The relationship between altruistic attitudes and dentists' Medicaid participation.

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Please see article for additional authors.

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Comments
Supplemental data (survey instrument) is available online.

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RELATIONSHIP BETWEEN ALTRUISTIC ATTITUDES
AND DENTISTS’ MEDICAID PARTICIPATION

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ABSTRACT

Background. This study investigates the role of private practitioners in the dental safety net, including the provision of care for Medicaid enrollees and attitudinal factors that affect participation.

Methods. In 2013, a mixed-mode survey was sent to all general dentists in Iowa assessing their current Medicaid participation and factors affecting participation, including attitudinal statements about altruism, the Medicaid program, and the government’s role in providing access to dental care.

Results. 56% of responding dentists accepted new Medicaid patients; dentists living in non-metro areas were significantly more likely to accept Medicaid than those in metro areas. A logistic regression model demonstrated that participating dentists scored significantly higher in altruistic attitudes and perceived problems with Medicaid as less important.

Conclusions. Dentists who accepted Medicaid patients had significantly more positive attitudes about Medicaid administration and altruism in general. Future studies should examine how these attitudes are shaped by educational and professional experiences.

Practical Implications. Dentists’ perceptions about Medicaid are potentially modifiable by changing program policies in ways to improve access for vulnerable populations, including new Medicaid enrollees.

Key Words. Social responsibility; Medicaid; Affordable Care Act; access to care.
Acknowledgments:

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INTRODUCTION

A majority of states – 30 as of January 2014 – are currently implementing some form of Medicaid expansion under the Affordable Care Act (ACA).\(^1\) It is widely recognized by professional and governmental policymakers that the low level of Medicaid participation among dentists is a cause for concern. Limited availability of participating dentists acts as a major barrier to care for low income populations. A recent report from the U.S. Government Accountability Office found that over half of reporting states had serious challenges ensuring that they had enough dentists available to treat Medicaid enrollees – more than any other health care provider.\(^2\)

Private practice dentists play a vital role in the oral health safety net since the public safety net, including federally-qualified health centers (FQHCs) and other public health clinics, lacks sufficient capacity to ensure access to care for low income Americans.\(^3\) The American Dental Association (ADA) estimates that approximately 27% of dentists nationally treat Medicaid-insured patients.\(^4\) Despite this relatively low participation in Medicaid, private practitioners provide the greatest volume of care to Medicaid enrollees, given the size of the private dental workforce relative to public safety net capacity. In 2009, it is estimated that approximately 54% of dental care provided to children enrolled in Medicaid was provided by private general and pediatric dentists.\(^5\)

The American Dental Association (ADA) also estimates that 8.7 million children and 17.7 million adults will gain some form of dental benefits by 2018 through ACA-related changes to the health care delivery system, many as a result of expanded Medicaid coverage.\(^6\) If demand for dental services increases with the ACA-related expansion of dental benefits, then the considerations for workforce sufficiency are considerable, especially for those with coverage through Medicaid.
Dentists’ most commonly reported barriers to Medicaid participation include low reimbursement rates, administrative burdens, and undesirable patient behaviors, including high rates of broken appointments.\textsuperscript{7-9} Iowa Medicaid generally reimburses 40 to 50 percent of the amount charged by dentists in the region. The average fee charged for a periodic oral evaluation in the region (including North and South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri) is $38.58, and the rate of Iowa Medicaid reimbursement for the same service is $16.37.\textsuperscript{10,11}

While low reimbursement rates are often cited as the primary reason for not accepting Medicaid patients,\textsuperscript{7} the ADA found that fewer than half of non-participating dentists would treat Medicaid patients even if fees were raised to meet overhead costs.\textsuperscript{4} Iowa provides dental benefits to low income children through the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) Program and offers relatively comprehensive dental benefits to adult Medicaid enrollees.\textsuperscript{12} Medicaid reimbursement rates for dental procedures in Iowa lag behind national averages; an adult prophylaxis is reimbursed at approximately 90% of the national average and a pediatric prophylaxis is reimbursed at 80% of the national average.\textsuperscript{13}

