

PAY SCHEMES AND HEALTH POLICY OBJECTIVES: WHICH PAY SCHEMES WOULD NORWEGIAN DENTISTS PREFER FOR THEMSELVES, AND WHICH DO THEY THINK ARE BEST FOR ACHIEVING POLICY OBJECTIVES?

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ABSTRACT

Objective: The paper seeks to investigate which pay scheme Norwegian dentists would prefer for themselves and which they think is best for achieving dental health policy objectives.

Methods: A questionnaire was mailed to a random sample of 1,111 dentists. The respondents gave information about their current and preferred pay schemes, and indicated which pay scheme, in their opinion, would contribute the most to overall dental health policy objectives of efficiency, quality, and retention.

Results: A total of 504 dentists (45%) returned the questionnaire. There was no indication of systematic non-response bias. All *public* dentists had a current pay scheme based on fixed salary, and the majority preferred a pay scheme different from their current. The preferred pay schemes coincided in general with the ones believed to comply with retention objectives. Among the *private* dentists fee-for-service from individual output only, predominated the current pay schemes, and the majority preferred their current pay scheme. The preferred pay schemes coincided in general with the ones believed to comply with efficiency objectives.

Conclusion: Both public and private dentists believed that pay schemes complying with an efficiency objective had to include more performance-related pay than the ones believed to comply with retention and quality objectives.

Keywords: dentist, performance-related pay, incentives, policy objectives

INTRODUCTION

Publicly employed health care personnel are normally salaried, while private practitioners most often have an activity based income. So is the case for Norwegian dentists as well [1]. However, given the range of potential pay schemes that exist, which one would Norwegian dentists prefer for themselves, and which do they think would be best for achieving health policy objectives regarding dental care?

The choice of payment system for health care, seem in general to depend on the existence of a third party payer and organisation size. Primary care is often dominated by small general practices with self-employed doctors. The remuneration of general practitioners in Norway and many other countries is to a large extent activity based (fee-for-service and capitation). Secondary care is characterised by large scale organisations – hospitals where health personnel are usually salaried, although the reimbursement of hospitals is becoming more activity based.

Trade unions and collective bargaining plays an important role in wage determination in many European countries [2, 3], and a fixed hourly wage independent of individual productivity has been the predominant payment [4]. However, during the last decades compensation has shifted towards an increase in performance-related pay (PRP) [5]. In the private sector the PRP-trend can be explained by increased product-market competition caused by globalization, resulting in more uncertainty, triggering more delegation of tasks within firms, and greater reliance on individual performance [4]. In the public sector recruiting and retaining highly qualified staff is one common cause of payment reforms. The strive for PRP reflects the influence of the private sector culture of incentives and individual accountability [6]. However, PRP reforms have been difficult to implement in the public sector in most countries because other factors like social concern, job content, and career development prospects often are stronger incentives for public employees than PRP [7, 8]. This gives reason to believe that pay scheme preferences will differ among public and private dentists.

PRP-schemes are possible to implement when it is easy to *measure* output and easy to make it *attributable* to a single producer or a production team. As for dentistry, output can to a large extent easily be measured and it is most often attributed to the activity of one dentist only.

In Norway, provision of dental care is characterized by a distinct split between public and private provision. The counties are responsible for the Public Dental Service (PDS) which offer free dental services to specific groups of the population: children and adolescences under 18 years old, all mentally handicapped people, and certain senior citizens. It also offers subsidized services for 18-20 year olds. The PDS operates on fixed public budgets. Dentists who work in the PDS are county employees covered by collective agreements. In Norway wage setting for employees covered by collective agreements takes place at two levels: national and firm. At the national level wage regulations, working hours, working conditions, pensions, medical benefits, etc. are negotiated. Firm-level negotiations determine possible local adjustments and additions to the collective agreements [9]. During the last 10-15 years it has become quite common among counties to negotiate local wage agreements which enable the PDS to offer pay schemes based on fixed salary and additional PRP for dental personnel. These schemes are optional, and the PRP could either be linked to team output or individual output. The share of PRP has generally been low in relation to the fixed salary. This is because the PRP is not related to the main activity of offering free dental treatment to specific groups, but to a minor activity where treatment is given to adults who pay for services out of their own pocket. It is this income which is shared between the county and the public dentists.

