Job Satisfaction among Dentists Varies by Type of Large Group Practice





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## **Research Brief**

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## Job Satisfaction among Dentists Varies by Type of Large Group Practice Setting

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## **Key Messages**

- We examined career satisfaction among dentists working in two types of large group practice: those affiliated with a dental management organization, and those completely owned and operated by dentists.
- Dentists working in large group practices affiliated with dental management organizations were less satisfied with certain aspects of their practice, such as income and feeling emotionally drained, but were more satisfied with others, such as weekends off and reported fewer hours spent on non-clinical tasks, compared to dentists working in practices that were dentist owned and operated.
- As dental practice structures evolve, it is important to continue studying the implications for both dentists and patients.

## Introduction

The practice of dentistry is changing. Group practices in the United States are expanding. The character and structure of large group practices are shifting as well.<sup>1</sup>

A recent study by the authors<sup>2</sup> examined dentist satisfaction in different practice settings. In that study, information about career satisfaction was gathered from dentists practicing in three settings: solo practices, small group practices, and large group practices.

With the current expansion of large group practices,<sup>3</sup> learning more about the experiences and attitudes of dentists in these groups is important. This information could help dentists considering joining a group practice in making that decision.

In this research brief, we compare job satisfaction among dentists in two types of large group practices: (1) dental management organization affiliated (DMOA) practices and (2) dentist owned and operated practices (DOO).

Based on a recently established classification of dental group practices,<sup>3</sup> we define DMOA practices as those who contract with a dental management organization to conduct all of the business activities of the practice that do not involve the statutory practice of dentistry. This sometimes includes the ownership of the physical assets of the practice. We define DOO practices as those with more than one dentist in a single practice that may be located at a single or multiple site and that are completely owned and operated by dentists, usually organized as a partnership or professional corporation.

Our goal is to contribute to a better understanding of the characteristics that may impact job satisfaction among dentists in each of these large group practice settings.

## **Data & Methods**

#### Survey Instrument

We developed a survey to measure dentist satisfaction with income, benefits, hours worked, clinical autonomy, work-life balance, emotional exhaustion, and overall satisfaction. Items were drawn from pre-existing surveys<sup>4,5,6,7,8,9</sup> and developed by the research team.

#### Sample of Large Group Practice Dentists

We created a roster of large group practice dentists based on membership lists from the Dental Group Practice Association (DGPA) and the American Academy of Dental Group Practice (AADGP). All dentists on the DGPA membership list were large group practice dentists; membership requires employment in a group practice making a minimum of millions in revenue each year. Dentists on the AADGP membership list came from both large and small group practices. In order to determine which of these dentists were working in large group practices, a member of the research team examined practice webpages. Practices whose websites indicated a large group practice setting and multiple dentists at a single or multiple locations were included in the large group practice sample. In total, 5,208 large group practice dentists from 63 different practices were identified.

The 5,208 dentists included in our large group practice sample represented the six types of dental group practice defined in Table 1. DOO practices were usually organized as a partnership or professional corporation and included 736 dentists in the sample. Among DMOA practices, there were several types of dental management organizations and the nature of the agreements between the dentist and the dental management organization varied; 3,932 dentists working in DMOA practices were in the sample.

An additional 540 dentists were working in other types of large group practice, including insurer-provider (IP), not-for-profit (NFP), government agency (GA), and hybrid (H) group practices (Table 1). Although some of these dentists responded to the survey, they were not included in the analyses presented in this brief.

#### Respondents

The survey was sent to all 5,208 dentists via email; a follow-up mail survey was conducted to achieve a better response rate.

Of the 5,208 dentists from DOO, DMOA, and other types of large group practices, 865 responded for a total response rate of 16.6% (Table 2). Of those, 183 were DOO dentists (a 24.9% response rate), 655 DMOA dentists (a 16.7% response rate), and 27 were from other types of large group practice (a 5.0% response rate). Respondents represent a crosssectional "snapshot" of dentists in large group practice and are not necessarily nationally representative. First, compared to non-respondents to the survey, respondents were more likely to be ADA members and white. Also, bias is possible to the extent that the decision to respond to the survey was related to job satisfaction; for example, a dissatisfied dentist might feel more eager to complete the survey than a satisfied dentist or vice versa. Additionally, dentists who have chosen to stay in a practice for a long time are likely more satisfied, and dentists may end up in a given practice setting for a variety of reasons unobservable in our survey. Such factors could contribute to reported satisfaction. We controlled for many respondent level factors, but those not accounted for in this study may contribute to observed differences in satisfaction.