Examining Medicaid participation in states where Medicaid fees have been adjusted reveals that increased reimbursement levels alone are not always sufficient to improve access to dental care.\textsuperscript{2,9} At least one study suggests that combining fee increases with streamlined administration, case management, and improving dentists’ attitudes provide the most gains in Medicaid participation.\textsuperscript{9} Additionally, increased ethnic and racial diversity of the dental workforce is consistently linked to higher rates of Medicaid participation.\textsuperscript{14-16}

Despite being recognized as barriers, attitudes as they relate to treating Medicaid enrollees are rarely considered when researching this topic. Most existing literature describes
relationships between demographic characteristics of dentists and Medicaid participation or perceptions of the Medicaid program. Dentists’ attitudes about altruism and other aspects of social responsibility remain poorly described. It has been documented, however, that dentists often feel tension between their roles as business owners and their societal obligations. This concept of social responsibility is closely linked to the professional obligations and privileges of dentistry.

To help prepare for Iowa’s ACA-related Medicaid expansion, we conducted a survey of private practice dentists in Iowa to understand the capacity of the private dental safety net for the influx of new enrollees as well as describe relationships between current Medicaid participation and attitudes about social responsibility, the Medicaid program, and Medicaid enrollees. This survey was conducted as part of a larger project to examine current capacity of the health care safety net in Iowa and to identify opportunities and challenges for providing care to the populations receiving dental coverage with full implementation of the ACA.

METHODS

In early 2013, a survey was mailed to all general dentists engaged in private practice in Iowa (N=1,101). The basic questionnaire was modified from a previous version developed by the University of Iowa Public Policy Center and College of Dentistry. We included additional items to ask dentists about their attitudes towards social responsibility, the Medicaid population, and commonly reported problems with the Medicaid program.

The survey was pre-tested for format and content validity by members of a national advisory committee, which included representatives from organized dentistry, academic experts, dental safety net providers, and government agencies. Members received iterative versions of the survey and provided feedback via cognitive interviews. The Iowa Dental Association supported
the survey with an announcement encouraging members to participate in the project. Dentist mailing addresses were obtained from the Iowa Dentist Tracking System (IDTS), which maintains information about all licensed dentists in the state.\textsuperscript{21}

After receiving an initial invitation to participate, dentists received a postcard reminder two weeks later, followed by a second survey mailing two weeks after that. Dentists were offered the option to complete the survey online. The online version of the survey was identical in content and similar in format to the paper version. No incentives were offered to encourage participation. Dentist participation was voluntary and confidential; by answering questions and returning surveys, consent was implied. This survey was approved by the University of Iowa Institutional Review Board.

**Dentist practice characteristics**

We obtained information about dentist age and gender from the IDTS. Survey items asked about dentists’ practice arrangements (e.g., solo versus group practice) and perceived workload during the previous 12 months. Workload was categorized as “too busy”, “busy, but not overworked”, and “not busy enough”.\textsuperscript{16} Practice urbanicity was defined at the county level and categorized using 2013 Rural-Urban Continuum Codes (RUCCs) as metropolitan (RUCCs 1-3) or nonmetropolitan (RUCCs 4-9).\textsuperscript{22}

**Dentist attitudes**

We included a series of survey items to measure altruistic attitudes among dentists, attitudes about Medicaid program administration, and attitudes about Medicaid enrollees (Table 1). Dentists were asked to indicate on a four-point scale the degree to which they disagreed or agreed with each statement (1=strongly disagree, 4=strongly agree). These statements were adapted from a previous survey provided to dental students\textsuperscript{23} that was modeled on a study that
examined attitudes towards social responsibility among medical students. We also provided dentists with a list of commonly reported problems with the Medicaid program and asked to indicate how important each factor was in their decision accept Medicaid patients. Response options ranged from 1 (“not at all important”) to 4 (“extremely important”).

