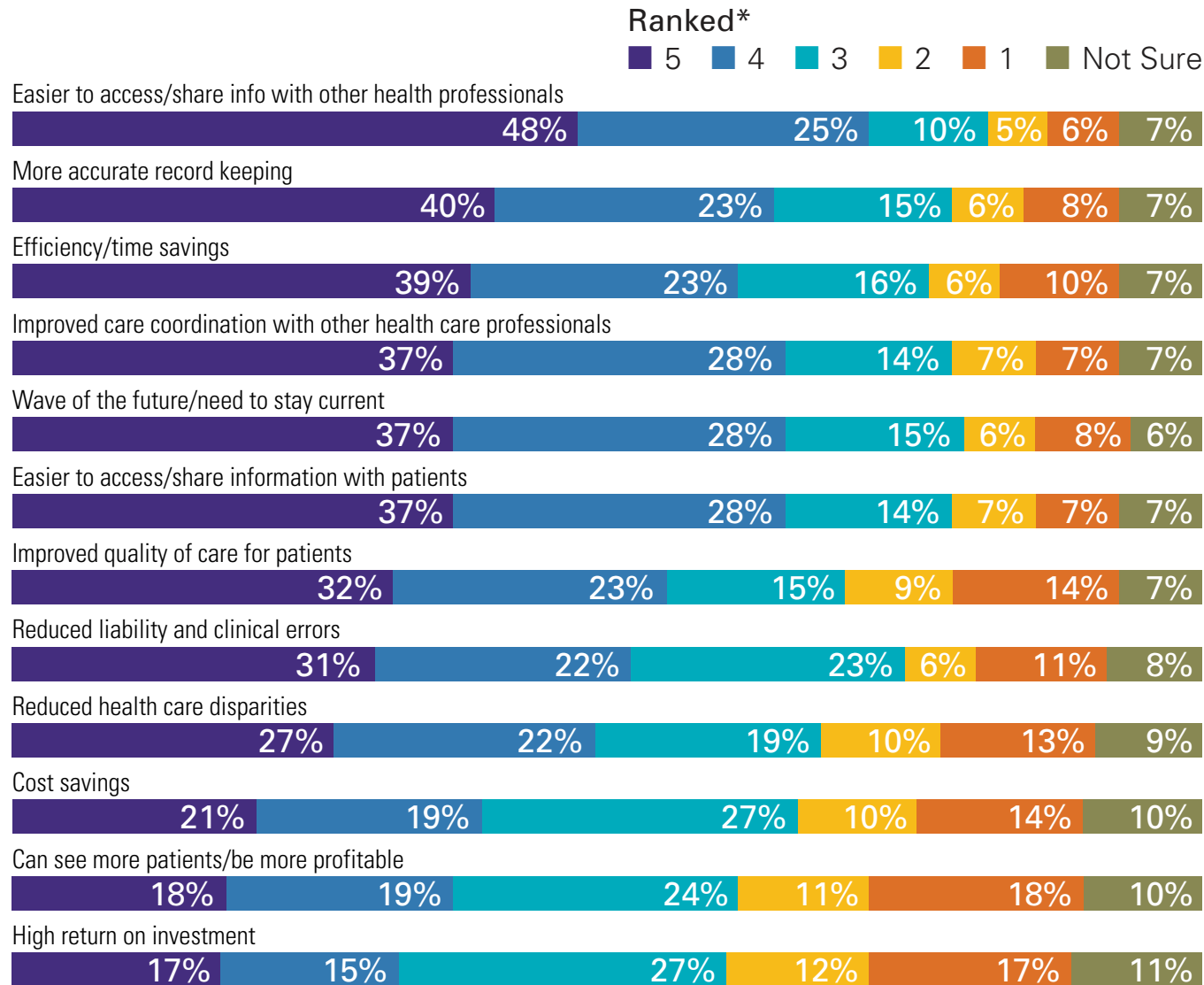


Dental HIT Survey Practice Participation

Stage 4 dentists (more than 25 years in practice) are less likely to use EDHRs now or in the future.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Perceived Benefits of Using EDHRs, California, 2010



*A ranking of 5 signifies a key benefit of using EDHRs and 1 means it wasn't seen as a benefit at all.

Note: May not add to 100 percent due to rounding.