#### Analysis

As mentioned earlier, the analysis conducted for this research brief focused only on dentists working in two types of large group practice: DOO and DMOA. Too few responses from dentists in the other types of practices were available to include them in our analysis. We used logistic regression to evaluate the association between type of large group practice setting and our measures of satisfaction: income/benefits, hours/scheduling, work-life balance, clinical autonomy, career advancement/skill development, emotional exhaustion, and overall satisfaction.

Nearly all outcome variables were measured on rating scales of satisfaction or agreement. Ratings were recoded as "satisfied" versus indifferent or dissatisfied and "agree" versus indifferent or disagree. Emotional exhaustion was measured on a rating scale of likeness "to me." Ratings were recoded as "like me" versus indifferent or "unlike me." We controlled for years worked in current practice, marital status, gender, an indicator for working partner, age, presence of preschool- and school-aged children, and specialty.

For estimated income, we also controlled for full-time status.

## Results

Differences emerged between DOO and DMOA dentists on income, non-clinical hours worked per week, and certain satisfaction measures. Table 3 presents results of regression models for income and nonclinical hours and overall feelings about dentistry; only statistically significant differences are reported. Figures illustrate the differences in responses between DOO and DMOA dentists.

In regards to income, DMOA dentists reported lower satisfaction than DOO dentists, as shown in Figure 1, and they were more likely to indicate lower salary ranges, estimated at almost \$15,000 less per year on average (see Table 3). Nearly one-third of DMOA dentists reported incomes between \$100,000 and \$149,999, while one-fifth of DOO dentists reported incomes of \$300,000 or more (see Figure 2). DMOA dentists also reported about 1 hour less, on average, spent on non-clinical tasks per week (see Table 3). They were 80% more likely than DOO dentists to be satisfied with weekends off per month (see Table 3). Four out of five DMOA dentists reported satisfaction with weekends off compared to 69.7% of DOO dentists (see Figure 1).

Figure 3 summarizes differences in overall feelings about dentistry. As shown in Table 3, DMOA dentists were 60% more likely than DOO dentists to report that they feel emotionally drained from dentistry, and twice as likely to say that the experience of working in their current primary practice has changed how they feel about dentistry in a negative way. They were 35% less likely than DOO dentists to agree that they would make the same decision to go into dentistry knowing what they know now, and 40% less likely to agree that their current practice situation was what they envisioned when they chose to become a dentist.

## Discussion

This research brief examined differences within two categories of large group practice dentists: DOO and DMOA dentists. Both categories of dentists were similar in likelihood to feel stressed at work and likelihood to be satisfied with the care delivered in the practice. Both categories also reported similar levels of satisfaction with working hours, schedules, and overall work-life balance.

However, some significant differences in satisfaction levels that emerged are of key interest in explaining how these two sub-groups of large group practice dentists differ.

Dentists working in DMOA group practices reported lower salaries and spending fewer hours per week, on average, on nonclinical tasks compared to DOO dentists. Earning a lower salary has the potential to decrease satisfaction, whereas spending less time on nonclinical tasks could increase satisfaction. Depending on which aspect is more important to a given dentist, the dentist may decide one type of practice setting is a better fit for him/her than the other.

Of particular interest are the differences that reflect upon the practice of dentistry as a career choice. DMOA dentists were less likely to agree with the statements "Knowing what I know now, I would make the same decision to go into dentistry," and "My current practice situation is what I envisioned when I chose to become a dentist." They were more likely to report that they "feel emotionally drained from dentistry" and that the experience of working in their current primary practice has changed how they feel about dentistry in a negative way.