In general, Norwegian adults have to pay all necessary dental treatment themselves. They are mostly served by private clinics, in which the majority (71 %) of general practicing dentists are working [10]. There are no public regulations, neither on where a private clinic can be set up, nor which fees can be charged for dental services. The absence of private providers is the main reason why the PDS in scarcely populated areas offer dental treatment to paying adults.

The private sector is dominated by very small firms concerning employment. Most private dentists are self-employed. A resent study showed that 38 % of the private dentists work in solo practices [11]. The private dental care businesses are dominated by sole proprietorships. A sole proprietor is not separate from the individual; what the business makes, so does the individual. Grytten et al [11] estimated the sole proprietorship share to 65 % of dental care businesses. The rest are organized as limited companies (31 %) or companies with shared liabilities - where each participant is directly liable for his/her relative ownership of the company. Compared to dentists in the public sector, private dentist are highly exposed to market forces, and take on a large amount of risk concerning their own wage formation.

A pay scheme can be seen as a contract between an agent and a principal. In the standard economic treatment of the principal-agent problem [12-18], on how to make an agent act in the interest of the principal, payment systems both allocate risks and rewards productive work [19]. The behaviour of both agent and principal is influenced by pay scheme incentives [20]. A pay scheme can be summarized by the linear equation, $w = s + by$, the intercept is the base salary, and the slope b is the payment per output (y). Increasing b relative to s creates stronger incentives to increase output but also imposes more risk to the agent. The extreme case, $b = 0$, puts no risk on the agent and offers no financial incentive for increased efforts. The other extreme, $s = 0$, is completely dependent on the agents output, and offers the agent no insurance at all [14]. The agents input or *effort* is not contractible [17], but the lower the cost of measuring output, good workers will demand that their output be measured, and the greater the likelihood that pay is a function of output [5].

While the agent stays the same, the principal – or the purchaser – differs between public and private sector dentistry. In the private sector where self employment and sole proprietorship is prominent among agents, the customer seeking dental care is the purchaser. In the public sector the county authority is the purchaser, acting as principal with the aim to maximize social welfare. In negotiating proper pay schemes the authorities will not only care about the agent's productivity, but will also consider how the agents' behavior affect overall health policy objectives like efficiency, quality, and retention (to maintain continuity of care). There is reason to believe that these objectives will coincide with the interests of customers paying for dental treatment out of their own pockets, but their negotiating power towards the agents will be far less than the county authorities'. Doctors as agents are motivated more or less by concern for their patients, for the social good, and self-interests [17, 21] – the same is likely to motivate dentists.

The possibility of conflicting goals and unverifiable efforts in the principal/agent relationship makes it interesting to study any discrepancies between which pay schemes public and private dentists prefer for themselves, and which pay schemes they believe would best comply with overall health policy objectives. First, this paper compares any discrepancy between dentists' current and preferred pay schemes. Would salaried public dentists be willing to take on more risk in their preferred pay schemes? Would performance paid private dentists prefer pay schemes offering less risk? Second, we compare their current and preferred pay schemes with those pay schemes they believe would best comply with overall health policy objectives like

efficiency, quality and retention. In which ways should the current pay schemes be changed in order to improve efficiency, quality and retention? In this way we can compare respondents' preferences for what they think is best for themselves, and what they acknowledge might be best in terms of societal objectives.

A FRAMEWORK OF PAY SCHEMES FOR DENTISTS:

MODELLING RISK DIFFERENCES

Based on knowledge concerning local wage agreements in the PDS, and knowledge of the business structure and organisation of private dental care in Norway [11], five different pay schemes were categorised. The categorisation was based on two general assumptions as well. First, fixed salary imposes less risk to the dentist than fee-for-service. Second, pay schemes based on team work, as compared to only own work, imposes less risk to the individual dentist. This is based on the assumption that team productivity is less variable, and therefore less risky, than the productivity of individuals working alone.