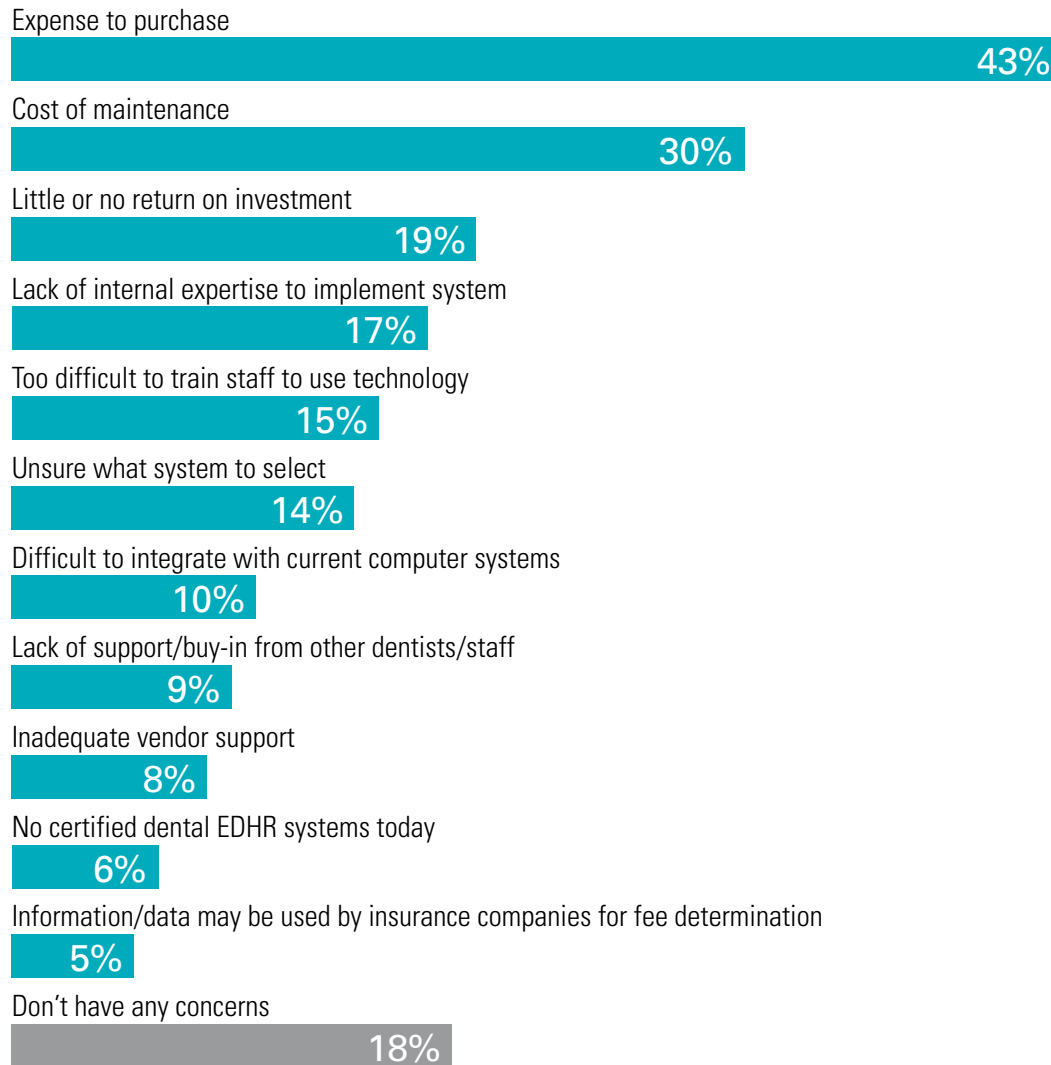
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Practice Participation

When asked to rank the potential benefits of EDHRs to their practice, dentists place the highest value on better communication/coordination of care with other health professionals and patients, efficiency, and accuracy. Far fewer expect EDHRs to provide a good return on investment.

Concerns About Implementing EDHRs, California, 2010

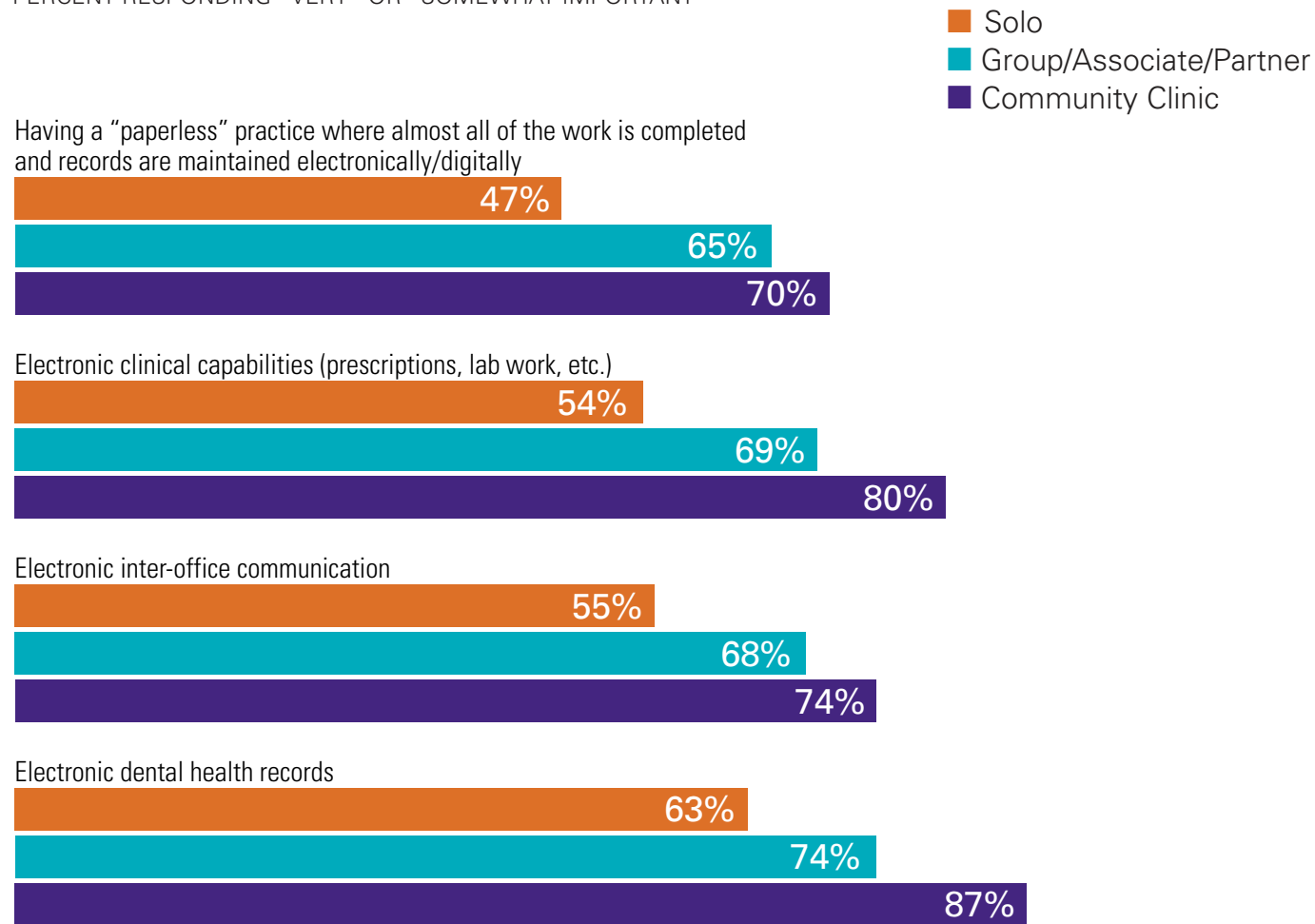


Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Cost is the most common concern about EDHR implementation.

