

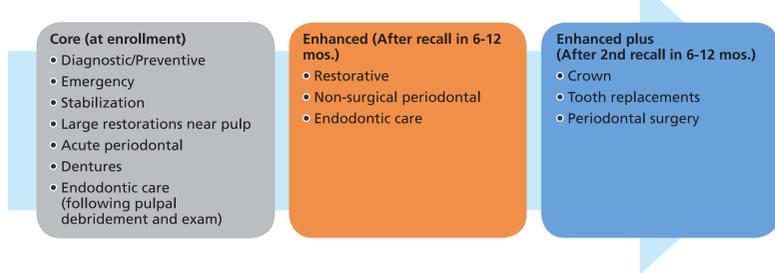


Introduction

The Dental Wellness Plan (DWP) provides dental coverage for enrollees in the Iowa Health and Wellness Plan (IHAWP), which is the Medicaid expansion program in Iowa. IHAWP includes adults aged 19-64 years with income between 0 and 133% of the Federal Poverty Level (FPL) and who are not otherwise eligible for Medicaid. A unique feature of the DWP is its earned benefits structure (EBS) that was designed to encourage preventive health care-seeking behaviors and member responsibility. DWP enrollees receive dental benefits at three levels: core benefits, enhanced benefits, and enhanced plus benefits.¹

Upon enrollment, all members are eligible for "core benefits"; however, in order to achieve the "enhanced benefits" and "enhanced plus benefits", members must return every 6-12 months for regular dental examinations. Figure 1 lists the dental services that are covered in each tier. Failure to return for regular recall visits results in return to core benefits tier.

Figure 1. Earned Benefits in Dental Wellness Plan of Iowa



Objective

Dentists' participation in public dental programs is influenced by their experience and satisfaction with the program. Studies examining dentists' attitudes towards Medicaid have reported several programmatic- and patient-related barriers to providing care for Medicaid members.²⁻⁹ The objective of this study is to examine providers' perception of the earned benefits component of the Dental Wellness Plan, as well as factors associated with dentists' attitudes towards DWP's earned benefits structure.

Methods

- Mixed-mode surveys were administered to all licensed Iowa general dentists in private practice as of March 1, 2015 (N=1140).
- Dentists were asked the extent to which they agree or disagree with 5 statements about the Earned Benefits Structure (Figure 2). Responses ranged from "-2" (strongly disagree) to "+2" (strongly agree).
- Dependent variable:** Using factor analysis, responses from the 5 items were used to create a scale summarizing attitudes towards EBS. EBS attitude scores ranged from -10 to +10; higher scores indicate more positive attitudes.
- Explanatory variables:**
 - Dentists' perceptions about 8 DWP-related problems - rated on a scale of 1 (No problem) to 5 (Major problem).
 - Current participation in DWP - categorized as "Accepting all new members", "Accepting some new members", and "Accepting no new members".
 - Altruistic attitude - dentists were asked to indicate the degree to which they agree or disagree with the statement, "Dentists have an ethical obligation to treat DWP patients". Responses ranged from "-2" (strongly disagree) to "+2" (strongly agree).
 - Sociodemographic and practice characteristics.
- Bivariate analyses and multivariable linear regression was performed to explore associations between the explanatory variables and EBS attitude scores.

Figure 2. Dentists' attitudes towards DWP's Earned Benefits Structure (EBS) (N=221)

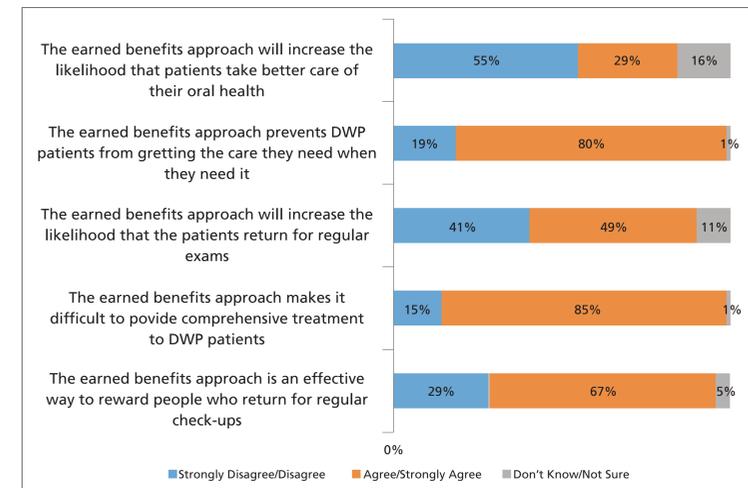


Table 1. Dentists' sociodemographic and practice characteristics and bivariate associations with EBS scale scores