Likert scales were produced by combining conceptually related items and calculated as the mean of scores across items. Internal consistency of scales was assessed using Cronbach’s $\alpha$. Item-total correlations were used to assemble scales and ensure construct validity (see Appendix); exploratory factor analysis was used to check for concept unidimensionality of each scale.

A scale measuring altruistic attitudes among dentists was built with seven survey items (Table 1). This scale demonstrated satisfactory internal consistency ($\alpha = .77$). Higher scores on this scale indicate more altruistic attitudes. A second scale measuring dentists’ attitudes about Medicaid enrollees was created from four survey items. This scaled variable also demonstrated satisfactory internal consistency ($\alpha = .63$). Higher scores on this scale indicated more positive attitudes towards the patient population.

Two additional scales were constructed to measure dentists’ attitudes towards administration of the Medicaid program (3-item scale) and perceptions of problems with Medicaid (11-item scale). Both scales demonstrated satisfactory internal consistency (Cronbach $\alpha$, .64 and .78, respectively). Higher scores indicated more positive attitudes about Medicaid administration and higher importance of problems, with respect to dentists’ decisions to participate in Medicaid.

Two additional Likert items were analyzed separately and assessed dentists’ concerns about having the only practice in the area that accepts Medicaid and their ability to provide
comprehensive treatment to Medicaid enrollees (Table 1). Higher scores here indicate more concern with each issue.

**Medicaid Participation**

The dependent variable for this study was current Medicaid participation analyzed as a dichotomous variable (yes or no). For this study, we defined a dentist as participating in the Medicaid program if they answered “yes” when asked whether they currently accept new Medicaid patients into their practice. If dentists responded affirmatively, they were also asked whether they accepted all Medicaid patients who contacted their office and how seriously they were considering stopping their acceptance of new Medicaid patients. Dentists were also asked what proportion of their current patients was covered by Medicaid.

**Analysis**

Bivariate analyses using the chi-square test and Student’s t-test compared demographic characteristics of respondents based on Medicaid participation. Additionally, we examined whether dentists’ attitudes varied with Medicaid participation. Effect sizes were estimated using the partial-biserial correlation coefficient, $r_{pb}$, and provide a measure of the magnitude of association between independent variables with Medicaid participation; these are reported in the Appendix. Correlations values of .37, .24, and .10 were considered to represent large, medium, or small effects.\(^{26}\)

We constructed two logistic regression models to identify predictors of accepting new Medicaid patients. The first model included all demographic characteristics entered simultaneously as a block. Attitudinal variables were entered as a second block in the second model. Models were compared using Nagelkerke’s pseudo-$R^2$; Hosmer-Lemeshow test of goodness of fit was used to test model significance.
A significance level of .05 was used for all hypothesis tests. Statistical analyses were conducted using IBM SPSS Statistics (version 21, Armonk, NY). Missing responses were treated as missing values in analysis. We examined patterns of missing responses to attitudinal statements among dentists based on Medicaid participation; Chi-square tests here did not reveal any statistically significant evidence of response bias based on age or gender (p>.05).

RESULTS

Demographic characteristics of survey respondents

Of the 1,101 eligible primary care dentists, 651 completed and returned surveys for an adjusted response rate of 59%. Survey respondents were comparable to the overall population of general dentists in age and gender. However, survey respondents were significantly more likely to be solo practitioners (65% versus 53% of all general dentists; p<.001). The majority of respondents were male dentists between the ages of 30-59 years (Table 2). Almost half were solo practitioners and the majority lived in metropolitan counties. Overall, dentists who lived in nonmetro areas were significantly more likely to accept Medicaid patients (Table 2).