Importance of EDHRs, by Practice Type, California, 2010

PERCENT RESPONDING "VERY" OR "SOMEWHAT IMPORTANT"

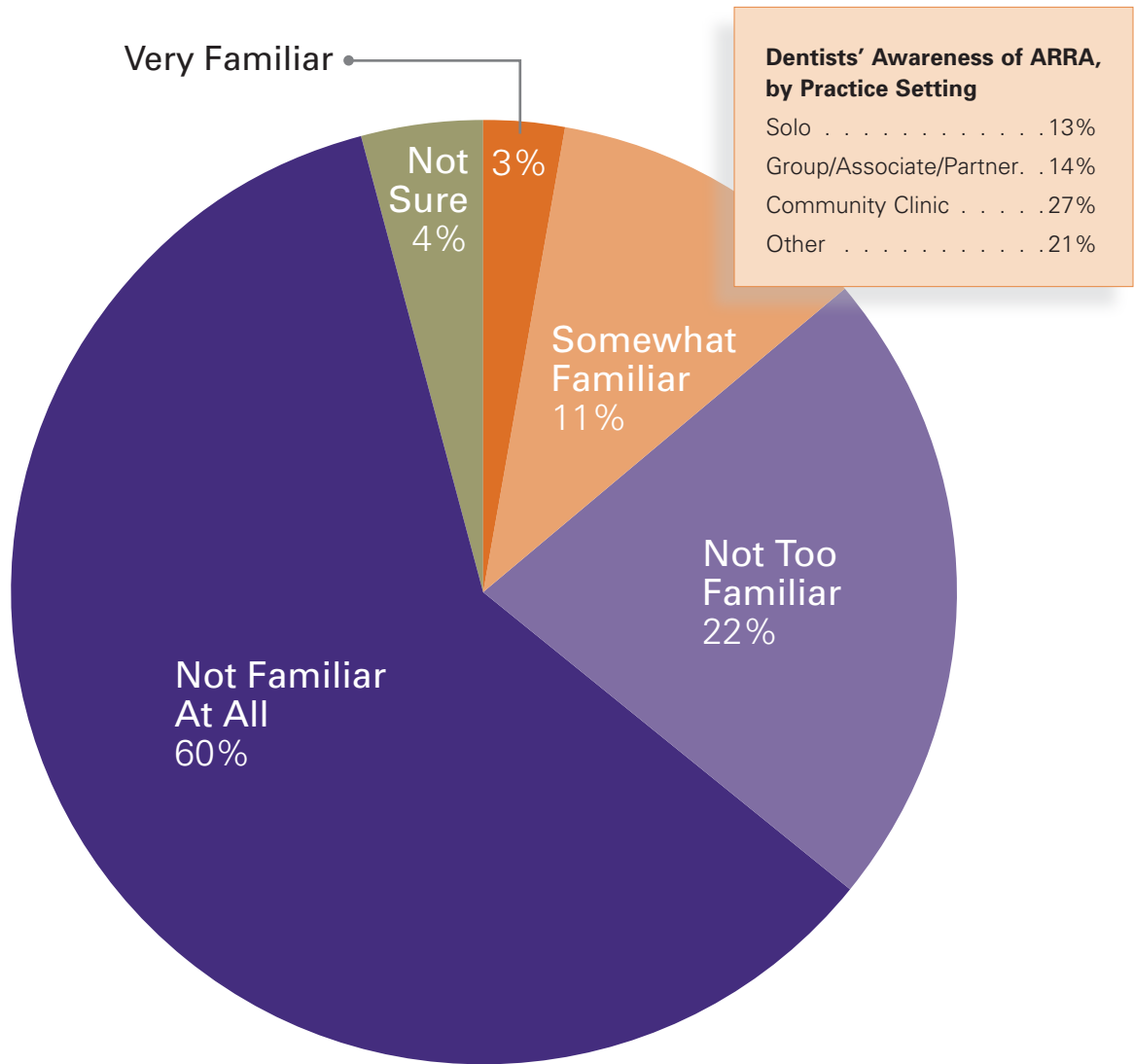


Dental HIT Survey Practice Participation

Community clinic dentists are more likely to report that EDHRs are important. Dentists in group practices are also more likely to feel that electronic capabilities are more important than those who work solo.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Familiarity with ARRA Provisions for EDHRs, California, 2010