Characteristic	N (%)	EBS summative scale score ^a		P value ^c
		Mean (SD)		
Total	221	-1.7 (4.5)		NA
Age (years)				
Mean (SD)	49.0 (13.1)	0.21 ^b		0.002^b
Gender				
Female	58 (26.2)	-1.7 (4.5)		0.95
Male	163 (73.8)	-1.7 (4.4)		
Race				
White	196 (88.7)	-1.4 (4.2)		0.33
Non-White	6 (2.7)	-2.6 (4.5)		
Unknown race	19 (8.6)	-1.8 (3.9)		
DWP current participation				
Accepting all new members	102 (46.2)	-1.2 (4.9)		0.005
Accepting some new members	54 (24.4)	-0.8 (4.3)		
Accepting no new members	65 (29.4)	-3.2 (3.6)		
Practice type				
Solo	130 (58.8)	-1.4 (4.6)		0.26
Other	91 (41.2)	-2.1 (4.2)		
Perceived Workload				
Too busy	68 (30.8)	-1.9 (4.3)		0.90
Busy but not overworked	119 (53.8)	-1.6 (4.6)		
Not busy enough	34 (15.4)	-1.6 (4.6)		
Years in practice				
Mean (SD)	16.6 (12.4)	0.14 ^b		0.04^b
Practice Urbanicity				
Metro	58 (26.2)	-1.7 (4.7)		0.71
Non-Metro	163 (73.8)	-1.7 (4.4)		

DWP: Dental Wellness Plan; SD: Standard Deviation
 NA: Not applicable
^aRanges from -10 to +10; higher scores indicate more positive attitudes
^bSpearman's measure of correlation between characteristic and EBS summative scale score
^cP-value for Spearman's correlation
^dMann Whitney U Tests and Kruskal Wallis Tests performed
 Significant at p<0.05

Table 2. Bivariate correlations between dentists' attitudes and altruism and DWP's Earned Benefits Structure (EBS)^a (N=221)

Perception of DWP-related problems ^b	Mean (SD)	Spearman's ρ	P value ^c
Time spent on paperwork	2.4 (1.1)	0.33	<0.001*
Denial of payment	2.6 (1.2)	0.41	<0.001*
Difficulty of eligibility determination	2.8 (1.4)	0.39	<0.001*
Limited services covered	2.2 (1.2)	0.44	<0.001*
Broken appointments	2.6 (1.0)	0.29	<0.001*
Complexity of patient dental treatment needs	2.8 (1.1)	0.12	0.09
Patient non-compliance with recommended treatment	2.9 (1.1)	0.31	<0.001*
Ability to refer to dental specialists	1.9 (1.0)	0.23	0.001*
Measure of dentist's altruism^d			
Dentists have an ethical obligation to treat DWP patients	0.6 (1.3)	0.42	<0.001*

EBS: Earned Benefits Structure; DWP: Dental Wellness Plan; SD: Standard Deviation
^aEBS summative scale score ranges from -10 to +10; higher scores indicate more positive attitudes
^bRated from 1 to 5; higher ratings indicate that dentists perceived the statement as less of a problem
^cRated from -2 (Strongly disagree) to +2 (Strongly agree); higher ratings indicate more altruistic attitude
^dSpearman's Correlation Coefficient tests performed
 *Significant at p<0.05

Table 3. Multivariable linear regression of factors associated with dentists' attitudes towards Dental Wellness Plan's Earned Benefits Structure (EBS) (N=221)

Variable	EBS summative score ^a		P value
	Unstandardized Coefficients		
	β	SE	
Age	0.05	0.02	0.03*
Gender			
Male		<i>Reference</i>	
Female	-0.04	0.63	0.95
Race			
Whites		<i>Reference</i>	
Non-Whites	1.73	1.56	0.27
Unknown race	-0.76	0.89	0.39
Perceived Workload			
Too busy		<i>Reference</i>	
Busy but not overworked	0.66	0.56	0.24
Not busy enough	0.35	0.77	0.65
Practice setting			
Solo		<i>Reference</i>	
Other	0.35	0.54	0.52
Urbanicity			
Metro		<i>Reference</i>	
Non-Metro	-0.08	0.57	0.90
DWP participation			
Accepting all new members		<i>Reference</i>	
Accepting some new members	0.81	0.62	0.20
Accepting no new members	0.79	0.66	0.23
Dentists' altruistic attitude ^b	0.98	0.22	<0.001*
DWP-related problem ^c			
Time spent on paperwork	0.58	0.27	0.03*
Denial of payment	0.05	0.29	0.86
Difficulty of eligibility determination	0.55	0.22	0.01*
Limited services covered	0.85	0.26	0.001*
Broken appointments	0.03	0.27	0.90
Complexity of patient dental treatment needs	0.03	0.26	0.90
Patient non-compliance with recommended treatment	0.23	0.29	0.42
Ability to refer to dental specialists	0.56	0.25	0.03*
Adjusted R²	0.37		