These findings indicate that for dentists working in DMOA settings, their current job may not be matching expectations they originally had in regards to practicing dentistry. DMOA dentists' increased likelihood to feel negatively about dentistry also indicates some dissatisfaction associated with the DMOA practice setting.

Together with our previous work,<sup>2</sup> these findings can be used to educate dentists about the aspects of different practice settings. Our interest in dentists' satisfaction was prompted by the link between job satisfaction and job performance,<sup>10</sup> the quality of the doctor-patient relationship, quality of care,<sup>11,12</sup> and patient compliance.<sup>13,14,15,16,17</sup> The analyses addressed in this brief and a previous study by the authors serve as a first step in that direction and provide some insight about dentists' experiences in the large group practice setting.

### Table 1: Classification of Dental Group Practices

| Dentist Owned and<br>Operated Group<br>Practice (DOO)                    | An aggregation of a variable number and/or type of dentists in a single practice that may be located at a single or multiple sites completely owned and operated by dentists, usually organized as a partnership or professional corporation.  |
|--|--|
| Dental Management<br>Organization<br>Affiliated Group<br>Practice (DMOA) | A group practice that has contracted with a dental management organization to conduct all of the business activities of the practice that do not involve the statutory practice of dentistry, sometimes including the ownership of the physical assets of the practice. There are several types of dental management organizations and there can be significant variations in the nature of the agreements between the dentist and the dental management organization. |
| Insurer-Provider<br>Group Practice (IP)                                  | A group practice that is part of an organization that both insures the health care of an enrolled population and also provides their health care services.   |
| Not-for-Profit Group<br>Practice (NFP)                                   | A group practice that is operated by a charitable, educational or quasi-governmental organization that often focuses on providing treatment for disadvantaged populations or training healthcare professionals.  |
| Government<br>Agency Group<br>Practice (GA)                              | A group practice that is part of a government agency. It is organized and managed completely by the agency. All dentists are government employees or contractors and operate according to agency policies.   |
| Hybrid Group<br>Practice (H)   | A group practice that does not clearly fit into any of the above categories and can exhibit some characteristics of several of them.   |

Source: American Dental Association, Health Policy Institute Research Brief, A Proposed Classification of Dental Group Practices.

Table 2: Number of Dentists in Sample by Type of Large Group Practice

| Type of Large Group Practice                    | Number of dentists<br>in sample | Number of survey<br>respondents | Response Rates |
|---|---------------------------------|---------------------------------|----------------|
| DOO (included)                                  | 736 (14.1%)                     | 183 (21.2%)                     | 24.9%          |
| DMOA (included)                                 | 3,932 (75.5%)                   | 655 (75.7%)                     | 16.7%          |
| Other includes IP, NFP, GA, H<br>(not included) | 540 (10.4%)                     | 27 (3.1%)                       | 5.0%           |
| TOTAL   | 5,208 (100.0%)                  | 865 (100.0%)                    | 16.6%          |

Source: American Dental Association, Health Policy Institute, 2015 Survey of Dentist's Practice Choices and Satisfaction.

|  | DMOA Dentists Relative to DOO Dentists |                           |  |
|--|--|---------------------------|--|
| Survey Item  | Regression<br>Coefficients             | t-statistics <sup>‡</sup> | Interpretation of<br>Coefficients            |
| Income and hours   |  |                           |  |
| Please estimate your 2012 income from your <b>current primary practice</b> , before taxes: (I)   | \$ -14,809.17*                         | -1.97                     | Make \$14,809 less                           |
| Hours per week spent on non-clinical tasks   | -1.1480*                               | 2.14                      | Spend 1.15 hours less                        |
| Weekends off per month (S) <sup>†</sup>  | 1.8410**                               | 2.92                      | 84% more likely to be satisfied              |
| Overall feelings about dentistry   |  |                           |  |
| I feel emotionally drained from dentistry. (L) $^{\dagger}$  | 1.6203*                                | 2.34                      | 62% more likely to say<br>"like me"          |
| Knowing what I know now, I would make the same decision to go into dentistry. (A) $^{\dagger}$   | 0.6465*                                | 2.10                      | 35% less likely to agree                     |
| My current practice situation is what I envisioned when I chose to become a dentist. (A) $^{\dagger}$                                      | 0.5986**                               | 2.71                      | 40% less likely to agree                     |
| Has the experience of working in your current practice changed how you feel about dentistry? [1= yes, negatively/0 otherwise] <sup>†</sup> | 2.2887***                              | 2.95                      | 129% more likely to say<br>"yes, negatively" |

#### Table 3: Significant Findings from Regression Analysis

Source: American Dental Association, Health Policy Institute, 2015 Survey of Dentist's Practice Choices and Satisfaction.