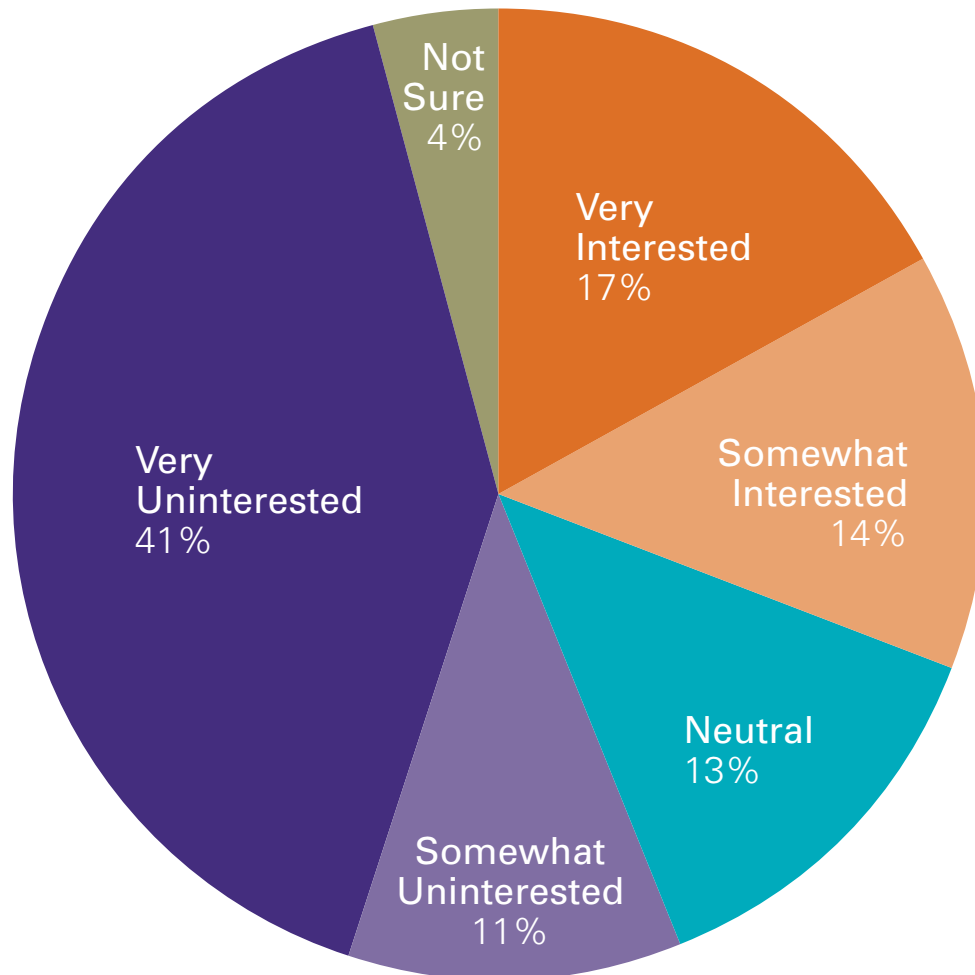


Dental HIT Survey ARRA

Most dentists are unfamiliar with provisions in the American Recovery and Reinvestment Act (ARRA) that provide financial incentives to dentists to adopt EDHRs. A quarter of dentists who work in community clinics are familiar.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

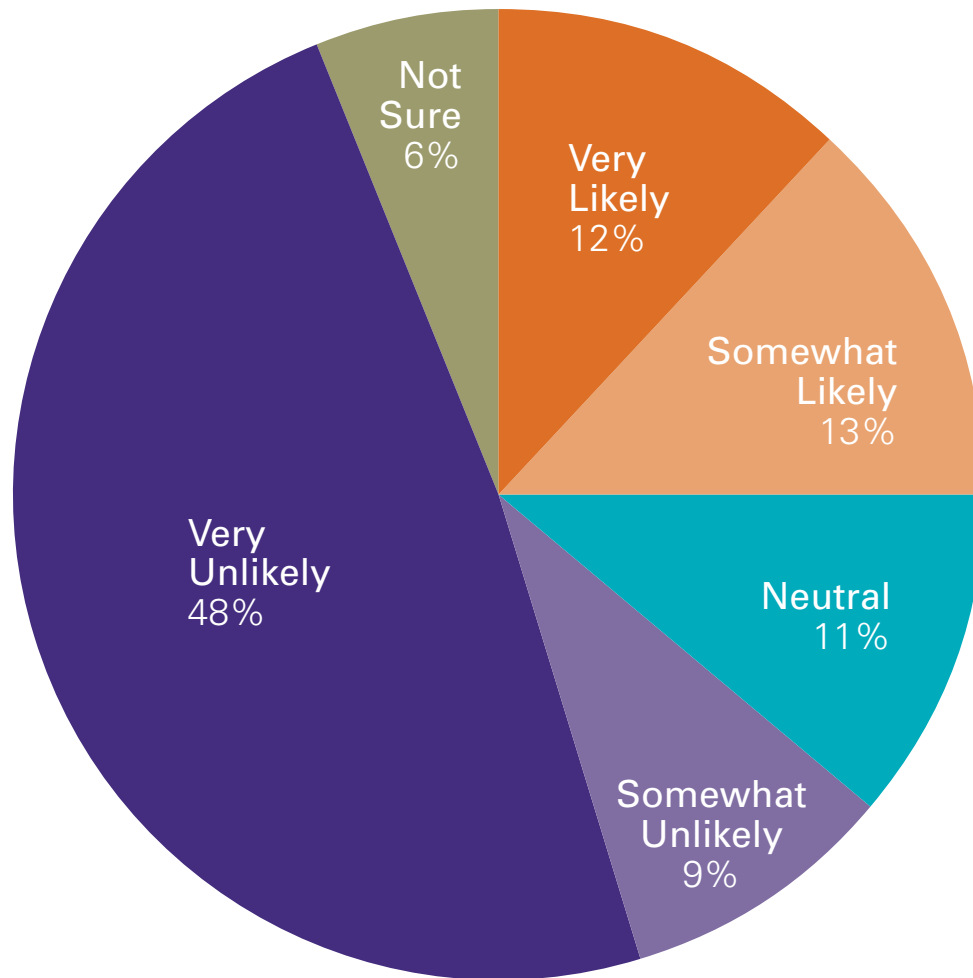
Interest in Learning More About ARRA, California, 2010



Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

After being exposed to basic information about ARRA, a third of California dentists expressed interest in learning more about the program's incentives to adopt EDHRs.