EBS: Earned Benefits Structure; DWP: Dental Wellness Plan; SE: Standard Error
 Years in practice removed from model due to high collinearity with age.
^aEBS summative scale score ranges from -10 to +10; higher scores indicate more positive attitudes
^bRated from -2 (Strongly disagree) to +2 (Strongly agree); higher ratings indicate more altruistic attitude
^cRated from 1 to 5; higher ratings indicate that dentists perceived the statement as less of a problem
 *Significant at p<0.05

Results

- Adjusted survey response rate was 45% (N=489). Of the 489 respondents, complete data were available only for **221 individuals which constituted our final sample**. Table 1 provides a description of dentists' sociodemographic and practice characteristics. At the time of the survey, approximately 60% of dentists were not accepting any new DWP members into their practice.
- Approximately 80% of dentists agreed that the EBS made it difficult to provide comprehensive care and prevents patients from getting care when needed (Figure 2).
- Mean EBS attitude score was -1.70±4.50, indicating slightly negative attitudes overall (Table 1).
- Bivariate analyses revealed significant associations between EBS attitude scores and attitudes about DWP-related problems and altruism (Table 2). DWP current participation did not demonstrate significant bivariate association with EBS attitude scores (Table 1).
- In the multivariable linear regression model, age, altruism, and four DWP-related problems were significantly associated with attitudes towards EBS (Table 3).

Conclusions

- The results of our study showed that general dentists had a slightly negative overall attitude toward the DWP's EBS. Attitudes towards the EBS were influenced by their perceptions about common DWP-related problems and their personal altruistic outlook.
- Administration- and network-related DWP issues were found to negatively influence dentists' attitudes towards DWP's earned benefits structure. Interestingly, patient-related DWP issues such as broken appointments, patient compliance, and complexity of dental treatment needs were not found to have a significant association with attitudes towards EBS. Iowa general dentists might consider patient-related problems inherent to the DWP population being served, hence, they do not influence their attitudes towards the program. Alternatively, DWP administration- and network-related issues may simply outweigh any potential impacts from patient factors.
- These findings represent dentists' experiences from the first year of DWP's implementation. Further research is needed to examine changes in factors influencing Iowa general dentists' attitudes towards DWP's earned benefits structure, for subsequent years.

References

- Iowa Department of Human Services. Iowa Health and Wellness Plan. 2016. Available at: <http://dhs.iowa.gov/ime/about/iowa-health-and-wellness-plan>
- Blackwelder, A. and J.D. Shulman, Texas dentists' attitudes toward the Dental Medicaid program. *Pediatr Dent*, 2007. 29(1): p. 40-6.
- Damiano, P.C., et al., Factors affecting dentist participation in a state Medicaid program. *J Dent Educ*, 1990. 54(11): p. 638-43.
- McKernan, S.C., et al., The relationship between altruistic attitudes and dentists' Medicaid participation. *Journal of the American Dental Association*, 2015. 146(1): p. 34-U63.
- Milgrom, P. and C. Riedy, Survey of Medicaid child dental services in Washington state: preparation for a marketing program. *J Am Dent Assoc*, 1998. 129(6): p. 753-63.
- Shulman, J.D., et al., Louisiana dentists' attitudes toward the dental Medicaid program. *Pediatr Dent*, 2001. 23(5): p. 395-400.
- Damiano, P.C., et al., A Report on the Iowa Title XIX Dental Program: Dentist's Participation in and Attitudes Toward the Iowa Title XIX Program. 1996, University of Iowa, Public Policy Center: Iowa City. p. 25-37.
- Porteous NB. Provider input for improvement of the EPSDT in Texas (unpublished case report). University of Texas Health Science Center at San Antonio, 1994.
- Bouchard JM. Ohio's oral health needs assessment: Findings from community surveys- primary care dentist's surveys. Unpublished Masters Thesis. Ohio State University Department of Preventive Medicine, January 1993.

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