Medicaid participation

Fifty-six percent of dentists reported that they currently accept new Medicaid patients into their practice. Among these participating dentists, 28% indicated that they accepted all new Medicaid patients who contact their office, while 72% accepted only limited numbers of new patients (i.e. only children or their own patients who go on Medicaid). On average, participating dentists reported that approximately 15% of their current patients were enrolled in Medicaid (range: 1-89%).
Dentists’ attitudes

Dentists who participate in the Medicaid program scored significantly higher on the scale measuring altruistic attitudes than nonparticipating dentists (p<.001, Appendix Table A3); this scale demonstrated a medium-large effect size ($r_{pb}=.32$, Appendix Table A3). Participating dentists also had significantly more positive attitudes towards administration of the Medicaid program (p<.001); attitudes about administration demonstrated a medium effect size as an independent variable ($r_{pb}=.22$). However, there was no significant difference in attitudes about Medicaid patients between the two groups (p=.36). Participating dentists had significantly greater concern about being the only practice in the area that accepts Medicaid (p=.01) and were significantly less concerned about their ability to provide Medicaid patients with comprehensive dental treatment (p<.001); both of these variables demonstrated small to medium effect sizes ($r_{pb}=.17$, .14, respectively). Dentists who participated in Medicaid perceived problems with the Medicaid program to be significantly less important than nonparticipating dentists (p<.001), with this variable demonstrating a small to medium effect size ($r_{pb}=.19$).

A scale that described dentists’ importance of perceived problems with the Medicaid program was included in the regression analysis. Additionally, we examined items that comprised this scale individually. Regardless of current Medicaid participation, low reimbursement was rated as the most important factor affecting dentists’ decisions to participate in the Medicaid program, followed by broken appointments, and denial of payment (Table 3).

Regression analysis

In the multivariable logistic regression model (N=484), none of the demographic characteristics were statistically significant predictors of Medicaid participation (Table 4, Model 1). When attitudinal variables were added to the regression model, four of these six variables
demonstrated statistical significance (Model 2). Dentists with higher levels of altruism, less positive attitudes about Medicaid patients, more positive attitudes about Medicaid administration, and lower ratings about the importance of perceived problems with Medicaid were significantly more likely to accept new Medicaid patients.

Models 1 and 2 both failed to demonstrate significance in the Hosmer-Lemeshow test (Table 4; p=.99 and .40, respectively) indicating adequate fit for both models. Nagelkerke pseudo-R² value for Model 1 increased substantially with the addition of attitudinal variables in Model 2, from .03 to .23.

DISCUSSION

Overall, about one in six general dentists (16%) who responded to this survey indicated that they accept all new Medicaid patients into their practices. This represents a significant decline in Iowa over the past few decades. In 1992, 62% of dentists in Iowa reported accepting all new Medicaid patients.²⁰ The current level of participation in a state with traditionally higher Medicaid participation than most portends the challenges that states face to ensure adequate provider networks for new enrollees in their expansion populations. However, 56% of dentists in this state currently accept at least some new Medicaid patients. This study found no significant relationship between perceived dentist workload and Medicaid participation. Although the Great Recession of 2007-2009 and slow economic recovery did contribute to challenges for Medicaid funding in many states²⁷, it is unknown whether this affected dentists’ decision to participate in Medicaid.

We conducted this survey to also examine how dentists’ attitudes were associated with Medicaid participation. Medicaid participation did not differ significantly with any demographic characteristic in the final model (Model 2; Table 4). Although there is some evidence that
dentists in nonmetro areas are more likely to accept Medicaid patients\textsuperscript{11}, this study did not find an association between practice location and Medicaid participation, although this relationship showed a trend towards significance (Table 4). However, participating dentists did have significantly different attitudes towards administration of the Medicaid program and the patient population.

We also found significant differences in how dentists perceived problems with Medicaid. Interestingly, the importance of reimbursement rates did not differ significantly between dentists based on their Medicaid participation (Table 3) and both groups ranked this factor as the most important problem, on average, with the Medicaid program. However, this perception does not appear to act as a major barrier to participation for certain dentists in the state. Indeed, dentists who accept new Medicaid patients scored significantly lower on their perceptions of problems with the Medicaid program in general.

Dentists who do not accept new Medicaid patients had significantly less favorable attitudes towards program administration. These attitudes may represent modifiable barriers to participation. The fact that dentists who currently accept new Medicaid patients had more favorable attitudes towards program administration may be due to positive experiences with the program. Alternatively, their more positive attitudes may be related to generally higher levels of altruism.