Likelihood to Participate in ARRA Program, California, 2010



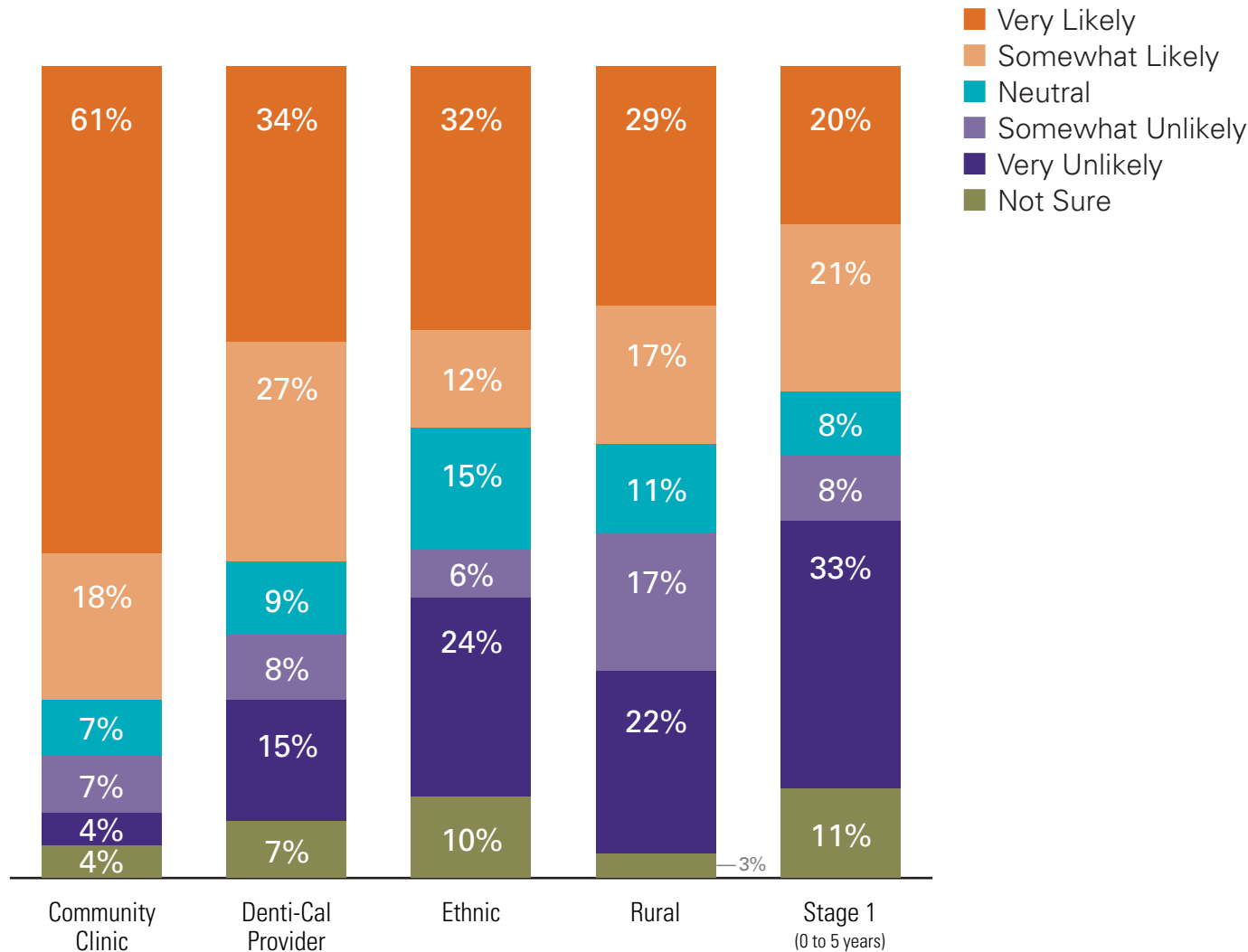
Notes: May not add to 100 percent due to rounding.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey ARRA

After being exposed to basic information about ARRA, just one-quarter of California dentists say they are likely to take advantage of the law's incentives to implement EDHRs.

Likelihood to Participate in ARRA Program, by Key Group, California, 2010



Dental HIT Survey ARRA

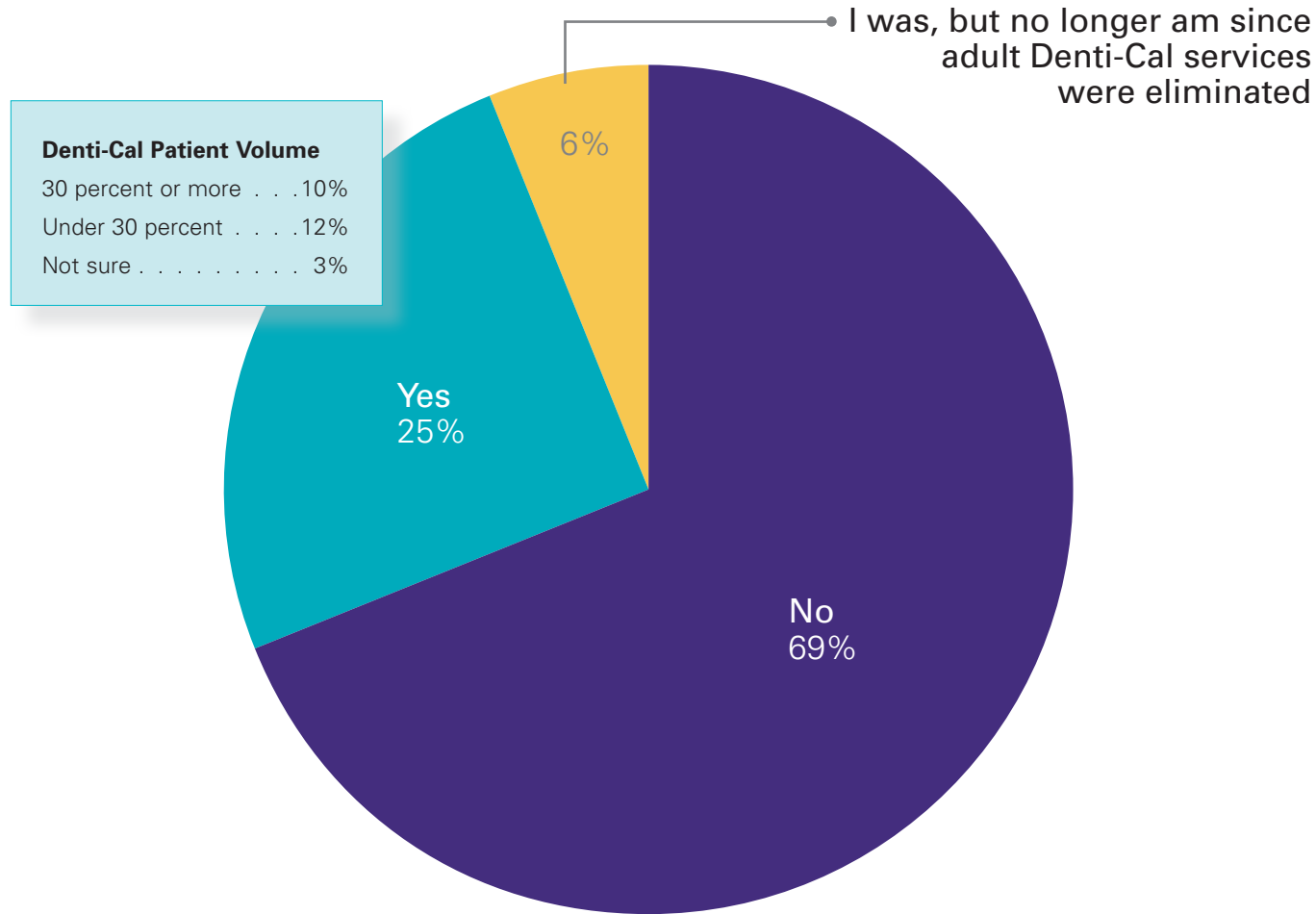
There are a number of key groups who say they are more likely to take advantage of the EDHR incentives in ARRA: community clinic, Denti-Cal, ethnic, rural, and younger dentists.