The pay schemes are summarized by the linear equation:

$$W = q_i \cdot S_i + (1/n) \cdot R,$$

where:

S_i = fixed salary for individual dentist i

n = number of dentists in practice

R = the pot set for PRP, most often = $\sum R_i$ net revenues in practice

R_i = net revenue for individual dentist i

q_i = fixed salary share for individual dentist i ($q_i \leq 1$)

Pay schemes in Norwegian dentistry can then be categorised into five different types according to the level of risks associated with how predictable dentist income will be:

1. **no risk** ($R = 0$, $q_i = 1$); fixed salary: $W = S_i$
2. mild risk; fixed salary + team based PRP: $W = q_i \cdot S + (1/n) \cdot R$
3. moderate risk; fixed salary + individual PRP: $W = q_i \cdot S + R_i$
4. high risk; only team based PRP: $W = (1/n) \cdot R$
5. **full risk**; only individual PRP: $W = R_i$

MATERIALS AND METHODS

Questionnaires were mailed to a random sample of 1,111 dentists in April 2005. The sample was randomly selected among members of the Norwegian Dental Association (NDA), of which 96 % of all practising dentists are members. The sample included 28 % of all NDA registered members. The sample size was determined by Cochran's sample size formula and budget constrains [22]. One reminder was sent with an option to fill out an electronic version of the questionnaire on the Internet. The reminder increased the respondent sample by 98 dentists, among whom 51 online. No distinction was made between dental specialists and dentists in general practice.

A total of 504 (45 % response rate) dentists returned the questionnaire. Despite the fact that less than half of the sample responded, there was no indication of systematic non-response bias. There were no significant discrepancies, neither in the sector of employment (private vs. public) nor the place of residence, among the responding dentists compared to information on members of the NDA. Nor were there significant differences in the gender-mix between responders and non-responders.

The respondents were presented with the above mentioned pay schemes and asked to give information about their current and preferred alternative(s). They were also asked to indicate which, in their opinion, among the five pay schemes would contribute the most to common health policy objectives like: efficiency (most oral health for the money spent); technical quality in the dental service delivery, and; retention among dentists. Finally, the questionnaire asked for some background information concerning the respondent's sex, age, employment in public or private sector, municipal residency, and clinic structure concerning number of dentists in their workplace.

The survey instrument was developed in close collaboration with senior dentists representing a wide range of skills (clinical practice, oral health planning, research). The questionnaire was pre-tested on a small group of dentists.

For analysis purposes the different pay schemes were assigned rank values ranging from 1 to 5 (i.e. no risk = 1, ..., full risk = 5). These values, which we call *risk values*, were used to analyse individual rank differences between dentists' current and preferred pay schemes and the ones they consider to comply with general dental health policy objectives of efficiency,

quality and retention. The risk values are ordinal scale and the distances between the categories are not known. However, in the linear regression analyses (see Table 2), and when comparing differences in risk values (Table 3), we treat the risk values as interval scale assuming it to be a reasonable approximation [23].

The material was analysed using frequency and contingency tables, one-sample T-test, chi-square test, multivariate linear regression analysis and multinomial logistic regression analysis. Multivariate linear regression analysis [23] was used to study the relationship between the dentists' current pay scheme and their sex, age, residency, and number of dentists in clinic. All independent variables were included as dummies in the analysis. Multinomial logistic regression analysis [24, 25] was used to create profiles of the dentists most likely to prefer more risk in their pay schemes, and those most likely to prefer less risk. The dependent variable constructed and analyzed for this purpose was *risk preference*. The *risk preference* values were categorized as: *no difference* if there was no difference between the dentists current and preferred pay scheme; *more risk* if the risk value of the preferred pay scheme was higher than the risk value of the current, or; *less risk* if the risk value of the current pay scheme was higher than the risk value of the preferred. The independent variables were the same as those included in the linear regression analysis. SPSS version 15.0 was used to perform the statistical analysis.