These generally favorable attitudes are reflected in participating dentists’ perceptions of problems with the Medicaid program. In general, dentists who accept Medicaid enrollees viewed commonly reported problems as less important to their decisions about Medicaid participation. Low reimbursement rates were the most important factor for both groups of dentists; whether
this factor acts as a barrier to participation appears to be attenuated by other factors, including attitudes about social responsibility.

One interesting finding from our study is that dentists who accept new Medicaid patients had less favorable attitudes about treating these patients. However, this relationship may not necessarily reflect negative attitudes about Medicaid enrollees: this scale included statements about the severity of oral health problems experienced by Medicaid patients and difficulty treating them. These findings may indicate a more realistic perception of the challenges dentists face treating this patient population.

**Study Limitations**

Our findings from this cross-sectional survey have several potential limitations. First, nonresponse bias could have affected our results, although we did not find any evidence of response bias when we compared demographic characteristics of survey respondents and non-responders. Secondly, as a cross-sectional study we can only describe the relationships between dentist characteristics and Medicaid participation. Altruistic attitudes may have led dentists to treat low income patients or altruism may develop after involvement with this population; likely, it is a bidirectional relationship. We were also unable to identify if any of our respondents were in practice together, which may have biased findings; however, this is likely to be a non-differential source of bias. Finally, dentists’ self-reported responses may suffer from social desirability bias if dentists were inclined to answer items in a way that portrayed them more favorably; however, this bias would likely lead to an overestimation of Medicaid participation, altruism, and attitudes about the population.
CONCLUSION

Despite several decades worth of research indicating that dentists perceive low reimbursement rates to be a significant barrier to participating in Medicaid, several recent studies have demonstrated that increased reimbursement levels do not always translate into improved participation rates.\textsuperscript{2,9} Reimbursement rates and other perceived administrative burdens are difficult to modify at a systems level and characteristics of the Medicaid population, such as case severity, are even less modifiable. However, our findings demonstrate that Medicaid participation is significantly associated with dentists’ attitudes, including views on social responsibility.

These attitudes may be potentially shaped by educational and professional experiences such as service-learning and community-based clinical experiences.\textsuperscript{28,29} However, studies have demonstrated a decrease in idealistic attitudes towards caring for underserved populations throughout dental school,\textsuperscript{23,30} although it is unclear whether these changes are the result of a true decline in altruism or reflect more realistic attitudes about the complexity of this issue.

As states move forward with ACA-related Medicaid expansion, ensuring an adequate supply of dentists willing to accept these enrollees may require innovative strategies that aim to change dentists’ attitudes and perceptions alongside administrative reform.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Survey Item</th>
</tr>
</thead>
</table>
| Dentist altruism                     | • Dental care should be available for needy patients  
• It is the responsibility of the government to fund programs that provide dental care to the needy  
• I feel a personal responsibility for providing dental care to the needy  
• Taxes should be raised so that dentists can be reimbursed more to treat needy patients  
• It is more efficient for the government to pay private dentists to provide care to needy patients than to fund public clinics  
• Without the Medicaid program, low income patients would not be able to get adequate dental care  
• Dentists have an ethical obligation to treat Medicaid patients |
| Attitudes about Medicaid patients*   | • Medicaid patients make other patients feel uncomfortable in the office  
• Oral health problems of Medicaid patients are more severe than those of other patients  
• Low income patients are more difficult to treat than others  
• I am more likely to be sued if I treat Medicaid patients |
| Attitudes about Medicaid administration | • The Medicaid program has been getting less complicated in the last few years  
• The Medicaid program respects my professional judgment concerning patient care  
• Changes in the Medicaid program are communicated effectively to my office |
| Perceptions of problems with the Medicaid program | • Complicated paperwork  
• Low reimbursement rates  
• Intermittent eligibility of Medicaid patients  
• Denial of payment  
• Broken appointments  
• Slow payment  
• Patient non-compliance with recommended treatment  
• Frequently changing Medicaid regulations  
• Not enough other practices in the area accepting Medicaid patients  
• Fear of government investigation (e.g., chart audits)  
• Limited services covered by Medicaid |
| Concern about providing comprehensive care | • It is difficult to provide comprehensive treatment to Medicaid patients |
| Concern about having the only local Medicaid practice | • I am concerned about having the only practice in the area that accepts Medicaid patients |

*Recoded so that higher scores corresponded to more positive attitudes towards Medicaid patients.
TABLE 2. Demographic characteristics of dentists by Medicaid participation.