Notes: May not add to 100 percent due to rounding. Denti-Cal is California's Medicaid dental program.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Denti-Cal Provider Status, California, 2010

Are you currently a Denti-Cal provider?



Note: Denti-Cal is California's Medicaid dental program.

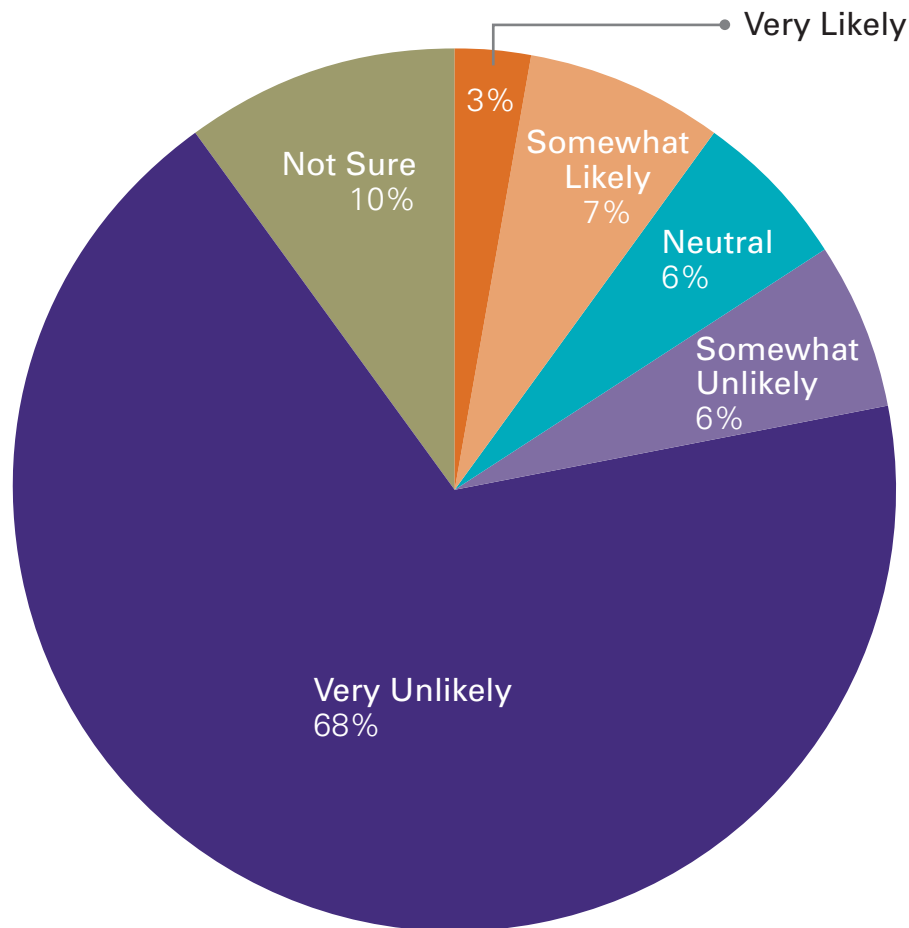
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey Denti-Cal Participation

One-quarter of California dentists surveyed report treating Denti-Cal patients. These practices are almost evenly split above and below the 30 percent volume threshold that would qualify them for EDHR incentives under ARRA.

Likelihood to Increase Denti-Cal Volume for ARRA Incentives, California, 2010

How likely would you be to consider increasing your Denti-Cal patient volume to 30 percent or more if you could receive federal incentive payments for Electronic Dental Health Record (EDHR) adoption?