RESULTS

The study aimed at exploring two different issues concerning public and private dentists; the current vs. their preferred pay schemes, and; which pay schemes they think are best for achieving overall dental health policy objectives.

The analysis included 478 dentists who reported their main employment in the public (32 %, 155) or private sector (68 %, 323). We excluded respondents working in the nonclinical sector. This affected 26 respondents.

Table 1 shows respondent characteristics. Among the public dentist there was a majority of women, while men outnumbered the women among the private dentists. There was no significant difference in age structure between public and private dentists. The mean age was 48 years among public dentist and 49 among private. There was a higher share of public dentists living in municipalities with a small sized population compared to the private

dentists. Working in clinics with only one dentist (solo practice) was significantly more common among the private dentists than among the public.

Current pay schemes

The last column of Table 2 shows that all public dentists had a current pay scheme based on fixed salary ($S_i > 0$ in the above equation). Fixed salary only was as common as fixed salary combined with PRP. Most PRP schemes were based on the public dentist's individual output. The linear regression analysis presented in Table 4 shows that public dentists living in municipalities with a small population had significantly more risk in their current pay schemes than other public dentists. Female public dentist had significantly less risk in their current pay schemes than their male counterparts.

The last column of Table 3 shows that three quarter of the private dentists had a full risk pay scheme. A no risk pay scheme was nearly as common as a high risk pay scheme. The linear regression analysis of risk values show that older private dentists had significantly less risk in their current pay schemes than younger ones (see Table 4).

Current vs. preferred pay schemes

Table 2 shows that among the public dentists, the majority preferred a pay scheme different from their current; 50 % preferred a more risky pay scheme, while 11 % preferred a less risky one. The public dentists had a strong preference for a moderate risk pay scheme. Among the ones whose current pay scheme was moderate risk, 69 % would prefer to keep this pay scheme. The majority among the ones with other current pay schemes would rather prefer moderate risk.

The mean difference in risk value between preferred and current pay scheme among the public dentists was positive and significantly different from 0 (see Table 5). This is interpreted as a general willingness among the public dentists to take on more risk in their preferred pay schemes compared to the current situation. The multinomial logistic regression analysis presented in Table 6, shows that the probability of preferring more risk among the public dentists increased significantly if the dentist was a woman, and decreased significantly if the dentist lived in a low populated municipality.

The majority among the private dentists (62 %) preferred their current pay scheme, 26 % preferred a less risky pay scheme, while 12 % preferred a more risky pay scheme. Even if most private dentists (60 %) would prefer a full risk pay scheme, as much as 26 % preferred a moderate risk pay scheme (see Table 3). Compared to the current situation where less than 3 % had a moderate risk pay scheme, this could be interpreted as a clear preference for less risk among the private dentists. Among the ones who currently had other pay schemes than full risk, there was a preference tendency towards moderate risk. The mean difference in risk value between preferred and current pay scheme was negative and differed significantly from 0 (see Table 5), which supports the general impression of a preference for less risk among the private dentist. The multinomial logistic regression analysis shows that the probability of preferring less risk among the private dentists increased significantly if the dentist worked in solo practice (see Table 6).

Pay schemes and health policy objectives

Table 7 shows that the majority among the public dentists believed a moderate risk pay scheme comply with efficiency and retention objectives. Concerning quality objectives, the share in favour of moderate risk was lower, and nearly similar to the share in favour of a no risk pay scheme. Among the private dentists the majority believed efficiency and quality objectives comply with a full risk pay scheme. Concerning retention, the share favouring moderate risk was lower but not very different from the share favouring full risk. Public and private dentists differed significantly in their opinion concerning which pay scheme best comply with efficiency, quality and retention objectives. However, the mean risk values had the same ordering between the public and private dentists; efficiency had the highest mean risk value and quality the lowest.