**Notes:** n = 740. Each row represents a separate regression. Regressions controlled for married, female, having a partner who works, age categories (<40, 41-50, 51-60, 60+), presence of pre-school-aged children, presence of school-aged children, years in current practice (less than 1 year, 1 to 2 years, 3 to 5 years, 6 to 10 years, 11 to 20 years, or over 20 years), and specialty (general, oral surg/endo/ortho, or peds/perio/prosth/public health). Regression for estimated income also controlled for full-time status.

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

I = Scale: 1 (\$0-49,000), 2 (\$50,000-99,000), 3 (\$100,000-149,000), 4 (\$150,000-199,000), 5 (\$200,000-249,000), 6 (\$250,000-299,000), 7 (\$300,000 or

more), linearized with the midpoint of the category and a value of \$350,000 for observations reporting \$300,000 or more.

S = Scale: 1 (very dissatisfied) - 5 (very satisfied), Binary outcome: 1 = 4 or 5, 0 otherwise

L = Scale: 1 (Unlike me) - 7 (like me), Binary outcome: 1 = 6 or 7, 0 otherwise

A = Scale: 1 (strongly disagree) - 5 (strongly agree), Binary outcome: 1 = 4 or 5, 0 otherwise

<sup>‡</sup>The t-statistics indicate precision of these coefficients; all coefficients fall within 95% confidence intervals.

<sup>†</sup>The regression coefficient for this item reflects the degree of difference between DMOA and DOO dentists in odds ratios.

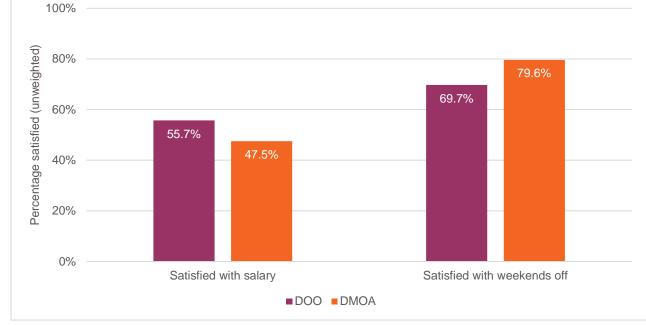
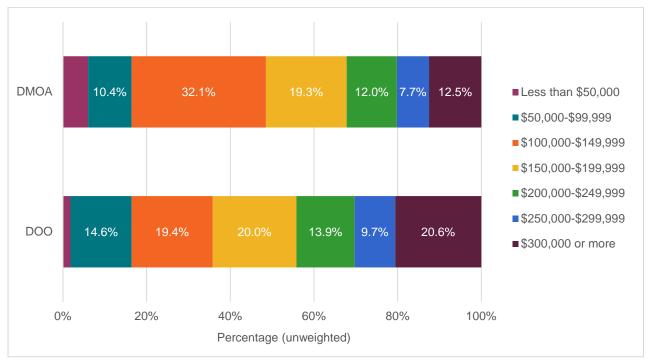


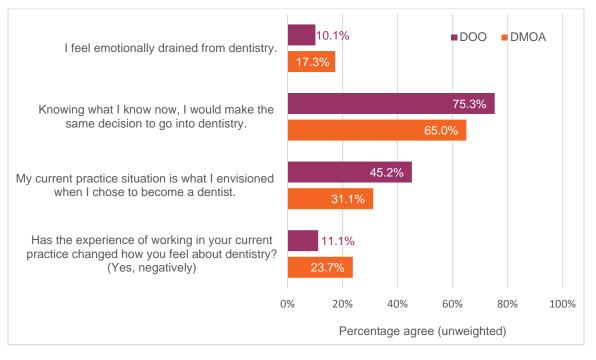
Figure 1. Satisfaction by Type of Large Group Practice

Source: American Dental Association, Health Policy Institute, 2015 Survey of Dentist's Practice Choices and Satisfaction.