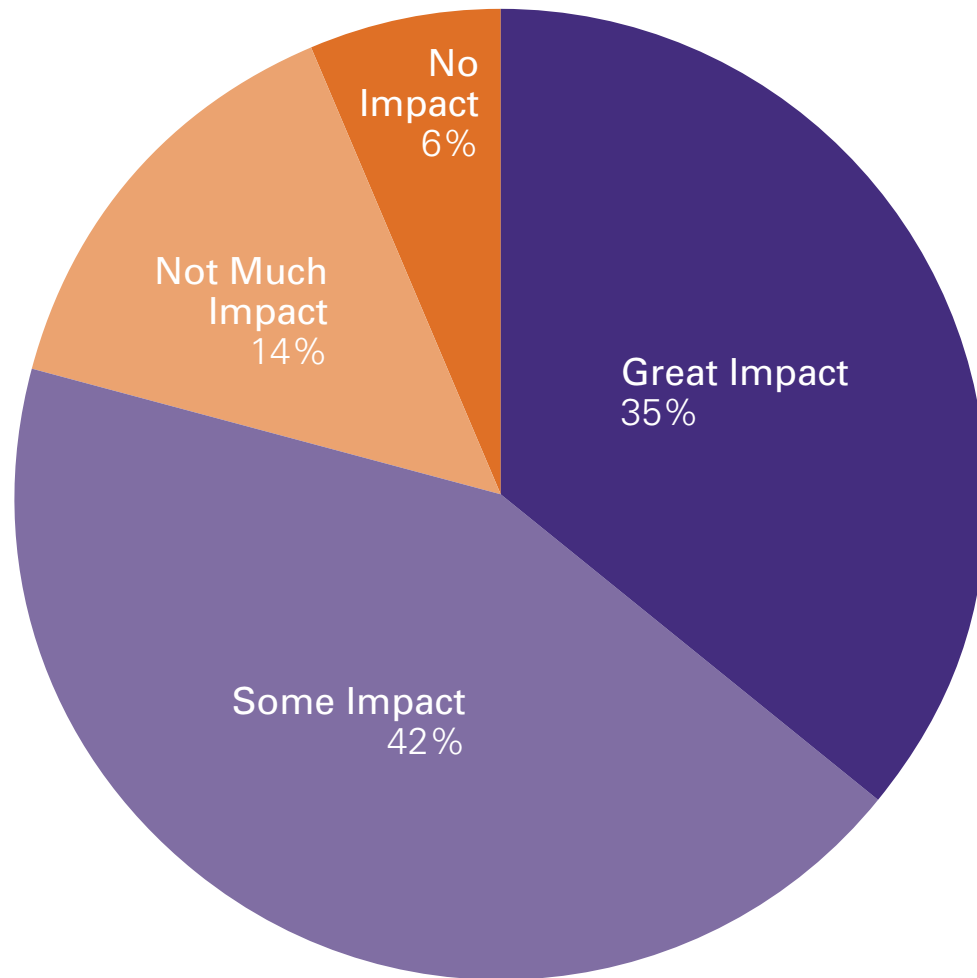


Notes: Asked of those with less than 30 percent Denti-Cal patient volume (n=530). Denti-Cal is California's Medicaid dental program.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dentists who do not already accept some Denti-Cal patients are unlikely to be motivated by the ARRA incentives.

Impact of Economic Climate on Technology Purchases, California, 2010



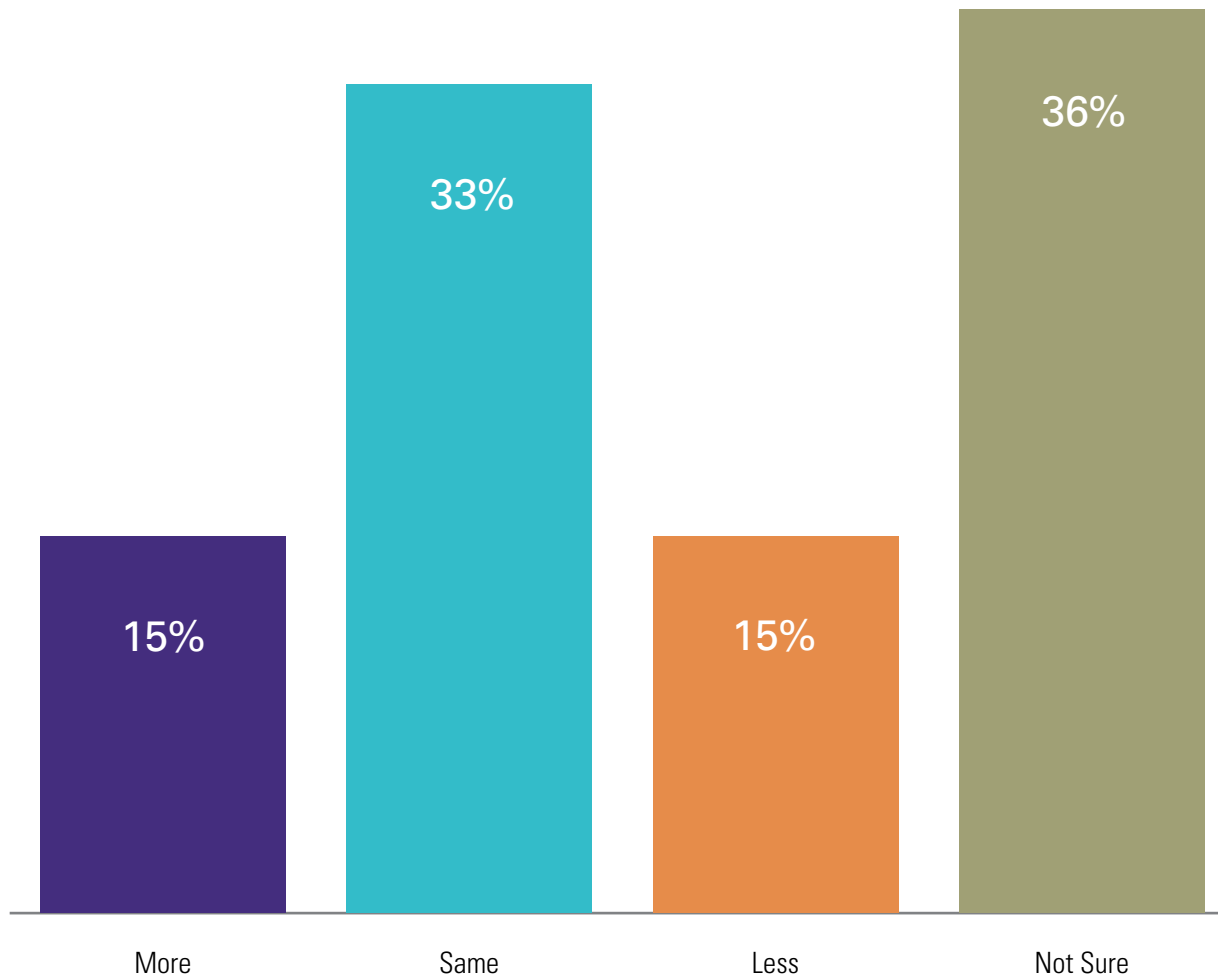
Notes: Percentages do not add up to 100 due to exclusion of "not sure" category.