The results in Table 5 shows that among the public dentists the current pay schemes impose significantly less risk, and among the private dentists significantly more risk to the agent, than those they believed comply with efficiency, quality and retention objectives. Among the public dentists the preferred pay schemes coincided in general with the ones believed to comply with retention objectives, but impose less risk than believed to comply with efficiency objectives, and more risk than believed to comply with quality objectives. Among the private dentists the preferred pay schemes coincides in general with the ones believed to comply with efficiency objectives, but impose more risk than believed to comply with quality and retention objectives.

DISCUSSION

One in two public dentists had a current pay scheme combining fixed salary with performance related pay. PRP contracts were most common among public dentists living in municipalities with a small population. This indicates that PRP is used systematically by the Public Dental Service as a strategic measure in areas where recruiting and retaining dentists is an old and recognised challenge. The majority among the public dentists who already had a moderate risk pay scheme preferred this. Also among those who had other current pay schemes, there was a strong preference for a moderate risk pay scheme, i.e. a more risky pay scheme. The majority among the public dentists believed a moderate risk pay scheme best comply with efficiency and retention objectives. Concerning quality objectives, public dentists were close to evenly divided between moderate risk and no risk pay schemes.

A move from fixed salary to a PRP based pay scheme generally have two different effects: an efficiency effect and a selection effect [2, 26]. The selection effect refers to a change in the composition of the workforce. PRP is relatively more attractive to more able workers [27]. Workers who value intrinsic internal motivation more than extrinsic rewards will gravitate towards salaried jobs [5]. The efficiency effect refers to the improvements in performance and productivity of workers that are already in the firm [2].

In this case, where dentists already working in the PDS say they prefer moderate risk pay schemes in favour of fixed salary, and the majority among the public dentists share the preference for this particular pay scheme, there is reason to believe that a change to PRP will give an efficiency effect. The strong preference for individual PRP among public dentists indicates slack in today's organisations which might be decreased with proper payment incentives. The preference for individual PRP could also be explained by the fact that dentist output to a large extent is measurable [5].

The results from this study suggests that the possibility of choosing a more risky pay scheme is welcomed among public dentists, and believed to have a positive impact on retention and efficiency. A general offer of fixed salary combined with individual PRP to all public dentists might, however, be difficult to implement with today's contracts where the PRP share stems from adult treatment income. Outside low populated areas adults are treated in private clinics and not in the PDS, so there will be no income to share between the PDS and the dentists.

Hence, to meet with dentist preferences the PRP pot has to somehow originate from the fixed PDS budgets.

Three out of four private dentists currently had a full risk pay scheme. The majority among the private dentists preferred their current pay scheme. Among the ones who preferred another pay scheme than their current, most preferred a less risky alternative, in particular a moderate risk pay scheme. The probability of preferring a less risky pay scheme increased significantly if the dentist worked in private solo practice. This could be explained by the absence of third party regulations of fees and clinic establishments in Norwegian private sector dentistry. In theory this means that private dentists are competing for patients, even if it is considered a key question to what extent [20]. The result might indicate that solo practicing dentists experience more competition, and hence more risk concerning their wage formation than wanted. By merging into group practices and seeking employment rather than self-employment, less risky pay schemes can be accomplished. A capitation system could contribute as well to less risky pay schemes, but will probably require public funding or at least public regulations of adult payments for dental services.

Fee-for-service payment links income directly to the volume of service provided and has been studied most widely in the context of supplier induced demand [17]. Competition for patients can influence the dentist to induce demand for dental treatment. If this is the case, it leads to increased costs for the patient. Grytten and Sørensen [28] found evidence indicating that high costs imposed in search for cost-effective treatment, and high transaction costs of changing dentist, unable the patient to put necessary pressure on the dentists to offer cost-effective treatment. However, the majority among the private dentists in this study believed a full risk pay scheme best comply with efficiency and quality objectives which might articulate self-serving interests.