## Figure 2. Income Range by Type of Large Group Practice

Source: American Dental Association, Health Policy Institute, 2015 Survey of Dentist's Practice Choices and Satisfaction.



### Figure 3. Agreement by Type of Large Group Practice

Source: American Dental Association, Health Policy Institute, 2015 Survey of Dentist's Practice Choices and Satisfaction.

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## References

<sup>3</sup> Guay, A, Warren, M, Starkel R, Vujicic, M. A proposed classification of dental group practices. Health Policy Institute Research Brief. American Dental Association. February 2014. Available from: http://www.ada.org/~/media/ADA/Science%20and%20Research/HPI/Files/HPIBrief 0214 2.ashx.

<sup>4</sup> Harris R, Ashcroft A, Burnside G, et al. Facets of job satisfaction of dental practitioners working in different organisational settings in England. *Brit Dent J* 2008;204:1-8.

<sup>5</sup> Shugars DA, Hays RD, DiMatteo MR, et al. Development of an instrument to measure job satisfaction among dentists. *Med Care* 1991;29:728-744.

<sup>6</sup> McCloskey JC, Mueller CW. McCloskey/Mueller Satisfaction Scale [Measurement instrument]. Iowa City, IA: University of Iowa College of Nursing. 1989.

<sup>7</sup> American Dental Association. Survey of Dental Practice [Measurement instrument]. Chicago, IL: Health Policy Institute. 2013.

<sup>8</sup> American Dental Association. Dental Well-Being Survey [Measurement instrument]. Chicago, IL: Health Policy Institute. 2003.

<sup>9</sup> Maslach C, Jackson SE, Leiter MP, et al. Maslach Burnout Inventory [Measurement instrument]. Menlo Park, CA: Mind Garden, Inc. 1981.

<sup>10</sup> Judge TA, Thorensen CJ, Bono JE, et al. The job satisfaction-job performance relationship: a qualitative review. *Psychol Bull* 2001;127:376-407.

<sup>11</sup> Williams ES, Skinner AC. Outcomes of physician job satisfaction: A narrative review, implications, and directions for future research. *Health Care Manage R* 2003;28:119-139.

<sup>12</sup> Friedburg MW, Chen PG, Van Busum KR, et al. Factors affecting physician professional satisfaction and their implications for patient care, health systems, and health policy. 2013. "www.rand.org/pubs/research\_briefs/RB9740.html" Accessed January 30, 2014. Archived at http://www.webcitation.org/6TreYlojM on Nov. 5, 2014.

<sup>13</sup> DiMatteo MR, Sherbourne CD, Hays RD, et al. Physicians' characteristics influence patients' adherence to medical treatment: results from the Medical Outcomes Study. *Health Psychol* 1993;12:93-102.

<sup>14</sup> Pascoe GC. Patient satisfaction in primary health care: a literature review and analysis. *Eval Program Plann* 1983;6:185-210.

<sup>15</sup> Kent G. Satisfaction with dental care. *Med Care* 1984;22:583-585.

<sup>16</sup> Zastowny TR, Roghmann KJ, Cafferata GL. Patient Satisfaction and the use of health services: explorations in causality. *Med Care* 1989;27:705-723.

<sup>17</sup> Zimmerman R. The dental appointment and patient behavior. Differences in patient and practitioner preferences, patient satisfaction, and adherence. *Med Care* 1988;26:403-414.

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<sup>&</sup>lt;sup>1</sup> Guay A. The evolution of dental group practices. J Calif Dent Assoc 2013;41:899-904.

<sup>&</sup>lt;sup>2</sup> Losasso T, Starkel R, Warren M, Guay A, Vujicic M. Practice setting and dentist job satisfaction. *J Am Dent Assoc;146(8),600-609.*