Sources: *Dental Health Information Technology Survey*, Edge Research, April 2010. *CDA Mind of the Dentist*, Edge Research, June 2009.

Dental HIT Survey Expenditures

Large numbers of California dentists say the economy has had an impact on their technology spending. Dentists' confidence about the future of their practice could affect their willingness to make technology purchases.

Plans for Technology Spending in Next Year, California, 2010



Notes: May not add to 100 percent due to rounding.

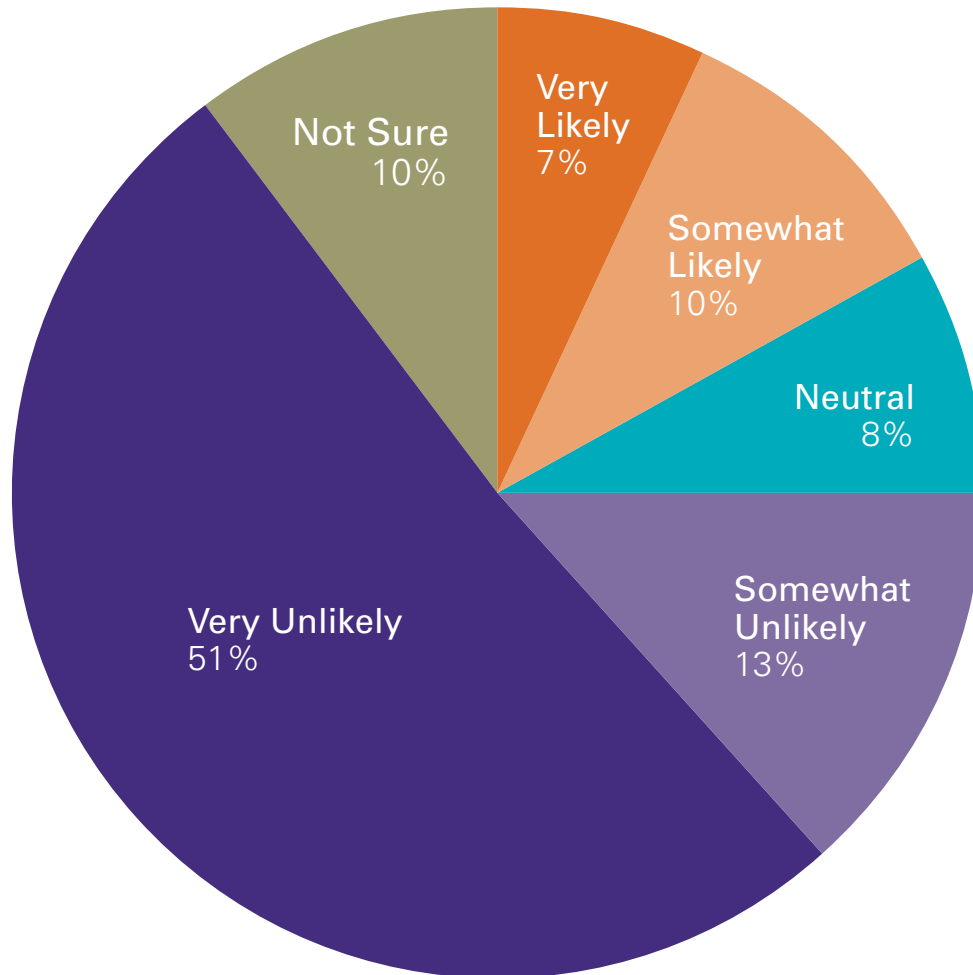
Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Dental HIT Survey

Expenditures

Seventy percent of California dental practices report they either plan to continue their current level of technology spending in the next 12 months or are uncertain. The remainder are equally divided about whether they plan to increase or decrease technology spending.

Likelihood to Borrow Money for Technology Purchase, California, 2010



Dental HIT Survey Expenditures

Few dentists say they are likely to take out a loan to fund a technology purchase in the next 12 months.

Source: *Dental Health Information Technology Survey*. Edge Research. April 2010.

Methodology

The survey used a mixed-modal data collection process, which included mail and online versions of the survey. All non-responders received at least one telephone and email reminder, to increase response rates. All California dentists were eligible to be randomly selected for the mail survey. All dentists with an email address on the California Dental Association file were eligible for random selection for online survey participation. Samples were pulled, and data weighted, to be representative by component (region), gender, and stage of practice. An oversample of community health clinic (CHC) dental directors was included in order to allow specific analysis of CHCs.

Survey fielded: January 14 through April 4, 2010

Total completes: 714 (399 online, 315 mail)

Response rate: 3.7 percent (7,140 invites mailed, 12,394 invites emailed)

Margin of error for the total sample is ± 3.7 percentage points at the 95 percent confidence level. Margin of error for subgroups is larger and varies.

Authors

Pam Loeb, principal

Ryan McGibony, analyst

Peter Yeung, analyst

Edge Research

Arlington, Virginia

FOR MORE INFORMATION



CALIFORNIA
HEALTHCARE
FOUNDATION

California HealthCare Foundation
1438 Webster Street, Suite 400
Oakland, CA 94612
510.238.1040
www.chcf.org