<table>
<thead>
<tr>
<th></th>
<th>Survey Respondents</th>
<th>Accepts new Medicaid patients?</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>NO N (%)</td>
<td>YES N (%)</td>
</tr>
<tr>
<td>Total</td>
<td>651</td>
<td>285 (43.8)</td>
<td>366 (56.2)</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>38</td>
<td>14 (36.8)</td>
<td>24 (63.2)</td>
</tr>
<tr>
<td>30-59</td>
<td>439</td>
<td>197 (44.9)</td>
<td>242 (55.1)</td>
</tr>
<tr>
<td>≥60</td>
<td>173</td>
<td>72 (42.2)</td>
<td>100 (57.8)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>498</td>
<td>217 (43.6)</td>
<td>281 (56.4)</td>
</tr>
<tr>
<td>Female</td>
<td>153</td>
<td>68 (44.4)</td>
<td>85 (55.6)</td>
</tr>
<tr>
<td>Practice type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solo</td>
<td>317</td>
<td>147 (46.4)</td>
<td>170 (53.6)</td>
</tr>
<tr>
<td>Other</td>
<td>334</td>
<td>138 (41.3)</td>
<td>196 (58.7)</td>
</tr>
<tr>
<td>Perceived workload</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too busy</td>
<td>147</td>
<td>64 (43.5)</td>
<td>83 (56.5)</td>
</tr>
<tr>
<td>Busy but not work-worked</td>
<td>358</td>
<td>158 (44.1)</td>
<td>200 (55.9)</td>
</tr>
<tr>
<td>Not busy enough</td>
<td>122</td>
<td>51 (41.8)</td>
<td>71 (58.2)</td>
</tr>
<tr>
<td>Practice urbanicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro</td>
<td>371</td>
<td>177 (47.7)</td>
<td>194 (52.3)</td>
</tr>
<tr>
<td>Nonmetro</td>
<td>280</td>
<td>108 (38.6)</td>
<td>172 (61.4)</td>
</tr>
</tbody>
</table>

*P<.05.
TABLE 3. Importance of commonly reported problems with Medicaid†

<table>
<thead>
<tr>
<th>Problem</th>
<th>Mean Rating</th>
<th>Accepts new Medicaid patients?</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low reimbursement rates</td>
<td>3.79</td>
<td>NO</td>
<td>3.82</td>
</tr>
<tr>
<td>Broken appointments</td>
<td>3.77</td>
<td>NO</td>
<td>3.78</td>
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<tr>
<td>Denial of payment</td>
<td>3.43</td>
<td>NO</td>
<td>3.56</td>
</tr>
<tr>
<td>Patient non-compliance with recommendations</td>
<td>3.21</td>
<td>NO</td>
<td>3.33</td>
</tr>
<tr>
<td>Complicated paperwork</td>
<td>3.08</td>
<td>NO</td>
<td>3.22</td>
</tr>
<tr>
<td>Frequently changing regulations</td>
<td>3.03</td>
<td>NO</td>
<td>3.18</td>
</tr>
<tr>
<td>Limited services covered by Medicaid</td>
<td>3.04</td>
<td>NO</td>
<td>3.18</td>
</tr>
<tr>
<td>Intermittent eligibility of Medicaid patients</td>
<td>2.97</td>
<td>NO</td>
<td>3.06</td>
</tr>
<tr>
<td>Not enough other practices in the area accept Medicaid</td>
<td>2.89</td>
<td>NO</td>
<td>2.87</td>
</tr>
<tr>
<td>Slow payment</td>
<td>2.82</td>
<td>NO</td>
<td>3.02</td>
</tr>
<tr>
<td>Fear of government investigation (eg, chart audit)</td>
<td>1.90</td>
<td>NO</td>
<td>2.05</td>
</tr>
</tbody>
</table>

†Rated from 1 (not at all important) to 4 (extremely important).