The results presented in this article show that public and private dentists differed significantly in their opinion concerning which pay scheme best comply with efficiency, quality and retention objectives. This could be explained by context. While the public dentists were answering the question in a competition protected PDS context, the private dentists' answers are coloured by the market conditions they experience in their everyday life. However, the mean risk values of the pay schemes believed to comply with the three different overall objectives had the same ordering between the public and private dentists; efficiency had the

highest mean risk value and quality the lowest. This could mean that both public and private dentists in general believe that pay schemes complying with efficiency objectives, has to include more PRP than the ones believed to comply with retention and quality objectives. In other words; one pay scheme is not believed to comply simultaneously with all the three different objectives.

ACKNOWLEDGEMENT

I would like to thank Professor Jan Abel Olsen, University of Tromsø, for invaluable advice, comments, support and patience during the preparation of this paper. I would also like to thank the Norwegian Directorate of Health for financial support.

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Table 1: Respondent characteristics. Percent.

Variable	Value	Public dentists n = 155	Private dentist n = 323	Chi-square p-value
Sex	Male	42	70	< 0.001
	Female	58	30	
Age	< 40 years	29	25	0.312
	40 – 54 years	38	45	
	> 55 years	33	30	
Municipal residence	Small : \leq 10 000 inhabitants	28	13	< 0.001
	Middle: <10 000 – 50 000] inhab.	29	39	
	High: > 50 000 inhabitants	43	48	
Number of dentists in clinic	1	19	38	< 0.001
	2-3	42	47	
	4 or more	39	15	

Table 2: Public dentists' current and preferred pay schemes. Percent. n=143.

(The share above the diagonal prefers *more* risk, while the share below prefers *less* risk.)

Current pay scheme	Preferred pay scheme					Total
	no risk	mild risk	moderate risk	high risk	full risk	
no risk	11.9	9.8	26.6	0.7	1.4	50.3
mild risk	3.5	4.2	8.4	0.0	0.7	16.8
moderate risk	4.9	2.1	23.1	0.0	2.8	32.9
high risk	0.0	0.0	0.0	0.0	0.0	0.0
full risk	0.0	0.0	0.0	0.0	0.0	0.0
Total	20.3	16.1	58.0	0.7	4.9	100.0

Table 3: Private dentists' current and preferred pay schemes among the. Percent. n=297.

(The share above the diagonal prefers *more* risk, while the share below prefers *less* risk.)

Current pay scheme	Preferred pay scheme					Total
	no risk	mild risk	moderate risk	high risk	full risk	
no risk	2.7	0.0	4.0	0.0	2.4	9.1
mild risk	0.0	0.0	0.0	0.0	0.0	0.0
moderate risk	0.3	0.0	2.4	0.0	0.0	2.7
high risk	0.0	0.0	2.4	5.4	6.0	13.8
full risk	2.4	2.4	17.2	1.3	51.2	74.4
Total	5.4	2.4	25.9	6.7	59.6	100.0

Table 4: Linear regression analyses of rank values in current pay scheme among public and private dentists, on sex, age, municipal residence and clinic structure. Unstandardized (b) and standardized (beta) regression coefficients.

	Public dentists (n=147)		Private dentists (n=305)	
	b	beta	b	Beta
Sex (female = 1)	-0.307*	-0.169	0.178	0.068
Age_1 (40-54 years = 1)	-0.163	-0.086	-0.295	-0.121
Age_2 (≥ 55 years = 1)	-0.116	0.187	-0.422*	0.163
Municipal residence_1 (Middle = 1)	-0.007	-0.004	0.186	0.075
Municipal residence_2 (Small = 1)	0.777**	0.389	-0.171	-0.046
Dentists in clinic_1 (2-3 dentists = 1)	0.032	0.018	-0.190	-0.079
Dentists in clinic_2 (1 dentist = 1)	-0.090	-0.039	0.301	0.121
Constant	1.902			
R ²	0.172		0.051	

* p-value<0.05, **p-value<0.001

Table 5: Mean difference in risk value (1-5) between current and preferred pay schemes and pay schemes considered meeting with efficiency, quality and retention objectives, among public (n=143) and private dentists (n=305).