*P<.05.
TABLE 4. Predictors of dentist Medicaid participation (N=484).

<table>
<thead>
<tr>
<th>Table</th>
<th>Odds Ratio (95% CI)</th>
<th>P value</th>
<th>Odds Ratio (95% CI)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>Reference</td>
<td>.29</td>
<td>Reference</td>
<td>.71</td>
</tr>
<tr>
<td>30-59</td>
<td>.44 (.16, 1.23)</td>
<td>.64 (.21, 1.92)</td>
<td>.61 (.19, 2.00)</td>
<td></td>
</tr>
<tr>
<td>≥60</td>
<td>.48 (.16, 1.43)</td>
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<td></td>
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</tr>
<tr>
<td>Gender</td>
<td></td>
<td>.58</td>
<td></td>
<td>.35</td>
</tr>
<tr>
<td>Male</td>
<td>Reference</td>
<td></td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.15 (.71, 1.86)</td>
<td></td>
<td>1.29 (.76, 2.19)</td>
<td></td>
</tr>
<tr>
<td>Practice type</td>
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<td>.16</td>
<td></td>
<td>.15</td>
</tr>
<tr>
<td>Solo</td>
<td>Reference</td>
<td></td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1.31 (.90, 1.93)</td>
<td></td>
<td>1.36 (.89, 2.06)</td>
<td></td>
</tr>
<tr>
<td>Perceived workload</td>
<td></td>
<td>.16</td>
<td></td>
<td>.84</td>
</tr>
<tr>
<td>Too busy</td>
<td>Reference</td>
<td></td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>Busy but not over-worked</td>
<td>1.06 (.67, 1.67)</td>
<td></td>
<td>1.16 (.71, 1.90)</td>
<td></td>
</tr>
<tr>
<td>Not busy enough</td>
<td>1.10 (.97, 2.11)</td>
<td></td>
<td>1.10 (.58, 2.07)</td>
<td></td>
</tr>
<tr>
<td>Practice urbanicity</td>
<td></td>
<td>.07</td>
<td></td>
<td>.07</td>
</tr>
<tr>
<td>Metro</td>
<td>Reference</td>
<td></td>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>Non-metro</td>
<td>1.43 (.97, 2.11)</td>
<td></td>
<td>1.50 (.97, 2.32)</td>
<td></td>
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<tr>
<td>Dentist altruism</td>
<td></td>
<td>3.49 (2.23, 5.44)</td>
<td>&lt;.001*</td>
<td></td>
</tr>
<tr>
<td>Attitudes about Medicaid patients</td>
<td></td>
<td>.54 (.36, .80)</td>
<td>.002*</td>
<td></td>
</tr>
<tr>
<td>Attitudes about Medicaid administration</td>
<td></td>
<td>1.50 (1.07, 2.10)</td>
<td>.02*</td>
<td></td>
</tr>
<tr>
<td>Importance of perceived problems with Medicaid</td>
<td></td>
<td>.49 (.30, .81)</td>
<td>.01*</td>
<td></td>
</tr>
<tr>
<td>Only practice that accepts Medicaid</td>
<td></td>
<td>1.10 (.89, 1.37)</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Comprehensive treatment</td>
<td></td>
<td>.78 (.60, 1.03)</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Pseudo-R^2</td>
<td></td>
<td>.03</td>
<td></td>
<td>.23</td>
</tr>
<tr>
<td>Chi-square (P value)</td>
<td></td>
<td>1.06 (.99)</td>
<td>8.41 (.40)</td>
<td></td>
</tr>
</tbody>
</table>

*P<.05.
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