Mean difference between → and ↓ public and private dentists	Current	Preferred	Efficiency	Quality	Retention
Current	0	-	-	-	-
Preferred	0.73*** -0.32***	0	-	-	-
Efficiency	-1.01*** 0.20*	-0.27** -0.11	0	-	-
Quality	-0.27* 0.60***	0.47*** 0.30***	0.72*** 0.41***	0	-
Retention	-0.78*** 0.50***	-0.06 0.22***	0.19* 0.32***	-0.53*** -0.12	0

One sample T-test, H₀: difference = 0, * p-value < 0.05, ** p-value < 0.01, *** p-value < 0.001

Table 6: Multinomial logistic regression analyses of risk preference among public and private dentists on sex, age, municipal residence and clinic structure.

Risk preference (dependent variable)	Independent variable	Public dentists (n=142)			Private dentists (n=296)		
		X ²	df	OR (95% CI)	X ²	df	OR (95% CI)
More risk (preferred by 50% of the public dentists and 12 % of the private dentists)	Intercept	0.002	1				
	Sex (female = 1)	5.158	1	2.6 (1.1 - 6.1)			
	Age_1 (40-54 years = 1)	0.483	1	1.4 (0.5 – 4.0)	The analysis is not presented because of few observations (n=36) in this category.		
	Age_2 (≥ 55 years = 1)	0.093	1	0.9 (0.3 – 2.3)			
	Municipal residence_1 (Middle = 1)	1.689	1	0.6 (0.2 – 1.4)			
	Municipal residence_2 (Small = 1)	9.572	1	0.2 (0.1 – 0.5)			
	Dentists in clinic_1 (2-3 dentists = 1)	0.179	1	1.2 (0.5 – 2.9)			
Dentists in clinic (1 dentist = 1)	2.814	1	2.8 (0.8 – 9.5)				
Pseudo R-square		Nagelkerke = 0.195					
Less risk (preferred by 11% of the public dentists and 26 % of the private dentists)	Intercept				7.663	1	
	Sex (female = 1)				1.151	1	1.4 (0.7 – 2.7)
	Age_1 (40-54 years = 1)			The analysis is not presented because of few observations (n=15) in this category.	3.767	1	0.5 (0.3 – 1.0)
	Age_2 (≥ 55 years = 1)				0.382	1	0.8 (0.4 – 1.7)
	Municipal residence_1 (Middle = 1)				0.009	1	1.0 (0.6 – 1.9)
	Municipal residence_2 (Small = 1)				1.181	1	0.6 (0.2 – 1.6)
	Dentists in clinic_1 (2-3 dentists = 1)				2.199	1	2.0 (0.8 – 5.0)
Dentists in clinic (1 dentist = 1)			6.807		1	3.6 (1.4 – 9.2)	
Pseudo R-square					Nagelkerke = 0.080		

The reference category is: **no difference** (same risk in current and preferred pay scheme) was preferred by 39% of public and 62% of private dentists.

Table 7: Pay schemes believed to best comply with efficiency, quality, and retention objectives among public and private dentists. Percent and mean risk value.

	Public dentists			Private dentists		
	Efficiency n=147	Quality n=144	Retention n=140	Efficiency n=317	Quality n=308	Retention n=308
No risk	10.2	39.6	15.0	2.2	11.0	2.9
Mild risk	20.4	16.0	15.0	4.1	5.5	4.9
Moderate risk	57.1	42.4	65.7	26.8	28.6	40.3
High risk	0.7	0.0	0.7	5.0	3.6	3.9
Full risk	11.6	2.1	3.6	61.8	51.3	48.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Mean risk value	2.8	2.1	2.6	4.2	3.8	3.9